CHPRC - REVIEW COMMENT RECORD (RCR)

1. Date	2. Review No.
1/9/12	RCR-VSR12-005
3. Project No. KW Floodplain	Page 1 of 1

5. Document Number(s)/Title(s)	6. Program/Project/Building Number	7. Reviewer	8. Organization/Group	9. Location/Phone
VSR12-005, 100-K-63 Pothole Samples Project KW Floodplain	SGRP	SL Huggins	SGRP QA	MO-2216/A101 373-3630

17. Comment Submittal Approval	10. Agreement With Indicated Comment Disposition(s)	11. CLOSED
Date / Organization Manager (optional) (print and sign)	1/9/12 Date; Reviewer/Point of Contact (print and sign); SL Huggins Author/Originator (print and sign)	1/12/12 Date; Reviewer/Point of Contact (print and sign); SL HUGGINS Author/Originator (print and sign)

12. Item	13a. Comments	13b. Basis	13c. Recommendation	14. Reviewer Concurrence Required (Y or N)	15. Disposition (provide justification if **NOT** accepted)	16. Status
1	In the General Chemistry section none of the data required to be flagged is flagged.		Flag data appropriately	Y	Correct general chemistry appendix 3 inserted	CLOSED

CHPRC - REVIEW COMMENT RECORD (RCR)

1. Date	2. Review No.
01/10/2012	
3. Project No.	Page 1 of 1

5. Document Number(s)/Title(s)	6. Program/Project/Building Number	7. Reviewer	8. Organization/Group	9. Location/Phone
VSR12-005		Scot Fitzgerald	Analytical Support Group	2753/373-7495

17. Comment Submittal Approval	10. Agreement With Indicated Comment Disposition(s)	11. CLOSED
Date / Organization Manager (optional) (print and sign)	Scot Fitzgerald Reviewer/Point of Contact (print and sign) 01/10/2012 Date Author/Originator (print and sign)	Scot Fitzgerald Reviewer/Point of Contact (print and sign) 1/23/2012 Date Author/Originator (print and sign)

12. Item	13a. Comments	13b. Basis	13c. Recommendation	14. Reviewer Concurrence Required (Y or N)	15. Disposition (provide justification if **NOT** accepted)	16. Status
1	General Chemistry annotated lab reports section contains inorganics data section.		Replace annotated report with the correct section.		Closed SLF	closed
2	Page 564 has typo in first paragraph.		Correct SDG number from WSCF105237 to WSCF 102537.		Closed SLF	closed

REVIEW COMMENT RECORD (RCR)

1. Date	01/10/2012
2. Review No.	
3. Project No.	
	Page 1 of 1

5. Document Number(s)/Title(s)	6. Program/Project/Building Number	7. Reviewer	8. Organization/Group	9. Location/Phone
Data Validation Report for CH2M Hill Plateau Remediation Company: VSR12-005, Project KW Floodplain, 100-K-63 Pothole Samples	100-K-63 KW Floodplain	D. L. Klages	100-K Soil Remediation	(509)942-3947

17. Comment Submittal Approval	10. Agreement With Indicated Comment Disposition(s)	11. CLOSED
Date / Organization Manager (optional) (print and sign)	01/10/2012 Date; Deanna L. Klages Reviewer/Point of Contact (print and sign); Deanna L. Klages Author/Originator (print and sign)	01/10/2012 Date; Deanna L. Klages Reviewer/Point of Contact (print and sign); Deanna L. Klages Author/Originator (print and sign)

12. Item	13a. Comments	13b. Basis	13c. Recommendation	14. Reviewer Concurrence Required (Y or N)	15. Disposition (provide justification if **NOT** accepted)	16. Status
1	No issues noted beyond the comments already made by Scot Fitzgerald.					

ANALYTICAL QUALITY ASSOCIATES, INC.
616 Maxine NE
Albuquerque, NM 87123
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Data Validation Report for CH2M Hill
Plateau Remediation Company

100-K-63 Pothole Samples
VSR12-005
Project KW Floodplain

Chemical & Radiochemical Validation - Level C

Validation Performed By: Maryann Jordan **Date: 12-12-2011**
(General Chemistry, Inorganics)

Validation Reviewed By: Eyda Hergenreder **Date: 12-13-2011**

Validation Performed By: Eyda Hergenreder **Date: 12-15-2011**

(Radiochemical)

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Date: 12 December 2011
To: CH2M Hill (technical representative)
From: Analytical Quality Associates, Inc.
Project: 100-K-63 Pothole Samples
Subject: Inorganics - Sample Data Groups (SDGs) WSCF102445, WSCF102425, WSCF102473, WSCF102537, WSCF102515 and WSCF102464

INTRODUCTION

This memorandum presents the results of data validation for SDGs WSCF102445, WSCF102425, WSCF102473, WSCF102537, WSCF102515 and WSCF102464 prepared by WSCF Analytical Laboratories. A list of samples validated along with the analytical methods is provided in the following table.

Sample ID	Sample Date	Media	Validation Level	Analytical Methods
B27M35	09/02/10	Soil	C	200.8 & 6010
B27MJ8	09/02/10	Soil	C	200.8 & 6010
B27MB5	09/02/10	Soil	C	200.8 & 6010
B27MR7	09/02/10	Water	C	200.8 & 6010
B27MB6	09/07/10	Soil	C	200.8 & 6010
B27M36	09/07/10	Soil	C	200.8 & 6010
B27MJ9	09/07/10	Soil	C	200.8 & 6010
B27M37	09/08/10	Soil	C	200.8 & 6010
B27MB9	09/08/10	Soil	C	200.8 & 6010
B27MK0	09/08/10	Soil	C	200.8 & 6010
B27M38	09/08/10	Soil	C	200.8 & 6010
B27MB7	09/08/10	Soil	C	200.8 & 6010
B27MB8	09/08/10	Soil	C	200.8 & 6010
B27MK1	09/08/10	Soil	C	200.8 & 6010
B27MP4	09/08/10	Soil	C	200.8 & 6010
B27M39	09/08/10	Soil	C	200.8 & 6010
B27MK2	09/08/10	Soil	C	200.8 & 6010
B27MP3	09/08/10	Soil	C	200.8 & 6010
B27MP5	09/08/10	Soil	C	200.8 & 6010
B27MC0	09/09/10	Soil	C	200.8 & 6010
B27MC1	09/09/10	Soil	C	200.8 & 6010
B27M40	09/09/10	Soil	C	200.8 & 6010
B27M41	09/09/10	Soil	C	200.8 & 6010
B27MP6	09/09/10	Soil	C	200.8 & 6010
B27MP7	09/09/10	Soil	C	200.8 & 6010
B27MK3	09/09/10	Soil	C	200.8 & 6010
B27MK4	09/09/10	Soil	C	200.8 & 6010
B27MK8	09/13/10	Soil	C	200.8 & 6010
B27MC5	09/13/10	Soil	C	200.8 & 6010

B27M45	09/13/10	Soil	C	200.8 & 6010
B27MR0	09/13/10	Soil	C	200.8 & 6010
B27MK7	09/13/10	Soil	C	200.8 & 6010
B27MC4	09/13/10	Soil	C	200.8 & 6010
B27MP8	09/13/10	Soil	C	200.8 & 6010
B27M44	09/13/10	Soil	C	200.8 & 6010
B27MK5	09/13/10	Soil	C	200.8 & 6010
B27MC2	09/13/10	Soil	C	200.8 & 6010
B27MR1	09/13/10	Soil	C	200.8 & 6010
B27M42	09/13/10	Soil	C	200.8 & 6010
B27M46	09/14/10	Soil	C	200.8 & 6010
B27M47	09/14/10	Soil	C	200.8 & 6010
B27M49	09/14/10	Soil	C	200.8 & 6010
B27MC6	09/14/10	Soil	C	200.8 & 6010
B27MC7	09/14/10	Soil	C	200.8 & 6010
B27MC9	09/14/10	Soil	C	200.8 & 6010
B27MK9	09/14/10	Soil	C	200.8 & 6010
B27ML2	09/14/10	Soil	C	200.8 & 6010
B27MR5	09/14/10	Soil	C	200.8 & 6010

Data validation was conducted in accordance with the CHPRC validation statement of work and the 100 Area Remedial Action Sampling and Analysis Plan, DOE/RL-96-22, Rev. 5, (SAP). Appendices 1 through 6 provide the following information as indicated below:

Appendix 1. Glossary of Data Reporting Qualifiers
Appendix 2. Summary of Data Qualification
Appendix 3. Annotated Laboratory Reports
Appendix 4. Laboratory Narrative and Chain-of-Custody Documentation
Appendix 5. Data Validation Supporting Documentation
Appendix 6. Additional Documentation Requested By Client

DATA QUALITY OBJECTIVES

- **Holding Times and Sample Preservation**

Holding times are calculated from Chain-of-Custody forms to determine the validity of the results. The holding time requirement for ICP metals are analysis within 180 days of sample collection, and the holding time requirement for mercury is analysis within 28 days of sample collection. Sample preservation for the water sample requires acid preservation with nitric acid to pH <2. Sample preservation for soil samples requires chilling to 4 degrees Celsius.

The samples were analyzed within the prescribed holding times and properly preserved.

- **Blanks**

The blank data results are reviewed to assess the extent of contamination introduced through sampling, sample preparation, and analysis.

Laboratory Blanks

All laboratory blank results were acceptable with the following exceptions.

For SDG WSCF102425, the Zn laboratory blank result was > the method detection limit (MDL) but < the reporting limit (RL). The Zn result for sample B27MR7 was < the RL and should be qualified as a non-detect at the RL (10 ug/l) and flagged "U".

For SDG WSCF102537, the Se laboratory blank result was > the MDL but < RL. The Se results for all associated samples were < the RL and should be qualified as non-detects at the associated RL and flagged "U". See the table in Appendix 2 for a listing of all affected sample results.

For SDG WSCF102515, the Mo laboratory blank result was > the MDL but < the RL. The Mo results for all associated samples were < the RL and should be qualified as non-detects at the RL (1.0 mg/kg) and flagged "U". See the table in Appendix 2 for a listing of all affected sample results.

Trip Blanks

No trip blanks were submitted for validation.

Field Blanks

No field blanks were submitted for validation.

Equipment Blanks

All equipment blank results were acceptable with the following exceptions. For SDG WCSF102425, Ba, Co, Cu, Mn, Ni, Pb, Se, Sr, V and Zn were detected in equipment blank B27MR7. The Zn result has been qualified as non-detect and flagged "U" due to laboratory blank contamination.

- **Accuracy**

Accuracy is evaluated by reviewing matrix spike sample results and laboratory control sample results. According to the SAP, the matrix spike sample and laboratory control sample accuracy limits are 70% to 130%. The limits for reported analytes not listed in the SAP are specified by the DV procedure.

Matrix Spike/Matrix Spike Duplicate (MS/MSD) Samples

All MS/MSD recoveries were acceptable with the following exceptions.

For SDG WSCF102473, the MS recovery for Mn was above the upper acceptance limit (batch 160836). The results for Mn in all of the associated samples were detects and should be qualified as estimates and flagged "J+". See the table in Appendix 2 for a listing of all affected sample results.

For SDG WSCF102537, the MS recovery for Mn was below the lower acceptance limit. The results for Mn in all of the associated samples were detects and should be qualified as estimates and flagged "J-". See the table in Appendix 2 for a listing of all affected sample results.

Laboratory Control Samples (LCSs)

All LCS recoveries were acceptable with the following exception.

For SDG WSCF102515, the recovery for Li was below the lower acceptance limit. The results for Li in all associated samples were detects and should be qualified as estimates and flagged "J-". See the table in Appendix 2 for a listing of all affected sample results.

- **Precision**

Precision is evaluated by reviewing MS/MSD results, field duplicate sample results, and field split sample results. These QC results provide information on the laboratory reproducibility and whether sampling activities are adequate to acquire consistent sample results. According to the SAP, the relative percent difference (RPD) limits are ±30%. The limits for reported analytes not listed in the SAP are specified by the DV procedure. When duplicate RPDs exceed the limits and have associated results <5X the reporting limits with differences <1X the water reporting limits or differences <2X the soil reporting limits no precision infraction occurred.

MS/MSD Samples

All MS/MSD RPD values were acceptable.

Field Duplicate Samples

All field duplicate results were acceptable.

Field Split Samples

No field splits were submitted for validation.

- **Detection Limits**

Reported MDLs are compared against the contractually required detection limits (CRDLs) to ensure that laboratory detection limits meet the required criteria.

All reported sample MDLs with associated non-detected sample results were below the CRDLs.

- **Completeness**

SDGs WSCF102445, WSCF102425, WSCF102473, WSCF102537, WSCF102515 and WSCF102464 were submitted for validation and verified for completeness. Completeness is based on the percentage of data determined to be valid (i.e., not rejected). The completion percentage was 100%.

MAJOR DEFICIENCIES

None found.

MINOR DEFICIENCIES

Minor deficiencies leading to qualification of Mo, Se and Zn sample results as non-detects were due to laboratory blank infractions, to qualification of Mn were due to high and low MS recoveries and to qualification of Li were due to an LCS infraction. See the table in Appendix 2 for a listing of all affected sample results.

REFERENCES

GRP-GD-003, Rev. 0, Change 0, *Data Validation for Chemical Analyses*, August 2010.

DOE/RL-96-22, Rev. 5, *100 Area Remedial Action Sampling and Analysis Plan*, September 2009.

Appendix 1

Glossary of Data Reporting Qualifiers

Qualifiers that may be applied by data validators in compliance with the CHPRC statement of work are as follows:

- **U** — The constituent was analyzed for, but was not detected. The data should be considered usable for decision-making purposes.

- **UJ** — The constituent was analyzed for and was not detected. Due to a quality control deficiency identified during data validation the value reported may not accurately reflect the RL. The data should be considered usable for decision-making purposes.

- **J** — Indicates the constituent was analyzed for and detected. The associated value is estimated due to a quality control deficiency identified during data validation. The data should be considered usable for decision-making purposes.

- **J+** — Indicates the constituent was analyzed for and detected. The associated value is estimated with a suspected positive bias due to a quality control deficiency identified during data validation. The data should be considered usable for decision-making purposes.

- **J-** — Indicates the constituent was analyzed for and detected. The associated value is estimated with a suspected negative bias due to a quality control deficiency identified during data validation. The data should be considered usable for decision-making purposes.

- **N** — The analysis indicates the presence of an analyte that has been tentatively identified.

- **NJ** — The analysis indicates the presence of an analyte that has been tentatively identified and the associated numerical value represents its approximate concentration.

- **NJ+** — The analysis indicates the presence of an analyte that has been tentatively identified. The associated value is estimated with a suspected positive bias due to a quality control deficiency identified during data validation.

- **NJ-** — The analysis indicates the presence of an analyte that has been tentatively identified. The associated value is estimated with a suspected negative bias due to a quality control deficiency identified during data validation.

- **UR** — Indicates the constituent was analyzed for and not detected; however, due to an identified quality control deficiency the data should be considered unusable for decision-making purposes.

- **R** — Indicates the constituent was analyzed for and detected; however, due to an identified quality control deficiency the data should be considered unusable for decision-making purposes.

Appendix 2

Summary of Data Qualification

Inorganic Data Qualification Summary			
SDGs: WSCF102445, WSCF102425, WSCF102473, WSCF102537, WSCF102515, WSCF102464	Reviewer: AQA	Project: 100-K-63 Pothole Samples	Page 1 of 1
Analyte(s)	**DV Flag**	**Samples Affected**	**Reason**
Zn	10U	B27MR7	Laboratory blank contamination
Mn	J+	B27M40, B27M41, B27MP6, B27MP7, B27MK3, B27MK4	High MS recovery
Se	3.0U	B27M46, B27M47, B27MC6, B27ML2	Laboratory blank contamination
Se	2.9U	B27M49	Laboratory blank contamination
Se	3.1U	B27MC7, B27MC9, B27MK9, B27MR5	Laboratory blank contamination
Mn	J-	B27M46, B27M47, B27M49, B27MC6, B27MC7, B27MC9, B27MK9, B27ML2, B27MR5	Low MS recovery
Li	J-	B27MK8, B27MC5, B27M45, B27MR0, B27MK7, B27MC4, B27MP8, B27M44, B27MK5, B27MC2, B27MR1, B27M42,	Low LCS recovery
Mo	1.0U	B27MK8, B27MC5, B27M45, B27MR0, B27MK7, B27MC4, B27MP8, B27M44, B27MK5, B27MC2, B27MR1, B27M42	Laboratory blank contamination

Comments: None

Appendix 3

Annotated Laboratory Reports

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102425

Sample # 102425001
SAF# F10-268
Sample ID B27MR7

Matrix WATER
Sampled 09/02/10
Received 09/07/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI)										**09/07/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.0020		mg/L	1	0.0020	0.0050	09/07/10
ICP Prep										**09/10/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411	U	<4.0		ug/L	1	4.0	20	09/14/10
Boron	7440-42-8	LA-505-411	U	<41		ug/L	1	41	95	09/14/10
ICPMS Prep										**09/16/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412	D	24.0		ug/L	2	0.20	2.0	09/16/10
Nickel	7440-02-0	LA-505-412	BD	0.480		ug/L	2	0.40	4.0	09/16/10
Silver	7440-22-4	LA-505-412	UD	<0.20		ug/L	2	0.20	2.0	09/16/10
Antimony	7440-36-0	LA-505-412	UD	<0.60		ug/L	2	0.60	6.0	09/16/10
Barium	7440-39-3	LA-505-412	D	5.90		ug/L	2	0.40	4.0	09/16/10
Beryllium	7440-41-7	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	09/16/10
Cadmium	7440-43-9	LA-505-412	UD	<0.20		ug/L	2	0.20	2.0	09/16/10
Chromium	7440-47-3	LA-505-412	UD	<1.0		ug/L	2	1.0	10	09/16/10
Cobalt	7440-48-4	LA-505-412	BD	0.324		ug/L	2	0.10	0.50	09/16/10
Copper	7440-50-8	LA-505-412	BD	1.06		ug/L	2	0.20	2.0	09/16/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102425

Sample # 102425001
SAF# F10-268
Sample ID B27MR7

Matrix WATER
Sampled 09/02/10
Received 09/07/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Vanadium	7440-62-2	LA-505-412	BD	1.00		ug/L	2	0.40	4.0	09/16/10
Zinc	7440-66-6	LA-505-412	BDC	5.69 10U		ug/L	2	1.6	10	09/16/10
Lead	7439-92-1	LA-505-412	BD	0.548		ug/L	2	0.20	2.0	09/16/10
Mercury	7439-97-6	LA-505-412	UD	<0.10		ug/L	2	0.10	0.40	09/16/10
Molybdenum	7439-98-7	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	09/16/10
Strontium	7440-24-6	LA-505-412	D	5.01		ug/L	2	0.20	2.0	09/16/10
Tin	7440-31-5	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	09/16/10
Uranium	7440-61-1	LA-505-412	UD	<0.10		ug/L	2	0.10	0.40	09/16/10
Arsenic	7440-38-2	LA-505-412	UD	<0.80		ug/L	2	0.80	8.0	09/16/10
Selenium	7782-49-2	LA-505-412	BD	1.04		ug/L	2	0.60	6.0	09/16/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102445

Sample # 102445001
SAF# F10-256
Sample ID B27M35

Matrix SOIL
Sampled 09/02/10
Received 09/07/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep										**09/17/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.52	09/17/10
ICP Prep										**09/08/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		7.38		mg/kg	1	0.42	2.1	09/10/10
Boron	7440-42-8	LA-505-411	EX	19.3		mg/kg	1	4.3	9.9	09/10/10
ICPMS Prep										**09/13/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		316		mg/kg	1	0.10	1.0	09/14/10
Nickel	7440-02-0	LA-505-412		10.2		mg/kg	1	0.20	2.0	09/14/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10
Antimony	7440-36-0	LA-505-412	U	<0.31		mg/kg	1	0.31	3.1	09/14/10
Barium	7440-39-3	LA-505-412		63.1		mg/kg	1	0.20	2.0	09/14/10
Beryllium	7440-41-7	LA-505-412	B	0.399		mg/kg	1	0.10	0.51	09/14/10
Cadmium	7440-43-9	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10
Chromium	7440-47-3	LA-505-412		8.43		mg/kg	1	0.51	5.1	09/14/10
Cobalt	7440-48-4	LA-505-412		7.23		mg/kg	1	0.10	0.51	09/14/10
Copper	7440-50-8	LA-505-412		15.2		mg/kg	1	0.10	1.0	09/14/10

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)

REVISED

MJ
12/12/11

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102445

Sample # 102445001
SAF# F10-256
Sample ID B27M35

Matrix SOIL
Sampled 09/02/10
Received 09/07/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Vanadium	7440-62-2	LA-505-412		26.9		mg/kg	1	0.20	2.0	09/14/10
Zinc	7440-66-6	LA-505-412		41.6		mg/kg	1	0.81	5.1	09/14/10
Lead	7439-92-1	LA-505-412		6.48		mg/kg	1	0.10	1.0	09/14/10
Mercury	7439-97-6	LA-505-412	U	<0.051		mg/kg	1	0.051	0.20	09/14/10
Molybdenum	7439-98-7	LA-505-412	B	0.211		mg/kg	1	0.10	1.0	09/14/10
Strontium	7440-24-6	LA-505-412		29.5		mg/kg	1	0.10	1.0	09/14/10
Tin	7440-31-5	LA-505-412		6.04		mg/kg	1	0.10	0.51	09/14/10
Uranium	7440-61-1	LA-505-412	B	0.404		mg/kg	1	0.10	0.51	09/14/10
Arsenic	7440-38-2	LA-505-412	B	2.89		mg/kg	1	0.41	4.1	09/14/10
Selenium	7782-49-2	LA-505-412	B	1.12		mg/kg	1	0.31	3.1	09/14/10

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)

REVISED

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102445

Sample # 102445002
SAF# F10-256
Sample ID B27MJ8

Matrix SOIL
Sampled 09/02/10
Received 09/07/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep										**09/17/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.52	09/17/10
ICP Prep										**09/08/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		8.07		mg/kg	1	0.41	2.1	09/10/10
Boron	7440-42-8	LA-505-411	EX	19.6		mg/kg	1	4.2	9.8	09/10/10
ICPMS Prep										**09/13/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		260		mg/kg	1	0.10	1.0	09/14/10
Nickel	7440-02-0	LA-505-412		10.5		mg/kg	1	0.21	2.1	09/14/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10
Antimony	7440-36-0	LA-505-412	U	<0.31		mg/kg	1	0.31	3.1	09/14/10
Barium	7440-39-3	LA-505-412		63.2		mg/kg	1	0.21	2.1	09/14/10
Beryllium	7440-41-7	LA-505-412	B	0.387		mg/kg	1	0.10	0.51	09/14/10
Cadmium	7440-43-9	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10
Chromium	7440-47-3	LA-505-412		8.63		mg/kg	1	0.51	5.1	09/14/10
Cobalt	7440-48-4	LA-505-412		6.45		mg/kg	1	0.10	0.51	09/14/10
Copper	7440-50-8	LA-505-412		14.3		mg/kg	1	0.10	1.0	09/14/10

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

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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)

REVISED

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102445

Sample # 102445002
SAF# F10-256
Sample ID B27MJ8

Matrix SOIL
Sampled 09/02/10
Received 09/07/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Vanadium	7440-62-2	LA-505-412		25.9		mg/kg	1	0.21	2.1	09/14/10
Zinc	7440-66-6	LA-505-412		36.8		mg/kg	1	0.82	5.1	09/14/10
Lead	7439-92-1	LA-505-412		5.73		mg/kg	1	0.10	1.0	09/14/10
Mercury	7439-97-6	LA-505-412	U	<0.051		mg/kg	1	0.051	0.21	09/14/10
Molybdenum	7439-98-7	LA-505-412	B	0.345		mg/kg	1	0.10	1.0	09/14/10
Strontium	7440-24-6	LA-505-412		25.9		mg/kg	1	0.10	1.0	09/14/10
Tin	7440-31-5	LA-505-412		1.01		mg/kg	1	0.10	0.51	09/14/10
Uranium	7440-61-1	LA-505-412	B	0.394		mg/kg	1	0.10	0.51	09/14/10
Arsenic	7440-38-2	LA-505-412	B	2.59		mg/kg	1	0.41	4.1	09/14/10
Selenium	7782-49-2	LA-505-412	B	0.975		mg/kg	1	0.31	3.1	09/14/10

MDL = Minimum Detection
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TP Err = Total Propagated
DF = Dilution Factor
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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)

REVISED

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102445

Sample # 102445003
SAF# F10-256
Sample ID B27MB5

Matrix SOIL
Sampled 09/02/10
Received 09/07/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep										**09/17/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.52	09/17/10
ICP Prep										**09/08/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		7.35		mg/kg	1	0.42	2.1	09/10/10
Boron	7440-42-8	LA-505-411	EX	21.0		mg/kg	1	4.3	10	09/10/10
ICPMS Prep										**09/13/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		285		mg/kg	1	0.10	1.0	09/14/10
Nickel	7440-02-0	LA-505-412		8.77		mg/kg	1	0.20	2.0	09/14/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10
Antimony	7440-36-0	LA-505-412	U	<0.31		mg/kg	1	0.31	3.1	09/14/10
Barium	7440-39-3	LA-505-412		58.5		mg/kg	1	0.20	2.0	09/14/10
Beryllium	7440-41-7	LA-505-412	B	0.275		mg/kg	1	0.10	0.51	09/14/10
Cadmium	7440-43-9	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10
Chromium	7440-47-3	LA-505-412		6.76		mg/kg	1	0.51	5.1	09/14/10
Cobalt	7440-48-4	LA-505-412		7.45		mg/kg	1	0.10	0.51	09/14/10
Copper	7440-50-8	LA-505-412		15.1		mg/kg	1	0.10	1.0	09/14/10

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
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C - Analyte was found in the Associated Blank. (Inorganic)
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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)

REVISED

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102445

Sample # 102445003
SAF# F10-256
Sample ID B27MB5

Matrix SOIL
Sampled 09/02/10
Received 09/07/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Vanadium	7440-62-2	LA-505-412		24.3		mg/kg	1	0.20	2.0	09/14/10
Zinc	7440-66-6	LA-505-412		33.9		mg/kg	1	0.82	5.1	09/14/10
Lead	7439-92-1	LA-505-412		5.34		mg/kg	1	0.10	1.0	09/14/10
Mercury	7439-97-6	LA-505-412	U	<0.051		mg/kg	1	0.051	0.20	09/14/10
Molybdenum	7439-98-7	LA-505-412	B	0.295		mg/kg	1	0.10	1.0	09/14/10
Strontium	7440-24-6	LA-505-412		31.1		mg/kg	1	0.10	1.0	09/14/10
Tin	7440-31-5	LA-505-412		1.19		mg/kg	1	0.10	0.51	09/14/10
Uranium	7440-61-1	LA-505-412	B	0.410		mg/kg	1	0.10	0.51	09/14/10
Arsenic	7440-38-2	LA-505-412	B	3.12		mg/kg	1	0.41	4.1	09/14/10
Selenium	7782-49-2	LA-505-412	B	0.926		mg/kg	1	0.31	3.1	09/14/10

MDL = Minimum Detection
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TP Err = Total Propagated
DF = Dilution Factor
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C - Analyte was found in the Associated Blank. (Inorganic)
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E - Analyte is an estimate, see comment section.
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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)

REVISED

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102445

Sample # 102445004
SAF# F10-256
Sample ID B27MB6

Matrix SOIL
Sampled 09/07/10
Received 09/07/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/08/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<7.7		mg/kg	5	7.7	51	09/08/10
Chloride	16887-00-6	LA-533-410	UD	<11		mg/kg	5	11	100	09/08/10
Nitrite-N	NO2-N	LA-533-410	UD	<4.7		mg/kg	5	4.7	26	09/08/10
Nitrate-N	NO3-N	LA-533-410	UD	<7.9		mg/kg	5	7.9	26	09/08/10
Sulfate	14808-79-8	LA-533-410	UD	<17		mg/kg	5	17	260	09/08/10
Cr(VI) Prep										**09/17/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.52	09/17/10
ICP Prep										**09/08/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		8.59		mg/kg	1	0.41	2.1	09/10/10
Boron	7440-42-8	LA-505-411	EX	20.2		mg/kg	1	4.2	9.8	09/10/10
ICPMS Prep										**09/13/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		322		mg/kg	1	0.10	1.0	09/14/10
Nickel	7440-02-0	LA-505-412		11.1		mg/kg	1	0.21	2.1	09/14/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10

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

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C - Analyte was found in the Associated Blank. (Inorganic)
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E - Analyte is an estimate, see comment section.
N - MS and/or MSD recovery outside control limits.

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X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)

REVISED

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102445

Sample # 102445004
SAF# F10-256
Sample ID B27MB6

Matrix SOIL
Sampled 09/07/10
Received 09/07/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Antimony	7440-36-0	LA-505-412	U	<0.31		mg/kg	1	0.31	3.1	09/14/10
Barium	7440-39-3	LA-505-412		60.8		mg/kg	1	0.21	2.1	09/14/10
Beryllium	7440-41-7	LA-505-412	B	0.395		mg/kg	1	0.10	0.52	09/14/10
Cadmium	7440-43-9	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10
Chromium	7440-47-3	LA-505-412		7.13		mg/kg	1	0.52	5.2	09/14/10
Cobalt	7440-48-4	LA-505-412		7.96		mg/kg	1	0.10	0.52	09/14/10
Copper	7440-50-8	LA-505-412		17.2		mg/kg	1	0.10	1.0	09/14/10
Vanadium	7440-62-2	LA-505-412		24.9		mg/kg	1	0.21	2.1	09/14/10
Zinc	7440-66-6	LA-505-412		35.6		mg/kg	1	0.82	5.2	09/14/10
Lead	7439-92-1	LA-505-412		5.87		mg/kg	1	0.10	1.0	09/14/10
Mercury	7439-97-6	LA-505-412	U	<0.052		mg/kg	1	0.052	0.21	09/14/10
Molybdenum	7439-98-7	LA-505-412	B	0.226		mg/kg	1	0.10	1.0	09/14/10
Strontium	7440-24-6	LA-505-412		31.2		mg/kg	1	0.10	1.0	09/14/10
Tin	7440-31-5	LA-505-412	B	0.334		mg/kg	1	0.10	0.52	09/14/10
Uranium	7440-61-1	LA-505-412		0.680		mg/kg	1	0.10	0.52	09/14/10
Arsenic	7440-38-2	LA-505-412	B	3.60		mg/kg	1	0.41	4.1	09/14/10
Selenium	7782-49-2	LA-505-412	B	1.46		mg/kg	1	0.31	3.1	09/14/10

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X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)

REVISED

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102445

Sample # 102445005
SAF# F10-256
Sample ID B27M36

Matrix SOIL
Sampled 09/07/10
Received 09/07/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/08/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<7.8		mg/kg	5	7.8	51	09/08/10
Chloride	16887-00-6	LA-533-410	UD	<11		mg/kg	5	11	100	09/08/10
Nitrite-N	NO2-N	LA-533-410	UD	<4.7		mg/kg	5	4.7	26	09/08/10
Nitrate-N	NO3-N	LA-533-410	UD	<8.0		mg/kg	5	8.0	26	09/08/10
Sulfate	14808-79-8	LA-533-410	UD	<17		mg/kg	5	17	260	09/08/10
Cr(VI) Prep										**09/17/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.51	09/17/10
ICP Prep										**09/08/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		8.27		mg/kg	1	0.41	2.1	09/10/10
Boron	7440-42-8	LA-505-411	EX	21.7		mg/kg	1	4.2	9.8	09/10/10
ICPMS Prep										**09/13/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		360		mg/kg	1	0.10	1.0	09/14/10
Nickel	7440-02-0	LA-505-412		10.9		mg/kg	1	0.20	2.0	09/14/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
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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)

REVISED

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102445

Sample # 102445005
SAF# F10-256
Sample ID B27M36

Matrix SOIL
Sampled 09/07/10
Received 09/07/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Antimony	7440-36-0	LA-505-412	U	<0.30		mg/kg	1	0.30	3.0	09/14/10
Barium	7440-39-3	LA-505-412		71.8		mg/kg	1	0.20	2.0	09/14/10
Beryllium	7440-41-7	LA-505-412	B	0.328		mg/kg	1	0.10	0.50	09/14/10
Cadmium	7440-43-9	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10
Chromium	7440-47-3	LA-505-412		8.30		mg/kg	1	0.50	5.0	09/14/10
Cobalt	7440-48-4	LA-505-412		8.23		mg/kg	1	0.10	0.50	09/14/10
Copper	7440-50-8	LA-505-412		16.6		mg/kg	1	0.10	1.0	09/14/10
Vanadium	7440-62-2	LA-505-412		30.5		mg/kg	1	0.20	2.0	09/14/10
Zinc	7440-66-6	LA-505-412		38.8		mg/kg	1	0.81	5.0	09/14/10
Lead	7439-92-1	LA-505-412		6.33		mg/kg	1	0.10	1.0	09/14/10
Mercury	7439-97-6	LA-505-412	U	<0.050		mg/kg	1	0.050	0.20	09/14/10
Molybdenum	7439-98-7	LA-505-412	B	0.232		mg/kg	1	0.10	1.0	09/14/10
Strontium	7440-24-6	LA-505-412		34.8		mg/kg	1	0.10	1.0	09/14/10
Tin	7440-31-5	LA-505-412	B	0.314		mg/kg	1	0.10	0.50	09/14/10
Uranium	7440-61-1	LA-505-412	B	0.475		mg/kg	1	0.10	0.50	09/14/10
Arsenic	7440-38-2	LA-505-412	B	3.84		mg/kg	1	0.40	4.0	09/14/10
Selenium	7782-49-2	LA-505-412	B	1.28		mg/kg	1	0.30	3.0	09/14/10

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TP Err = Total Propagated
DF = Dilution Factor
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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)

REVISED

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102445

Sample # 102445006
SAF# F10-256
Sample ID B27MJ9

Matrix SOIL
Sampled 09/07/10
Received 09/07/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/08/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<8.0		mg/kg	5	8.0	53	09/08/10
Chloride	16887-00-6	LA-533-410	UD	<11		mg/kg	5	11	110	09/08/10
Nitrite-N	NO2-N	LA-533-410	UD	<4.8		mg/kg	5	4.8	26	09/08/10
Nitrate-N	NO3-N	LA-533-410	UD	<8.2		mg/kg	5	8.2	26	09/08/10
Sulfate	14808-79-8	LA-533-410	UD	<17		mg/kg	5	17	260	09/08/10
Cr(VI) Prep										**09/17/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.11		ug/g	1	0.11	0.53	09/17/10
ICP Prep										**09/08/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		8.78		mg/kg	1	0.43	2.1	09/10/10
Boron	7440-42-8	LA-505-411	EX	21.1		mg/kg	1	4.4	10	09/10/10
ICPMS Prep										**09/13/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		306		mg/kg	1	0.10	1.0	09/14/10
Nickel	7440-02-0	LA-505-412		9.88		mg/kg	1	0.21	2.1	09/14/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10

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)

REVISED

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102445

Sample # 102445006
SAF# F10-256
Sample ID B27MJ9

Matrix SOIL
Sampled 09/07/10
Received 09/07/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Antimony	7440-36-0	LA-505-412	U	<0.31		mg/kg	1	0.31	3.1	09/14/10
Barium	7440-39-3	LA-505-412		61.6		mg/kg	1	0.21	2.1	09/14/10
Beryllium	7440-41-7	LA-505-412	B	0.318		mg/kg	1	0.10	0.52	09/14/10
Cadmium	7440-43-9	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10
Chromium	7440-47-3	LA-505-412		7.20		mg/kg	1	0.52	5.2	09/14/10
Cobalt	7440-48-4	LA-505-412		7.41		mg/kg	1	0.10	0.52	09/14/10
Copper	7440-50-8	LA-505-412		16.3		mg/kg	1	0.10	1.0	09/14/10
Vanadium	7440-62-2	LA-505-412		25.2		mg/kg	1	0.21	2.1	09/14/10
Zinc	7440-66-6	LA-505-412		35.4		mg/kg	1	0.83	5.2	09/14/10
Lead	7439-92-1	LA-505-412		6.02		mg/kg	1	0.10	1.0	09/14/10
Mercury	7439-97-6	LA-505-412	U	<0.052		mg/kg	1	0.052	0.21	09/14/10
Molybdenum	7439-98-7	LA-505-412	B	0.221		mg/kg	1	0.10	1.0	09/14/10
Strontium	7440-24-6	LA-505-412		35.8		mg/kg	1	0.10	1.0	09/14/10
Tin	7440-31-5	LA-505-412	B	0.310		mg/kg	1	0.10	0.52	09/14/10
Uranium	7440-61-1	LA-505-412	B	0.486		mg/kg	1	0.10	0.52	09/14/10
Arsenic	7440-38-2	LA-505-412	B	3.65		mg/kg	1	0.41	4.1	09/14/10
Selenium	7782-49-2	LA-505-412	B	0.770		mg/kg	1	0.31	3.1	09/14/10

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)

REVISED

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102464

Sample # 102464001
SAF# F10-256
Sample ID B27M37

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/08/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<7.7		mg/kg	5	7.7	51	09/08/10
Chloride	16887-00-6	LA-533-410	UD	<11		mg/kg	5	11	100	09/08/10
Nitrite-N	NO2-N	LA-533-410	UD	<4.6		mg/kg	5	4.6	25	09/08/10
Nitrate-N	NO3-N	LA-533-410	UD	<7.9		mg/kg	5	7.9	25	09/08/10
Sulfate	14808-79-8	LA-533-410	UD	<17		mg/kg	5	17	250	09/08/10
Cr(VI) Prep										**10/22/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.10		ug/g	1	0.10	0.51	10/22/10
ICP Prep										**09/13/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		5.89		mg/kg	1	0.41	2.1	09/22/10
Boron	7440-42-8	LA-505-411	BEX	4.65		mg/kg	1	4.2	21	09/22/10
ICPMS Prep										**09/13/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		249		mg/kg	1	0.10	1.0	09/14/10
Nickel	7440-02-0	LA-505-412		7.22		mg/kg	1	0.20	2.0	09/14/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10

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)

REVISED102464 -

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102464

Sample # 102464001
SAF# F10-256
Sample ID B27M37

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Antimony	7440-36-0	LA-505-412	U	<0.30		mg/kg	1	0.30	3.0	09/14/10
Barium	7440-39-3	LA-505-412		52.4		mg/kg	1	0.20	2.0	09/14/10
Beryllium	7440-41-7	LA-505-412	B	0.257		mg/kg	1	0.10	0.50	09/14/10
Cadmium	7440-43-9	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10
Chromium	7440-47-3	LA-505-412	B	4.63		mg/kg	1	0.50	5.0	09/14/10
Cobalt	7440-48-4	LA-505-412		6.94		mg/kg	1	0.10	0.50	09/14/10
Copper	7440-50-8	LA-505-412		15.0		mg/kg	1	0.10	1.0	09/14/10
Vanadium	7440-62-2	LA-505-412		24.7		mg/kg	1	0.20	2.0	09/14/10
Zinc	7440-66-6	LA-505-412		29.8		mg/kg	1	0.81	5.0	09/14/10
Lead	7439-92-1	LA-505-412		3.99		mg/kg	1	0.10	1.0	09/14/10
Mercury	7439-97-6	LA-505-412	U	<0.050		mg/kg	1	0.050	0.20	09/14/10
Molybdenum	7439-98-7	LA-505-412	B	0.163		mg/kg	1	0.10	1.0	09/14/10
Strontium	7440-24-6	LA-505-412		24.7		mg/kg	1	0.10	1.0	09/14/10
Tin	7440-31-5	LA-505-412	B	0.282		mg/kg	1	0.10	0.50	09/14/10
Uranium	7440-61-1	LA-505-412	B	0.338		mg/kg	1	0.10	0.50	09/14/10
Arsenic	7440-38-2	LA-505-412	B	2.43		mg/kg	1	0.40	4.0	09/14/10
Selenium	7782-49-2	LA-505-412	B	1.09		mg/kg	1	0.30	3.0	09/14/10

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)

REVISED102464 -

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102464

Sample # 102464002
SAF# F10-256
Sample ID B27MB9

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/08/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<7.7		mg/kg	5	7.7	51	09/08/10
Chloride	16887-00-6	LA-533-410	UD	<11		mg/kg	5	11	100	09/08/10
Nitrite-N	NO2-N	LA-533-410	UD	<4.6		mg/kg	5	4.6	25	09/08/10
Nitrate-N	NO3-N	LA-533-410	UD	<7.9		mg/kg	5	7.9	25	09/08/10
Sulfate	14808-79-8	LA-533-410	UD	<17		mg/kg	5	17	250	09/08/10
Cr(VI) Prep										**10/22/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.10		ug/g	1	0.10	0.51	10/22/10
ICP Prep										**09/13/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		6.31		mg/kg	1	0.41	2.0	09/22/10
Boron	7440-42-8	LA-505-411	UEX	<4.2		mg/kg	1	4.2	21	09/22/10
ICPMS Prep										**09/13/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		281		mg/kg	1	0.099	0.99	09/14/10
Nickel	7440-02-0	LA-505-412		8.18		mg/kg	1	0.20	2.0	09/14/10
Silver	7440-22-4	LA-505-412	U	<0.099		mg/kg	1	0.099	0.99	09/14/10

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
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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)

REVISED102464 -

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102464

Sample # 102464002
SAF# F10-256
Sample ID B27MB9

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Antimony	7440-36-0	LA-505-412	U	<0.30		mg/kg	1	0.30	3.0	09/14/10
Barium	7440-39-3	LA-505-412		58.4		mg/kg	1	0.20	2.0	09/14/10
Beryllium	7440-41-7	LA-505-412	B	0.299		mg/kg	1	0.099	0.50	09/14/10
Cadmium	7440-43-9	LA-505-412	B	0.104		mg/kg	1	0.099	0.99	09/14/10
Chromium	7440-47-3	LA-505-412		6.69		mg/kg	1	0.50	5.0	09/14/10
Cobalt	7440-48-4	LA-505-412		6.52		mg/kg	1	0.099	0.50	09/14/10
Copper	7440-50-8	LA-505-412		13.0		mg/kg	1	0.099	0.99	09/14/10
Vanadium	7440-62-2	LA-505-412		23.9		mg/kg	1	0.20	2.0	09/14/10
Zinc	7440-66-6	LA-505-412		31.2		mg/kg	1	0.80	5.0	09/14/10
Lead	7439-92-1	LA-505-412		4.36		mg/kg	1	0.099	0.99	09/14/10
Mercury	7439-97-6	LA-505-412	U	<0.050		mg/kg	1	0.050	0.20	09/14/10
Molybdenum	7439-98-7	LA-505-412	B	0.149		mg/kg	1	0.099	0.99	09/14/10
Strontium	7440-24-6	LA-505-412		25.8		mg/kg	1	0.099	0.99	09/14/10
Tin	7440-31-5	LA-505-412	B	0.250		mg/kg	1	0.099	0.50	09/14/10
Uranium	7440-61-1	LA-505-412	B	0.412		mg/kg	1	0.099	0.50	09/14/10
Arsenic	7440-38-2	LA-505-412	B	2.25		mg/kg	1	0.40	4.0	09/14/10
Selenium	7782-49-2	LA-505-412	B	1.02		mg/kg	1	0.30	3.0	09/14/10

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)

REVISED102464 -

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102464

Sample # 102464003
SAF# F10-256
Sample ID B27MK0

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/08/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<7.8		mg/kg	5	7.8	51	09/08/10
Chloride	16887-00-6	LA-533-410	UD	<11		mg/kg	5	11	100	09/08/10
Nitrite-N	NO2-N	LA-533-410	UD	<4.7		mg/kg	5	4.7	26	09/08/10
Nitrate-N	NO3-N	LA-533-410	UD	<8.0		mg/kg	5	8.0	26	09/08/10
Sulfate	14808-79-8	LA-533-410	UD	<17		mg/kg	5	17	260	09/08/10
Cr(VI) Prep										**10/22/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.10		ug/g	1	0.10	0.52	10/22/10
ICP Prep										**09/13/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		6.42		mg/kg	1	0.41	2.1	09/22/10
Boron	7440-42-8	LA-505-411	UEX	<4.2		mg/kg	1	4.2	21	09/22/10
ICPMS Prep										**09/13/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		304		mg/kg	1	0.10	1.0	09/14/10
Nickel	7440-02-0	LA-505-412		9.14		mg/kg	1	0.20	2.0	09/14/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10

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)

REVISED102464 -

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102464

Sample # 102464003
SAF# F10-256
Sample ID B27MK0

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Antimony	7440-36-0	LA-505-412	U	<0.30		mg/kg	1	0.30	3.0	09/14/10
Barium	7440-39-3	LA-505-412		59.2		mg/kg	1	0.20	2.0	09/14/10
Beryllium	7440-41-7	LA-505-412	B	0.330		mg/kg	1	0.10	0.50	09/14/10
Cadmium	7440-43-9	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10
Chromium	7440-47-3	LA-505-412		5.85		mg/kg	1	0.50	5.0	09/14/10
Cobalt	7440-48-4	LA-505-412		8.01		mg/kg	1	0.10	0.50	09/14/10
Copper	7440-50-8	LA-505-412		16.0		mg/kg	1	0.10	1.0	09/14/10
Vanadium	7440-62-2	LA-505-412		29.0		mg/kg	1	0.20	2.0	09/14/10
Zinc	7440-66-6	LA-505-412		34.5		mg/kg	1	0.81	5.0	09/14/10
Lead	7439-92-1	LA-505-412		4.81		mg/kg	1	0.10	1.0	09/14/10
Mercury	7439-97-6	LA-505-412	U	<0.050		mg/kg	1	0.050	0.20	09/14/10
Molybdenum	7439-98-7	LA-505-412	B	0.192		mg/kg	1	0.10	1.0	09/14/10
Strontium	7440-24-6	LA-505-412		33.4		mg/kg	1	0.10	1.0	09/14/10
Tin	7440-31-5	LA-505-412	B	0.378		mg/kg	1	0.10	0.50	09/14/10
Uranium	7440-61-1	LA-505-412	B	0.398		mg/kg	1	0.10	0.50	09/14/10
Arsenic	7440-38-2	LA-505-412	B	3.13		mg/kg	1	0.40	4.0	09/14/10
Selenium	7782-49-2	LA-505-412	B	1.64		mg/kg	1	0.30	3.0	09/14/10

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)

REVISED102464 -

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102464

Sample # 102464004
SAF# F10-256
Sample ID B27M38

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/08/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<7.7		mg/kg	5	7.7	51	09/08/10
Chloride	16887-00-6	LA-533-410	UD	<11		mg/kg	5	11	100	09/08/10
Nitrite-N	NO2-N	LA-533-410	UD	<4.6		mg/kg	5	4.6	25	09/08/10
Nitrate-N	NO3-N	LA-533-410	UD	<7.9		mg/kg	5	7.9	25	09/08/10
Sulfate	14808-79-8	LA-533-410	UD	<17		mg/kg	5	17	250	09/08/10
Cr(VI) Prep										**10/22/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.10		ug/g	1	0.10	0.51	10/22/10
ICP Prep										**09/13/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		3.76		mg/kg	1	0.41	2.0	09/22/10
Boron	7440-42-8	LA-505-411	UEX	<4.2		mg/kg	1	4.2	21	09/22/10
ICPMS Prep										**09/13/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		219		mg/kg	1	0.10	1.0	09/14/10
Nickel	7440-02-0	LA-505-412		6.68		mg/kg	1	0.20	2.0	09/14/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10

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)

REVISED102464 -

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102464

Sample # 102464004
SAF# F10-256
Sample ID B27M38

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Antimony	7440-36-0	LA-505-412	U	<0.31		mg/kg	1	0.31	3.1	09/14/10
Barium	7440-39-3	LA-505-412		50.7		mg/kg	1	0.20	2.0	09/14/10
Beryllium	7440-41-7	LA-505-412	B	0.145		mg/kg	1	0.10	0.51	09/14/10
Cadmium	7440-43-9	LA-505-412	B	0.275		mg/kg	1	0.10	1.0	09/14/10
Chromium	7440-47-3	LA-505-412	B	4.21		mg/kg	1	0.51	5.1	09/14/10
Cobalt	7440-48-4	LA-505-412		6.06		mg/kg	1	0.10	0.51	09/14/10
Copper	7440-50-8	LA-505-412		11.5		mg/kg	1	0.10	1.0	09/14/10
Vanadium	7440-62-2	LA-505-412		25.9		mg/kg	1	0.20	2.0	09/14/10
Zinc	7440-66-6	LA-505-412		42.2		mg/kg	1	0.81	5.1	09/14/10
Lead	7439-92-1	LA-505-412		4.32		mg/kg	1	0.10	1.0	09/14/10
Mercury	7439-97-6	LA-505-412	U	<0.051		mg/kg	1	0.051	0.20	09/14/10
Molybdenum	7439-98-7	LA-505-412	B	0.220		mg/kg	1	0.10	1.0	09/14/10
Strontium	7440-24-6	LA-505-412		18.5		mg/kg	1	0.10	1.0	09/14/10
Tin	7440-31-5	LA-505-412	B	0.257		mg/kg	1	0.10	0.51	09/14/10
Uranium	7440-61-1	LA-505-412	B	0.292		mg/kg	1	0.10	0.51	09/14/10
Arsenic	7440-38-2	LA-505-412	B	1.75		mg/kg	1	0.41	4.1	09/14/10
Selenium	7782-49-2	LA-505-412	B	0.989		mg/kg	1	0.31	3.1	09/14/10

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)

REVISED102464 -

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102464

Sample # 102464005
SAF# F10-256
Sample ID B27MB7

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/08/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<7.9		mg/kg	5	7.9	52	09/08/10
Chloride	16887-00-6	LA-533-410	UD	<11		mg/kg	5	11	100	09/08/10
Nitrite-N	NO2-N	LA-533-410	UD	<4.7		mg/kg	5	4.7	26	09/08/10
Nitrate-N	NO3-N	LA-533-410	UD	<8.1		mg/kg	5	8.1	26	09/08/10
Sulfate	14808-79-8	LA-533-410	UD	<17		mg/kg	5	17	260	09/08/10
Cr(VI) Prep										**10/22/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.10		ug/g	1	0.10	0.52	10/22/10
ICP Prep										**09/13/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		4.22		mg/kg	1	0.42	2.1	09/22/10
Boron	7440-42-8	LA-505-411	UEX	<4.3		mg/kg	1	4.3	22	09/22/10
ICPMS Prep										**09/13/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		292		mg/kg	1	0.10	1.0	09/14/10
Nickel	7440-02-0	LA-505-412		7.40		mg/kg	1	0.20	2.0	09/14/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10

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)

REVISED102464 -

MJ
12/12/11

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102464

Sample # 102464005
SAF# F10-256
Sample ID B27MB7

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Antimony	7440-36-0	LA-505-412	U	<0.30		mg/kg	1	0.30	3.0	09/14/10
Barium	7440-39-3	LA-505-412		58.1		mg/kg	1	0.20	2.0	09/14/10
Beryllium	7440-41-7	LA-505-412	B	0.314		mg/kg	1	0.10	0.51	09/14/10
Cadmium	7440-43-9	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10
Chromium	7440-47-3	LA-505-412	B	4.30		mg/kg	1	0.51	5.1	09/14/10
Cobalt	7440-48-4	LA-505-412		8.36		mg/kg	1	0.10	0.51	09/14/10
Copper	7440-50-8	LA-505-412		15.9		mg/kg	1	0.10	1.0	09/14/10
Vanadium	7440-62-2	LA-505-412		26.9		mg/kg	1	0.20	2.0	09/14/10
Zinc	7440-66-6	LA-505-412		34.0		mg/kg	1	0.81	5.1	09/14/10
Lead	7439-92-1	LA-505-412		4.09		mg/kg	1	0.10	1.0	09/14/10
Mercury	7439-97-6	LA-505-412	U	<0.051		mg/kg	1	0.051	0.20	09/14/10
Molybdenum	7439-98-7	LA-505-412	B	0.165		mg/kg	1	0.10	1.0	09/14/10
Strontium	7440-24-6	LA-505-412		28.8		mg/kg	1	0.10	1.0	09/14/10
Tin	7440-31-5	LA-505-412	B	0.369		mg/kg	1	0.10	0.51	09/14/10
Uranium	7440-61-1	LA-505-412	B	0.415		mg/kg	1	0.10	0.51	09/14/10
Arsenic	7440-38-2	LA-505-412	B	2.61		mg/kg	1	0.40	4.0	09/14/10
Selenium	7782-49-2	LA-505-412	B	1.57		mg/kg	1	0.30	3.0	09/14/10

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)

REVISED102464 -

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102464

Sample # 102464006
SAF# F10-256
Sample ID B27MB8

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/08/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<7.7		mg/kg	5	7.7	51	09/08/10
Chloride	16887-00-6	LA-533-410	UD	<11		mg/kg	5	11	100	09/08/10
Nitrite-N	NO2-N	LA-533-410	UD	<4.6		mg/kg	5	4.6	26	09/08/10
Nitrate-N	NO3-N	LA-533-410	UD	<7.9		mg/kg	5	7.9	26	09/08/10
Sulfate	14808-79-8	LA-533-410	UD	<17		mg/kg	5	17	260	09/08/10
Cr(VI) Prep										**10/22/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.10		ug/g	1	0.10	0.51	10/22/10
ICP Prep										**09/13/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		5.18		mg/kg	1	0.41	2.1	09/22/10
Boron	7440-42-8	LA-505-411	UEX	<4.2		mg/kg	1	4.2	21	09/22/10
ICPMS Prep										**09/13/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		200		mg/kg	1	0.10	1.0	09/14/10
Nickel	7440-02-0	LA-505-412		5.59		mg/kg	1	0.20	2.0	09/14/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10

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)

REVISED102464 -

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102464

Sample # 102464006
SAF# F10-256
Sample ID B27MB8

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Antimony	7440-36-0	LA-505-412	U	<0.30		mg/kg	1	0.30	3.0	09/14/10
Barium	7440-39-3	LA-505-412		48.9		mg/kg	1	0.20	2.0	09/14/10
Beryllium	7440-41-7	LA-505-412	B	0.188		mg/kg	1	0.10	0.50	09/14/10
Cadmium	7440-43-9	LA-505-412	B	0.168		mg/kg	1	0.10	1.0	09/14/10
Chromium	7440-47-3	LA-505-412	B	2.72		mg/kg	1	0.50	5.0	09/14/10
Cobalt	7440-48-4	LA-505-412		5.94		mg/kg	1	0.10	0.50	09/14/10
Copper	7440-50-8	LA-505-412		12.8		mg/kg	1	0.10	1.0	09/14/10
Vanadium	7440-62-2	LA-505-412		22.1		mg/kg	1	0.20	2.0	09/14/10
Zinc	7440-66-6	LA-505-412		30.8		mg/kg	1	0.81	5.0	09/14/10
Lead	7439-92-1	LA-505-412		2.75		mg/kg	1	0.10	1.0	09/14/10
Mercury	7439-97-6	LA-505-412	U	<0.050		mg/kg	1	0.050	0.20	09/14/10
Molybdenum	7439-98-7	LA-505-412	B	0.191		mg/kg	1	0.10	1.0	09/14/10
Strontium	7440-24-6	LA-505-412		19.8		mg/kg	1	0.10	1.0	09/14/10
Tin	7440-31-5	LA-505-412	B	0.253		mg/kg	1	0.10	0.50	09/14/10
Uranium	7440-61-1	LA-505-412	B	0.329		mg/kg	1	0.10	0.50	09/14/10
Arsenic	7440-38-2	LA-505-412	B	1.62		mg/kg	1	0.40	4.0	09/14/10
Selenium	7782-49-2	LA-505-412	B	1.02		mg/kg	1	0.30	3.0	09/14/10

MDL = Minimum Detection
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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)

REVISED102464 -

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102464

Sample # 102464007
SAF# F10-256
Sample ID B27MK1

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/09/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<7.7		mg/kg	5	7.7	51	09/09/10
Chloride	16887-00-6	LA-533-410	UD	<11		mg/kg	5	11	100	09/09/10
Nitrite-N	NO2-N	LA-533-410	UD	<4.6		mg/kg	5	4.6	25	09/09/10
Nitrate-N	NO3-N	LA-533-410	UD	<7.9		mg/kg	5	7.9	25	09/09/10
Sulfate	14808-79-8	LA-533-410	UD	<17		mg/kg	5	17	250	09/09/10
Cr(VI) Prep										**10/22/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.10		ug/g	1	0.10	0.51	10/22/10
ICP Prep										**09/13/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		5.35		mg/kg	1	0.41	2.1	09/22/10
Boron	7440-42-8	LA-505-411	UEX	<4.2		mg/kg	1	4.2	21	09/22/10
ICPMS Prep										**09/13/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		216		mg/kg	1	0.10	1.0	09/14/10
Nickel	7440-02-0	LA-505-412		7.79		mg/kg	1	0.20	2.0	09/14/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10

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.

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X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)

REVISED102464 -

MJ
12/12/11

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102464

Sample # 102464007
SAF# F10-256
Sample ID B27MK1

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Antimony	7440-36-0	LA-505-412	U	<0.30		mg/kg	1	0.30	3.0	09/14/10
Barium	7440-39-3	LA-505-412		51.8		mg/kg	1	0.20	2.0	09/14/10
Beryllium	7440-41-7	LA-505-412	B	0.232		mg/kg	1	0.10	0.51	09/14/10
Cadmium	7440-43-9	LA-505-412	B	0.249		mg/kg	1	0.10	1.0	09/14/10
Chromium	7440-47-3	LA-505-412		5.11		mg/kg	1	0.51	5.1	09/14/10
Cobalt	7440-48-4	LA-505-412		5.36		mg/kg	1	0.10	0.51	09/14/10
Copper	7440-50-8	LA-505-412		12.2		mg/kg	1	0.10	1.0	09/14/10
Vanadium	7440-62-2	LA-505-412		22.8		mg/kg	1	0.20	2.0	09/14/10
Zinc	7440-66-6	LA-505-412		35.5		mg/kg	1	0.81	5.1	09/14/10
Lead	7439-92-1	LA-505-412		3.53		mg/kg	1	0.10	1.0	09/14/10
Mercury	7439-97-6	LA-505-412	U	<0.051		mg/kg	1	0.051	0.20	09/14/10
Molybdenum	7439-98-7	LA-505-412	B	0.213		mg/kg	1	0.10	1.0	09/14/10
Strontium	7440-24-6	LA-505-412		19.3		mg/kg	1	0.10	1.0	09/14/10
Tin	7440-31-5	LA-505-412	B	0.235		mg/kg	1	0.10	0.51	09/14/10
Uranium	7440-61-1	LA-505-412	B	0.331		mg/kg	1	0.10	0.51	09/14/10
Arsenic	7440-38-2	LA-505-412	B	1.67		mg/kg	1	0.40	4.0	09/14/10
Selenium	7782-49-2	LA-505-412	B	0.767		mg/kg	1	0.30	3.0	09/14/10

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)

REVISED102464 -

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102464

Sample # 102464008
SAF# F10-256
Sample ID B27MP4

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/09/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<7.8		mg/kg	5	7.8	52	09/09/10
Chloride	16887-00-6	LA-533-410	UD	<11		mg/kg	5	11	100	09/09/10
Nitrite-N	NO2-N	LA-533-410	UD	<4.7		mg/kg	5	4.7	26	09/09/10
Nitrate-N	NO3-N	LA-533-410	UD	<8.0		mg/kg	5	8.0	26	09/09/10
Sulfate	14808-79-8	LA-533-410	UD	<17		mg/kg	5	17	260	09/09/10
Cr(VI) Prep										**10/22/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.10		ug/g	1	0.10	0.52	10/22/10
ICP Prep										**09/13/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		8.85		mg/kg	1	0.41	2.1	09/22/10
Boron	7440-42-8	LA-505-411	UEX	<4.2		mg/kg	1	4.2	21	09/22/10
ICPMS Prep										**09/13/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		213		mg/kg	1	0.10	1.0	09/14/10
Nickel	7440-02-0	LA-505-412		12.0		mg/kg	1	0.21	2.1	09/14/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10

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)

REVISED102464 -

MJ
12/12/11

3004.1.1084.3
Report ID: 102464
Group # WSCF102464

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102464

Sample # 102464008
SAF# F10-256
Sample ID B27MP4

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Antimony	7440-36-0	LA-505-412	U	<0.31		mg/kg	1	0.31	3.1	09/14/10
Barium	7440-39-3	LA-505-412		65.4		mg/kg	1	0.21	2.1	09/14/10
Beryllium	7440-41-7	LA-505-412	B	0.222		mg/kg	1	0.10	0.52	09/14/10
Cadmium	7440-43-9	LA-505-412	B	0.235		mg/kg	1	0.10	1.0	09/14/10
Chromium	7440-47-3	LA-505-412		11.3		mg/kg	1	0.52	5.2	09/14/10
Cobalt	7440-48-4	LA-505-412		4.74		mg/kg	1	0.10	0.52	09/14/10
Copper	7440-50-8	LA-505-412		10.8		mg/kg	1	0.10	1.0	09/14/10
Vanadium	7440-62-2	LA-505-412		20.4		mg/kg	1	0.21	2.1	09/14/10
Zinc	7440-66-6	LA-505-412		58.2		mg/kg	1	0.83	5.2	09/14/10
Lead	7439-92-1	LA-505-412		10.7		mg/kg	1	0.10	1.0	09/14/10
Mercury	7439-97-6	LA-505-412	U	<0.052		mg/kg	1	0.052	0.21	09/14/10
Molybdenum	7439-98-7	LA-505-412	B	0.174		mg/kg	1	0.10	1.0	09/14/10
Strontium	7440-24-6	LA-505-412		25.3		mg/kg	1	0.10	1.0	09/14/10
Tin	7440-31-5	LA-505-412	B	0.284		mg/kg	1	0.10	0.52	09/14/10
Uranium	7440-61-1	LA-505-412		0.646		mg/kg	1	0.10	0.52	09/14/10
Arsenic	7440-38-2	LA-505-412	B	3.96		mg/kg	1	0.41	4.1	09/14/10
Selenium	7782-49-2	LA-505-412	B	0.764		mg/kg	1	0.31	3.1	09/14/10

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)

REVISED102464 -

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102464

Sample # 102464009
SAF# F10-256
Sample ID B27M39

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/09/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<7.7		mg/kg	5	7.7	51	09/09/10
Chloride	16887-00-6	LA-533-410	UD	<11		mg/kg	5	11	100	09/09/10
Nitrite-N	NO2-N	LA-533-410	UD	<4.6		mg/kg	5	4.6	26	09/09/10
Nitrate-N	NO3-N	LA-533-410	UD	<7.9		mg/kg	5	7.9	26	09/09/10
Sulfate	14808-79-8	LA-533-410	UD	<17		mg/kg	5	17	260	09/09/10
Cr(VI) Prep										**10/22/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.10		ug/g	1	0.10	0.51	10/22/10
ICP Prep										**09/13/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		6.06		mg/kg	1	0.41	2.1	09/22/10
Boron	7440-42-8	LA-505-411	UEX	<4.2		mg/kg	1	4.2	21	09/22/10
ICPMS Prep										**09/13/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		293		mg/kg	1	0.10	1.0	09/14/10
Nickel	7440-02-0	LA-505-412		9.98		mg/kg	1	0.20	2.0	09/14/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10

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)

REVISED102464 -

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102464

Sample # 102464009
SAF# F10-256
Sample ID B27M39

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Antimony	7440-36-0	LA-505-412	U	<0.30		mg/kg	1	0.30	3.0	09/14/10
Barium	7440-39-3	LA-505-412		56.5		mg/kg	1	0.20	2.0	09/14/10
Beryllium	7440-41-7	LA-505-412	B	0.216		mg/kg	1	0.10	0.51	09/14/10
Cadmium	7440-43-9	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10
Chromium	7440-47-3	LA-505-412		7.87		mg/kg	1	0.51	5.1	09/14/10
Cobalt	7440-48-4	LA-505-412		7.42		mg/kg	1	0.10	0.51	09/14/10
Copper	7440-50-8	LA-505-412		15.9		mg/kg	1	0.10	1.0	09/14/10
Vanadium	7440-62-2	LA-505-412		31.9		mg/kg	1	0.20	2.0	09/14/10
Zinc	7440-66-6	LA-505-412		33.8		mg/kg	1	0.81	5.1	09/14/10
Lead	7439-92-1	LA-505-412		4.49		mg/kg	1	0.10	1.0	09/14/10
Mercury	7439-97-6	LA-505-412	U	<0.051		mg/kg	1	0.051	0.20	09/14/10
Molybdenum	7439-98-7	LA-505-412	B	0.226		mg/kg	1	0.10	1.0	09/14/10
Strontium	7440-24-6	LA-505-412		29.7		mg/kg	1	0.10	1.0	09/14/10
Tin	7440-31-5	LA-505-412	B	0.337		mg/kg	1	0.10	0.51	09/14/10
Uranium	7440-61-1	LA-505-412	B	0.374		mg/kg	1	0.10	0.51	09/14/10
Arsenic	7440-38-2	LA-505-412	B	2.96		mg/kg	1	0.41	4.1	09/14/10
Selenium	7782-49-2	LA-505-412	B	0.937		mg/kg	1	0.30	3.0	09/14/10

MDL = Minimum Detection
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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)

REVISED102464 -

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102464

Sample # 102464010
SAF# F10-256
Sample ID B27MK2

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/09/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<7.7		mg/kg	5	7.7	51	09/09/10
Chloride	16887-00-6	LA-533-410	UD	<11		mg/kg	5	11	100	09/09/10
Nitrite-N	NO2-N	LA-533-410	UD	<4.6		mg/kg	5	4.6	25	09/09/10
Nitrate-N	NO3-N	LA-533-410	UD	<7.9		mg/kg	5	7.9	25	09/09/10
Sulfate	14808-79-8	LA-533-410	UD	<17		mg/kg	5	17	250	09/09/10
Cr(VI) Prep										**10/22/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.10		ug/g	1	0.10	0.51	10/22/10
ICP Prep										**09/13/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		6.16		mg/kg	1	0.41	2.1	09/22/10
Boron	7440-42-8	LA-505-411	UEX	<4.2		mg/kg	1	4.2	21	09/22/10
ICPMS Prep										**09/13/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		291		mg/kg	1	0.10	1.0	09/14/10
Nickel	7440-02-0	LA-505-412		8.69		mg/kg	1	0.20	2.0	09/14/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10

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)

REVISED102464 -

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102464

Sample # 102464010
SAF# F10-256
Sample ID B27MK2

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Antimony	7440-36-0	LA-505-412	U	<0.31		mg/kg	1	0.31	3.1	09/14/10
Barium	7440-39-3	LA-505-412		60.9		mg/kg	1	0.20	2.0	09/14/10
Beryllium	7440-41-7	LA-505-412	B	0.320		mg/kg	1	0.10	0.51	09/14/10
Cadmium	7440-43-9	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10
Chromium	7440-47-3	LA-505-412		7.36		mg/kg	1	0.51	5.1	09/14/10
Cobalt	7440-48-4	LA-505-412		6.83		mg/kg	1	0.10	0.51	09/14/10
Copper	7440-50-8	LA-505-412		12.8		mg/kg	1	0.10	1.0	09/14/10
Vanadium	7440-62-2	LA-505-412		30.4		mg/kg	1	0.20	2.0	09/14/10
Zinc	7440-66-6	LA-505-412		34.2		mg/kg	1	0.81	5.1	09/14/10
Lead	7439-92-1	LA-505-412		4.30		mg/kg	1	0.10	1.0	09/14/10
Mercury	7439-97-6	LA-505-412	U	<0.051		mg/kg	1	0.051	0.20	09/14/10
Molybdenum	7439-98-7	LA-505-412	B	0.210		mg/kg	1	0.10	1.0	09/14/10
Strontium	7440-24-6	LA-505-412		24.9		mg/kg	1	0.10	1.0	09/14/10
Tin	7440-31-5	LA-505-412	B	0.291		mg/kg	1	0.10	0.51	09/14/10
Uranium	7440-61-1	LA-505-412	B	0.358		mg/kg	1	0.10	0.51	09/14/10
Arsenic	7440-38-2	LA-505-412	B	2.31		mg/kg	1	0.41	4.1	09/14/10
Selenium	7782-49-2	LA-505-412	B	1.39		mg/kg	1	0.31	3.1	09/14/10

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)

REVISED102464 -

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102464

Sample # 102464011
SAF# F10-256
Sample ID B27MP3

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/09/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<7.8		mg/kg	5	7.8	52	09/09/10
Chloride	16887-00-6	LA-533-410	UD	<11		mg/kg	5	11	100	09/09/10
Nitrite-N	NO2-N	LA-533-410	UD	<4.7		mg/kg	5	4.7	26	09/09/10
Nitrate-N	NO3-N	LA-533-410	UD	<8.0		mg/kg	5	8.0	26	09/09/10
Sulfate	14808-79-8	LA-533-410	UD	<17		mg/kg	5	17	260	09/09/10
Cr(VI) Prep										**10/22/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.10		ug/g	1	0.10	0.52	10/22/10
ICP Prep										**09/13/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		8.88		mg/kg	1	0.41	2.1	09/22/10
Boron	7440-42-8	LA-505-411	UEX	<4.2		mg/kg	1	4.2	21	09/22/10
ICPMS Prep										**09/13/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		209		mg/kg	1	0.10	1.0	09/14/10
Nickel	7440-02-0	LA-505-412		12.4		mg/kg	1	0.20	2.0	09/14/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10

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)

REVISED102464 -

MJ
12/12/11

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102464

Sample # 102464011
SAF# F10-256
Sample ID B27MP3

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Antimony	7440-36-0	LA-505-412	U	<0.30		mg/kg	1	0.30	3.0	09/14/10
Barium	7440-39-3	LA-505-412		66.5		mg/kg	1	0.20	2.0	09/14/10
Beryllium	7440-41-7	LA-505-412	B	0.288		mg/kg	1	0.10	0.50	09/14/10
Cadmium	7440-43-9	LA-505-412	B	0.207		mg/kg	1	0.10	1.0	09/14/10
Chromium	7440-47-3	LA-505-412		11.6		mg/kg	1	0.50	5.0	09/14/10
Cobalt	7440-48-4	LA-505-412		4.83		mg/kg	1	0.10	0.50	09/14/10
Copper	7440-50-8	LA-505-412		10.9		mg/kg	1	0.10	1.0	09/14/10
Vanadium	7440-62-2	LA-505-412		20.6		mg/kg	1	0.20	2.0	09/14/10
Zinc	7440-66-6	LA-505-412		57.0		mg/kg	1	0.80	5.0	09/14/10
Lead	7439-92-1	LA-505-412		10.5		mg/kg	1	0.10	1.0	09/14/10
Mercury	7439-97-6	LA-505-412	U	<0.050		mg/kg	1	0.050	0.20	09/14/10
Molybdenum	7439-98-7	LA-505-412	B	0.186		mg/kg	1	0.10	1.0	09/14/10
Strontium	7440-24-6	LA-505-412		24.4		mg/kg	1	0.10	1.0	09/14/10
Tin	7440-31-5	LA-505-412	B	0.290		mg/kg	1	0.10	0.50	09/14/10
Uranium	7440-61-1	LA-505-412		0.662		mg/kg	1	0.10	0.50	09/14/10
Arsenic	7440-38-2	LA-505-412	B	3.76		mg/kg	1	0.40	4.0	09/14/10
Selenium	7782-49-2	LA-505-412	B	0.552		mg/kg	1	0.30	3.0	09/14/10

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
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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)

REVISED102464 -

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102464

Sample # 102464012
SAF# F10-256
Sample ID B27MP5

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/09/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<7.7		mg/kg	5	7.7	51	09/09/10
Chloride	16887-00-6	LA-533-410	UD	<11		mg/kg	5	11	100	09/09/10
Nitrite-N	NO2-N	LA-533-410	UD	<4.6		mg/kg	5	4.6	26	09/09/10
Nitrate-N	NO3-N	LA-533-410	UD	<7.9		mg/kg	5	7.9	26	09/09/10
Sulfate	14808-79-8	LA-533-410	UD	<17		mg/kg	5	17	260	09/09/10
Cr(VI) Prep										**10/22/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.10		ug/g	1	0.10	0.51	10/22/10
ICP Prep										**09/13/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		7.33		mg/kg	1	0.41	2.0	09/22/10
Boron	7440-42-8	LA-505-411	UEX	<4.2		mg/kg	1	4.2	21	09/22/10
ICPMS Prep										**09/13/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		234		mg/kg	1	0.10	1.0	09/14/10
Nickel	7440-02-0	LA-505-412		10.8		mg/kg	1	0.20	2.0	09/14/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10

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)

REVISED102464 -

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102464

Sample # 102464012
SAF# F10-256
Sample ID B27MP5

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Antimony	7440-36-0	LA-505-412	U	<0.30		mg/kg	1	0.30	3.0	09/14/10
Barium	7440-39-3	LA-505-412		65.7		mg/kg	1	0.20	2.0	09/14/10
Beryllium	7440-41-7	LA-505-412	B	0.197		mg/kg	1	0.10	0.51	09/14/10
Cadmium	7440-43-9	LA-505-412	B	0.154		mg/kg	1	0.10	1.0	09/14/10
Chromium	7440-47-3	LA-505-412		10.8		mg/kg	1	0.51	5.1	09/14/10
Cobalt	7440-48-4	LA-505-412		5.35		mg/kg	1	0.10	0.51	09/14/10
Copper	7440-50-8	LA-505-412		10.8		mg/kg	1	0.10	1.0	09/14/10
Vanadium	7440-62-2	LA-505-412		23.6		mg/kg	1	0.20	2.0	09/14/10
Zinc	7440-66-6	LA-505-412		42.8		mg/kg	1	0.81	5.1	09/14/10
Lead	7439-92-1	LA-505-412		6.65		mg/kg	1	0.10	1.0	09/14/10
Mercury	7439-97-6	LA-505-412	U	<0.051		mg/kg	1	0.051	0.20	09/14/10
Molybdenum	7439-98-7	LA-505-412	B	0.199		mg/kg	1	0.10	1.0	09/14/10
Strontium	7440-24-6	LA-505-412		28.1		mg/kg	1	0.10	1.0	09/14/10
Tin	7440-31-5	LA-505-412	B	0.255		mg/kg	1	0.10	0.51	09/14/10
Uranium	7440-61-1	LA-505-412	B	0.486		mg/kg	1	0.10	0.51	09/14/10
Arsenic	7440-38-2	LA-505-412	B	3.36		mg/kg	1	0.41	4.1	09/14/10
Selenium	7782-49-2	LA-505-412	B	0.859		mg/kg	1	0.30	3.0	09/14/10

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)

REVISED102464 -

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102473

Sample # 102473001
SAF# F10-256
Sample ID B27MC0

Matrix SOIL
Sampled 09/09/10
Received 09/09/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/10/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<7.8		mg/kg	5	7.8	52	09/10/10
Chloride	16887-00-6	LA-533-410	UD	<11		mg/kg	5	11	100	09/10/10
Nitrite-N	NO2-N	LA-533-410	UD	<4.7		mg/kg	5	4.7	26	09/10/10
Nitrate-N	NO3-N	LA-533-410	UD	<8.0		mg/kg	5	8.0	26	09/10/10
Sulfate	14808-79-8	LA-533-410	UD	<17		mg/kg	5	17	260	09/10/10
Cr(VI) Prep										**09/23/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.10		ug/g	1	0.10	0.51	09/23/10
ICP Prep										**09/13/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		8.24		mg/kg	1	0.41	2.1	09/22/10
Boron	7440-42-8	LA-505-411	UEX	<4.2		mg/kg	1	4.2	21	09/22/10
ICPMS Prep										**09/13/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		376		mg/kg	1	0.10	1.0	09/14/10
Nickel	7440-02-0	LA-505-412		11.9		mg/kg	1	0.20	2.0	09/14/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102473

Sample # 102473001
SAF# F10-256
Sample ID B27MC0

Matrix SOIL
Sampled 09/09/10
Received 09/09/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Antimony	7440-36-0	LA-505-412	U	<0.30		mg/kg	1	0.30	3.0	09/14/10
Barium	7440-39-3	LA-505-412		72.1		mg/kg	1	0.20	2.0	09/14/10
Beryllium	7440-41-7	LA-505-412	B	0.372		mg/kg	1	0.10	0.50	09/14/10
Cadmium	7440-43-9	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10
Chromium	7440-47-3	LA-505-412		8.74		mg/kg	1	0.50	5.0	09/14/10
Cobalt	7440-48-4	LA-505-412		8.43		mg/kg	1	0.10	0.50	09/14/10
Copper	7440-50-8	LA-505-412		17.0		mg/kg	1	0.10	1.0	09/14/10
Vanadium	7440-62-2	LA-505-412		33.3		mg/kg	1	0.20	2.0	09/14/10
Zinc	7440-66-6	LA-505-412		38.5		mg/kg	1	0.80	5.0	09/14/10
Lead	7439-92-1	LA-505-412		6.12		mg/kg	1	0.10	1.0	09/14/10
Mercury	7439-97-6	LA-505-412	U	<0.050		mg/kg	1	0.050	0.20	09/14/10
Molybdenum	7439-98-7	LA-505-412	B	0.206		mg/kg	1	0.10	1.0	09/14/10
Strontium	7440-24-6	LA-505-412		32.0		mg/kg	1	0.10	1.0	09/14/10
Tin	7440-31-5	LA-505-412	B	0.368		mg/kg	1	0.10	0.50	09/14/10
Uranium	7440-61-1	LA-505-412	B	0.447		mg/kg	1	0.10	0.50	09/14/10
Arsenic	7440-38-2	LA-505-412	B	3.58		mg/kg	1	0.40	4.0	09/14/10
Selenium	7782-49-2	LA-505-412	B	1.60		mg/kg	1	0.30	3.0	09/14/10

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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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102473

Sample # 102473002
SAF# F10-256
Sample ID B27MC1

Matrix SOIL
Sampled 09/09/10
Received 09/09/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/10/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<8.1		mg/kg	5	8.1	53	09/10/10
Chloride	16887-00-6	LA-533-410	UD	<11		mg/kg	5	11	110	09/10/10
Nitrite-N	NO2-N	LA-533-410	UD	<4.8		mg/kg	5	4.8	27	09/10/10
Nitrate-N	NO3-N	LA-533-410	BD	13.2		mg/kg	5	8.3	27	09/10/10
Sulfate	14808-79-8	LA-533-410	UD	<18		mg/kg	5	18	270	09/10/10
Cr(VI) Prep										**09/17/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.11		ug/g	1	0.11	0.53	09/17/10
ICP Prep										**09/13/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		6.55		mg/kg	1	0.43	2.1	09/22/10
Boron	7440-42-8	LA-505-411	UEX	<4.4		mg/kg	1	4.4	22	09/22/10
ICPMS Prep										**09/13/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		318		mg/kg	1	0.10	1.0	09/14/10
Nickel	7440-02-0	LA-505-412		9.99		mg/kg	1	0.21	2.1	09/14/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10

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X,Y or Z - See comment detail and/or narrative.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102473

Sample # 102473002
SAF# F10-256
Sample ID B27MC1

Matrix SOIL
Sampled 09/09/10
Received 09/09/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Antimony	7440-36-0	LA-505-412	U	<0.31		mg/kg	1	0.31	3.1	09/14/10
Barium	7440-39-3	LA-505-412		60.9		mg/kg	1	0.21	2.1	09/14/10
Beryllium	7440-41-7	LA-505-412	B	0.341		mg/kg	1	0.10	0.52	09/14/10
Cadmium	7440-43-9	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10
Chromium	7440-47-3	LA-505-412		8.35		mg/kg	1	0.52	5.2	09/14/10
Cobalt	7440-48-4	LA-505-412		7.40		mg/kg	1	0.10	0.52	09/14/10
Copper	7440-50-8	LA-505-412		16.3		mg/kg	1	0.10	1.0	09/14/10
Vanadium	7440-62-2	LA-505-412		28.4		mg/kg	1	0.21	2.1	09/14/10
Zinc	7440-66-6	LA-505-412		37.1		mg/kg	1	0.83	5.2	09/14/10
Lead	7439-92-1	LA-505-412		5.96		mg/kg	1	0.10	1.0	09/14/10
Mercury	7439-97-6	LA-505-412	U	<0.052		mg/kg	1	0.052	0.21	09/14/10
Molybdenum	7439-98-7	LA-505-412	B	0.214		mg/kg	1	0.10	1.0	09/14/10
Strontium	7440-24-6	LA-505-412		32.1		mg/kg	1	0.10	1.0	09/14/10
Tin	7440-31-5	LA-505-412	B	0.283		mg/kg	1	0.10	0.52	09/14/10
Uranium	7440-61-1	LA-505-412	B	0.405		mg/kg	1	0.10	0.52	09/14/10
Arsenic	7440-38-2	LA-505-412	B	3.02		mg/kg	1	0.41	4.1	09/14/10
Selenium	7782-49-2	LA-505-412	B	0.998		mg/kg	1	0.31	3.1	09/14/10

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X,Y or Z - See comment detail and/or narrative.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102473

Sample # 102473003
SAF# F10-256
Sample ID B27M40

Matrix SOIL
Sampled 09/09/10
Received 09/09/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/10/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<7.8		mg/kg	5	7.8	52	09/10/10
Chloride	16887-00-6	LA-533-410	UD	<11		mg/kg	5	11	100	09/10/10
Nitrite-N	NO2-N	LA-533-410	UD	<4.7		mg/kg	5	4.7	26	09/10/10
Nitrate-N	NO3-N	LA-533-410	UD	<8.0		mg/kg	5	8.0	26	09/10/10
Sulfate	14808-79-8	LA-533-410	UD	<17		mg/kg	5	17	260	09/10/10
Cr(VI) Prep										**09/17/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.52	09/17/10
ICP Prep										**09/13/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		6.84		mg/kg	1	0.41	2.1	09/22/10
Boron	7440-42-8	LA-505-411	UEX	<4.2		mg/kg	1	4.2	21	09/22/10
ICPMS Prep										**09/13/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412	N	311	J+	mg/kg	1	0.10	1.0	09/14/10
Nickel	7440-02-0	LA-505-412		9.62		mg/kg	1	0.21	2.1	09/14/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10

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WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102473

Sample # 102473003
SAF# F10-256
Sample ID B27M40

Matrix SOIL
Sampled 09/09/10
Received 09/09/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Antimony	7440-36-0	LA-505-412	U	<0.31		mg/kg	1	0.31	3.1	09/14/10
Barium	7440-39-3	LA-505-412		64.2		mg/kg	1	0.21	2.1	09/14/10
Beryllium	7440-41-7	LA-505-412	B	0.299		mg/kg	1	0.10	0.52	09/14/10
Cadmium	7440-43-9	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10
Chromium	7440-47-3	LA-505-412		7.37		mg/kg	1	0.52	5.2	09/14/10
Cobalt	7440-48-4	LA-505-412		7.44		mg/kg	1	0.10	0.52	09/14/10
Copper	7440-50-8	LA-505-412		15.6		mg/kg	1	0.10	1.0	09/14/10
Vanadium	7440-62-2	LA-505-412		29.7		mg/kg	1	0.21	2.1	09/14/10
Zinc	7440-66-6	LA-505-412		35.4		mg/kg	1	0.83	5.2	09/14/10
Lead	7439-92-1	LA-505-412		5.21		mg/kg	1	0.10	1.0	09/14/10
Mercury	7439-97-6	LA-505-412	U	<0.052		mg/kg	1	0.052	0.21	09/14/10
Molybdenum	7439-98-7	LA-505-412	B	0.240		mg/kg	1	0.10	1.0	09/14/10
Strontium	7440-24-6	LA-505-412		29.6		mg/kg	1	0.10	1.0	09/14/10
Tin	7440-31-5	LA-505-412	B	0.367		mg/kg	1	0.10	0.52	09/14/10
Uranium	7440-61-1	LA-505-412	B	0.414		mg/kg	1	0.10	0.52	09/14/10
Arsenic	7440-38-2	LA-505-412	B	3.39		mg/kg	1	0.41	4.1	09/14/10
Selenium	7782-49-2	LA-505-412	B	1.40		mg/kg	1	0.31	3.1	09/14/10

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X,Y or Z - See comment detail and/or narrative.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102473

Sample # 102473004
SAF# F10-256
Sample ID B27M41

Matrix SOIL
Sampled 09/09/10
Received 09/09/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/10/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<8.6		mg/kg	5	8.6	57	09/10/10
Chloride	16887-00-6	LA-533-410	UD	<12		mg/kg	5	12	110	09/10/10
Nitrite-N	NO2-N	LA-533-410	UD	<5.2		mg/kg	5	5.2	28	09/10/10
Nitrate-N	NO3-N	LA-533-410	D	73.6		mg/kg	5	8.8	28	09/10/10
Sulfate	14808-79-8	LA-533-410	UD	<19		mg/kg	5	19	280	09/10/10
Cr(VI) Prep										**09/17/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.11		ug/g	1	0.11	0.57	09/17/10
ICP Prep										**09/13/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		6.35		mg/kg	1	0.45	2.3	09/22/10
Boron	7440-42-8	LA-505-411	UEX	<4.7		mg/kg	1	4.7	23	09/22/10
ICPMS Prep										**09/13/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412	N	286	J+	mg/kg	1	0.11	1.1	09/14/10
Nickel	7440-02-0	LA-505-412		11.0		mg/kg	1	0.23	2.3	09/14/10
Silver	7440-22-4	LA-505-412	U	<0.11		mg/kg	1	0.11	1.1	09/14/10

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WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102473

Sample # 102473004
SAF# F10-256
Sample ID B27M41

Matrix SOIL
Sampled 09/09/10
Received 09/09/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Antimony	7440-36-0	LA-505-412	U	<0.34		mg/kg	1	0.34	3.4	09/14/10
Barium	7440-39-3	LA-505-412		59.4		mg/kg	1	0.23	2.3	09/14/10
Beryllium	7440-41-7	LA-505-412	B	0.277		mg/kg	1	0.11	0.57	09/14/10
Cadmium	7440-43-9	LA-505-412	B	0.165		mg/kg	1	0.11	1.1	09/14/10
Chromium	7440-47-3	LA-505-412		11.4		mg/kg	1	0.57	5.7	09/14/10
Cobalt	7440-48-4	LA-505-412		6.91		mg/kg	1	0.11	0.57	09/14/10
Copper	7440-50-8	LA-505-412		18.7		mg/kg	1	0.11	1.1	09/14/10
Vanadium	7440-62-2	LA-505-412		30.1		mg/kg	1	0.23	2.3	09/14/10
Zinc	7440-66-6	LA-505-412		45.1		mg/kg	1	0.91	5.7	09/14/10
Lead	7439-92-1	LA-505-412		9.18		mg/kg	1	0.11	1.1	09/14/10
Mercury	7439-97-6	LA-505-412	U	<0.057		mg/kg	1	0.057	0.23	09/14/10
Molybdenum	7439-98-7	LA-505-412	B	0.313		mg/kg	1	0.11	1.1	09/14/10
Strontium	7440-24-6	LA-505-412		28.2		mg/kg	1	0.11	1.1	09/14/10
Tin	7440-31-5	LA-505-412	B	0.386		mg/kg	1	0.11	0.57	09/14/10
Uranium	7440-61-1	LA-505-412	B	0.382		mg/kg	1	0.11	0.57	09/14/10
Arsenic	7440-38-2	LA-505-412	B	2.66		mg/kg	1	0.45	4.5	09/14/10
Selenium	7782-49-2	LA-505-412	B	1.48		mg/kg	1	0.34	3.4	09/14/10

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X,Y or Z - See comment detail and/or narrative.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102473

Sample # 102473005
SAF# F10-256
Sample ID B27MP6

Matrix SOIL
Sampled 09/09/10
Received 09/09/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/10/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<7.8		mg/kg	5	7.8	52	09/10/10
Chloride	16887-00-6	LA-533-410	UD	<11		mg/kg	5	11	100	09/10/10
Nitrite-N	NO2-N	LA-533-410	UD	<4.7		mg/kg	5	4.7	26	09/10/10
Nitrate-N	NO3-N	LA-533-410	UD	<8.0		mg/kg	5	8.0	26	09/10/10
Sulfate	14808-79-8	LA-533-410	BD	28.6		mg/kg	5	17	260	09/10/10
Cr(VI) Prep										**09/17/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.52	09/17/10
ICP Prep										**09/13/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		9.83		mg/kg	1	0.41	2.1	09/22/10
Boron	7440-42-8	LA-505-411	UEX	<4.2		mg/kg	1	4.2	21	09/22/10
ICPMS Prep										**09/13/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412	N	301	J+	mg/kg	1	0.10	1.0	09/14/10
Nickel	7440-02-0	LA-505-412		16.8		mg/kg	1	0.21	2.1	09/14/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102473

Sample # 102473005
SAF# F10-256
Sample ID B27MP6

Matrix SOIL
Sampled 09/09/10
Received 09/09/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Antimony	7440-36-0	LA-505-412	U	<0.31		mg/kg	1	0.31	3.1	09/14/10
Barium	7440-39-3	LA-505-412		99.1		mg/kg	1	0.21	2.1	09/14/10
Beryllium	7440-41-7	LA-505-412	B	0.348		mg/kg	1	0.10	0.52	09/14/10
Cadmium	7440-43-9	LA-505-412	B	0.188		mg/kg	1	0.10	1.0	09/14/10
Chromium	7440-47-3	LA-505-412		16.0		mg/kg	1	0.52	5.2	09/14/10
Cobalt	7440-48-4	LA-505-412		7.12		mg/kg	1	0.10	0.52	09/14/10
Copper	7440-50-8	LA-505-412		15.4		mg/kg	1	0.10	1.0	09/14/10
Vanadium	7440-62-2	LA-505-412		31.2		mg/kg	1	0.21	2.1	09/14/10
Zinc	7440-66-6	LA-505-412		45.8		mg/kg	1	0.83	5.2	09/14/10
Lead	7439-92-1	LA-505-412		7.29		mg/kg	1	0.10	1.0	09/14/10
Mercury	7439-97-6	LA-505-412	U	<0.052		mg/kg	1	0.052	0.21	09/14/10
Molybdenum	7439-98-7	LA-505-412	B	0.193		mg/kg	1	0.10	1.0	09/14/10
Strontium	7440-24-6	LA-505-412		53.5		mg/kg	1	0.10	1.0	09/14/10
Tin	7440-31-5	LA-505-412	B	0.322		mg/kg	1	0.10	0.52	09/14/10
Uranium	7440-61-1	LA-505-412		1.55		mg/kg	1	0.10	0.52	09/14/10
Arsenic	7440-38-2	LA-505-412		4.59		mg/kg	1	0.41	4.1	09/14/10
Selenium	7782-49-2	LA-505-412	B	0.963		mg/kg	1	0.31	3.1	09/14/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102473

Sample # 102473006
SAF# F10-256
Sample ID B27MP7

Matrix SOIL
Sampled 09/09/10
Received 09/09/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/10/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<7.9		mg/kg	5	7.9	52	09/10/10
Chloride	16887-00-6	LA-533-410	UD	<11		mg/kg	5	11	100	09/10/10
Nitrite-N	NO2-N	LA-533-410	UD	<4.7		mg/kg	5	4.7	26	09/10/10
Nitrate-N	NO3-N	LA-533-410	BD	24.2		mg/kg	5	8.1	26	09/10/10
Sulfate	14808-79-8	LA-533-410	BD	32.7		mg/kg	5	17	260	09/10/10
Cr(VI) Prep										**09/17/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.52	09/17/10
ICP Prep										**09/13/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		9.94		mg/kg	1	0.42	2.1	09/22/10
Boron	7440-42-8	LA-505-411	UEX	<4.3		mg/kg	1	4.3	21	09/22/10
ICPMS Prep										**09/13/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412	N	308	J+	mg/kg	1	0.10	1.0	09/14/10
Nickel	7440-02-0	LA-505-412		15.8		mg/kg	1	0.21	2.1	09/14/10
Silver	7440-22-4	LA-505-412	B	0.146		mg/kg	1	0.10	1.0	09/14/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102473

Sample # 102473006
SAF# F10-256
Sample ID B27MP7

Matrix SOIL
Sampled 09/09/10
Received 09/09/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Antimony	7440-36-0	LA-505-412	U	<0.31		mg/kg	1	0.31	3.1	09/14/10
Barium	7440-39-3	LA-505-412		97.6		mg/kg	1	0.21	2.1	09/14/10
Beryllium	7440-41-7	LA-505-412	B	0.317		mg/kg	1	0.10	0.51	09/14/10
Cadmium	7440-43-9	LA-505-412	B	0.182		mg/kg	1	0.10	1.0	09/14/10
Chromium	7440-47-3	LA-505-412		14.0		mg/kg	1	0.51	5.1	09/14/10
Cobalt	7440-48-4	LA-505-412		7.07		mg/kg	1	0.10	0.51	09/14/10
Copper	7440-50-8	LA-505-412		16.7		mg/kg	1	0.10	1.0	09/14/10
Vanadium	7440-62-2	LA-505-412		26.8		mg/kg	1	0.21	2.1	09/14/10
Zinc	7440-66-6	LA-505-412		50.5		mg/kg	1	0.82	5.1	09/14/10
Lead	7439-92-1	LA-505-412		7.43		mg/kg	1	0.10	1.0	09/14/10
Mercury	7439-97-6	LA-505-412	U	<0.051		mg/kg	1	0.051	0.21	09/14/10
Molybdenum	7439-98-7	LA-505-412	B	0.244		mg/kg	1	0.10	1.0	09/14/10
Strontium	7440-24-6	LA-505-412		102		mg/kg	1	0.10	1.0	09/14/10
Tin	7440-31-5	LA-505-412	B	0.311		mg/kg	1	0.10	0.51	09/14/10
Uranium	7440-61-1	LA-505-412		0.599		mg/kg	1	0.10	0.51	09/14/10
Arsenic	7440-38-2	LA-505-412		4.48		mg/kg	1	0.41	4.1	09/14/10
Selenium	7782-49-2	LA-505-412	B	0.650		mg/kg	1	0.31	3.1	09/14/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102473

Sample # 102473007
SAF# F10-256
Sample ID B27MK3

Matrix SOIL
Sampled 09/09/10
Received 09/09/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/10/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<7.9		mg/kg	5	7.9	53	09/10/10
Chloride	16887-00-6	LA-533-410	UD	<11		mg/kg	5	11	110	09/10/10
Nitrite-N	NO2-N	LA-533-410	UD	<4.8		mg/kg	5	4.8	26	09/10/10
Nitrate-N	NO3-N	LA-533-410	UD	<8.1		mg/kg	5	8.1	26	09/10/10
Sulfate	14808-79-8	LA-533-410	UD	<17		mg/kg	5	17	260	09/10/10
Cr(VI) Prep										**09/17/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.11		ug/g	1	0.11	0.53	09/17/10
ICP Prep										**09/13/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		6.54		mg/kg	1	0.42	2.1	09/22/10
Boron	7440-42-8	LA-505-411	UEX	<4.3		mg/kg	1	4.3	22	09/22/10
ICPMS Prep										**09/13/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412	N	332	J+	mg/kg	1	0.10	1.0	09/14/10
Nickel	7440-02-0	LA-505-412		10.1		mg/kg	1	0.21	2.1	09/14/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10

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. (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.

MJ
12/12/11

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102473

Sample # 102473007
SAF# F10-256
Sample ID B27MK3

Matrix SOIL
Sampled 09/09/10
Received 09/09/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Antimony	7440-36-0	LA-505-412	U	<0.31		mg/kg	1	0.31	3.1	09/14/10
Barium	7440-39-3	LA-505-412		65.1		mg/kg	1	0.21	2.1	09/14/10
Beryllium	7440-41-7	LA-505-412	B	0.325		mg/kg	1	0.10	0.52	09/14/10
Cadmium	7440-43-9	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10
Chromium	7440-47-3	LA-505-412		8.28		mg/kg	1	0.52	5.2	09/14/10
Cobalt	7440-48-4	LA-505-412		7.76		mg/kg	1	0.10	0.52	09/14/10
Copper	7440-50-8	LA-505-412		18.6		mg/kg	1	0.10	1.0	09/14/10
Vanadium	7440-62-2	LA-505-412		27.6		mg/kg	1	0.21	2.1	09/14/10
Zinc	7440-66-6	LA-505-412		36.3		mg/kg	1	0.83	5.2	09/14/10
Lead	7439-92-1	LA-505-412		5.80		mg/kg	1	0.10	1.0	09/14/10
Mercury	7439-97-6	LA-505-412	U	<0.052		mg/kg	1	0.052	0.21	09/14/10
Molybdenum	7439-98-7	LA-505-412	B	0.193		mg/kg	1	0.10	1.0	09/14/10
Strontium	7440-24-6	LA-505-412		29.0		mg/kg	1	0.10	1.0	09/14/10
Tin	7440-31-5	LA-505-412	B	0.322		mg/kg	1	0.10	0.52	09/14/10
Uranium	7440-61-1	LA-505-412	B	0.418		mg/kg	1	0.10	0.52	09/14/10
Arsenic	7440-38-2	LA-505-412	B	3.51		mg/kg	1	0.41	4.1	09/14/10
Selenium	7782-49-2	LA-505-412	B	1.31		mg/kg	1	0.31	3.1	09/14/10

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. (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.

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X,Y or Z - See comment detail and/or narrative.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102473

Sample # 102473008
SAF# F10-256
Sample ID B27MK4

Matrix SOIL
Sampled 09/09/10
Received 09/09/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/10/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<7.9		mg/kg	5	7.9	52	09/10/10
Chloride	16887-00-6	LA-533-410	UD	<11		mg/kg	5	11	100	09/10/10
Nitrite-N	NO2-N	LA-533-410	UD	<4.8		mg/kg	5	4.8	26	09/10/10
Nitrate-N	NO3-N	LA-533-410	UD	<8.1		mg/kg	5	8.1	26	09/10/10
Sulfate	14808-79-8	LA-533-410	UD	<17		mg/kg	5	17	260	09/10/10
Cr(VI) Prep										**09/17/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.11		ug/g	1	0.11	0.53	09/17/10
ICP Prep										**09/13/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		7.16		mg/kg	1	0.42	2.1	09/22/10
Boron	7440-42-8	LA-505-411	UEX	<4.3		mg/kg	1	4.3	22	09/22/10
ICPMS Prep										**09/13/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412	N	324 J+		mg/kg	1	0.10	1.0	09/14/10
Nickel	7440-02-0	LA-505-412		9.65		mg/kg	1	0.20	2.0	09/14/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10

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. (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.

MJ
12/12/11

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102473

Sample # 102473008
SAF# F10-256
Sample ID B27MK4

Matrix SOIL
Sampled 09/09/10
Received 09/09/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Antimony	7440-36-0	LA-505-412	U	<0.31		mg/kg	1	0.31	3.1	09/14/10
Barium	7440-39-3	LA-505-412		62.3		mg/kg	1	0.20	2.0	09/14/10
Beryllium	7440-41-7	LA-505-412	B	0.307		mg/kg	1	0.10	0.51	09/14/10
Cadmium	7440-43-9	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10
Chromium	7440-47-3	LA-505-412		8.22		mg/kg	1	0.51	5.1	09/14/10
Cobalt	7440-48-4	LA-505-412		7.35		mg/kg	1	0.10	0.51	09/14/10
Copper	7440-50-8	LA-505-412		14.8		mg/kg	1	0.10	1.0	09/14/10
Vanadium	7440-62-2	LA-505-412		29.2		mg/kg	1	0.20	2.0	09/14/10
Zinc	7440-66-6	LA-505-412		34.5		mg/kg	1	0.82	5.1	09/14/10
Lead	7439-92-1	LA-505-412		5.20		mg/kg	1	0.10	1.0	09/14/10
Mercury	7439-97-6	LA-505-412	U	<0.051		mg/kg	1	0.051	0.20	09/14/10
Molybdenum	7439-98-7	LA-505-412	B	0.207		mg/kg	1	0.10	1.0	09/14/10
Strontium	7440-24-6	LA-505-412		31.8		mg/kg	1	0.10	1.0	09/14/10
Tin	7440-31-5	LA-505-412	B	0.319		mg/kg	1	0.10	0.51	09/14/10
Uranium	7440-61-1	LA-505-412		0.568		mg/kg	1	0.10	0.51	09/14/10
Arsenic	7440-38-2	LA-505-412	B	3.01		mg/kg	1	0.41	4.1	09/14/10
Selenium	7782-49-2	LA-505-412	B	0.744		mg/kg	1	0.31	3.1	09/14/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102515

Sample # 102515001
SAF# F10-256
Sample ID B27MK8

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/14/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	U	<1.6		mg/kg	1	1.6	11	09/14/10
Chloride	16887-00-6	LA-533-410	B	6.30		mg/kg	1	2.3	21	09/14/10
Nitrite-N	NO2-N	LA-533-410	U	<0.95		mg/kg	1	0.95	5.3	09/14/10
Nitrate-N	NO3-N	LA-533-410	U	<1.6		mg/kg	1	1.6	5.3	09/14/10
Sulfate	14808-79-8	LA-533-410	B	11.8		mg/kg	1	3.4	53	09/14/10
Cr(VI) Prep										**09/24/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	BN	0.121		ug/g	1	0.10	0.52	09/24/10
ICP Prep										**09/20/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		6.61	J-	mg/kg	1	0.42	2.1	09/23/10
Boron	7440-42-8	LA-505-411	BEX	19.6		mg/kg	1	4.3	22	09/23/10
ICPMS Prep										**09/15/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		366		mg/kg	1	0.10	1.0	09/16/10
Nickel	7440-02-0	LA-505-412		9.62		mg/kg	1	0.21	2.1	09/16/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/16/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102515

Sample # 102515001
SAF# F10-256
Sample ID B27MK8

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Antimony	7440-36-0	LA-505-412	U	<0.31		mg/kg	1	0.31	3.1	09/16/10
Barium	7440-39-3	LA-505-412		71.3		mg/kg	1	0.21	2.1	09/16/10
Beryllium	7440-41-7	LA-505-412	B	0.457		mg/kg	1	0.10	0.52	09/16/10
Cadmium	7440-43-9	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/16/10
Chromium	7440-47-3	LA-505-412		7.47		mg/kg	1	0.52	5.2	09/16/10
Cobalt	7440-48-4	LA-505-412		8.89		mg/kg	1	0.10	0.52	09/16/10
Copper	7440-50-8	LA-505-412		16.7		mg/kg	1	0.10	1.0	09/16/10
Vanadium	7440-62-2	LA-505-412		38.5		mg/kg	1	0.21	2.1	09/16/10
Zinc	7440-66-6	LA-505-412		39.9		mg/kg	1	0.83	5.2	09/16/10
Lead	7439-92-1	LA-505-412		7.50		mg/kg	1	0.10	1.0	09/16/10
Mercury	7439-97-6	LA-505-412	U	<0.052		mg/kg	1	0.052	0.21	09/16/10
Molybdenum	7439-98-7	LA-505-412	BC	0.286	1.0U	mg/kg	1	0.10	1.0	09/16/10
Strontium	7440-24-6	LA-505-412		33.1		mg/kg	1	0.10	1.0	09/16/10
Tin	7440-31-5	LA-505-412	B	0.405		mg/kg	1	0.10	0.52	09/16/10
Uranium	7440-61-1	LA-505-412		0.553		mg/kg	1	0.10	0.52	09/16/10
Arsenic	7440-38-2	LA-505-412	B	3.97		mg/kg	1	0.42	4.2	09/16/10
Selenium	7782-49-2	LA-505-412	B	1.64		mg/kg	1	0.31	3.1	09/16/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102515

Sample # 102515002
SAF# F10-256
Sample ID B27MC5

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/14/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	U	<1.5		mg/kg	1	1.5	10	09/14/10
Chloride	16887-00-6	LA-533-410	B	4.57		mg/kg	1	2.2	21	09/14/10
Nitrite-N	NO2-N	LA-533-410	U	<0.93		mg/kg	1	0.93	5.1	09/14/10
Nitrate-N	NO3-N	LA-533-410	U	<1.6		mg/kg	1	1.6	5.1	09/14/10
Sulfate	14808-79-8	LA-533-410	B	10.2		mg/kg	1	3.4	51	09/14/10
Cr(VI) Prep										**09/24/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.10		ug/g	1	0.10	0.51	09/24/10
ICP Prep										**09/20/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		7.34	J-	mg/kg	1	0.41	2.0	09/23/10
Boron	7440-42-8	LA-505-411	BEX	19.4		mg/kg	1	4.2	21	09/23/10
ICPMS Prep										**09/15/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		414		mg/kg	1	0.10	1.0	09/16/10
Nickel	7440-02-0	LA-505-412		10.6		mg/kg	1	0.20	2.0	09/16/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/16/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102515

Sample # 102515002
SAF# F10-256
Sample ID B27MC5

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Antimony	7440-36-0	LA-505-412	U	<0.31		mg/kg	1	0.31	3.1	09/16/10
Barium	7440-39-3	LA-505-412		80.5		mg/kg	1	0.20	2.0	09/16/10
Beryllium	7440-41-7	LA-505-412	B	0.489		mg/kg	1	0.10	0.51	09/16/10
Cadmium	7440-43-9	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/16/10
Chromium	7440-47-3	LA-505-412		9.87		mg/kg	1	0.51	5.1	09/16/10
Cobalt	7440-48-4	LA-505-412		9.08		mg/kg	1	0.10	0.51	09/16/10
Copper	7440-50-8	LA-505-412		16.3		mg/kg	1	0.10	1.0	09/16/10
Vanadium	7440-62-2	LA-505-412		37.9		mg/kg	1	0.20	2.0	09/16/10
Zinc	7440-66-6	LA-505-412		41.9		mg/kg	1	0.82	5.1	09/16/10
Lead	7439-92-1	LA-505-412		6.52		mg/kg	1	0.10	1.0	09/16/10
Mercury	7439-97-6	LA-505-412	U	<0.051		mg/kg	1	0.051	0.20	09/16/10
Molybdenum	7439-98-7	LA-505-412	BC	0.378	1.0U	mg/kg	1	0.10	1.0	09/16/10
Strontium	7440-24-6	LA-505-412		30.5		mg/kg	1	0.10	1.0	09/16/10
Tin	7440-31-5	LA-505-412	B	0.486		mg/kg	1	0.10	0.51	09/16/10
Uranium	7440-61-1	LA-505-412	B	0.496		mg/kg	1	0.10	0.51	09/16/10
Arsenic	7440-38-2	LA-505-412	B	3.07		mg/kg	1	0.41	4.1	09/16/10
Selenium	7782-49-2	LA-505-412	B	1.62		mg/kg	1	0.31	3.1	09/16/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102515

Sample # 102515003
SAF# F10-256
Sample ID B27M45

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/14/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	U	<1.6		mg/kg	1	1.6	10	09/14/10
Chloride	16887-00-6	LA-533-410	B	2.49		mg/kg	1	2.2	21	09/14/10
Nitrite-N	NO2-N	LA-533-410	U	<0.93		mg/kg	1	0.93	5.1	09/14/10
Nitrate-N	NO3-N	LA-533-410	B	2.84		mg/kg	1	1.6	5.1	09/14/10
Sulfate	14808-79-8	LA-533-410	B	4.26		mg/kg	1	3.4	51	09/14/10
Cr(VI) Prep										**09/24/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.099		ug/g	1	0.099	0.50	09/24/10
ICP Prep										**09/20/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		6.91	J-	mg/kg	1	0.41	2.0	09/23/10
Boron	7440-42-8	LA-505-411	BEX	19.4		mg/kg	1	4.2	21	09/23/10
ICPMS Prep										**09/15/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		381		mg/kg	1	0.10	1.0	09/16/10
Nickel	7440-02-0	LA-505-412		10.3		mg/kg	1	0.20	2.0	09/16/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/16/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102515

Sample # 102515003
SAF# F10-256
Sample ID B27M45

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Antimony	7440-36-0	LA-505-412	U	<0.31		mg/kg	1	0.31	3.1	09/16/10
Barium	7440-39-3	LA-505-412		90.4		mg/kg	1	0.20	2.0	09/16/10
Beryllium	7440-41-7	LA-505-412	B	0.385		mg/kg	1	0.10	0.51	09/16/10
Cadmium	7440-43-9	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/16/10
Chromium	7440-47-3	LA-505-412		9.19		mg/kg	1	0.51	5.1	09/16/10
Cobalt	7440-48-4	LA-505-412		8.94		mg/kg	1	0.10	0.51	09/16/10
Copper	7440-50-8	LA-505-412		17.3		mg/kg	1	0.10	1.0	09/16/10
Vanadium	7440-62-2	LA-505-412		40.3		mg/kg	1	0.20	2.0	09/16/10
Zinc	7440-66-6	LA-505-412		41.8		mg/kg	1	0.81	5.1	09/16/10
Lead	7439-92-1	LA-505-412		6.53		mg/kg	1	0.10	1.0	09/16/10
Mercury	7439-97-6	LA-505-412	U	<0.051		mg/kg	1	0.051	0.20	09/16/10
Molybdenum	7439-98-7	LA-505-412	BC	0.293	1.0U	mg/kg	1	0.10	1.0	09/16/10
Strontium	7440-24-6	LA-505-412		31.4		mg/kg	1	0.10	1.0	09/16/10
Tin	7440-31-5	LA-505-412	B	0.462		mg/kg	1	0.10	0.51	09/16/10
Uranium	7440-61-1	LA-505-412	B	0.453		mg/kg	1	0.10	0.51	09/16/10
Arsenic	7440-38-2	LA-505-412	B	3.64		mg/kg	1	0.41	4.1	09/16/10
Selenium	7782-49-2	LA-505-412	B	1.76		mg/kg	1	0.31	3.1	09/16/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102515

Sample # 102515004
SAF# F10-256
Sample ID B27MR0

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/14/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	U	<1.6		mg/kg	1	1.6	10	09/14/10
Chloride	16887-00-6	LA-533-410	B	7.08		mg/kg	1	2.2	21	09/14/10
Nitrite-N	NO2-N	LA-533-410	U	<0.93		mg/kg	1	0.93	5.1	09/14/10
Nitrate-N	NO3-N	LA-533-410	U	<1.6		mg/kg	1	1.6	5.1	09/14/10
Sulfate	14808-79-8	LA-533-410	B	6.75		mg/kg	1	3.4	51	09/14/10
Cr(VI) Prep										**09/24/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	BN	0.133		ug/g	1	0.10	0.52	09/24/10
ICP Prep										**09/20/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		10.6	J-	mg/kg	1	0.41	2.1	09/23/10
Boron	7440-42-8	LA-505-411	BEX	13.8		mg/kg	1	4.2	21	09/23/10
ICPMS Prep										**09/15/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		308		mg/kg	1	0.10	1.0	09/16/10
Nickel	7440-02-0	LA-505-412		16.1		mg/kg	1	0.20	2.0	09/16/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/16/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102515

Sample # 102515004
SAF# F10-256
Sample ID B27MR0

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Antimony	7440-36-0	LA-505-412	U	<0.30		mg/kg	1	0.30	3.0	09/16/10
Barium	7440-39-3	LA-505-412		75.7		mg/kg	1	0.20	2.0	09/16/10
Beryllium	7440-41-7	LA-505-412	B	0.316		mg/kg	1	0.10	0.50	09/16/10
Cadmium	7440-43-9	LA-505-412	B	0.202		mg/kg	1	0.10	1.0	09/16/10
Chromium	7440-47-3	LA-505-412		17.9		mg/kg	1	0.50	5.0	09/16/10
Cobalt	7440-48-4	LA-505-412		6.68		mg/kg	1	0.10	0.50	09/16/10
Copper	7440-50-8	LA-505-412		14.7		mg/kg	1	0.10	1.0	09/16/10
Vanadium	7440-62-2	LA-505-412		29.7		mg/kg	1	0.20	2.0	09/16/10
Zinc	7440-66-6	LA-505-412		65.8		mg/kg	1	0.81	5.0	09/16/10
Lead	7439-92-1	LA-505-412		10.2		mg/kg	1	0.10	1.0	09/16/10
Mercury	7439-97-6	LA-505-412	U	<0.050		mg/kg	1	0.050	0.20	09/16/10
Molybdenum	7439-98-7	LA-505-412	BC	0.310	1.0U	mg/kg	1	0.10	1.0	09/16/10
Strontium	7440-24-6	LA-505-412		39.5		mg/kg	1	0.10	1.0	09/16/10
Tin	7440-31-5	LA-505-412	B	0.325		mg/kg	1	0.10	0.50	09/16/10
Uranium	7440-61-1	LA-505-412		1.00		mg/kg	1	0.10	0.50	09/16/10
Arsenic	7440-38-2	LA-505-412	B	3.76		mg/kg	1	0.40	4.0	09/16/10
Selenium	7782-49-2	LA-505-412	B	1.00		mg/kg	1	0.30	3.0	09/16/10

MDL = Minimum Detection
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TP Err = Total Propagated
DF = Dilution Factor
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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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102515

Sample # 102515005
SAF# F10-256
Sample ID B27MK7

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/14/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	U	<1.5		mg/kg	1	1.5	10	09/14/10
Chloride	16887-00-6	LA-533-410	B	7.46		mg/kg	1	2.2	21	09/14/10
Nitrite-N	NO2-N	LA-533-410	U	<0.93		mg/kg	1	0.93	5.1	09/14/10
Nitrate-N	NO3-N	LA-533-410	U	<1.6		mg/kg	1	1.6	5.1	09/14/10
Sulfate	14808-79-8	LA-533-410	B	6.66		mg/kg	1	3.4	51	09/14/10
Cr(VI) Prep										**09/24/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	BN	0.132		ug/g	1	0.10	0.51	09/24/10
ICP Prep										**09/20/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		6.77	J-	mg/kg	1	0.41	2.1	09/23/10
Boron	7440-42-8	LA-505-411	BEX	16.9		mg/kg	1	4.2	21	09/23/10
ICPMS Prep										**09/15/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		306		mg/kg	1	0.10	1.0	09/16/10
Nickel	7440-02-0	LA-505-412		10.1		mg/kg	1	0.20	2.0	09/16/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/16/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102515

Sample # 102515005
SAF# F10-256
Sample ID B27MK7

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Antimony	7440-36-0	LA-505-412	U	<0.30		mg/kg	1	0.30	3.0	09/16/10
Barium	7440-39-3	LA-505-412		62.8		mg/kg	1	0.20	2.0	09/16/10
Beryllium	7440-41-7	LA-505-412	B	0.125		mg/kg	1	0.10	0.51	09/16/10
Cadmium	7440-43-9	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/16/10
Chromium	7440-47-3	LA-505-412		8.95		mg/kg	1	0.51	5.1	09/16/10
Cobalt	7440-48-4	LA-505-412		7.23		mg/kg	1	0.10	0.51	09/16/10
Copper	7440-50-8	LA-505-412		14.9		mg/kg	1	0.10	1.0	09/16/10
Vanadium	7440-62-2	LA-505-412		30.0		mg/kg	1	0.20	2.0	09/16/10
Zinc	7440-66-6	LA-505-412		35.4		mg/kg	1	0.81	5.1	09/16/10
Lead	7439-92-1	LA-505-412		4.90		mg/kg	1	0.10	1.0	09/16/10
Mercury	7439-97-6	LA-505-412	U	<0.051		mg/kg	1	0.051	0.20	09/16/10
Molybdenum	7439-98-7	LA-505-412	BC	0.274	1.0U	mg/kg	1	0.10	1.0	09/16/10
Strontium	7440-24-6	LA-505-412		30.4		mg/kg	1	0.10	1.0	09/16/10
Tin	7440-31-5	LA-505-412	B	0.316		mg/kg	1	0.10	0.51	09/16/10
Uranium	7440-61-1	LA-505-412	B	0.398		mg/kg	1	0.10	0.51	09/16/10
Arsenic	7440-38-2	LA-505-412	B	2.86		mg/kg	1	0.41	4.1	09/16/10
Selenium	7782-49-2	LA-505-412	B	2.03		mg/kg	1	0.30	3.0	09/16/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102515

Sample # 102515006
SAF# F10-256
Sample ID B27MC4

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/14/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	U	<1.5		mg/kg	1	1.5	10	09/14/10
Chloride	16887-00-6	LA-533-410	B	6.85		mg/kg	1	2.2	21	09/14/10
Nitrite-N	NO2-N	LA-533-410	U	<0.93		mg/kg	1	0.93	5.1	09/14/10
Nitrate-N	NO3-N	LA-533-410	B	2.46		mg/kg	1	1.6	5.1	09/14/10
Sulfate	14808-79-8	LA-533-410	B	7.98		mg/kg	1	3.4	51	09/14/10
Cr(VI) Prep										**09/24/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	BN	0.133		ug/g	1	0.10	0.51	09/24/10
ICP Prep										**09/20/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		6.88	J-	mg/kg	1	0.41	2.1	09/23/10
Boron	7440-42-8	LA-505-411	BEX	16.1		mg/kg	1	4.2	21	09/23/10
ICPMS Prep										**09/15/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		304		mg/kg	1	0.10	1.0	09/16/10
Nickel	7440-02-0	LA-505-412		10.3		mg/kg	1	0.20	2.0	09/16/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/16/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102515

Sample # 102515006
SAF# F10-256
Sample ID B27MC4

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Antimony	7440-36-0	LA-505-412	U	<0.30		mg/kg	1	0.30	3.0	09/16/10
Barium	7440-39-3	LA-505-412		59.9		mg/kg	1	0.20	2.0	09/16/10
Beryllium	7440-41-7	LA-505-412	B	0.289		mg/kg	1	0.10	0.50	09/16/10
Cadmium	7440-43-9	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/16/10
Chromium	7440-47-3	LA-505-412		8.65		mg/kg	1	0.50	5.0	09/16/10
Cobalt	7440-48-4	LA-505-412		7.36		mg/kg	1	0.10	0.50	09/16/10
Copper	7440-50-8	LA-505-412		15.1		mg/kg	1	0.10	1.0	09/16/10
Vanadium	7440-62-2	LA-505-412		32.6		mg/kg	1	0.20	2.0	09/16/10
Zinc	7440-66-6	LA-505-412		36.7		mg/kg	1	0.80	5.0	09/16/10
Lead	7439-92-1	LA-505-412		4.90		mg/kg	1	0.10	1.0	09/16/10
Mercury	7439-97-6	LA-505-412	U	<0.050		mg/kg	1	0.050	0.20	09/16/10
Molybdenum	7439-98-7	LA-505-412	BC	0.237	1.0U	mg/kg	1	0.10	1.0	09/16/10
Strontium	7440-24-6	LA-505-412		31.7		mg/kg	1	0.10	1.0	09/16/10
Tin	7440-31-5	LA-505-412	B	0.319		mg/kg	1	0.10	0.50	09/16/10
Uranium	7440-61-1	LA-505-412	B	0.399		mg/kg	1	0.10	0.50	09/16/10
Arsenic	7440-38-2	LA-505-412	B	2.74		mg/kg	1	0.40	4.0	09/16/10
Selenium	7782-49-2	LA-505-412	B	1.63		mg/kg	1	0.30	3.0	09/16/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102515

Sample # 102515007
SAF# F10-256
Sample ID B27MP8

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/14/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	U	<1.5		mg/kg	1	1.5	10	09/14/10
Chloride	16887-00-6	LA-533-410	U	<2.2		mg/kg	1	2.2	20	09/14/10
Nitrite-N	NO2-N	LA-533-410	U	<0.92		mg/kg	1	0.92	5.1	09/14/10
Nitrate-N	NO3-N	LA-533-410		16.6		mg/kg	1	1.6	5.1	09/14/10
Sulfate	14808-79-8	LA-533-410	B	32.1		mg/kg	1	3.3	51	09/14/10
Cr(VI) Prep										**09/24/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	BN	0.118		ug/g	1	0.10	0.51	09/24/10
ICP Prep										**09/20/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		9.45	J-	mg/kg	1	0.41	2.0	09/23/10
Boron	7440-42-8	LA-505-411	BEX	12.0		mg/kg	1	4.2	21	09/23/10
ICPMS Prep										**09/15/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		264		mg/kg	1	0.10	1.0	09/16/10
Nickel	7440-02-0	LA-505-412		13.5		mg/kg	1	0.20	2.0	09/16/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/16/10

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. (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.

MJ
12/12/11

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102515

Sample # 102515007
SAF# F10-256
Sample ID B27MP8

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Antimony	7440-36-0	LA-505-412	U	<0.30		mg/kg	1	0.30	3.0	09/16/10
Barium	7440-39-3	LA-505-412		68.5		mg/kg	1	0.20	2.0	09/16/10
Beryllium	7440-41-7	LA-505-412	B	0.182		mg/kg	1	0.10	0.50	09/16/10
Cadmium	7440-43-9	LA-505-412	B	0.247		mg/kg	1	0.10	1.0	09/16/10
Chromium	7440-47-3	LA-505-412		13.8		mg/kg	1	0.50	5.0	09/16/10
Cobalt	7440-48-4	LA-505-412		5.46		mg/kg	1	0.10	0.50	09/16/10
Copper	7440-50-8	LA-505-412		15.3		mg/kg	1	0.10	1.0	09/16/10
Vanadium	7440-62-2	LA-505-412		25.1		mg/kg	1	0.20	2.0	09/16/10
Zinc	7440-66-6	LA-505-412		96.4		mg/kg	1	0.80	5.0	09/16/10
Lead	7439-92-1	LA-505-412		18.8		mg/kg	1	0.10	1.0	09/16/10
Mercury	7439-97-6	LA-505-412	U	<0.050		mg/kg	1	0.050	0.20	09/16/10
Molybdenum	7439-98-7	LA-505-412	BC	0.365	1.0U	mg/kg	1	0.10	1.0	09/16/10
Strontium	7440-24-6	LA-505-412		33.1		mg/kg	1	0.10	1.0	09/16/10
Tin	7440-31-5	LA-505-412	B	0.403		mg/kg	1	0.10	0.50	09/16/10
Uranium	7440-61-1	LA-505-412		0.680		mg/kg	1	0.10	0.50	09/16/10
Arsenic	7440-38-2	LA-505-412	B	3.74		mg/kg	1	0.40	4.0	09/16/10
Selenium	7782-49-2	LA-505-412	B	0.348		mg/kg	1	0.30	3.0	09/16/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102515

Sample # 102515008
SAF# F10-256
Sample ID B27M44

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/14/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	U	<1.5		mg/kg	1	1.5	10	09/14/10
Chloride	16887-00-6	LA-533-410	B	3.51		mg/kg	1	2.2	20	09/14/10
Nitrite-N	NO2-N	LA-533-410	U	<0.93		mg/kg	1	0.93	5.1	09/14/10
Nitrate-N	NO3-N	LA-533-410	B	2.34		mg/kg	1	1.6	5.1	09/14/10
Sulfate	14808-79-8	LA-533-410	B	4.76		mg/kg	1	3.4	51	09/14/10
Cr(VI) Prep										**09/24/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.10		ug/g	1	0.10	0.51	09/24/10
ICP Prep										**09/20/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		6.86	J-	mg/kg	1	0.41	2.0	09/23/10
Boron	7440-42-8	LA-505-411	BEX	13.7		mg/kg	1	4.2	21	09/23/10
ICPMS Prep										**09/15/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		356		mg/kg	1	0.10	1.0	09/16/10
Nickel	7440-02-0	LA-505-412		12.8		mg/kg	1	0.21	2.1	09/16/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/16/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102515

Sample # 102515008
SAF# F10-256
Sample ID B27M44

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Antimony	7440-36-0	LA-505-412	U	<0.31		mg/kg	1	0.31	3.1	09/16/10
Barium	7440-39-3	LA-505-412		71.7		mg/kg	1	0.21	2.1	09/16/10
Beryllium	7440-41-7	LA-505-412	B	0.245		mg/kg	1	0.10	0.51	09/16/10
Cadmium	7440-43-9	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/16/10
Chromium	7440-47-3	LA-505-412		9.37		mg/kg	1	0.51	5.1	09/16/10
Cobalt	7440-48-4	LA-505-412		7.19		mg/kg	1	0.10	0.51	09/16/10
Copper	7440-50-8	LA-505-412		15.5		mg/kg	1	0.10	1.0	09/16/10
Vanadium	7440-62-2	LA-505-412		29.8		mg/kg	1	0.21	2.1	09/16/10
Zinc	7440-66-6	LA-505-412		35.7		mg/kg	1	0.82	5.1	09/16/10
Lead	7439-92-1	LA-505-412		5.23		mg/kg	1	0.10	1.0	09/16/10
Mercury	7439-97-6	LA-505-412	U	<0.051		mg/kg	1	0.051	0.21	09/16/10
Molybdenum	7439-98-7	LA-505-412	BC	0.222	1.0U	mg/kg	1	0.10	1.0	09/16/10
Strontium	7440-24-6	LA-505-412		39.9		mg/kg	1	0.10	1.0	09/16/10
Tin	7440-31-5	LA-505-412	B	0.366		mg/kg	1	0.10	0.51	09/16/10
Uranium	7440-61-1	LA-505-412	B	0.479		mg/kg	1	0.10	0.51	09/16/10
Arsenic	7440-38-2	LA-505-412	B	3.13		mg/kg	1	0.41	4.1	09/16/10
Selenium	7782-49-2	LA-505-412	B	1.58		mg/kg	1	0.31	3.1	09/16/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102515

Sample # 102515009
SAF# F10-256
Sample ID B27MK5

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/14/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	U	<1.6		mg/kg	1	1.6	10	09/14/10
Chloride	16887-00-6	LA-533-410	B	3.75		mg/kg	1	2.2	21	09/14/10
Nitrite-N	NO2-N	LA-533-410	U	<0.93		mg/kg	1	0.93	5.2	09/14/10
Nitrate-N	NO3-N	LA-533-410	U	<1.6		mg/kg	1	1.6	5.2	09/14/10
Sulfate	14808-79-8	LA-533-410	B	6.40		mg/kg	1	3.4	52	09/14/10
Cr(VI) Prep										**09/24/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	BN	0.133		ug/g	1	0.10	0.51	09/24/10
ICP Prep										**09/20/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		6.72	J-	mg/kg	1	0.41	2.1	09/23/10
Boron	7440-42-8	LA-505-411	BEX	18.0		mg/kg	1	4.2	21	09/23/10
ICPMS Prep										**09/15/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		305		mg/kg	1	0.10	1.0	09/16/10
Nickel	7440-02-0	LA-505-412		8.42		mg/kg	1	0.21	2.1	09/16/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/16/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102515

Sample # 102515009
SAF# F10-256
Sample ID B27MK5

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Antimony	7440-36-0	LA-505-412	U	<0.31		mg/kg	1	0.31	3.1	09/16/10
Barium	7440-39-3	LA-505-412		57.5		mg/kg	1	0.21	2.1	09/16/10
Beryllium	7440-41-7	LA-505-412	B	0.298		mg/kg	1	0.10	0.51	09/16/10
Cadmium	7440-43-9	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/16/10
Chromium	7440-47-3	LA-505-412		7.83		mg/kg	1	0.51	5.1	09/16/10
Cobalt	7440-48-4	LA-505-412		7.02		mg/kg	1	0.10	0.51	09/16/10
Copper	7440-50-8	LA-505-412		13.4		mg/kg	1	0.10	1.0	09/16/10
Vanadium	7440-62-2	LA-505-412		28.4		mg/kg	1	0.21	2.1	09/16/10
Zinc	7440-66-6	LA-505-412		32.6		mg/kg	1	0.82	5.1	09/16/10
Lead	7439-92-1	LA-505-412		4.88		mg/kg	1	0.10	1.0	09/16/10
Mercury	7439-97-6	LA-505-412	U	<0.051		mg/kg	1	0.051	0.21	09/16/10
Molybdenum	7439-98-7	LA-505-412	BC	0.187	1.0U	mg/kg	1	0.10	1.0	09/16/10
Strontium	7440-24-6	LA-505-412		30.8		mg/kg	1	0.10	1.0	09/16/10
Tin	7440-31-5	LA-505-412	B	0.290		mg/kg	1	0.10	0.51	09/16/10
Uranium	7440-61-1	LA-505-412		0.891		mg/kg	1	0.10	0.51	09/16/10
Arsenic	7440-38-2	LA-505-412	B	2.74		mg/kg	1	0.41	4.1	09/16/10
Selenium	7782-49-2	LA-505-412	B	0.795		mg/kg	1	0.31	3.1	09/16/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102515

Sample # 102515010
SAF# F10-256
Sample ID B27MC2

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/14/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	U	<1.5		mg/kg	1	1.5	10	09/14/10
Chloride	16887-00-6	LA-533-410	U	<2.2		mg/kg	1	2.2	20	09/14/10
Nitrite-N	NO2-N	LA-533-410	U	<0.92		mg/kg	1	0.92	5.1	09/14/10
Nitrate-N	NO3-N	LA-533-410	U	<1.6		mg/kg	1	1.6	5.1	09/14/10
Sulfate	14808-79-8	LA-533-410	B	3.47		mg/kg	1	3.3	51	09/14/10
Cr(VI) Prep										**09/24/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.10		ug/g	1	0.10	0.51	09/24/10
ICP Prep										**09/20/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		7.14	J-	mg/kg	1	0.41	2.0	09/23/10
Boron	7440-42-8	LA-505-411	BEX	17.0		mg/kg	1	4.2	21	09/23/10
ICPMS Prep										**09/15/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		277		mg/kg	1	0.10	1.0	09/16/10
Nickel	7440-02-0	LA-505-412		7.84		mg/kg	1	0.20	2.0	09/16/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/16/10

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. (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.

MJ
12/12/11

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102515

Sample # 102515010
SAF# F10-256
Sample ID B27MC2

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Antimony	7440-36-0	LA-505-412	U	<0.30		mg/kg	1	0.30	3.0	09/16/10
Barium	7440-39-3	LA-505-412		51.6		mg/kg	1	0.20	2.0	09/16/10
Beryllium	7440-41-7	LA-505-412	B	0.275		mg/kg	1	0.10	0.50	09/16/10
Cadmium	7440-43-9	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/16/10
Chromium	7440-47-3	LA-505-412		7.90		mg/kg	1	0.50	5.0	09/16/10
Cobalt	7440-48-4	LA-505-412		6.21		mg/kg	1	0.10	0.50	09/16/10
Copper	7440-50-8	LA-505-412		12.5		mg/kg	1	0.10	1.0	09/16/10
Vanadium	7440-62-2	LA-505-412		27.6		mg/kg	1	0.20	2.0	09/16/10
Zinc	7440-66-6	LA-505-412		31.3		mg/kg	1	0.80	5.0	09/16/10
Lead	7439-92-1	LA-505-412		4.44		mg/kg	1	0.10	1.0	09/16/10
Mercury	7439-97-6	LA-505-412	U	<0.050		mg/kg	1	0.050	0.20	09/16/10
Molybdenum	7439-98-7	LA-505-412	BC	0.182	1.0U	mg/kg	1	0.10	1.0	09/16/10
Strontium	7440-24-6	LA-505-412		25.0		mg/kg	1	0.10	1.0	09/16/10
Tin	7440-31-5	LA-505-412	B	0.297		mg/kg	1	0.10	0.50	09/16/10
Uranium	7440-61-1	LA-505-412	B	0.309		mg/kg	1	0.10	0.50	09/16/10
Arsenic	7440-38-2	LA-505-412	B	2.25		mg/kg	1	0.40	4.0	09/16/10
Selenium	7782-49-2	LA-505-412	B	1.43		mg/kg	1	0.30	3.0	09/16/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102515

Sample # 102515011
SAF# F10-256
Sample ID B27MR1

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/14/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	U	<1.6		mg/kg	1	1.6	10	09/14/10
Chloride	16887-00-6	LA-533-410	B	4.29		mg/kg	1	2.2	21	09/14/10
Nitrite-N	NO2-N	LA-533-410	U	<0.94		mg/kg	1	0.94	5.2	09/14/10
Nitrate-N	NO3-N	LA-533-410		79.1		mg/kg	1	1.6	5.2	09/14/10
Sulfate	14808-79-8	LA-533-410	B	50.6		mg/kg	1	3.4	52	09/14/10
Cr(VI) Prep										**09/24/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	BN	0.120		ug/g	1	0.10	0.52	09/24/10
ICP Prep										**09/20/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		12.2	J-	mg/kg	1	0.41	2.1	09/23/10
Boron	7440-42-8	LA-505-411	BEX	13.7		mg/kg	1	4.2	21	09/23/10
ICPMS Prep										**09/15/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		290		mg/kg	1	0.10	1.0	09/16/10
Nickel	7440-02-0	LA-505-412		13.5		mg/kg	1	0.20	2.0	09/16/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/16/10

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. (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.

MJ
12/12/11

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102515

Sample # 102515011
SAF# F10-256
Sample ID B27MR1

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Antimony	7440-36-0	LA-505-412	U	<0.30		mg/kg	1	0.30	3.0	09/16/10
Barium	7440-39-3	LA-505-412		68.2		mg/kg	1	0.20	2.0	09/16/10
Beryllium	7440-41-7	LA-505-412	B	0.375		mg/kg	1	0.10	0.50	09/16/10
Cadmium	7440-43-9	LA-505-412	B	0.159		mg/kg	1	0.10	1.0	09/16/10
Chromium	7440-47-3	LA-505-412		13.1		mg/kg	1	0.50	5.0	09/16/10
Cobalt	7440-48-4	LA-505-412		5.92		mg/kg	1	0.10	0.50	09/16/10
Copper	7440-50-8	LA-505-412		13.5		mg/kg	1	0.10	1.0	09/16/10
Vanadium	7440-62-2	LA-505-412		27.9		mg/kg	1	0.20	2.0	09/16/10
Zinc	7440-66-6	LA-505-412		47.8		mg/kg	1	0.81	5.0	09/16/10
Lead	7439-92-1	LA-505-412		6.39		mg/kg	1	0.10	1.0	09/16/10
Mercury	7439-97-6	LA-505-412	U	<0.050		mg/kg	1	0.050	0.20	09/16/10
Molybdenum	7439-98-7	LA-505-412	BC	0.265	1.0U	mg/kg	1	0.10	1.0	09/16/10
Strontium	7440-24-6	LA-505-412		62.3		mg/kg	1	0.10	1.0	09/16/10
Tin	7440-31-5	LA-505-412	B	0.294		mg/kg	1	0.10	0.50	09/16/10
Uranium	7440-61-1	LA-505-412		0.562		mg/kg	1	0.10	0.50	09/16/10
Arsenic	7440-38-2	LA-505-412		4.06		mg/kg	1	0.40	4.0	09/16/10
Selenium	7782-49-2	LA-505-412	B	1.33		mg/kg	1	0.30	3.0	09/16/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102515

Sample # 102515012
SAF# F10-256
Sample ID B27M42

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/14/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	U	<1.6		mg/kg	1	1.6	10	09/14/10
Chloride	16887-00-6	LA-533-410	U	<2.2		mg/kg	1	2.2	21	09/14/10
Nitrite-N	NO2-N	LA-533-410	U	<0.94		mg/kg	1	0.94	5.2	09/14/10
Nitrate-N	NO3-N	LA-533-410	B	3.09		mg/kg	1	1.6	5.2	09/14/10
Sulfate	14808-79-8	LA-533-410	B	4.26		mg/kg	1	3.4	52	09/14/10
Cr(VI) Prep										**09/24/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.10		ug/g	1	0.10	0.50	09/24/10
ICP Prep										**09/20/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		7.06	J-	mg/kg	1	0.41	2.0	09/23/10
Boron	7440-42-8	LA-505-411	BEX	18.2		mg/kg	1	4.2	21	09/23/10
ICPMS Prep										**09/15/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		326		mg/kg	1	0.10	1.0	09/16/10
Nickel	7440-02-0	LA-505-412		9.15		mg/kg	1	0.20	2.0	09/16/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/16/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102515

Sample # 102515012
SAF# F10-256
Sample ID B27M42

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Antimony	7440-36-0	LA-505-412	U	<0.31		mg/kg	1	0.31	3.1	09/16/10
Barium	7440-39-3	LA-505-412		58.8		mg/kg	1	0.20	2.0	09/16/10
Beryllium	7440-41-7	LA-505-412	B	0.301		mg/kg	1	0.10	0.51	09/16/10
Cadmium	7440-43-9	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/16/10
Chromium	7440-47-3	LA-505-412		6.11		mg/kg	1	0.51	5.1	09/16/10
Cobalt	7440-48-4	LA-505-412		8.89		mg/kg	1	0.10	0.51	09/16/10
Copper	7440-50-8	LA-505-412		16.2		mg/kg	1	0.10	1.0	09/16/10
Vanadium	7440-62-2	LA-505-412		38.2		mg/kg	1	0.20	2.0	09/16/10
Zinc	7440-66-6	LA-505-412		40.1		mg/kg	1	0.82	5.1	09/16/10
Lead	7439-92-1	LA-505-412		4.93		mg/kg	1	0.10	1.0	09/16/10
Mercury	7439-97-6	LA-505-412	U	<0.051		mg/kg	1	0.051	0.20	09/16/10
Molybdenum	7439-98-7	LA-505-412	BC	0.294	1.0U	mg/kg	1	0.10	1.0	09/16/10
Strontium	7440-24-6	LA-505-412		31.3		mg/kg	1	0.10	1.0	09/16/10
Tin	7440-31-5	LA-505-412	B	0.430		mg/kg	1	0.10	0.51	09/16/10
Uranium	7440-61-1	LA-505-412	B	0.505		mg/kg	1	0.10	0.51	09/16/10
Arsenic	7440-38-2	LA-505-412	B	3.07		mg/kg	1	0.41	4.1	09/16/10
Selenium	7782-49-2	LA-505-412	B	1.79		mg/kg	1	0.31	3.1	09/16/10

MDL = Minimum Detection
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TP Err = Total Propagated
DF = Dilution Factor
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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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102537

Sample # 102537001
SAF# F10-256
Sample ID B27M46

Matrix SOIL
Sampled 09/14/10
Received 09/14/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/15/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	U	<1.5		mg/kg	1	1.5	10	09/15/10
Chloride	16887-00-6	LA-533-410	B	2.81		mg/kg	1	2.2	20	09/15/10
Nitrite-N	NO2-N	LA-533-410	U	<0.92		mg/kg	1	0.92	5.1	09/15/10
Nitrate-N	NO3-N	LA-533-410	B	2.10		mg/kg	1	1.6	5.1	09/15/10
Sulfate	14808-79-8	LA-533-410	U	<3.3		mg/kg	1	3.3	51	09/15/10
Cr(VI) Prep										**09/24/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.098		ug/g	1	0.098	0.49	09/24/10
ICP Prep										**09/20/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		6.18		mg/kg	1	0.41	2.0	09/22/10
Boron	7440-42-8	LA-505-411	B	12.6		mg/kg	1	4.2	21	09/22/10
ICPMS Prep										**09/17/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412	N	229	J-	mg/kg	1	0.10	1.0	09/20/10
Nickel	7440-02-0	LA-505-412		9.53		mg/kg	1	0.20	2.0	09/20/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/20/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102537

Sample # 102537001
SAF# F10-256
Sample ID B27M46

Matrix SOIL
Sampled 09/14/10
Received 09/14/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Antimony	7440-36-0	LA-505-412	U	<0.30		mg/kg	1	0.30	3.0	09/20/10
Barium	7440-39-3	LA-505-412		54.2		mg/kg	1	0.20	2.0	09/20/10
Beryllium	7440-41-7	LA-505-412	B	0.174		mg/kg	1	0.10	0.51	09/20/10
Cadmium	7440-43-9	LA-505-412	B	0.109		mg/kg	1	0.10	1.0	09/20/10
Chromium	7440-47-3	LA-505-412		7.35		mg/kg	1	0.51	5.1	09/20/10
Cobalt	7440-48-4	LA-505-412		4.64		mg/kg	1	0.10	0.51	09/20/10
Copper	7440-50-8	LA-505-412		12.0		mg/kg	1	0.10	1.0	09/20/10
Vanadium	7440-62-2	LA-505-412		25.3		mg/kg	1	0.20	2.0	09/20/10
Zinc	7440-66-6	LA-505-412		38.0		mg/kg	1	0.81	5.1	09/20/10
Lead	7439-92-1	LA-505-412		5.43		mg/kg	1	0.10	1.0	09/20/10
Mercury	7439-97-6	LA-505-412	U	<0.051		mg/kg	1	0.051	0.20	09/20/10
Molybdenum	7439-98-7	LA-505-412	B	0.213		mg/kg	1	0.10	1.0	09/20/10
Strontium	7440-24-6	LA-505-412		17.6		mg/kg	1	0.10	1.0	09/20/10
Tin	7440-31-5	LA-505-412	B	0.254		mg/kg	1	0.10	0.51	09/20/10
Uranium	7440-61-1	LA-505-412	B	0.304		mg/kg	1	0.10	0.51	09/20/10
Arsenic	7440-38-2	LA-505-412	B	2.03		mg/kg	1	0.41	4.1	09/20/10
Selenium	7782-49-2	LA-505-412	BC	1.37	3.0U	mg/kg	1	0.30	3.0	09/20/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102537

Sample # 102537002
SAF# F10-256
Sample ID B27M47

Matrix SOIL
Sampled 09/14/10
Received 09/14/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/15/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	U	<1.5		mg/kg	1	1.5	10	09/15/10
Chloride	16887-00-6	LA-533-410	U	<2.2		mg/kg	1	2.2	20	09/15/10
Nitrite-N	NO2-N	LA-533-410	U	<0.92		mg/kg	1	0.92	5.1	09/15/10
Nitrate-N	NO3-N	LA-533-410	U	<1.6		mg/kg	1	1.6	5.1	09/15/10
Sulfate	14808-79-8	LA-533-410	U	<3.3		mg/kg	1	3.3	51	09/15/10
Cr(VI) Prep										**09/24/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.10		ug/g	1	0.10	0.51	09/24/10
ICP Prep										**09/23/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		5.90		mg/kg	1	0.41	2.0	09/23/10
Boron	7440-42-8	LA-505-411	B	18.0		mg/kg	1	4.2	21	09/23/10
ICPMS Prep										**09/17/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412	N	275	J-	mg/kg	1	0.10	1.0	09/20/10
Nickel	7440-02-0	LA-505-412		7.94		mg/kg	1	0.20	2.0	09/20/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/20/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102537

Sample # 102537002
SAF# F10-256
Sample ID B27M47

Matrix SOIL
Sampled 09/14/10
Received 09/14/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Antimony	7440-36-0	LA-505-412	U	<0.30		mg/kg	1	0.30	3.0	09/20/10
Barium	7440-39-3	LA-505-412		62.9		mg/kg	1	0.20	2.0	09/20/10
Beryllium	7440-41-7	LA-505-412	B	0.363		mg/kg	1	0.10	0.51	09/20/10
Cadmium	7440-43-9	LA-505-412	B	0.159		mg/kg	1	0.10	1.0	09/20/10
Chromium	7440-47-3	LA-505-412		5.88		mg/kg	1	0.51	5.1	09/20/10
Cobalt	7440-48-4	LA-505-412		6.67		mg/kg	1	0.10	0.51	09/20/10
Copper	7440-50-8	LA-505-412		14.5		mg/kg	1	0.10	1.0	09/20/10
Vanadium	7440-62-2	LA-505-412		25.9		mg/kg	1	0.20	2.0	09/20/10
Zinc	7440-66-6	LA-505-412		33.7		mg/kg	1	0.81	5.1	09/20/10
Lead	7439-92-1	LA-505-412		9.14		mg/kg	1	0.10	1.0	09/20/10
Mercury	7439-97-6	LA-505-412	B	0.0617		mg/kg	1	0.051	0.20	09/20/10
Molybdenum	7439-98-7	LA-505-412	B	0.305		mg/kg	1	0.10	1.0	09/20/10
Strontium	7440-24-6	LA-505-412		25.7		mg/kg	1	0.10	1.0	09/20/10
Tin	7440-31-5	LA-505-412	B	0.273		mg/kg	1	0.10	0.51	09/20/10
Uranium	7440-61-1	LA-505-412	B	0.461		mg/kg	1	0.10	0.51	09/20/10
Arsenic	7440-38-2	LA-505-412	B	2.91		mg/kg	1	0.40	4.0	09/20/10
Selenium	7782-49-2	LA-505-412	BC	0.840	3.0U	mg/kg	1	0.30	3.0	09/20/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102537

Sample # 102537003
SAF# F10-256
Sample ID B27M49

Matrix SOIL
Sampled 09/14/10
Received 09/14/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/15/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	U	<1.5		mg/kg	1	1.5	10	09/15/10
Chloride	16887-00-6	LA-533-410	U	<2.2		mg/kg	1	2.2	21	09/15/10
Nitrite-N	NO2-N	LA-533-410	U	<0.93		mg/kg	1	0.93	5.1	09/15/10
Nitrate-N	NO3-N	LA-533-410	U	<1.6		mg/kg	1	1.6	5.1	09/15/10
Sulfate	14808-79-8	LA-533-410	U	<3.4		mg/kg	1	3.4	51	09/15/10
Cr(VI) Prep										**09/24/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.098		ug/g	1	0.098	0.49	09/24/10
ICP Prep										**09/20/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		7.91		mg/kg	1	0.41	2.1	09/22/10
Boron	7440-42-8	LA-505-411	B	14.5		mg/kg	1	4.2	21	09/22/10
ICPMS Prep										**09/17/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412	N	287	J-	mg/kg	1	0.098	0.98	09/20/10
Nickel	7440-02-0	LA-505-412		13.2		mg/kg	1	0.20	2.0	09/20/10
Silver	7440-22-4	LA-505-412	U	<0.098		mg/kg	1	0.098	0.98	09/20/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102537

Sample # 102537003
SAF# F10-256
Sample ID B27M49

Matrix SOIL
Sampled 09/14/10
Received 09/14/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Antimony	7440-36-0	LA-505-412	U	<0.29		mg/kg	1	0.29	2.9	09/20/10
Barium	7440-39-3	LA-505-412		65.3		mg/kg	1	0.20	2.0	09/20/10
Beryllium	7440-41-7	LA-505-412	B	0.334		mg/kg	1	0.098	0.49	09/20/10
Cadmium	7440-43-9	LA-505-412	B	0.0986		mg/kg	1	0.098	0.98	09/20/10
Chromium	7440-47-3	LA-505-412		9.04		mg/kg	1	0.49	4.9	09/20/10
Cobalt	7440-48-4	LA-505-412		7.08		mg/kg	1	0.098	0.49	09/20/10
Copper	7440-50-8	LA-505-412		15.9		mg/kg	1	0.098	0.98	09/20/10
Vanadium	7440-62-2	LA-505-412		27.6		mg/kg	1	0.20	2.0	09/20/10
Zinc	7440-66-6	LA-505-412		44.4		mg/kg	1	0.78	4.9	09/20/10
Lead	7439-92-1	LA-505-412		7.97		mg/kg	1	0.098	0.98	09/20/10
Mercury	7439-97-6	LA-505-412	U	<0.049		mg/kg	1	0.049	0.20	09/20/10
Molybdenum	7439-98-7	LA-505-412	B	0.235		mg/kg	1	0.098	0.98	09/20/10
Strontium	7440-24-6	LA-505-412		28.1		mg/kg	1	0.098	0.98	09/20/10
Tin	7440-31-5	LA-505-412	B	0.394		mg/kg	1	0.098	0.49	09/20/10
Uranium	7440-61-1	LA-505-412	B	0.430		mg/kg	1	0.098	0.49	09/20/10
Arsenic	7440-38-2	LA-505-412	B	3.08		mg/kg	1	0.39	3.9	09/20/10
Selenium	7782-49-2	LA-505-412	BC	0.713	2.9U	mg/kg	1	0.29	2.9	09/20/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102537

Sample # 102537004
SAF# F10-256
Sample ID B27MC6

Matrix SOIL
Sampled 09/14/10
Received 09/14/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/15/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	U	<1.5		mg/kg	1	1.5	10	09/15/10
Chloride	16887-00-6	LA-533-410	U	<2.2		mg/kg	1	2.2	20	09/15/10
Nitrite-N	NO2-N	LA-533-410	U	<0.92		mg/kg	1	0.92	5.1	09/15/10
Nitrate-N	NO3-N	LA-533-410	U	<1.6		mg/kg	1	1.6	5.1	09/15/10
Sulfate	14808-79-8	LA-533-410	U	<3.3		mg/kg	1	3.3	51	09/15/10
Cr(VI) Prep										**09/24/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.099		ug/g	1	0.099	0.49	09/24/10
ICP Prep										**09/20/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		6.02		mg/kg	1	0.41	2.0	09/22/10
Boron	7440-42-8	LA-505-411	B	8.26		mg/kg	1	4.2	21	09/22/10
ICPMS Prep										**09/17/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412	N	183	J-	mg/kg	1	0.10	1.0	09/20/10
Nickel	7440-02-0	LA-505-412		9.02		mg/kg	1	0.20	2.0	09/20/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/20/10

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. (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.

MJ
12/12/11

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102537

Sample # 102537004
SAF# F10-256
Sample ID B27MC6

Matrix SOIL
Sampled 09/14/10
Received 09/14/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Antimony	7440-36-0	LA-505-412	U	<0.30		mg/kg	1	0.30	3.0	09/20/10
Barium	7440-39-3	LA-505-412		43.0		mg/kg	1	0.20	2.0	09/20/10
Beryllium	7440-41-7	LA-505-412	B	0.318		mg/kg	1	0.10	0.51	09/20/10
Cadmium	7440-43-9	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/20/10
Chromium	7440-47-3	LA-505-412		6.45		mg/kg	1	0.51	5.1	09/20/10
Cobalt	7440-48-4	LA-505-412		3.74		mg/kg	1	0.10	0.51	09/20/10
Copper	7440-50-8	LA-505-412		10.1		mg/kg	1	0.10	1.0	09/20/10
Vanadium	7440-62-2	LA-505-412		17.3		mg/kg	1	0.20	2.0	09/20/10
Zinc	7440-66-6	LA-505-412		27.0		mg/kg	1	0.81	5.1	09/20/10
Lead	7439-92-1	LA-505-412		3.87		mg/kg	1	0.10	1.0	09/20/10
Mercury	7439-97-6	LA-505-412	U	<0.051		mg/kg	1	0.051	0.20	09/20/10
Molybdenum	7439-98-7	LA-505-412	B	0.149		mg/kg	1	0.10	1.0	09/20/10
Strontium	7440-24-6	LA-505-412		15.7		mg/kg	1	0.10	1.0	09/20/10
Tin	7440-31-5	LA-505-412	B	0.307		mg/kg	1	0.10	0.51	09/20/10
Uranium	7440-61-1	LA-505-412	B	0.241		mg/kg	1	0.10	0.51	09/20/10
Arsenic	7440-38-2	LA-505-412	B	1.68		mg/kg	1	0.40	4.0	09/20/10
Selenium	7782-49-2	LA-505-412	BC	0.699	3.0U	mg/kg	1	0.30	3.0	09/20/10

MDL = Minimum Detection
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TP Err = Total Propagated
DF = Dilution Factor
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B - Analyte < the RDL 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.

MJ
12/12/11

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102537

Sample # 102537005
SAF# F10-256
Sample ID B27MC7

Matrix SOIL
Sampled 09/14/10
Received 09/14/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/15/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	U	<1.6		mg/kg	1	1.6	10	09/15/10
Chloride	16887-00-6	LA-533-410	U	<2.2		mg/kg	1	2.2	21	09/15/10
Nitrite-N	NO2-N	LA-533-410	U	<0.94		mg/kg	1	0.94	5.2	09/15/10
Nitrate-N	NO3-N	LA-533-410	B	3.73		mg/kg	1	1.6	5.2	09/15/10
Sulfate	14808-79-8	LA-533-410	B	4.37		mg/kg	1	3.4	52	09/15/10
Cr(VI) Prep										**09/24/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.10		ug/g	1	0.10	0.52	09/24/10
ICP Prep										**09/20/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		8.13		mg/kg	1	0.42	2.1	09/22/10
Boron	7440-42-8	LA-505-411	B	12.6		mg/kg	1	4.3	22	09/22/10
ICPMS Prep										**09/17/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412	N	291	J-	mg/kg	1	0.10	1.0	09/20/10
Nickel	7440-02-0	LA-505-412		12.9		mg/kg	1	0.21	2.1	09/20/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/20/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102537

Sample # 102537005
SAF# F10-256
Sample ID B27MC7

Matrix SOIL
Sampled 09/14/10
Received 09/14/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Antimony	7440-36-0	LA-505-412	U	<0.31		mg/kg	1	0.31	3.1	09/20/10
Barium	7440-39-3	LA-505-412		79.7		mg/kg	1	0.21	2.1	09/20/10
Beryllium	7440-41-7	LA-505-412	B	0.302		mg/kg	1	0.10	0.52	09/20/10
Cadmium	7440-43-9	LA-505-412	B	0.212		mg/kg	1	0.10	1.0	09/20/10
Chromium	7440-47-3	LA-505-412		12.7		mg/kg	1	0.52	5.2	09/20/10
Cobalt	7440-48-4	LA-505-412		6.97		mg/kg	1	0.10	0.52	09/20/10
Copper	7440-50-8	LA-505-412		16.4		mg/kg	1	0.10	1.0	09/20/10
Vanadium	7440-62-2	LA-505-412		27.1		mg/kg	1	0.21	2.1	09/20/10
Zinc	7440-66-6	LA-505-412		64.9		mg/kg	1	0.84	5.2	09/20/10
Lead	7439-92-1	LA-505-412		11.5		mg/kg	1	0.10	1.0	09/20/10
Mercury	7439-97-6	LA-505-412	U	<0.052		mg/kg	1	0.052	0.21	09/20/10
Molybdenum	7439-98-7	LA-505-412	B	0.264		mg/kg	1	0.10	1.0	09/20/10
Strontium	7440-24-6	LA-505-412		34.5		mg/kg	1	0.10	1.0	09/20/10
Tin	7440-31-5	LA-505-412	B	0.401		mg/kg	1	0.10	0.52	09/20/10
Uranium	7440-61-1	LA-505-412		0.670		mg/kg	1	0.10	0.52	09/20/10
Arsenic	7440-38-2	LA-505-412	B	3.65		mg/kg	1	0.42	4.2	09/20/10
Selenium	7782-49-2	LA-505-412	BC	1.67	3.1U	mg/kg	1	0.31	3.1	09/20/10

MDL = Minimum Detection
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TP Err = Total Propagated
DF = Dilution Factor
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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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102537

Sample # 102537006
SAF# F10-256
Sample ID B27MC9

Matrix SOIL
Sampled 09/14/10
Received 09/14/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/15/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	U	<1.5		mg/kg	1	1.5	10	09/15/10
Chloride	16887-00-6	LA-533-410	U	<2.2		mg/kg	1	2.2	20	09/15/10
Nitrite-N	NO2-N	LA-533-410	U	<0.93		mg/kg	1	0.93	5.1	09/15/10
Nitrate-N	NO3-N	LA-533-410	B	3.58		mg/kg	1	1.6	5.1	09/15/10
Sulfate	14808-79-8	LA-533-410	B	4.06		mg/kg	1	3.4	51	09/15/10
Cr(VI) Prep										**09/24/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.10		ug/g	1	0.10	0.50	09/24/10
ICP Prep										**09/20/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		7.10		mg/kg	1	0.41	2.1	09/22/10
Boron	7440-42-8	LA-505-411	B	18.3		mg/kg	1	4.2	21	09/22/10
ICPMS Prep										**09/17/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412	N	283	J-	mg/kg	1	0.10	1.0	09/20/10
Nickel	7440-02-0	LA-505-412		8.05		mg/kg	1	0.21	2.1	09/20/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/20/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102537

Sample # 102537006
SAF# F10-256
Sample ID B27MC9

Matrix SOIL
Sampled 09/14/10
Received 09/14/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Antimony	7440-36-0	LA-505-412	U	<0.31		mg/kg	1	0.31	3.1	09/20/10
Barium	7440-39-3	LA-505-412		55.6		mg/kg	1	0.21	2.1	09/20/10
Beryllium	7440-41-7	LA-505-412	B	0.398		mg/kg	1	0.10	0.52	09/20/10
Cadmium	7440-43-9	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/20/10
Chromium	7440-47-3	LA-505-412		5.65		mg/kg	1	0.52	5.2	09/20/10
Cobalt	7440-48-4	LA-505-412		7.55		mg/kg	1	0.10	0.52	09/20/10
Copper	7440-50-8	LA-505-412		15.1		mg/kg	1	0.10	1.0	09/20/10
Vanadium	7440-62-2	LA-505-412		25.7		mg/kg	1	0.21	2.1	09/20/10
Zinc	7440-66-6	LA-505-412		32.3		mg/kg	1	0.83	5.2	09/20/10
Lead	7439-92-1	LA-505-412		4.63		mg/kg	1	0.10	1.0	09/20/10
Mercury	7439-97-6	LA-505-412	U	<0.052		mg/kg	1	0.052	0.21	09/20/10
Molybdenum	7439-98-7	LA-505-412	B	0.173		mg/kg	1	0.10	1.0	09/20/10
Strontium	7440-24-6	LA-505-412		28.6		mg/kg	1	0.10	1.0	09/20/10
Tin	7440-31-5	LA-505-412	B	0.338		mg/kg	1	0.10	0.52	09/20/10
Uranium	7440-61-1	LA-505-412	B	0.448		mg/kg	1	0.10	0.52	09/20/10
Arsenic	7440-38-2	LA-505-412	B	2.91		mg/kg	1	0.42	4.2	09/20/10
Selenium	7782-49-2	LA-505-412	BC	1.85	3.1U	mg/kg	1	0.31	3.1	09/20/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102537

Sample # 102537007
SAF# F10-256
Sample ID B27MK9

Matrix SOIL
Sampled 09/14/10
Received 09/14/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/15/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	U	<1.6		mg/kg	1	1.6	11	09/15/10
Chloride	16887-00-6	LA-533-410	U	<2.3		mg/kg	1	2.3	21	09/15/10
Nitrite-N	NO2-N	LA-533-410	U	<0.95		mg/kg	1	0.95	5.3	09/15/10
Nitrate-N	NO3-N	LA-533-410	U	<1.6		mg/kg	1	1.6	5.3	09/15/10
Sulfate	14808-79-8	LA-533-410	U	<3.4		mg/kg	1	3.4	53	09/15/10
Cr(VI) Prep										**09/24/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.10		ug/g	1	0.10	0.52	09/24/10
ICP Prep										**09/20/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		10.9		mg/kg	1	0.42	2.1	09/22/10
Boron	7440-42-8	LA-505-411	B	12.7		mg/kg	1	4.3	21	09/22/10
ICPMS Prep										**09/17/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412	N	276	J-	mg/kg	1	0.10	1.0	09/20/10
Nickel	7440-02-0	LA-505-412		15.0		mg/kg	1	0.21	2.1	09/20/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/20/10

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. (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.

MJ
12/12/11

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102537

Sample # 102537007
SAF# F10-256
Sample ID B27MK9

Matrix SOIL
Sampled 09/14/10
Received 09/14/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Antimony	7440-36-0	LA-505-412	U	<0.31		mg/kg	1	0.31	3.1	09/20/10
Barium	7440-39-3	LA-505-412		85.1		mg/kg	1	0.21	2.1	09/20/10
Beryllium	7440-41-7	LA-505-412	B	0.289		mg/kg	1	0.10	0.52	09/20/10
Cadmium	7440-43-9	LA-505-412	B	0.270		mg/kg	1	0.10	1.0	09/20/10
Chromium	7440-47-3	LA-505-412		14.1		mg/kg	1	0.52	5.2	09/20/10
Cobalt	7440-48-4	LA-505-412		6.17		mg/kg	1	0.10	0.52	09/20/10
Copper	7440-50-8	LA-505-412		17.7		mg/kg	1	0.10	1.0	09/20/10
Vanadium	7440-62-2	LA-505-412		25.4		mg/kg	1	0.21	2.1	09/20/10
Zinc	7440-66-6	LA-505-412		68.6		mg/kg	1	0.84	5.2	09/20/10
Lead	7439-92-1	LA-505-412		15.5		mg/kg	1	0.10	1.0	09/20/10
Mercury	7439-97-6	LA-505-412	U	<0.052		mg/kg	1	0.052	0.21	09/20/10
Molybdenum	7439-98-7	LA-505-412	B	0.354		mg/kg	1	0.10	1.0	09/20/10
Strontium	7440-24-6	LA-505-412		27.3		mg/kg	1	0.10	1.0	09/20/10
Tin	7440-31-5	LA-505-412	B	0.376		mg/kg	1	0.10	0.52	09/20/10
Uranium	7440-61-1	LA-505-412		0.750		mg/kg	1	0.10	0.52	09/20/10
Arsenic	7440-38-2	LA-505-412		5.10		mg/kg	1	0.42	4.2	09/20/10
Selenium	7782-49-2	LA-505-412	BC	1.38	3.1U	mg/kg	1	0.31	3.1	09/20/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102537

Sample # 102537008
SAF# F10-256
Sample ID B27ML2

Matrix SOIL
Sampled 09/14/10
Received 09/14/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/15/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	U	<1.5		mg/kg	1	1.5	10	09/15/10
Chloride	16887-00-6	LA-533-410	U	<2.2		mg/kg	1	2.2	20	09/15/10
Nitrite-N	NO2-N	LA-533-410	U	<0.93		mg/kg	1	0.93	5.1	09/15/10
Nitrate-N	NO3-N	LA-533-410	B	2.41		mg/kg	1	1.6	5.1	09/15/10
Sulfate	14808-79-8	LA-533-410	U	<3.3		mg/kg	1	3.3	51	09/15/10
Cr(VI) Prep										**09/24/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.10		ug/g	1	0.10	0.52	09/24/10
ICP Prep										**09/20/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		5.31		mg/kg	1	0.42	2.1	09/22/10
Boron	7440-42-8	LA-505-411	B	18.1		mg/kg	1	4.3	21	09/22/10
ICPMS Prep										**09/17/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412	N	331	J-	mg/kg	1	0.10	1.0	09/20/10
Nickel	7440-02-0	LA-505-412		8.90		mg/kg	1	0.20	2.0	09/20/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/20/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102537

Sample # 102537008
SAF# F10-256
Sample ID B27ML2

Matrix SOIL
Sampled 09/14/10
Received 09/14/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Antimony	7440-36-0	LA-505-412	U	<0.30		mg/kg	1	0.30	3.0	09/20/10
Barium	7440-39-3	LA-505-412		58.9		mg/kg	1	0.20	2.0	09/20/10
Beryllium	7440-41-7	LA-505-412	B	0.413		mg/kg	1	0.10	0.50	09/20/10
Cadmium	7440-43-9	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/20/10
Chromium	7440-47-3	LA-505-412	B	4.85		mg/kg	1	0.50	5.0	09/20/10
Cobalt	7440-48-4	LA-505-412		9.22		mg/kg	1	0.10	0.50	09/20/10
Copper	7440-50-8	LA-505-412		16.5		mg/kg	1	0.10	1.0	09/20/10
Vanadium	7440-62-2	LA-505-412		33.9		mg/kg	1	0.20	2.0	09/20/10
Zinc	7440-66-6	LA-505-412		37.8		mg/kg	1	0.80	5.0	09/20/10
Lead	7439-92-1	LA-505-412		4.12		mg/kg	1	0.10	1.0	09/20/10
Mercury	7439-97-6	LA-505-412	U	<0.050		mg/kg	1	0.050	0.20	09/20/10
Molybdenum	7439-98-7	LA-505-412	B	0.236		mg/kg	1	0.10	1.0	09/20/10
Strontium	7440-24-6	LA-505-412		26.1		mg/kg	1	0.10	1.0	09/20/10
Tin	7440-31-5	LA-505-412	B	0.393		mg/kg	1	0.10	0.50	09/20/10
Uranium	7440-61-1	LA-505-412		0.553		mg/kg	1	0.10	0.50	09/20/10
Arsenic	7440-38-2	LA-505-412	B	2.66		mg/kg	1	0.40	4.0	09/20/10
Selenium	7782-49-2	LA-505-412	BC	1.65	3.0U	mg/kg	1	0.30	3.0	09/20/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102537

Sample # 102537009
SAF# F10-256
Sample ID B27MR5

Matrix SOIL
Sampled 09/14/10
Received 09/14/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/15/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	U	<1.6		mg/kg	1	1.6	10	09/15/10
Chloride	16887-00-6	LA-533-410	B	5.86		mg/kg	1	2.2	21	09/15/10
Nitrite-N	NO2-N	LA-533-410	U	<0.94		mg/kg	1	0.94	5.2	09/15/10
Nitrate-N	NO3-N	LA-533-410		5.50		mg/kg	1	1.6	5.2	09/15/10
Sulfate	14808-79-8	LA-533-410	B	6.54		mg/kg	1	3.4	52	09/15/10
Cr(VI) Prep										**09/23/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.096		ug/g	1	0.096	0.48	09/23/10
ICP Prep										**09/20/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		11.3		mg/kg	1	0.42	2.1	09/22/10
Boron	7440-42-8	LA-505-411	B	15.8		mg/kg	1	4.3	21	09/22/10
ICPMS Prep										**09/17/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412	N	359	J-	mg/kg	1	0.10	1.0	09/20/10
Nickel	7440-02-0	LA-505-412		19.7		mg/kg	1	0.21	2.1	09/20/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/20/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102537

Sample # 102537009
SAF# F10-256
Sample ID B27MR5

Matrix SOIL
Sampled 09/14/10
Received 09/14/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Antimony	7440-36-0	LA-505-412	U	<0.31		mg/kg	1	0.31	3.1	09/20/10
Barium	7440-39-3	LA-505-412		99.6		mg/kg	1	0.21	2.1	09/20/10
Beryllium	7440-41-7	LA-505-412	B	0.479		mg/kg	1	0.10	0.52	09/20/10
Cadmium	7440-43-9	LA-505-412	B	0.232		mg/kg	1	0.10	1.0	09/20/10
Chromium	7440-47-3	LA-505-412		18.8		mg/kg	1	0.52	5.2	09/20/10
Cobalt	7440-48-4	LA-505-412		7.90		mg/kg	1	0.10	0.52	09/20/10
Copper	7440-50-8	LA-505-412		17.0		mg/kg	1	0.10	1.0	09/20/10
Vanadium	7440-62-2	LA-505-412		29.2		mg/kg	1	0.21	2.1	09/20/10
Zinc	7440-66-6	LA-505-412		66.1		mg/kg	1	0.84	5.2	09/20/10
Lead	7439-92-1	LA-505-412		8.94		mg/kg	1	0.10	1.0	09/20/10
Mercury	7439-97-6	LA-505-412	U	<0.052		mg/kg	1	0.052	0.21	09/20/10
Molybdenum	7439-98-7	LA-505-412	B	0.257		mg/kg	1	0.10	1.0	09/20/10
Strontium	7440-24-6	LA-505-412		55.1		mg/kg	1	0.10	1.0	09/20/10
Tin	7440-31-5	LA-505-412	B	0.354		mg/kg	1	0.10	0.52	09/20/10
Uranium	7440-61-1	LA-505-412		0.820		mg/kg	1	0.10	0.52	09/20/10
Arsenic	7440-38-2	LA-505-412	B	3.85		mg/kg	1	0.42	4.2	09/20/10
Selenium	7782-49-2	LA-505-412	BC	1.38	3.1U	mg/kg	1	0.31	3.1	09/20/10

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. (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.

Appendix 4

Laboratory Narrative and Chain-of-Custody Documentation

Attachment 2
Narrative
WSCF102425

Introduction

One (1) S&GRP sample was received at the WSCF Laboratory on September 7, 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. Also is attached an Issue Resolution Form (IRF) pertaining to out of specification holding times for hexavalent chromium.

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

ICP-AES 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 159733 analyzed on sample# B27MR7 (102425001)

- All QC controls are within the established limits.

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

- Batch QC 163538 analyzed on sample# B275R1 (102400007)
  - Strontium – MS/MSD Relative Percent Difference(s) (RPD) did not meet the established laboratory limits. No flags issued on sample results. RPD failure was "X" flagged on the Quality Control Report.
  - Zinc - was detected in the Blank. Affected sample results in this batch were "C" Flagged.
  - All other QC controls are within the established limits.

Hexavalent Chromium – The hold time requirements for this analysis were not met (Refer to analytical note below). A Duplicate, Matrix Spike, Blank and Laboratory Control Sample were analyzed with this delivery group. Analytical Note(s):

- Batch QC 157641 analyzed on sample# B27749 (102431001)
  - An Issue Resolution Form (CHPRC Tracking Number: 10-217) was issued for sample B27MR7 (102425001) for exceedance of the 24 hour hold time for hexavalnet chromium.
  - All other QC controls are within the established limits.

Radiochemistry Comments

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

- 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 161435 analyzed on sample# B26F38 (102059001)
    - 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.

Attachment 2
Narrative
WSCF102425

- Strontium-89/90:
  - Batch QC 157347 analyzed on sample# B26TV9 (102123008)
    - Duplicate Relative Percent Difference(s) (RPD) did not meet the established laboratory limits. All other QC was acceptable so the batch was accepted. No flags issued on sample results. RPD failure was "X" flagged on the Quality Control Report.
    - All other QC controls are within the established limits.
- Isotopic Plutonium analysis:
  - Batch QC 157368 analyzed on sample# B27MR7 (102425001)
    - Plutonium-238 and 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 157368 analyzed on sample# B27MR7 (102425001)
    - All QC controls are within the established limits.

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

Attachment 2
Narrative
WSCF102425

ISSUE RESOLUTION FORM

CHPRC TRACKING NUMBER: 10-217

Date: **9/10/2010** SAF No. **F10-268**

SDG: **WSCF102425** LOGIN No.: TEST: HEXAVALENT CHROMIUM (CR+6)

Sample No.(s) B27MR7 **102425-001**

Submitted By: H Medley Submitted To: S Champoux

Phone No. 372-1488 Phone No. 373-5290

Fax No. 372-0456 Fax No

ISSUE	PROPOSED RESOLUTION
The 24hr regulatory hold time was missed for the Groundwater samples identified above. The sample was collected on September 2, 2010 and received at WSCF on September 7, 2010.	Accept analytical results (accept as-is) and note in narrative.

GRP COMMENTS

Accept proposed resolution.

J. G. Douglas 9/10/2010

Signature and Date

4

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-268-001	PAGE 1 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 7C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 In-Process EB	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - QC Sampling		SAF NO.: F10-268	AIR QUALITY: ☐	
ICE CHEST NO.: SML-107	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: N/A	COA: 301966ES10	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)

102425

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	HNO3 to pH <2	Cool-4C	HNO3 to pH <2	HNO3 to pH <2	HNO3 to pH <2	HNO3 to pH <2
HOLDING TIME	6 Months	24 Hours	6 Months	180 Days	6 Months	6 Months
TYPE OF CONTAINER	G/P	aG	G/P	P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1	1
VOLUME	500mL	500mL	500mL	1000mL	1000mL	1L
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS	SEE ITEM (4) IN SPECIAL INSTRUCTIONS	Strontium-89,90 Total Sr

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME						
B27MR7	WATER	SEP 02 2010	1218	✓	✓	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 02 2010 1440	RECEIVED BY/STORED IN: M01109 SSU #1	DATE/TIME: SEP 02 2010 1440
RELINQUISHED BY/REMOVED FROM: M01109 SSU #1	DATE/TIME: SEP 07 2010 0815	RECEIVED BY/STORED IN: FM Hall CHPRC	DATE/TIME: SEP 07 2010 0815
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 07 2010 0850	RECEIVED BY/STORED IN: VILTER	DATE/TIME: SEP 07 2010 0850
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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-268-001	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT WIDRIG, DL	TELEPHONE NO. 376-2858	PROJECT COORDINATOR WIDRIG, DL	PRICE CODE 7C AIR QUALITY ☐	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 100-K-63 In-Process EB	PROJECT DESIGNATION ARRA 100-K-63 KW Floodplain In Process Sampling - QC Sampling		SAF NO. F10-268		
ICE CHEST NO. SML-107	FIELD LOGBOOK NO. HNF-N-507-B	ACTUAL SAMPLE DEPTH N/A	COA 301966ES10	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 WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.The CACN for WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring S

(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium};
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Isotopic Plutonium {Plutonium-238, Plutonium-239/240};
(4) Isotopic Uranium {Uranium-233/234, Uranium-235};

ORIGINAL

A-6003-618(01/06)

Attachment 2
Narrative Rev.2
WSCF102445

Revision 2 – Case Narrative Replaces The Prior Submittal in its Entirety

Introduction

Six (6) S&GRP samples were received at the WSCF Laboratory on September 7, 2010. The samples were analyzed for the analytes indicated on the attached copy of the chain of custody (COC) form in accordance with the *Statement of Work (SOW), Modification No. 2 to Agreement 36587, Release 3, "FH WSCF ANALYTICAL SERVICES FOR GROUNDWATER."*

The narrative (Attachment 2) will address sample characteristics, analyses requested and general information in performance of the analytical methods. Also attached is P&D SDG WSCF102445 which deals with incorrect sample collection dates. A Data Summary Report (Attachment 3) includes analytical results, a comment report detailing method abnormalities, tentatively identified peaks if applicable, method references, and Laboratory QC information as applicable. Copies of the chain of custody and sample receipt documentation are included as Attachment 4.

It should be noted that the attached chain of custody was not stamped "ICED" by the WSCF Laboratory Sample Custodian during sample receiving. However, based on procedure LO-090-403 form "NOTICE OF IMPROPER SAMPLE SUBMITTAL" was not submitted and was not stamped "NOT ICED". No anomaly was noted during sample receipt.

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

- **B** – Sample results with a concentration greater than the MDL but less than the PQL are B flagged (applies to inorganic and wet chemical analyses), as appropriate.
- **D** – Sample results are D flagged if dilution(s) were required, as appropriate.
- **J** – Sample results with a concentration greater than the MDL but less than the PQL are J flagged (applies to organic analyses), as appropriate.
- **U** – Analyzed for but not detected above limiting criteria. Relative Percent Difference (RPD) values associated with an analyte qualified with a "U" are not applicable.

Analytical Methodology for Requested Analyses

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

Inorganic Comments

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

- Batch QC 157734 analyzed on sample# B27MB6 (102445004)

Attachment 2
Narrative Rev.2
WSCF102445

All QC controls are within the established limits.

ICP-AES 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 157435 analyzed on sample# B27M35 (102445001)
    - Boron – Samples are "E" Flagged due to Iron interference.

All other 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 160834 analyzed on sample# B27M35 (102445001)

All QC controls are within the established limits.

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 164278 analyzed on sample# B27M35 (102445001)
    - Duplicate Relative Percent Difference(s) (RPD) did not meet the established laboratory limits. Duplicate Relative Percent Difference (RPD) does not apply to results near or below the minimum detectable level. No flags issued.

All other QC controls are within the established limits.

Radiochemistry Comments

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

- 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 162635 analyzed on sample# B26VN7 (102157001)
    - Radium-226 and Radium-228 were found in the blank. These are naturally occurring radioactive isotopes.

All other QC controls are within the established limits.

Attachment 2
Narrative Rev.2
WSCF102445

- Strontium-89/90:
  - Batch QC 157635 analyzed on sample# B27M35 (102445001)

  All QC controls are within the established limits.

- Americium-241:
  - Batch QC 157479 analyzed on sample# B27MB6 (102445004)
  - 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.
  - Americium-243 – The tracer is slightly high but the batch was accepted.

  All other QC controls are within the established limits.

- Isotopic Plutonium analysis:
  - Batch QC 157479 analyzed on sample# B27MB6 (102445004)

  All QC controls are within the established limits.

- Isotopic Uranium analysis:
  - Batch QC 157479 analyzed on sample# B27MB6 (102445004)
  - Uranium-235 - 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.
  - Uranium-234 - The Blank is less than two times the MDC. "B" Flag not required.

  All other QC controls are within the established limits.

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

Attachment 2
Narrative Rev.2
WSCF102445

10/11/2010

Problem and Discrepancy Report

WSCF

SDG WSCF102445

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1. The data package has the following issues:

a) SAF Number Cross Reference (page 3 of 76) and Acknowledgement of Sample Received (page 64 of 76) – Sample collection date is not correct for samples B27MB6 (102445 -004), B27M36 (102445 -005) and B27MJ9 (102445 -006). Sample collection date should be 9/7/2010. Refer to COCs (pages 71, 73 and 75 of 76) for sample collection date detail.

Resolution: *Provide corrections.*

Lab Response: **Collection dates are corrected.**

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

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-191 | PAGE 1 OF 2

COLLECTOR	FM Hall CHPRC
SAMPLING LOCATION	100-K-63 location 1 Surface
ICE CHEST NO.	SML - 107
SHIPPED TO	Waste Sampling & Characterization
COMPANY CONTACT	WIDRIG, DL
TELEPHONE NO.	376-2858
PROJECT COORDINATOR	WIDRIG, DL
PRICE CODE	8C
AIR QUALITY	☐
DATA TURNAROUND	15 Days / 15 Days
PROJECT DESIGNATION	ARRA 100-K-63 KW Floodplain In Process Sampling - Soil
SAF NO.	F10-256
FIELD LOGBOOK NO.	HNF-N-507-13
ACTUAL SAMPLE DEPTH	0-1 ft
COA	301966ES10
METHOD OF SHIPMENT	GOVERNMENT VEHICLE
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, St=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: 102445

PRESERVATION	Cool~4C	None	None
HOLDING TIME	6 Months	6 Months	6 Months
TYPE OF CONTAINER	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B27M35	SOIL	SEP 02 2010	1233	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 02 2010 / 1400	M01169 SSU #1	SEP 02 2010 / 1400
WM 1107 SSU #1	9-7-10 / 1400	FM Hall	9-7-10 / 1400
FM Hall	9-7-10 / 1300	Vicky Bins	9-7-10 / 1300

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-6002-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-191	PAGE 2 OF 2
COLLECTOR: FM Hal CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 1 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SAXL-107	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 0-1'	COA: 301965ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr;

ORIGINAL

A-6003-618(01/06)

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST**

F10-256-313 — PAGE 1 OF 2

COLLECTOR: FM Hall	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: GHPRC 100-K-63 location 1 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256
AIR QUALITY: ☐			
ICE CHEST NO.: SML-107	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 10'	COA: 301966ES10
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	None	None
HOLDING TIME	6 Months	6 Months	6 Months
TYPE OF CONTAINER	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B27MJ8 002	SOIL	SEP 02 2010	1320	✓	✓	✓

CHAIN OF POSSESSION — **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall	SEP 02 2010 1400	MN1109 SML #1	SEP 02 2010 1400
MN 1109 SML #1	9-7-10	FM Hall	9-7-10 1400
FM Hall	9-7-10	VWW	9-7-10
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-6003-518(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-313	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 1 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-107	FIELD LOGBOOK NO.: HNF-N-507-B	ACTUAL SAMPLE DEPTH: 10'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr;

ORIGINAL

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-260	PAGE 1 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 1 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML - 107	FIELD LOGBOOK NO.: HNF-N-507-13.	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10	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	None	None
HOLDING TIME	6 Months	6 Months	6 Months
TYPE OF CONTAINER	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B27MB5 003	SOIL	SEP 02 2010	1244	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 02 2010 / 1440	RECEIVED BY/STORED IN: M01109 SSU #1	DATE/TIME: SEP 02 2010 / 1440
RELINQUISHED BY/REMOVED FROM: M01109 SSU #	DATE/TIME: 9-7-10	RECEIVED BY/STORED IN: FM Hall	DATE/TIME: 9-7-10 1400
RELINQUISHED BY/REMOVED FROM: FM Hall	DATE/TIME: 9-7-10 1430	RECEIVED BY/STORED IN: Rick Bivins Jr	DATE/TIME: 9-7-10 1430
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-5003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-260	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 1 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-107	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr;

OFFICIAL

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-261

PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: WIDRIG, DL

TELEPHONE NO.: 376-2858

PROJECT COORDINATOR: WIDRIG, DL

PRICE CODE: 8C

DATA TURNAROUND: 15 Days / 15 Days

SAMPLING LOCATION: 100-K-63 location 2 5ft

PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

SAF NO.: F10-256

AIR QUALITY:

ICE CHEST NO.: SML-107

FIELD LOGBOOK NO.: HNF-N-807-13

ACTUAL SAMPLE DEPTH: 5'

COA: 301966E51D

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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MB6 604	SOIL	SEP 07 2010	1225	✓	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 07 2010 1430	[illegible]	SEP 07 2010 1430

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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-261	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 2 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML - 107	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-192 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days	AIR QUALITY: ☐	
SAMPLING LOCATION: 100-K-63 location 2 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	SAF NO.: F10-256	
ICE CHEST NO.: SML-107	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: ~~N/A~~ 1'	COA: 301966ES10
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27M36 005	SOIL	SEP 07 2010	1204	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 07 2010 1430	RECEIVED BY/STORED IN: VLDX	DATE/TIME: SEP 07 2010 1430
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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-192	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 2 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-107	FIELD LOGBOOK NO.: HNF-N-507-	ACTUAL SAMPLE DEPTH: 0-6"	COA: 301966ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-314 PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: WIDRIG, DL

TELEPHONE NO.: 376-2858

PROJECT COORDINATOR: WIDRIG, DL

PRICE CODE: 8C

DATA TURNAROUND: 15 Days / 15 Days

SAMPLING LOCATION: 100-K-63 location 2 10ft

PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

SAF NO.: F10-256

AIR QUALITY:

ICE CHEST NO.: SML - 107

FIELD LOGBOOK NO.: HNF-N-507-13

ACTUAL SAMPLE DEPTH: 10'

COA: 301966ES10

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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MJ9 006	SOIL	SEP 07 2010	1235	✓	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 07 2010 1420	[illegible]	SEP 07 2010 1430

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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-314	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 2 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY:	
ICE CHEST NO.: SAL - 107	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 10'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-018(01/06)

Attachment 2
Narrative, Rev.1
WSCF102464

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

Twelve (12) S&GRP samples were received at the WSCF Laboratory on September 8, 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. **Additionally, a copy of the completed P&D # WSCF102464 is included with this case narrative. Also is attached an Issue Resolution Form (IRF) pertaining to missing results for Hexavalent Chromium that were then scheduled to be analyzed outside the 30 day hold time.**

It should be noted that the attached chain of custody was not stamped "ICED" by the WSCF Laboratory Sample Custodian during sample receiving. However, based on procedure LO-090-403 form "NOTICE OF IMPROPER SAMPLE SUBMITTAL" was not submitted and was not stamped "NOT ICED". No anomaly was noted during sample receipt.

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

- **B** – Sample results with a concentration greater than the MDL but less than the PQL are B flagged (applies to inorganic and wet chemical analyses), as appropriate.
- **D** – Sample results are D flagged if dilution(s) were required, as appropriate.
- **J** – Sample results with a concentration greater than the MDL but less than the PQL are J flagged (applies to organic analyses), as appropriate.
- **U** – Analyzed for but not detected above limiting criteria. Relative Percent Difference (RPD) values associated with an analyte qualified with a "U" are not applicable.

Analytical Methodology for Requested Analyses

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

Inorganic Comments

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

- Batch QC 157734 analyzed on sample# B27MB6 (102445004)
  - All QC controls are within the established limits.
- Batch QC 158637 analyzed on sample# B27MP5 (102464012)
  - All QC controls are within the established limits.

Hexavalent Chromium – The hold time requirement for this analysis was not met. A Duplicate, Matrix Spike, Insoluble Matrix Spike, Blank and Laboratory Control Sample were analyzed with this delivery group. Analytical Note(s):

Batch QC 169038 analyzed on sample# B27M37 (102464001)

- Matrix Spike recovery was not within the established laboratory limits. Affected sample results in this batch were N flagged.
- An Issue Resolution Form regarding the analysis of the Hexavalent Chromium beyond the regulatory hold time is attached.

All other QC controls are within the established limits.

ICP-AES 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 158541 QC analyzed on sample# B27M37 (102464001)
  - Boron – Sample concentrations are estimated. "E"-Flagged are applied to samples. Samples are also "X" flagged to indicate iron interference.
  - All other 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 160834 analyzed on sample# B27M35 (102445001)
  - All QC controls are within the established limits.

Radiochemistry Comments

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

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

- Americium-241:
  - Batch QC 158433 analyzed on sample# B27M37 (102464001)
    - The Blank is less than two times the MDC. "B" Flag not required.
    - All other QC controls are within the established limits.
  - Batch QC 158434 analyzed on sample# B27MP4 (102464008)
    - All QC controls are within the established limits.
- Gamma Energy Analysis:
  - Batch QC 162635 analyzed on sample# B26VN7 (102157001)
    - Radium-226 and Radium-228 were detected in blank. These are Naturally Occurring Radioactive Materials (NORM). No flags assigned to sample results.
    - Cesium-137, cobalt-60, europium-152, europium-154, and europium-155 - 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.
  - Batch QC 162636 analyzed on sample# B27MK0 (102464003)
    - Radium-226 and Radium-228 were detected in blank. These are Naturally Occurring Radioactive Materials (NORM). No flags assigned to sample results.
    - Cesium-137, cobalt-60, europium-152, europium-154, radium-226 and radium-228- 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.
  - Batch QC 162637 analyzed on sample# B27MP5 (102464012)
    - Radium-226 and Radium-228 were detected in blank. These are Naturally Occurring Radioactive Materials (NORM). No flags assigned to sample results.

- Cesium-137, cobalt-60, europium-152, and europium-154 - 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 Plutonium analysis:
  - Batch QC 158433 analyzed on sample# B27M37 (102464001)
    - Plutonium-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.
    - All other QC controls are within the established limits.
  - Batch QC 158434 analyzed on sample# B27MP4 (102464008)
    - Plutonium 239/240—The Blank is less than two times the MDC. "B" Flag not required.
    - Plutonium-238—Duplicate RPD and Percent Recovery Limits are not shown due to the inability of the LIMS system to calculate a value when the results from the Sample and the Duplicate add up to zero.
    - All other QC controls are within the established limits.
- Isotopic Uranium analysis:
  - Batch QC 158433 analyzed on sample# B27M37 (102464001)
    - Uranium-235 - 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 other controls are within the established limits.
  - Batch QC 158434 analyzed on sample# B27MP4 (102464008)
    - The Blank is less than two times the MDC. "B" Flag not required.
    - Uranium-235 - 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.

- Strontium-89/90:
  - Batch QC 161633 analyzed on sample# B27M37 (102464001)
    - All QC controls are within the established limits.
  - Batch QC 161634 analyzed on sample# B27MP4 (102464008)
    - All QC controls are within the established limits.

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

Attachment 2
Narrative, Rev.1
WSCF102464

10/11/2010

Problem and Discrepancy Report

WSCF

SDG WSCF102464

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1. The data package has the following issues:

a) Hexavalent chromium was not reported in hard copy or electronic files for all samples.

Resolution: *Provide missing results.*

Lab Response: **The Hexavalent chromium results are provided in the hard copy report and in the corresponding EDD.**

b) Quality Control Report, Duplicate, Plutonium-238, page 93 of 140 – Duplicate RPD and RPD limit for Plutonium-238 are missing/ not reported in the "hard copy" data package. Please evaluate problem and submit missing QC data.

Resolution: *Provide missing results.*

Lab Response: **Upon review of the analytical report, it was found that duplicate RPD and Percent Recovery Limits are not shown due to the inability of the LIMS system to calculate a value when the results from the Sample and the Duplicate add up to zero.**

Please correct the issues and resubmit the hard copy and electronic data packages.

6

Sample Receipt

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-193 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K-63 location 3 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	SAF NO.: F10-256	AIR QUALITY: ☐
ICE CHEST NO.: SML-700	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 0-1'	COA: 301966ES10
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)

102464

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION			Cool<4C	Cool<4C	None	None	
HOLDING TIME			6 Months	28 Days/48 Hours	6 Months	6 Months	
TYPE OF CONTAINER			G/P	G/P	Square Bottle - Poly	G/P	
NO. OF CONTAINER(S)			1	1	1	1	
VOLUME			250mL	60mL	500mL	120mL	
SAMPLE ANALYSIS			SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27M37	SOIL	SEP 08 2010	0815	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 08 2010 1530	TA Frazier	SEP 08 2010 1530
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-6023-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-193	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376 2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 3 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-700	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 0-1'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-618(01/06)

Thursday, October 21, 2010 7:13:30 PM
Page 4 of 26

ChemWare

Sample Receipt

Chain of Custody

CHZMHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-264 PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K-63 location 5 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	SAF NO.: F10-256	AIR QUALITY: ☐
ICE CHEST NO.: SAIL-700	FIELD LOGBOOK NO.: HNF-N-607-13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966E510
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27M89 2	SOIL	SEP 08 2010	1233	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 08 2010 1530	TA Enzim	SEP 08 2010 1530
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(01/06)

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ChemWare

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-264 PAGE 2 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 5 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-700	FIELD LOGBOOK NO.: ~~HNF-N-507-~~ 13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-518(01/06)

ChemWare

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-315 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: WIDRIG, DL

TELEPHONE NO.: 376-2858

PROJECT COORDINATOR: WIDRIG, DL

PRICE CODE: 8C

DATA TURNAROUND: 15 Days / 15 Days

SAMPLING LOCATION: 100-K-63 location 3 10ft

PROJECT DESIGNATION: ARRA 100-K 63 KW Floodplain In Process Sampling - Soil

SAF NO.: F10-256

AIR QUALITY: ☐

ICE CHEST NO.: SML-700

FIELD LOGBOOK NO.: HNF-N-607-13.

ACTUAL SAMPLE DEPTH: 10'

COA: 301966ES10

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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MK0	3	SOIL	SEP 08 2010	0848	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 08 2010 1530	TA Finazin	SEP 08 2010 1530
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-6003-918(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-315 — PAGE 2 OF 2

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** WIDRIG, DL	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DL
PRICE CODE 8C	**DATA TURNAROUND** 15 Days / 15 Days		
SAMPLING LOCATION 100-K-63 location 3 10ft	**PROJECT DESIGNATION** ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	**SAF NO.** F10-256	**AIR QUALITY** ☐
ICE CHEST NO. SML-700	**FIELD LOGBOOK NO.** HNF-N-507-13	**ACTUAL SAMPLE DEPTH** 10'	**COA** 301966ES10
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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 - Total Sr; Americium-241;

A-6003 618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-194 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2853	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K-63 location 4 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	SAF NO.: F10-256	AIR QUALITY: ☐
ICE CHEST NO.: SML-700	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 0 - 1'	COA: 301966ES10
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250ml	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27M38	4 SOIL	SEP 08 2010	0905	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 08 2010 1530	[illegible]	SEP 08 2010 1530
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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/ SAMPLE ANALYSIS REQUEST			F10-256-194	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K 63 location 4 Surface	PROJECT DESIGNATION: ARRA 100 K 63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY:	
ICE CHEST NO.: SML-700	FIELD LOGBOOK NO.: HNF-N-607-13	ACTUAL SAMPLE DEPTH: 0-1'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-610(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-262 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
SAMPLING LOCATION: 100-K-63 location 3 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256
ICE CHEST NO.: SAIL - 700	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 9-5	COA: 301966E510
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: 8C — AIR QUALITY: ☐ — DATA TURNAROUND: 15 Days / 15 Days — METHOD OF SHIPMENT: GOVERNMENT VEHICLE

MATRIX*: A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegetation, W=Water, WI=Wipe, X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS: Contains Radioactive Material at concentrations that may or may not be regulated for transportaton per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool<4C	Cool<4C	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Scuare Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250ml	60ml	500ml	120ml
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MB7	5	SOIL	SEP 08 2010	0830	✓	✓	✓	✓

CHAIN OF POSSESSION — **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 08 2010 1530	TA Brazier	SEP 08 2010 1530

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(01/06)

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Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-262	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 3 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML - 700	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-263 PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC

COMPANY CONTACT: WIDRIG, DL

TELEPHONE NO.: 376-2858

PROJECT COORDINATOR: WIDRIG, DL

PRICE CODE: 8C

DATA TURNAROUND: 15 Days / 15 Days

SAMPLING LOCATION: 100-K-63 location 4 5ft

PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

SAF NO.: F10-256

AIR QUALITY: ☐

ICE CHEST NO.: SAL-700

FIELD LOGBOOK NO.: HNF-N-507-13

ACTUAL SAMPLE DEPTH: 5'

COA: 301966ES10

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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	50mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MB8	6 SOIL	SEP 08 2010	0925	✓	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 08 2010 / 1530	TA Fragua	SEP 08 2010 / 1530
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 6002-618(01/06)

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ChemWare

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-263	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 4 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-700	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-316 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
SAMPLING LOCATION: 100-K-63 location 4 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256
ICE CHEST NO.: SML-700	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 10'	COA: 301986ES10
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: BC — DATA TURNAROUND: 15 Days / 15 Days — AIR QUALITY: [ ] — METHOD OF SHIPMENT: GOVERNMENT VEHICLE

MATRIX*: A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegetation, W=Water, WI=Wipe, X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS: Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool~4C	Cool~4C	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MK1 7	SOIL	SEP 08 2010	0950	✓	✓	✓	✓

CHAIN OF POSSESSION — **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 08 2010 1530	TA Frazier	SEP 08 2010 1530
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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-316	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 4 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY:	
ICE CHEST NO.: SML-700	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 10'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-355 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K-63 location 4 15ft Dup	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	SAF NO.: F10-256	AIR QUALITY: ☐
ICE CHEST NO.: SML-700	FIELD LOGBOOK NO.: HNF-N-507-13.	ACTUAL SAMPLE DEPTH: 12'	COA: 301966E510
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MP4	8 SOIL	SEP 08 2010	1200	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 08 2010 / 1530	RECEIVED BY/STORED IN: TA Frazier	DATE/TIME: SEP 08 2010 / 1530
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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-355	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 4 15ft Dup	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-700	FIELD LOGBOOK NO.: HNF-N-607-13	ACTUAL SAMPLE DEPTH: 12'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

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Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-195 PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
SAMPLING LOCATION: 100-K-63 location 5 Surface	PROJECT DESIGNATION: AREA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256
ICE CHEST NO.: SML - 700	FIELD LOGBOOK NO.: HNF-N-607-13	ACTUAL SAMPLE DEPTH: 0-1	COA: 301966E510
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: 8C
AIR QUALITY: ☐
DATA TURNAROUND: 15 Days / 15 Days
METHOD OF SHIPMENT: GOVERNMENT VEHICLE

MATRIX*: A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegetation, W=Water, WI=Wipe, X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS: Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool-4C	Cool-4C	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250ml	60ml	500ml	120ml
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27M39	9 SOIL	SEP 08 2010	1220	✓	✓	✓	✓

CHAIN OF POSSESSION	DATE/TIME	SIGN/ PRINT NAMES	DATE/TIME
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	SEP 08 2010 1530	RECEIVED BY/STORED IN: TA Fleming	SEP 08 2010 1530
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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-195

PAGE 2 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: BC
				DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 5 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐
ICE CHEST NO.: SML-700	FIELD LOGBOOK NO.: HNF-N-507-___-___	ACTUAL SAMPLE DEPTH: 0-1	COA: 301966ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

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Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-317

PAGE 1 OF 2

COLLECTOR: FM Hall	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
SAMPLING LOCATION: CHPRC 100-K-63 location S 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain To Process Sampling - Soil		SAF NO.: F10-256
ICE CHEST NO.: SML-700	FIELD LOGBOOK NO.: HNF-N-607-13	ACTUAL SAMPLE DEPTH: 10'	COA: 301966ES10
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: 8C

AIR QUALITY: ☐

DATA TURNAROUND: 15 Days / 15 Days

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

MATRIX*: A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegetation, W=Water, WI=Wipe, K=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS: Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool-4C	Cool-4C	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MK2	10 SOIL	SEP 08 2010	1231	✓	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 08 2010 1530	TA Fleming	SEP 08 2010 1530

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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-317	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 5 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY:	
ICE CHEST NO.: SAML-700	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 10'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-354 PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DI	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K-63 location 4 15ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256
AIR QUALITY: ☐			
ICE CHEST NO.: SML-700	FIELD LOGBOOK NO.: HNF-N-607-13	ACTUAL SAMPLE DEPTH: 12'	COA: 301966ES10
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250ml	60ml	500ml	120ml
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MP3	SOIL	SEP 08 2010	1200	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 08 2010 1530	RECEIVED BY/STORED IN: TA Franklin	DATE/TIME: SEP 08 2010 1530
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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-354	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 4 15ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY:	
ICE CHEST NO.: SML-700	FIELD LOGBOOK NO.: HNF-N-507-13-	ACTUAL SAMPLE DEPTH: 12'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6003-118(01/06)

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Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-356

PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE:	BC	DATA TURNAROUND: 15 Days / 15 Days	
SAMPLING LOCATION: 100-K-63 location 5 15ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	SAF NO.: F10-256	AIR QUALITY: ☐
ICE CHEST NO.: SMAL-700	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 13'	COA: 301966ES10
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MP5	12 SOIL	SEP 08 2010	1310	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 08 2010 / 1530	RECEIVED BY/STORED IN: TA Frazier	DATE/TIME: SEP 08 2010 / 1530
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-6005-618(01/06)

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REVISED102464 -

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-356 — PAGE 2 OF 2

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** WIDRIG, DL	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DL
SAMPLING LOCATION 100-K-63 location 5 15ft	**PROJECT DESIGNATION** ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		**SAF NO.** F10-256
ICE CHEST NO. SML-700	**FIELD LOGBOOK NO.** HNF-N-507-13	**ACTUAL SAMPLE DEPTH** 13'	**COA** 301966ES10
SHIPPED TO Waste Sampling & Characterization	**~~HNF-N-507-OFFSITE PROPERTY NO.~~** N/A		**BILL OF LADING/AIR BILL NO.** N/A

PRICE CODE 8C — **AIR QUALITY** ☐ — **DATA TURNAROUND** 15 Days / 15 Days — **METHOD OF SHIPMENT** GOVERNMENT VEHICLE

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 – Total Sr; Americium-241;

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Attachment 2
Narrative
WSCF102473

Introduction

Eight (8) S&GRP samples were received at the WSCF Laboratory on September 9, 2010. The samples were analyzed for the analytes indicated on the attached copy of the chain of custody (COC) form in accordance with the *Statement of Work (SOW), Modification No. 2 to Agreement 36587, Release 3, "FH WSCF ANALYTICAL SERVICES FOR GROUNDWATER."*

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

It should be noted that the attached chain of custody was not stamped "ICED" by the WSCF Laboratory Sample Custodian during sample receiving. However, based on procedure LO-090-403 form "NOTICE OF IMPROPER SAMPLE SUBMITTAL" was not submitted and was not stamped "NOT ICED". No anomaly was noted during sample receipt.

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

- **B** – Sample results with a concentration greater than the MDL but less than the PQL are B flagged (applies to inorganic and wet chemical analyses), as appropriate.
- **D** – Sample results are D flagged if dilution(s) were required, as appropriate.
- **J** – Sample results with a concentration greater than the MDL but less than the PQL are J flagged (applies to organic analyses), as appropriate.
- **U** – Analyzed for but not detected above limiting criteria. Relative Percent Difference (RPD) values associated with an analyte qualified with a "U" are not applicable.

Analytical Methodology for Requested Analyses

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

Inorganic Comments

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

- Batch QC 161134 analyzed on sample# B27MP6 (102473005)

- Nitrate– Duplicate Relative Percent Difference(s) (RPD) did not meet the established laboratory limits. Duplicate Relative Percent Difference (RPD) does not apply to results near or below the minimum detectable level. No flags issued.
- All other QC controls are within the established limits.

ICP-AES 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 160033 analyzed on sample# B27MC0 (102473001)
  - Boron – Sample concentrations are estimated. "E"-Flagged are applied to samples. Samples are also "X" flagged to indicate iron interference.
  - All other 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 160834 analyzed on sample# B27M35 (102445001)
  - All QC controls are within the established limits.
- Batch QC 160836 analyzed on sample# B27M40 (102473003)
  - Manganese – Matrix Spike recovery exceeded established laboratory limits. Affected sample results in this batch were "N" flagged.
  - All other QC controls are within the established limits.

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 164278 analyzed on sample# B27M35 (102445001)
  - Duplicate Relative Percent Difference(s) (RPD) did not meet the established laboratory limits. Duplicate Relative Percent Difference (RPD) does not apply to results near or below the minimum detectable level. No flags issued.
  - All other QC controls are within the established limits.
- Batch QC 167140 analyzed on sample# B25H74 (102544001)

- Duplicate Relative Percent Difference(s) (RPD) did not meet the established laboratory limits. Duplicate Relative Percent Difference (RPD) does not apply to results near or below the minimum detectable level. No flags issued.
- Matrix Spike and Insoluble Matrix Spike recoveries exceeded established laboratory limits. Affected sample results in this batch were "N" flagged.
- All other QC controls are within the established limits.

Radiochemistry Comments

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

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 162637 analyzed on sample# B27MP5 (102464012)
    - Radium-226 and Radium-228 - Duplicate Relative Percent Difference(s) (RPD) did not meet the established laboratory limits due to Naturally Occurring Radioactive Material. No flags issued on sample results.
    - Cesium-137, cobalt-60, europium-152 and europium-154 - 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.
- Strontium-89/90:
  - Batch QC 162438 analyzed on sample# B27MC0 (102473001)
    - 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.
- Americium-241:
  - Batch QC 160633 analyzed on sample# B27MC0 (102473001)

- The Blank is less than two times the MDC. "B" Flag not required.
- 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 Plutonium analysis:
  - Batch QC 160633 analyzed on sample# B27MC0 (102473001)
    - Plutonium-238 and 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 160633 analyzed on sample# B27MC0 (102473001)
    - All QC controls are within the established limits.

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

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-265 — PAGE 1 OF 2

COLLECTOR: J. Scales	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: 100-K-63 location 6 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	SAF NO.: F10-256	
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-13.	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10
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)

102473

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool<4C	Cool<4C	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS 2017 (A017)	SEE ITEM (2) IN SPECIAL INSTRUCTIONS IC	SEE ITEM (3) IN SPECIAL INSTRUCTIONS GEA	SEE ITEM (4) IN SPECIAL INSTRUCTIONS PU U Am SE

SAMPLE NO.	MATRIX*		SAMPLE DATE	SAMPLE TIME				
B27MC0	1	SOIL	HNF-N-507-	0738	✓	✓	✓	✓

SEP 09 2010

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
J. Scales	SEP 09 2010 / 13:3	M. Wilson	SEP 09 2010 / 13:32

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(03/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-265	PAGE 2 OF 2
COLLECTOR: J. Scales	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 6 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SMK-007	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-266	PAGE 1 OF 2
COLLECTOR: J. Scales	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 7 5ft.	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-13-	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10	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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MC1	2 SOIL	SEP 09 2010	0925	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
J. Scales	SEP 09 2010 1332	M Nelson	SEP 09 2010 1332	
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 (003-618(01/06))

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-266	PAGE 2 OF 2
COLLECTOR J. Scales	COMPANY CONTACT WIDRIG, DL	TELEPHONE NO. 376-2858	PROJECT COORDINATOR WIDRIG, DL	PRICE CODE 8C	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 100-K-63 location 7 5ft	PROJECT DESIGNATION ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO. F10-256	AIR QUALITY ☐	
ICE CHEST NO. SML-007	FIELD LOGBOOK NO. HNF-N-507-13	ACTUAL SAMPLE DEPTH 5'	COA 301966ES10	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 WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/ SAMPLE ANALYSIS REQUEST			F10-256-196	PAGE 1 OF 2
COLLECTOR: J. Scales	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 6 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-	ACTUAL SAMPLE DEPTH: 0-1'	COA: 301966ES10	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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27M40 3	SOIL	SEP 09 2010	0738	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: J. Scales	DATE/TIME: SEP 09 2010/ 13:32	RECEIVED BY/STORED IN: M. Nelson	DATE/TIME: SEP 09 2010 13:32	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	ORIGINAL
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(01/06)

ChemVare

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-196	PAGE 2 OF 2
COLLECTOR: J. Scales	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 6 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 0-1'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-518(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-197	PAGE 1 OF 2
COLLECTOR: J. Scales	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 7 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY:	
ICE CHEST NO.: SML - 007	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 0 - 1'	COA: 301966ES10	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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27M41	4	SOIL	SEP 09 2010	0908	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: J. Scales	DATE/TIME: SEP 09 2010 1332	RECEIVED BY/STORED IN: M. Nelson M. Nelson	DATE/TIME: SEP 09 2010 13:32
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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-197	PAGE 2 OF 2
COLLECTOR: J. Scales	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 7 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SALL - 007	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 0-1'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-256-357** | **PAGE 1 OF 2**

COLLECTOR J. Scales	**COMPANY CONTACT** WIDRIG, DL	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DL
PRICE CODE 8C	**DATA TURNAROUND** 15 Days / 15 Days		
SAMPLING LOCATION 100-K-63 location 6 15ft	**PROJECT DESIGNATION** ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		**SAF NO.** F10-256
AIR QUALITY ☐			
ICE CHEST NO. SML-007	**FIELD LOGBOOK NO.** HNF-N-507-13	**ACTUAL SAMPLE DEPTH** 15'	**COA** 301966ES10
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27VP6	5	SOIL	SEP 09 2010	0846	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
J. Scales	SEP 09 2010 13:32	M. Nelson M. Nelson	SEP 09 2010 13:32
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

COPY

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

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-357	PAGE 2 OF 2
COLLECTOR: J. Scales	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 6 15ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-607-13	ACTUAL SAMPLE DEPTH: 15'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-358 — PAGE 1 OF 2

COLLECTOR: J. Scales	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
SAMPLING LOCATION: 100-K-63 location 7 15ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 15'	COA: 301966ES10
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: 8C — AIR QUALITY: ☐ — DATA TURNAROUND: 15 Days / 15 Days — METHOD OF SHIPMENT: GOVERNMENT VEHICLE

MATRIX*: A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegetation, W=Water, WI=Wipe, X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS: Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool-4C	Cool-4C	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MP7 6	SOIL	SEP 09 2010	1006	✓	✓	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
J. Scales	SEP 09 2010 13:32	M. Nelson M. Nelson	SEP 09 2010 13:32
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(01/05)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-358	PAGE 2 OF 2
COLLECTOR: J. Scales	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 7 15ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: ~~HNF-N-507-~~ 15 ~~HNF-N-507~~	ACTUAL SAMPLE DEPTH: 15'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-318 — PAGE 1 OF 2

COLLECTOR: J. Scales	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days	AIR QUALITY: ☐	
SAMPLING LOCATION: 100-K-53 location 6 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	SAF NO.: F10-256	
ICE CHEST NO.: SML - 007	FIELD LOGBOOK NO.: HNF-N-507-13.	ACTUAL SAMPLE DEPTH: 10'	COA: 301966ES10
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MK3	7	SOIL	SEP 09 2010	0752	✓	✓	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
J. Scales	SEP 09 2010 13:32	M. Weisman	SEP 09 2010 13:32

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-5003-618(01/06)

ChemVare

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-318	PAGE 2 OF 2
COLLECTOR: J. Scales	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 6 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 10'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-319 — PAGE 1 OF 2

COLLECTOR: J. Scales	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K-63 location 7 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	SAF NO.: F10-256	AIR QUALITY: ☐
ICE CHEST NO.: SAL-007	FIELD LOGBOOK NO.: HNF-N-607-13.	ACTUAL SAMPLE DEPTH: 10'	COA: 301966ES10
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MK4	8	SOIL	SEP 09 2010	0945	✓	✓	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
J. Scales	SEP 09 2010 13:32	M. Nelson	SEP 09 2010 13:32

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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-319	PAGE 2 OF 2
COLLECTOR: J. Scales	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 7 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SAML-007	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 10'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-618(01/06)

Attachment 2
Narrative
WSCF102515

Introduction

Twelve (12) S&GRP sample was received at the WSCF Laboratory on September 13, 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

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

- Batch QC 162938 analyzed on sample# B27MR0 (102515004)
- Batch QC 162939 analyzed on sample# B27MP8 (102515007)

- Chloride - Duplicate Relative Percent Difference (RPD) did not meet the established laboratory limits. The RPD criterion does not apply to results near or below the minimum detection limit.

All QC controls are within the established limits.

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

- Batch QC 167375 analyzed on sample# B27MK8 (102515001)
  - Matrix Spike and/or Matrix Spike (along with post spike) Duplicate recoveries exceeded established laboratory limits. Affected sample results in this batch were "N" flagged.

All QC controls are within the established limits.

ICP-AES 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 162852 QC analyzed on sample# B27MK8 (102515001)
  - Estimated Boron results due to Iron interference. Sample results are "E" flagged.

All other 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 162434 QC analyzed on sample# B27MK8 (102515001)
  - Molybdenum - was detected in the Blank and was evaluated. Affected sample results in this batch were "C" Flagged.

All other QC controls are within the established limits.

Radiochemistry Comments

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

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

Attachment 2
Narrative
WSCF102515

- Americium-241:
  - Batch QC 162840 analyzed on sample# B27MK8 (102515001)
    - The blank is less than 2 times the MDC and is acceptable. "B" flag not required.
  - Batch QC 162841 analyzed on sample# B27MP8 (102515007)
    - The blank is less than 2 times the MDC and is acceptable. "B" flag not required.
    - 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 QC controls are within the established limits.

- Gamma Energy Analysis:
  - Batch QC 163840 analyzed on sample# B27MK8 (102515001)
    - Radium-226 and 228 contaminations were detected in the Blank and was evaluated. These isotopes are Naturally Occurring Radioactive Material (NORM) and no flags were assigned.
  - Batch QC 163934 analyzed on sample# B27MC2 (102515010)

All QC controls are within the established limits.

- Isotopic Plutonium analysis:
  - Batch QC 162840 analyzed on sample# B27MK8 (102515001)
  - Batch QC 162841 analyzed on sample# B27MP8 (102515007)
    - Plutonium-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.

All QC controls are within the established limits.

- Isotopic Uranium analysis:
  - Batch QC 162840 analyzed on sample# B27MK8 (102515001)
    - 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 162841 analyzed on sample# B27MP8 (102515007)

All QC controls are within the established limits.

- Strontium-89/90:
  - Batch QC 165533 analyzed on sample# B27MK8 (102515001)
  - Batch QC 165534 analyzed on sample# B27MP8 (102515007)

All QC controls are within the established limits.

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

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-323

PAGE 1 OF 2

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** WIDRIG, DL	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DL
PRICE CODE 8C	**DATA TURNAROUND** 15 Days / 15 Days		
SAMPLING LOCATION 100-K-63 location 11 10ft	**PROJECT DESIGNATION** ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	**SAF NO.** F10-256	**AIR QUALITY** ☐
ICE CHEST NO. SML-007	**FIELD LOGBOOK NO.** HNF -N-507-13	**ACTUAL SAMPLE DEPTH** 10'	**COA** 301966E510
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
WT=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)

102515

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool~4C	Cool~4C	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60ml	500ml	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MK8	SOIL	SEP 13 2010	1040	✓	✓	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 13 2010 1430	Markson Williams	SEP 13 2010 1430

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-6003-518(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-323 — PAGE 2 OF 2

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** WIDRIG, DL	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DL
PRICE CODE 8C	**DATA TURNAROUND** 15 Days / 15 Days		
SAMPLING LOCATION 100-K-63 location 11 10ft	**PROJECT DESIGNATION** ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		**SAF NO.** F10-256
AIR QUALITY ☐			
ICE CHEST NO. SML-007	**FIELD LOGBOOK NO.** HNF-N-507-13.	**ACTUAL SAMPLE DEPTH** 10'	**COA** 301966ES10
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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6003-618(01/06)

ChemVare

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-270 PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: WIDRIG, DL

TELEPHONE NO.: 376-2858

PROJECT COORDINATOR: WIDRIG, DL

PRICE CODE: 8C

DATA TURNAROUND: 15 Days / 15 Days

AIR QUALITY: ☐

SAMPLING LOCATION: 100-K-63 location 11.5ft

PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

SAF NO.: F10-256

ICE CHEST NO.: SML-007

FIELD LOGBOOK NO.: HNF-N-507-13

ACTUAL SAMPLE DEPTH: 5'

COA: 301966ES10

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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MC5	2 SOIL	SEP 13 2010	1015	✓	✓	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 13 2010 1430	Mannison Manoja	SEP 13 2010 1430
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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-270	PAGE 2 OF 2
COLLECTOR: FM Hal CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 11 50	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-201 PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

SAMPLING LOCATION: 100-K-63 location 11 Surface

ICE CHEST NO.: SML-007

SHIPPED TO: Waste Sampling & Characterization

COMPANY CONTACT: WIDRIG, DL

TELEPHONE NO.: 376-2658

PROJECT COORDINATOR: WIDRIG, DL

PRICE CODE: 8C

DATA TURNAROUND: 15 Days / 15 Days

AIR QUALITY: ☐

PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

SAF NO.: F10-256

FIELD LOGBOOK NO.: ~~HNF-N-507~~ 13

ACTUAL SAMPLE DEPTH: 0-1'

COA: 301966ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

~~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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250ml	60mL	500ml	120ml
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27M45	3 SOIL	SEP 13 2010	1000	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 13 2010 1430	RECEIVED BY/STORED IN: MANRISON	DATE/TIME: SEP 13 2010 1430
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-6005-618(01/06)

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-201

PAGE 2 OF 2

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** WIDRIG, DL	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DL
SAMPLING LOCATION 100-K-63 location 11 Surface	**PROJECT DESIGNATION** ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		**SAF NO.** F10-256
TCF CHEST NO. SML-007	**FIELD LOGBOOK NO.** HNF-N-507-13	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 301966ES10
SHIPPED TO Waste Sampling & Characterization	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

PRICE CODE 8C

AIR QUALITY ☐

DATA TURNAROUND 15 Days / 15 Days

METHOD OF SHIPMENT GOVERNMENT VEHICLE

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium 239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST**

F10-256-361 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K-63 location 10 15ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256
AIR QUALITY:			
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-13.	ACTUAL SAMPLE DEPTH: 13'	COA: 301966ES10
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
E27MR0	4	SOIL	SEP 13 2010	0940	✓	✓	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 13 2010 1430	MARKSON Minock	SEP 13 2010 1430

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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-361 — PAGE 2 OF 2

COLLECTOR FM Hall	**COMPANY CONTACT** WIDRIG, DI	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DI
SAMPLING LOCATION CHPRC 100-K-63 location 10 15ft	**PROJECT DESIGNATION** ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		**SAF NO.** F10-256
ICE CHEST NO. SML-007	**FIELD LOGBOOK NO.** HNF-N-507-13	**ACTUAL SAMPLE DEPTH** 13'	**COA** 301966ES10
SHIPPED TO Waste Sampling & Characterization	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

PRICE CODE 8C — **AIR QUALITY** ☐ — **DATA TURNAROUND** 15 Days / 15 Days — **METHOD OF SHIPMENT** GOVERNMENT VEHICLE

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-322 PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
SAMPLING LOCATION: 100-K-63 location 10 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 10'	COA: 301966ES10
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: 8C
AIR QUALITY: ☐
DATA TURNAROUND: 15 Days / 15 Days
METHOD OF SHIPMENT: GOVERNMENT VEHICLE

MATRIX*: A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, v=Vegetation, W=Water, WI=Wipe, X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS: Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool~4C	Cool~4C	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MK7	S SOIL	SEP 13 2010	0925	✓	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 13 2010 1430	M Nelson	SEP 13 2010 1430

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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F10-256-322	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C
SAMPLING LOCATION: 100-K-63 location 10 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY:
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 10'	COA: 301966ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A	

DATA TURNAROUND: 15 Days / 15 Days

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-269 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K 63 location 10 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	SAF NO.: F10-256	AIR QUALITY: ☐
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MC4	6 SOIL	SEP 13 2010	0900	✓	✓	✓	✓

CHAIN OF POSSESSION: RELINQUISHED BY/REMOVED FROM	DATE/TIME	SIGN/ PRINT NAMES: RECEIVED BY/STORED IN	DATE/TIME
FM Hall	SEP 13 2010 1430	Marlon Mends	SEP 13 2010 1430
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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-269	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 10 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-807-13	ACTUAL SAMPLE DEPTH: 5	COA: 301966ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GK1 applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

☐ ORIGINAL

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-359 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: BC	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K-63 location 8 15ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	SAF NO.: F10-256	AIR QUALITY: ☐
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-13.	ACTUAL SAMPLE DEPTH: 13'	COA: 301966ES10
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27VP8 7	SOIL	SEP 13 2010	0831	✓	✓	✓	✓

CHAIN OF POSSESSION — **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 13 2010 1430	Marelson Morales	SEP 13 2010 1430

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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-359	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 8 15ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 13'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6003-018(01/06)

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST**

F10-256-200 PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
SAMPLING LOCATION: 100-K-63 location 10 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain Ir Process Sampling - Soil		SAF NO.: F10-256
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 0-1'	COA: 301966ES10
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: BC — DATA TURNAROUND: 15 Days / 15 Days

AIR QUALITY: ☐

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

MATRIX*: A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegetation, W=Water, WT=Wipe, X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS: Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool~4C	Cool~4C	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27M44	8 SOIL	SEP 13 2010	0845	✓	✓	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 13 2010 1430	Maneia MANASM	SEP 13 2010 1430

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(01/05)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-200 — PAGE 2 OF 2

COLLECTOR	**COMPANY CONTACT** WIDRIG, DI	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DI
SAMPLING LOCATION FM Hall CHPRC 100-K-63 location 10 Surface	**PROJECT DESIGNATION** ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		**SAF NO.** F10-256
ICE CHEST NO. SAL-007	**FIELD LOGBOOK NO.** HNF-N-507-13	**ACTUAL SAMPLE DEPTH** 0-1	**COA** 301966ES10
SHIPPED TO Waste Sampling & Characterization	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

PRICE CODE 8C — **AIR QUALITY** ☐ — **DATA TURNAROUND** 15 Days / 15 Days

METHOD OF SHIPMENT GOVERNMENT VEHICLE

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-618(01/06)

ChemVare

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-320

PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K-63 location 8 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	SAF NO.: F10-256	AIR QUALITY: ☐
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-13.	ACTUAL SAMPLE DEPTH: 10'	COA: 301966ES10
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MK5	9 SOIL	SEP 13 2010	0815	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 13 2010 1430	RECEIVED BY/STORED IN: Marvison Manes	DATE/TIME: SEP 13 2010 1430
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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-320	PAGE 2 OF 2
COLLECTOR: FM Hal CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 8 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 10'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-267 PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
SAMPLING LOCATION: 100-K-63 location 8 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256
ICE CHEST NO.: SAIL-007	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 0 4 5'	COA: 301966ES10
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: 8C
AIR QUALITY: ☐
DATA TURNAROUND: 15 Days / 15 Days
METHOD OF SHIPMENT: GOVERNMENT VEHICLE

MATRIX*: A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegetation, W=Water, WI=Wipe, X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS: Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool~4C	Cool~4C	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MC2	10	SOIL	SEP 13 2010	0800	✓	✓	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 13 2010 1430	Marlon Marlon	SEP 13 2010 1430

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

ChemVare

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-267	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 8 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: [ ]	
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-607-13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6023-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-362 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 375-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	AIR QUALITY: ☐	DATA TURNAROUND: 15 Days / 15 Days	
SAMPLING LOCATION: 100-K-63 location 11 15ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	SAF NO.: F10-256	
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-13.	ACTUAL SAMPLE DEPTH: 141	COA: 301966ES10
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MR1	SOIL	SEP 13 2010	1220	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 13 2010 1430	RECEIVED BY/STORED IN: Marvin Marvin	DATE/TIME: SEP 13 2010 1430
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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-362

PAGE 2 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K-63 location 11 15ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256
AIR QUALITY: ☐			
ICE CHEST NO.: SMC-007	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 141	COA: 301966ES10
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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-198 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
SAMPLING LOCATION: 100-K-63 location 8 Surface	PROJECT DESIGNATION: ARRA 100-K 63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 0 - 1	COA: 301966ES10
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: 8C — AIR QUALITY: ☐ — DATA TURNAROUND: 15 Days / 15 Days — METHOD OF SHIPMENT: GOVERNMENT VEHICLE

MATRIX*: A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegetation, W=Water, WI=Wipe, X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS: Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool~4C	Cool~4C	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27M42	12 SOIL	SEP 13 2010	0740	✓	✓	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 13 2010 1430	MAWilson	SEP 13 2010 1430

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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-198 PAGE 2 OF 2

COLLECTOR
FM Hall
CHPRC

COMPANY CONTACT
WIDRIG, DL

TELEPHONE NO.
376-2858

PROJECT COORDINATOR
WIDRIG, DL

PRICE CODE 8C

DATA TURNAROUND
15 Days / 15 Days

AIR QUALITY ☐

SAMPLING LOCATION
100-K-63 location 8 Surface

PROJECT DESIGNATION
ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

SAF NO.
F10-256

ICE CHEST NO.
SML-007

FIELD LOGBOOK NO.
HNF-N-507-13

ACTUAL SAMPLE DEPTH
0-1

COA
301966ES10

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 WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-618(01/06)

Attachment 2
Narrative
WSCF102537

Introduction

Nine (9) S&GRP samples were received at the WSCF Laboratory on September 14, 2010. The samples were analyzed for the analytes indicated on the attached copy of the chain of custody (COC) form in accordance with the *Statement of Work (SOW), Modification No. 2 to Agreement 36587, Release 3, "FH WSCF ANALYTICAL SERVICES FOR GROUNDWATER."*

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

It should be noted that the attached chain of custody was not stamped "ICED" by the WSCF Laboratory Sample Custodian during sample receiving. However, based on procedure LO-090-403 form "NOTICE OF IMPROPER SAMPLE SUBMITTAL" was not submitted and was not stamped "NOT ICED". No anomaly was noted during sample receipt.

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

- **B** – Sample results with a concentration greater than the MDL but less than the PQL are B flagged (applies to inorganic and wet chemical analyses), as appropriate.
- **D** – Sample results are D flagged if dilution(s) were required, as appropriate.
- **J** – Sample results with a concentration greater than the MDL but less than the PQL are J flagged (applies to organic analyses), as appropriate.
- **U** – Analyzed for but not detected above limiting criteria. Relative Percent Difference (RPD) values associated with an analyte qualified with a "U" are not applicable.

Analytical Methodology for Requested Analyses

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

Inorganic Comments

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

- Batch QC 163549 analyzed on sample# B27M46 (102537001)

All QC controls are within the established limits.

Attachment 2
Narrative
WSCF102537

ICP-AES 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 162853 analyzed on sample# B27M46 (102537001)

All QC controls are within the established limits.

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

- Batch QC 163533 analyzed on sample# B27M46 (102537001)
  - Manganese – Matrix Spike recovery was not within the established laboratory limits. Affected sample results in this batch were N flagged.
  - Selenium - was detected in the Blank. Affected sample results in this batch were "C" Flagged.

All other QC controls are within the established limits.

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 167140 analyzed on sample# B25H74 (102544001)
  - Matrix Spike and Insoluble Matrix Spike recoveries exceeded established laboratory limits. Affected sample results in this batch were N flagged.
  - Duplicate Relative Percent Difference(s) (RPD) did not meet the established laboratory limits. Duplicate Relative Percent Difference (RPD) does not apply to results near or below the minimum detectable level. No flags issued.
- Batch QC 167375 analyzed on sample# B27MK8 (102515001)
  - Matrix Spike, Matrix Spike Duplicate and Post Spike recoveries exceeded established laboratory limits. Affected sample results in this batch were N flagged.

All other QC controls are within the established limits.

Attachment 2
Narrative
WSCF102537

Radiochemistry Comments

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

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 163934 analyzed on sample# B27MC2 (102515010)
    - Radium-226—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 163942 analyzed on sample# B26FB7 (102197001)
    - Radium-226 and Radium-228 – The Blank was above established laboratory limits due to Naturally Occurring Radioactive Material.
    - Radium-226 - Duplicate Relative Percent Difference(s) (RPD) did not meet the established laboratory limits due to Naturally Occurring Radioactive Material.

All other QC controls are within the established limits.

- Strontium-89/90:
  - Batch QC 165535 analyzed on sample# B27M46 (102537001)

All QC controls are within the established limits.

- Americium-241:
  - Batch QC 163237 analyzed on sample# B27M46 (102537001)
    - The Blank is less than two times the MDC. "B" Flag not required.
    - 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 163238 analyzed on sample# B27MC9 (102537006)
    - The Blank is less than two times the MDC. "B" Flag not required.

All other QC controls are within the established limits.

Attachment 2
Narrative
WSCF102537

- Isotopic Plutonium analysis:
  - Batch QC 163237 analyzed on sample# B27M46 (102537001)
    - Plutonium-238 and 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.
  - Batch QC 163238 analyzed on sample# B27MC9 (102537006)
    - Plutonium-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.

  All other QC controls are within the established limits.

- Isotopic Uranium analysis:
  - Batch QC 163237 analyzed on sample# B27M46 (102537001)
  - Batch QC 163238 analyzed on sample# B27MC9 (102537006)

  All QC controls are within the established limits.

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

Sample Receipt

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-202 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	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: 100-K-63 location L2 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	SAF NO.: F10-256	
ICE CHEST NO.: SXXL-777	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 0-1	COA: 301966ES10
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: 102537

PRESERVATION	Cool~4C	Cool~4C	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27M46	SOIL	SEP 14 2010	0800	✓	✓	✓	✓

CHAIN OF POSSESSION	DATE/TIME	SIGN/ PRINT NAMES	DATE/TIME
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	SEP 14 2010 1400	RECEIVED BY/STORED IN: MAnelson Mandsell	SEP 14 2010 1400
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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-202	PAGE 2 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: BC	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 12 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-777	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 0-1	COA: 301966ES10	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 WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-203 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K-63 location 13 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256
AIR QUALITY: [ ]			
ICE CHEST NO.: SML-777	FIELD LOGBOOK NO.: HNF-N-507-13-	ACTUAL SAMPLE DEPTH: 0 - 1	COA: 301966ES10
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27M47	S SOIL	SEP 14 2010	0845	✓	✓	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 14 2010 1400	Marvelson Manoch	SEP 14 2010 1400
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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-203	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 13 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-777	FIELD LOGBOOK NO.: HNF-N-807-13	ACTUAL SAMPLE DEPTH: 0 - 1	COA: 301966ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-205 PAGE 1 OF 2

COLLECTOR	FM Hall CHPRC
SAMPLING LOCATION	100-K-63 location 15 Surface
ICE CHEST NO.	SML-777
SHIPPED TO	Waste Sampling & Characterization
COMPANY CONTACT	WIDRIG, DL
TELEPHONE NO.	376-2858
PROJECT COORDINATOR	WIDRIG, DL
PRICE CODE	8C
DATA TURNAROUND	15 Days / 15 Days
PROJECT DESIGNATION	ARRA 100-K-63 KW Floodplain In Process Sampling - Soil
SAF NO.	F10-256
AIR QUALITY	
FIELD LOGBOOK NO.	HNF-N-607-13
ACTUAL SAMPLE DEPTH	0-1
COA	301966ES10
METHOD OF SHIPMENT	GOVERNMENT VEHICLE
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27M49	3	SOIL	SEP 14 2010	09:25	✓	✓	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 14 2010 1400	MANXIson	SEP 14 2010 1400

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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-205	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 15 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: [ ]	
ICE CHEST NO.: SML-777	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 0-1'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-5003-618(01/06)

Wednesday, September 15, 2010 7:19:12 PM
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Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	F10-256-271	PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days	AIR QUALITY: ☐	
SAMPLING LOCATION: 100-K-63 location 12.5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	SAF NO.: F10-256	
ICE CHEST NO.: SML-777	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27M06	4 SOIL	SEP 14 2010	0820	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 14 2010 1400	MANSON Manson	SEP 14 2010 1400
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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-271	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 12 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SMIL-777	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-272 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K-63 location 13 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	SAF NO.: F10-256	AIR QUALITY:
ICE CHEST NO.: SML-777	FIELD LOGBOOK NO.: HNF-N-507-13.	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10
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=Wipe, X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS: Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool~4C	Cool~4C	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MC7	5	SOIL	SEP 14 2010	~~SEP 14 2010~~ 0905	✓	✓	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 14 2010 1400	MAJackson	SEP 14 2010 1400

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-6003-018(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-272 — PAGE 2 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
SAMPLING LOCATION: 100-K-63 location 13 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256
ICE CHEST NO.: SXL-777	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: 8C — AIR QUALITY: ☐ — DATA TURNAROUND: 15 Days / 15 Days — METHOD OF SHIPMENT: GOVERNMENT VEHICLE

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6003-618(01/06)

ChemVare

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-274 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K-63 location 15 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	SAF NO.: F10-256	AIR QUALITY: ☐
ICE CHEST NO.: SMC-777	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MC9	6	SOIL	SEP 14 2010	0940	✓	✓	✓	✓

CHAIN OF POSSESSION	DATE/TIME	SIGN/ PRINT NAMES	DATE/TIME
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	SEP 14 2010 1400	RECEIVED BY/STORED IN: MANelson	SEP 14 2010 1400
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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-274	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 15 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-777	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966E510	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 WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-324	PAGE 1 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 12 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: [ ]	
ICE CHEST NO.: SML-777	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 7'	COA: 301966ES10	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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MK9	7 SOIL	SEP 14 2010	0830	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 14 2010 1400	RECEIVED BY/STORED IN: Manuel Manuel	DATE/TIME: SEP 14 2010 1400	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	ORIGINAL
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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-324

PAGE 2 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K-63 location 12 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	SAF NO.: F10-256	AIR QUALITY: ☐
ICE CHEST NO.: SML-777	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 7'	COA: 301966ES10
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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-327

PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K-63 location 15 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	SAF NO.: F10-256	AIR QUALITY: ☐
ICE CHEST NO.: SAIL-777	FIELD LOGBOOK NO.: HNF-N-607-13	ACTUAL SAMPLE DEPTH: 10'	COA: 301966ES10
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27ML2	8	SOIL	SEP 14 2010	0950	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 14 2010/400	RECEIVED BY/STORED IN: Marie Gon	DATE/TIME: SEP 14 2010/400
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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-327	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 15 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SMC-777	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 10'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-356 PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: WIDRIG, DL

TELEPHONE NO.: 376-2858

PROJECT COORDINATOR: WIDRIG, DL

PRICE CODE: 8C

DATA TURNAROUND: 15 Days / 15 Days

SAMPLING LOCATION: 100-K-63 location 15 15ft

PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

SAF NO.: F10-256

AIR QUALITY: ☐

ICE CHEST NO.: SAL-777

FIELD LOGBOOK NO.: HNF-N-507-13

ACTUAL SAMPLE DEPTH: 141

COA: 301966ES10

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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MR5	9	SOIL	SEP 14 2010	1005	✓	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 14 2010 1400	[illegible]	SEP 14 2010 1400

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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-366	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 15 15ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodpain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SAM-777	FIELD LOGBOOK NO.: HNF-N-607-13	ACTUAL SAMPLE DEPTH: 14'	COA: 30196GES10	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 WSCF Analytical is 402111ES20. ** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-618(01/06)

Appendix 5

Data Validation Supporting Documentation

VALIDATION LEVEL:	A	B	C	D	E
PROJECT: 100-K-63 Pothole Samples			DATA PACKAGE: VSR12-005		
VALIDATOR: Maryann Jordan		LAB: WSCF		DATE: 12-12-2011	
			SDG: WSCF102445, WSCF102425, WSCF102473, WSCF102537, WSCF102515, WSCF102464		
ANALYSES PERFORMED					
SW-846/ICP	SW-846/GFAA	SW-846/Hg	SW-846 Cyanide	EPA 200.8 X	EPA 6010 X

SAMPLES/MATRIX Soil samples

SDG WSCF102445: B27M35, B27MJ8, B27MB5, B27MB6, B27M36, B27MJ9
SDG WSCF102425: B27MR7
SDG WSCF102473: B27MC0, B27MC1, B27M40, B27M41, B27MP6, B27MP7, B27MK3, B27MK4
SDG WSCF102537: B27M46, B27M47, B27M49, B27MC6, B27MC7, B27MC9, B27MK9, B27ML2, B27MR5
SDG WSCF102515: B27MK8, B27MC5, B27M45, B27MR0, B27MK7, B27MC4, B27MP8, B27M44, B27MK5, B27MC2, B27MR1, B27M42
SDG WSCF102464: B27M37, B27MB9, B27MK0, B27M38, B27MB7, B27MB8, B27MK1, B27MP4, B27M39, B27MK2, B27MP3, B27MP5

1. DATA PACKAGE COMPLETENESS AND CASE NARRATIVE

Technical verification documentation present?.....(Yes) No N/A

Comments: None

2. INSTRUMENT PERFORMANCE AND CALIBRATIONS (Levels D and E)

Initial calibrations performed on all instruments? ..... Yes No N/A

Initial calibrations acceptable? ..... Yes No N/A

ICP interference checks acceptable? ..... Yes No N/A

ICV and CCV checks performed on all instruments? ..... Yes No N/A

ICV and CCV checks acceptable? ..... Yes No N/A

Standards traceable? ..... Yes No N/A

Standards expired? ..... Yes No N/A

Calculation check acceptable? ..... Yes No N/A

Comments:

3. BLANKS (Levels B, C, D, and E)

ICB and CCB checks performed for all applicable analyses? (Levels D, E) ..... Yes No N/A

ICB and CCB results acceptable? (Levels D, E) ..... Yes No N/A

Laboratory blanks analyzed? ..... Yes No N/A

Laboratory blank results acceptable? ..... Yes No N/A

Field blanks analyzed? (Levels C, D, E) ..... Yes No N/A

Field blank results acceptable? (Levels C, D, E) ..... Yes No N/A

Transcription/calculation errors? (Levels D, E) ..... Yes No N/A

Comments:

SDG WSCF102425 MB detects: Zn 0.994 ug/l

SDG WSCF102425 EB detects: B27MR7: Mn 24 ug/l; Ni 0.48 ug/l; Ba 5.9 ug/l; Co 0.324 ug/k; Cu 1.06 ug/l; V 1.0 ug/l; Pb 0.548 ug/l; Sr 5.01 ug/l; Se 1.04 ug/l; Zn 5.69 ug/l

SDG WSCF102537 MB detects: Se 0.355 ug/l

SDG WSCF102515 MB detects: Mo 0.0549 ug/l

4. ACCURACY (Levels C, D, and E)

MS/MSD samples analyzed? ..... (Yes) No N/A

MS/MSD results acceptable? ..... Yes (No) N/A

MS/MSD standards NIST traceable? (Levels D, E) ..... Yes No (N/A)

MS/MSD standards expired? (Levels D, E) ..... Yes No (N/A)

LCS/BSS samples analyzed? ..... (Yes) No N/A

LCS/BSS results acceptable? ..... Yes (No) N/A

Standards traceable? (Levels D, E) ..... Yes No (N/A)

Standards expired? (Levels D, E) ..... Yes No (N/A)

Transcription/calculation errors? (Levels D, E) ..... Yes No (N/A)

Performance audit sample(s) analyzed? ..... Yes No (N/A)

Performance audit sample results acceptable? ..... Yes No (N/A)

Comments:

SDG WSCF102473:
MS: Mn %R 137.8% (batch 160836)

SDG WSCF102537:
MS; Mn %R 61.2%

SDG WSCF102515
LCS: Li %R 68.7%

5. PRECISION (Levels C, D, and E)

Duplicate RPD values acceptable?.....Yes No N/A

Duplicate results acceptable?.....Yes No N/A

MS/MSD standards NIST traceable? (Levels D, E)..... Yes No N/A

MS/MSD standards expired? (Levels D, E) ..... Yes No N/A

Field duplicate RPD values acceptable? .....Yes No N/A

Field split RPD values acceptable? ..... Yes No N/A

Transcription/calculation errors? (Levels D, E)..... Yes No N/A

Comments: None

6. ICP QUALITY CONTROL (Levels D and E)

ICP serial dilution samples analyzed? ..... Yes No N/A

ICP serial dilution %D values acceptable? ..... Yes No N/A

ICP post digestion spike required? ..... Yes No N/A

ICP post digestion spike values acceptable? ..... Yes No N/A

Standards traceable? ..... Yes No N/A

Standards expired? ..... Yes No N/A

Transcription/calculation errors? ..... Yes No N/A

Comments:

7. HOLDING TIMES (all levels)

Samples properly preserved? ..... Yes No N/A

Sample holding times acceptable? ..... Yes No N/A

Comments: None

8. RESULT QUANTITATION AND DETECTION LIMITS (all levels)

Results reported for all requested analyses?.....Yes No N/A

Results supported in the raw data? (Levels D, E) ..... Yes No N/A

Samples properly prepared? (Levels D, E)..... Yes No N/A

Detection limits meet RDL?.....Yes No N/A

Transcription/calculation errors? (Levels D, E) ..... Yes No N/A

Comments: None

Comments (attach additional sheets as necessary):

Appendix 6

Additional Documentation Requested By Client

Batch QC List

Attention Michael Neely
Department Inorganic

Group # WSCF102425

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
157641	157641	1	BLANK	37963	BLANK		Hexavalent chromium Discrete Analyzer
157641	157641	3	LCS	37965	LCS		Hexavalent chromium Discrete Analyzer
157641	157641	4	DUP	37966	B27749(102431001DUP)	102431001	Hexavalent chromium Discrete Analyzer
157641	157641	5	MS	37967	B27749(102431001MS)	102431001	Hexavalent chromium Discrete Analyzer
157641	157641	6	SAMPLE	102425001	B27MR7		Hexavalent chromium Discrete Analyzer
159733	162254	1	BLANK	38160	BLANK		ICP-6010 - All possible metals
159733	162254	2	LCS	38161	LCS		ICP-6010 - All possible metals
159733	162254	3	MS	38162	B27MR7(102425001MS)	102425001	ICP-6010 - All possible metals
159733	162254	4	MSD	38163	B27MR7(102425001MSD	102425001	ICP-6010 - All possible metals
159733	162254	5	SAMPLE	102425001	B27MR7		ICP-6010 - All possible metals
163538	163539	4	BLANK	38715	BLANK		ICP-2008 MS All possible metal
163538	163539	5	LCS	38716	LCS		ICP-2008 MS All possible metal
163538	163539	6	MS	38717	B275R1(102400007MS)	102400007	ICP-2008 MS All possible metal
163538	163539	7	MSD	38718	B275R1(102400007MSD)	102400007	ICP-2008 MS All possible metal
163538	163539	22	SAMPLE	102425001	B27MR7		ICP-2008 MS All possible metal

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF102425

QC Batch 159733
Associated Samples 102425001

Test ICP-6010 - All possible metals

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #38160**							
Lithium	7439-93-2		<4.0	ug/L					U	09/14/10
Boron	7440-42-8		<41	ug/L					U	09/14/10
LCS			**QC Sample #38161**							
Lithium	7439-93-2		483	ug/L	96.6	80 - 120				09/14/10
Boron	7440-42-8		959	ug/L	95.9	80 - 120				09/14/10
MS			**QC Sample #38162**							
			Original 102425001							
Lithium	7439-93-2	<4.0	489	ug/L	97.8	75 - 125				09/14/10
Boron	7440-42-8	<41	951	ug/L	95.1	75 - 125				09/14/10
MSD			**QC Sample #38163**							
			Original 102425001					**Paired**	**38162**	
Lithium	7439-93-2	<4.0	488	ug/L	97.6	75 - 125	0.20	20		09/14/10
Boron	7440-42-8	<41	986	ug/L	98.6	75 - 125	3.60	20		09/14/10

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF102425

QC Batch 163538
Associated Samples 102425001

Test ICP-2008 MS All possible metal

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #38715**							
Manganese	7439-96-5		<0.10	ug/L					U	09/16/10
Nickel	7440-02-0		<0.20	ug/L					U	09/16/10
Silver	7440-22-4		<0.10	ug/L					U	09/16/10
Antimony	7440-36-0		<0.30	ug/L					U	09/16/10
Barium	7440-39-3		<0.20	ug/L					U	09/16/10
Beryllium	7440-41-7		<0.050	ug/L					U	09/16/10
Cadmium	7440-43-9		<0.10	ug/L					U	09/16/10
Chromium	7440-47-3		<0.50	ug/L					U	09/16/10
Cobalt	7440-48-4		<0.050	ug/L					U	09/16/10
Copper	7440-50-8		<0.10	ug/L					U	09/16/10
Vanadium	7440-62-2		<0.20	ug/L					U	09/16/10
Zinc	7440-66-6		0.994	ug/L					B	09/16/10
Lead	7439-92-1		<0.10	ug/L					U	09/16/10
Mercury	7439-97-6		<0.050	ug/L					U	09/16/10
Molybdenum	7439-98-7		<0.050	ug/L					U	09/16/10
Strontium	7440-24-6		<0.10	ug/L					U	09/16/10
Tin	7440-31-5		<0.050	ug/L					U	09/16/10
Uranium	7440-61-1		<0.050	ug/L					U	09/16/10
Arsenic	7440-38-2		<0.40	ug/L					U	09/16/10

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF102425

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Selenium	7782-49-2		<0.30	ug/L					U	09/16/10
LCS			**QC Sample #38716**							
Manganese	7439-96-5		38.2	ug/L	95.6	85 - 115				09/16/10
Nickel	7440-02-0		37.0	ug/L	92.4	85 - 115				09/16/10
Silver	7440-22-4		38.4	ug/L	95.9	85 - 115				09/16/10
Antimony	7440-36-0		38.8	ug/L	97	85 - 115				09/16/10
Barium	7440-39-3		38.9	ug/L	97.3	85 - 115				09/16/10
Beryllium	7440-41-7		34.7	ug/L	86.8	85 - 115				09/16/10
Cadmium	7440-43-9		37.6	ug/L	93.9	85 - 115				09/16/10
Chromium	7440-47-3		37.3	ug/L	93.3	85 - 115				09/16/10
Cobalt	7440-48-4		37.6	ug/L	94.1	85 - 115				09/16/10
Copper	7440-50-8		37.2	ug/L	93	85 - 115				09/16/10
Vanadium	7440-62-2		38.0	ug/L	95.1	85 - 115				09/16/10
Zinc	7440-66-6		36.7	ug/L	91.8	85 - 115				09/16/10
Lead	7439-92-1		39.2	ug/L	98	85 - 115				09/16/10
Mercury	7439-97-6		2.06	ug/L	103.2	85 - 115				09/16/10
Molybdenum	7439-98-7		39.3	ug/L	98.2	85 - 115				09/16/10
Strontium	7440-24-6		38.7	ug/L	96.8	85 - 115				09/16/10
Tin	7440-31-5		39.8	ug/L	99.6	85 - 115				09/16/10
Uranium	7440-61-1		38.8	ug/L	97	85 - 115				09/16/10
Arsenic	7440-38-2		38.0	ug/L	95.1	85 - 115				09/16/10
Selenium	7782-49-2		36.8	ug/L	91.9	85 - 115				09/16/10
MS			**QC Sample #38717**							
			Original 102400007							

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF102425

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Manganese	7439-96-5		38.8	ug/L	96.9	70 - 130				09/16/10
Nickel	7440-02-0		37.4	ug/L	93.5	70 - 130				09/16/10
Silver	7440-22-4		36.9	ug/L	92.2	70 - 130				09/16/10
Antimony	7440-36-0		38.4	ug/L	96.1	70 - 130				09/16/10
Barium	7440-39-3		38.2	ug/L	95.6	70 - 130				09/16/10
Beryllium	7440-41-7		37.6	ug/L	94.1	70 - 130				09/16/10
Cadmium	7440-43-9		36.8	ug/L	92.1	70 - 130				09/16/10
Chromium	7440-47-3		37.4	ug/L	93.6	70 - 130				09/16/10
Cobalt	7440-48-4		37.6	ug/L	94	70 - 130				09/16/10
Copper	7440-50-8		37.1	ug/L	92.7	70 - 130				09/16/10
Vanadium	7440-62-2		38.0	ug/L	94.9	70 - 130				09/16/10
Zinc	7440-66-6		34.9	ug/L	87.2	70 - 130				09/16/10
Lead	7439-92-1		39.2	ug/L	98	70 - 130				09/16/10
Mercury	7439-97-6		2.04	ug/L	101.8	70 - 130				09/16/10
Molybdenum	7439-98-7		38.7	ug/L	96.6	70 - 130				09/16/10
Strontium	7440-24-6		29.2	ug/L	73	70 - 130				09/16/10
Tin	7440-31-5		38.7	ug/L	96.7	70 - 130				09/16/10
Uranium	7440-61-1		39.9	ug/L	99.7	70 - 130				09/16/10
Arsenic	7440-38-2		38.6	ug/L	96.6	70 - 130				09/16/10
Selenium	7782-49-2		36.1	ug/L	90.3	70 - 130				09/16/10
MSD			**QC Sample #38718**							
			Original 102400007						**Paired 38717**	
Manganese	7439-96-5		39.3	ug/L	98.4	70 - 130	1.50	20		09/16/10
Nickel	7440-02-0		37.9	ug/L	94.8	70 - 130	1.40	20		09/16/10
Silver	7440-22-4		37.5	ug/L	93.8	70 - 130	1.70	20		09/16/10

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF102425

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
Antimony	7440-36-0		39.3	ug/L	98.2	70 - 130	2.20	20			09/16/10
Barium	7440-39-3		39.8	ug/L	99.4	70 - 130	3.90	20			09/16/10
Beryllium	7440-41-7		38.6	ug/L	96.5	70 - 130	2.50	20			09/16/10
Cadmium	7440-43-9		37.4	ug/L	93.5	70 - 130	1.50	20			09/16/10
Chromium	7440-47-3		38.8	ug/L	97	70 - 130	3.60	20			09/16/10
Cobalt	7440-48-4		38.9	ug/L	97.3	70 - 130	3.50	20			09/16/10
Copper	7440-50-8		37.8	ug/L	94.5	70 - 130	1.90	20			09/16/10
Vanadium	7440-62-2		39.5	ug/L	98.8	70 - 130	4.00	20			09/16/10
Zinc	7440-66-6		36.2	ug/L	90.4	70 - 130	3.60	20			09/16/10
Lead	7439-92-1		40.4	ug/L	101	70 - 130	3.00	20			09/16/10
Mercury	7439-97-6		2.01	ug/L	100.7	70 - 130	1.10	20			09/16/10
Molybdenum	7439-98-7		40.0	ug/L	100	70 - 130	3.50	20			09/16/10
Strontium	7440-24-6		36.9	ug/L	92.2	70 - 130	23.20	20	*	X	09/16/10
Tin	7440-31-5		40.2	ug/L	100.5	70 - 130	3.90	20			09/16/10
Uranium	7440-61-1		41.5	ug/L	103.7	70 - 130	3.90	20			09/16/10
Arsenic	7440-38-2		39.4	ug/L	98.4	70 - 130	1.80	20			09/16/10
Selenium	7782-49-2		35.4	ug/L	88.5	70 - 130	2.00	20			09/16/10

Batch QC List

Attention Michael Neely
Department Inorganic

Group # WSCF102445

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
157435	158733	1	BLANK	37787	BLANK		ICP-6010 - All possible metals
157435	158733	2	LCS	37788	LCS		ICP-6010 - All possible metals
157435	158733	3	MS	37789	B27M35(102445001MS)	102445001	ICP-6010 - All possible metals
157435	158733	4	MSD	37790	B27M35(102445001MSD)	102445001	ICP-6010 - All possible metals
157435	158733	5	SAMPLE	102445001	B27M35		ICP-6010 - All possible metals
157435	158733	6	SAMPLE	102445002	B27MJ8		ICP-6010 - All possible metals
157435	158733	7	SAMPLE	102445003	B27MB5		ICP-6010 - All possible metals
157435	158733	8	SAMPLE	102445004	B27MB6		ICP-6010 - All possible metals
157435	158733	9	SAMPLE	102445005	B27M36		ICP-6010 - All possible metals
157435	158733	10	SAMPLE	102445006	B27MJ9		ICP-6010 - All possible metals
157734	157833	2	BLANK	37997	BLANK		Anions by Ion Chromatography (Solid)
157734	157833	3	LCS	37998	LCS		Anions by Ion Chromatography (Solid)
157734	157833	4	MS	37999	B27MB6(102445004MS)	102445004	Anions by Ion Chromatography (Solid)
157734	157833	5	MSD	38000	B27MB6(102445004MSD	102445004	Anions by Ion Chromatography (Solid)
157734	157833	6	DUP	38001	B27MB6(102445004DUP)	102445004	Anions by Ion Chromatography (Solid)
157734	157833	7	SAMPLE	102445004	B27MB6		Anions by Ion Chromatography (Solid)
157734	157833	8	SAMPLE	102445005	B27M36		Anions by Ion Chromatography (Solid)
157734	157833	9	SAMPLE	102445006	B27MJ9		Anions by Ion Chromatography (Solid)
160834	160838	4	BLANK	38214	BLANK		ICP-2008 MS All possible metal
160834	160838	5	LCS	38215	LCS		ICP-2008 MS All possible metal
160834	160838	6	SAMPLE	102445001	B27M35		ICP-2008 MS All possible metal
160834	160838	7	MS	38216	B27M35(102445001MS)	102445001	ICP-2008 MS All possible metal
160834	160838	8	MSD	38217	B27M35(102445001MSD)	102445001	ICP-2008 MS All possible metal

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Batch QC List

Attention Michael Neely
Department Inorganic

Group # WSCF102445

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
160834	160838	9	SAMPLE	102445002	B27MJ8		ICP-2008 MS All possible metal
160834	160838	10	SAMPLE	102445003	B27MB5		ICP-2008 MS All possible metal
160834	160838	11	SAMPLE	102445004	B27MB6		ICP-2008 MS All possible metal
160834	160838	12	SAMPLE	102445005	B27M36		ICP-2008 MS All possible metal
160834	160838	13	SAMPLE	102445006	B27MJ9		ICP-2008 MS All possible metal
164278	164537	1	BLANK	39016	BLANK		Hexavalent chromium
164278	164537	6	LCS	39017	LCS		Hexavalent chromium
164278	164537	7	DUP	39018	B27M35(102445001DUP)	102445001	Hexavalent chromium
164278	164537	8	MS	39019	B27M35(102445001MS)	102445001	Hexavalent chromium
164278	164537	9	PSTSPK	39020	PSTSPK		Hexavalent chromium
164278	164537	10	IMS	39021	B27M35(102445001IMS)	102445001	Hexavalent chromium
164278	164537	16	SAMPLE	102445001	B27M35		Hexavalent chromium
164278	164537	17	SAMPLE	102445002	B27MJ8		Hexavalent chromium
164278	164537	18	SAMPLE	102445003	B27MB5		Hexavalent chromium
164278	164537	19	SAMPLE	102445004	B27MB6		Hexavalent chromium
164278	164537	20	SAMPLE	102445005	B27M36		Hexavalent chromium
164278	164537	21	SAMPLE	102445006	B27MJ9		Hexavalent chromium

Quality Control Report

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Group # WSCF102445

QC Batch 157435 **Test** ICP-6010 - All possible metals
Associated Samples 102445001, 102445002, 102445003, 102445004, 102445005, 102445006

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #37787**							
Lithium	7439-93-2		<4.0	ug/L					U	09/10/10
Boron	7440-42-8		<41	ug/L					U	09/10/10
LCS			**QC Sample #37788**							
Lithium	7439-93-2		6.68	mg/kg	79.4	48 - 119				09/10/10
Boron	7440-42-8		127	mg/kg	110.4	76 - 151				09/10/10
MS			**QC Sample #37789**							
			Original 102445001							
Lithium	7439-93-2	7.38	91.2	mg/kg	90.8	75 - 125				09/10/10
Boron	7440-42-8	19.3	189	mg/kg	94.2	75 - 125				09/10/10
MSD			**QC Sample #37790**							
			Original 102445001					**Paired**	**37789**	
Lithium	7439-93-2	7.38	90.0	mg/kg	89.9	75 - 125	1.00	30		09/10/10
Boron	7440-42-8	19.3	190	mg/kg	94.7	75 - 125	0.50	30		09/10/10

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Quality Control Report

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Group # WSCF102445

QC Batch 160834 **Test** ICP-2008 MS All possible metal
Associated Samples 102445001, 102445002, 102445003, 102445004, 102445005, 102445006

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #38214**							
Manganese	7439-96-5		<0.10	ug/L					U	09/14/10
Nickel	7440-02-0		<0.20	ug/L					U	09/14/10
Silver	7440-22-4		<0.10	ug/L					U	09/14/10
Antimony	7440-36-0		<0.30	ug/L					U	09/14/10
Barium	7440-39-3		<0.20	ug/L					U	09/14/10
Beryllium	7440-41-7		<0.10	ug/L					U	09/14/10
Cadmium	7440-43-9		<0.10	ug/L					U	09/14/10
Chromium	7440-47-3		<0.50	ug/L					U	09/14/10
Cobalt	7440-48-4		<0.050	ug/L					U	09/14/10
Copper	7440-50-8		<0.10	ug/L					U	09/14/10
Vanadium	7440-62-2		<0.20	ug/L					U	09/14/10
Zinc	7440-66-6		<0.80	ug/L					U	09/14/10
Lead	7439-92-1		<0.10	ug/L					U	09/14/10
Mercury	7439-97-6		<0.050	ug/L					U	09/14/10
Molybdenum	7439-98-7		<0.050	ug/L					U	09/14/10
Strontium	7440-24-6		<0.10	ug/L					U	09/14/10
Tin	7440-31-5		<0.050	ug/L					U	09/14/10
Uranium	7440-61-1		<0.050	ug/L					U	09/14/10
Arsenic	7440-38-2		<0.40	ug/L					U	09/14/10

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Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF102445

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Selenium	7782-49-2		<0.30	ug/L					U	09/14/10
LCS			**QC Sample #38215**							
Manganese	7439-96-5		396	mg/kg	87.9	75 - 121				09/14/10
Nickel	7440-02-0		49.1	mg/kg	88.8	74 - 122				09/14/10
Silver	7440-22-4		98.9	mg/kg	98.4	83 - 127				09/14/10
Antimony	7440-36-0		83.7	mg/kg	93.2	62 - 205				09/14/10
Barium	7440-39-3		301	mg/kg	94.8	78 - 118				09/14/10
Beryllium	7440-41-7		82.7	mg/kg	92.8	77 - 120				09/14/10
Cadmium	7440-43-9		64.0	mg/kg	96.8	76 - 129				09/14/10
Chromium	7440-47-3		57.8	mg/kg	79.6	68 - 119				09/14/10
Cobalt	7440-48-4		66.6	mg/kg	91.6	77 - 122				09/14/10
Copper	7440-50-8		59.5	mg/kg	87.3	67 - 120				09/14/10
Vanadium	7440-62-2		67.3	mg/kg	81.5	67 - 122				09/14/10
Zinc	7440-66-6		163	mg/kg	92.8	73 - 131				09/14/10
Lead	7439-92-1		121	mg/kg	93.3	79 - 124				09/14/10
Mercury	7439-97-6		7.44	mg/kg	90.1	69 - 124				09/14/10
Molybdenum	7439-98-7		44.8	mg/kg	92.4	80 - 125				09/14/10
Strontium	7440-24-6		48.5	mg/kg	89.6	78 - 119				09/14/10
Tin	7440-31-5		173	mg/kg	100.3	84 - 130				09/14/10
Uranium	7440-61-1		384	mg/kg	96.4	86 - 113				09/14/10
Arsenic	7440-38-2		128	mg/kg	97.1	79 - 125				09/14/10
Selenium	7782-49-2		176	mg/kg	109.8	82 - 133				09/14/10
MS			**QC Sample #38216**							
			Original 102445001							

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Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF102445

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Manganese	7439-96-5	316	92.8	mg/kg	93.5	70 - 130				09/14/10
Nickel	7440-02-0	10.2	88.7	mg/kg	89.4	70 - 130				09/14/10
Silver	7440-22-4	<0.10	94.8	mg/kg	95.5	70 - 130				09/14/10
Antimony	7440-36-0	<0.31	77.1	mg/kg	77.7	70 - 130				09/14/10
Barium	7440-39-3	63.1	94.6	mg/kg	95.3	70 - 130				09/14/10
Beryllium	7440-41-7	0.399	93.4	mg/kg	94.1	70 - 130				09/14/10
Cadmium	7440-43-9	<0.10	96.5	mg/kg	97.2	70 - 130				09/14/10
Chromium	7440-47-3	8.43	89.9	mg/kg	90.6	70 - 130				09/14/10
Cobalt	7440-48-4	7.23	89.6	mg/kg	90.3	70 - 130				09/14/10
Copper	7440-50-8	15.2	87.8	mg/kg	88.5	70 - 130				09/14/10
Vanadium	7440-62-2	26.9	91.1	mg/kg	91.8	70 - 130				09/14/10
Zinc	7440-66-6	41.6	91.5	mg/kg	92.2	70 - 130				09/14/10
Lead	7439-92-1	6.48	96.4	mg/kg	97.1	70 - 130				09/14/10
Mercury	7439-97-6	<0.051	1.97	mg/kg	99	70 - 130				09/14/10
Molybdenum	7439-98-7	0.211	92.9	mg/kg	93.6	70 - 130				09/14/10
Strontium	7440-24-6	29.5	96.7	mg/kg	97.4	70 - 130				09/14/10
Tin	7440-31-5	6.04	95.0	mg/kg	95.7	70 - 130				09/14/10
Uranium	7440-61-1	0.404	99.0	mg/kg	99.7	70 - 130				09/14/10
Arsenic	7440-38-2	2.89	99.8	mg/kg	100.5	70 - 130				09/14/10
Selenium	7782-49-2	1.12	105	mg/kg	105.4	70 - 130				09/14/10
MSD			**QC Sample #38217**							
			Original 102445001						**Paired 38216**	
Manganese	7439-96-5	316	77.5	mg/kg	77.7	70 - 130	18.50	30		09/14/10
Nickel	7440-02-0	10.2	89.4	mg/kg	89.5	70 - 130	0.10	30		09/14/10
Silver	7440-22-4	<0.10	98.2	mg/kg	98.4	70 - 130	3.00	30		09/14/10

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Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF102445

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Antimony	7440-36-0	<0.31	82.5	mg/kg	82.6	70 - 130	6.10	30		09/14/10
Barium	7440-39-3	63.1	99.5	mg/kg	99.7	70 - 130	4.50	30		09/14/10
Beryllium	7440-41-7	0.399	97.0	mg/kg	97.2	70 - 130	3.20	30		09/14/10
Cadmium	7440-43-9	<0.10	100	mg/kg	100.4	70 - 130	3.20	30		09/14/10
Chromium	7440-47-3	8.43	91.2	mg/kg	91.4	70 - 130	0.90	30		09/14/10
Cobalt	7440-48-4	7.23	90.3	mg/kg	90.5	70 - 130	0.20	30		09/14/10
Copper	7440-50-8	15.2	88.4	mg/kg	88.6	70 - 130	0.10	30		09/14/10
Vanadium	7440-62-2	26.9	91.4	mg/kg	91.6	70 - 130	0.20	30		09/14/10
Zinc	7440-66-6	41.6	89.8	mg/kg	89.9	70 - 130	2.50	30		09/14/10
Lead	7439-92-1	6.48	100	mg/kg	100.2	70 - 130	3.10	30		09/14/10
Mercury	7439-97-6	<0.051	2.18	mg/kg	109	70 - 130	9.60	30		09/14/10
Molybdenum	7439-98-7	0.211	97.7	mg/kg	97.9	70 - 130	4.50	30		09/14/10
Strontium	7440-24-6	29.5	100	mg/kg	100.6	70 - 130	3.20	30		09/14/10
Tin	7440-31-5	6.04	97.9	mg/kg	98.1	70 - 130	2.50	30		09/14/10
Uranium	7440-61-1	0.404	102	mg/kg	102.3	70 - 130	2.60	30		09/14/10
Arsenic	7440-38-2	2.89	104	mg/kg	104	70 - 130	3.40	30		09/14/10
Selenium	7782-49-2	1.12	103	mg/kg	103.6	70 - 130	1.70	30		09/14/10

Batch QC List

Attention Michael Neely
Department Inorganic

Group # WSCF102464

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
157734	157833	2	BLANK	37997	BLANK		Anions by Ion Chromatography (Solid)
157734	157833	3	LCS	37998	LCS		Anions by Ion Chromatography (Solid)
157734	157833	4	MS	37999	B27MB6(102445004MS)	102445004	Anions by Ion Chromatography (Solid)
157734	157833	5	MSD	38000	B27MB6(102445004MSD	102445004	Anions by Ion Chromatography (Solid)
157734	157833	6	DUP	38001	B27MB6(102445004DUP)	102445004	Anions by Ion Chromatography (Solid)
157734	157833	10	SAMPLE	102464001	B27M37		Anions by Ion Chromatography (Solid)
157734	157833	11	SAMPLE	102464002	B27MB9		Anions by Ion Chromatography (Solid)
157734	157833	12	SAMPLE	102464003	B27MK0		Anions by Ion Chromatography (Solid)
157734	157833	13	SAMPLE	102464004	B27M38		Anions by Ion Chromatography (Solid)
157734	157833	14	SAMPLE	102464005	B27MB7		Anions by Ion Chromatography (Solid)
157734	157833	15	SAMPLE	102464006	B27MB8		Anions by Ion Chromatography (Solid)
158541	166233	1	BLANK	38121	BLANK		ICP-6010 - All possible metals
158541	166233	2	LCS	38122	LCS		ICP-6010 - All possible metals
158541	166233	3	MS	38123	B27M37(102464001MS)	102464001	ICP-6010 - All possible metals
158541	166233	4	MSD	38124	B27M37(102464001MSD)	102464001	ICP-6010 - All possible metals
158541	166233	5	SAMPLE	102464001	B27M37		ICP-6010 - All possible metals
158541	166233	6	SAMPLE	102464002	B27MB9		ICP-6010 - All possible metals
158541	166233	7	SAMPLE	102464003	B27MK0		ICP-6010 - All possible metals
158541	166233	8	SAMPLE	102464004	B27M38		ICP-6010 - All possible metals
158541	166233	9	SAMPLE	102464005	B27MB7		ICP-6010 - All possible metals
158541	166233	10	SAMPLE	102464006	B27MB8		ICP-6010 - All possible metals
158541	166233	11	SAMPLE	102464007	B27MK1		ICP-6010 - All possible metals
158541	166233	12	SAMPLE	102464008	B27MP4		ICP-6010 - All possible metals

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QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
158541	166233	13	SAMPLE	102464009	B27M39		ICP-6010 - All possible metals
158541	166233	14	SAMPLE	102464010	B27MK2		ICP-6010 - All possible metals
158541	166233	15	SAMPLE	102464011	B27MP3		ICP-6010 - All possible metals
158541	166233	16	SAMPLE	102464012	B27MP5		ICP-6010 - All possible metals
158637	158639	2	BLANK	38154	BLANK		Anions by Ion Chromatography (Solid)
158637	158639	3	LCS	38155	LCS		Anions by Ion Chromatography (Solid)
158637	158639	4	MS	38156	B27MP5(102464012MS)	102464012	Anions by Ion Chromatography (Solid)
158637	158639	5	MSD	38157	B27MP5(102464012MSD	102464012	Anions by Ion Chromatography (Solid)
158637	158639	6	DUP	38158	B27MP5(102464012DUP)	102464012	Anions by Ion Chromatography (Solid)
158637	158639	7	SAMPLE	102464007	B27MK1		Anions by Ion Chromatography (Solid)
158637	158639	8	SAMPLE	102464008	B27MP4		Anions by Ion Chromatography (Solid)
158637	158639	9	SAMPLE	102464009	B27M39		Anions by Ion Chromatography (Solid)
158637	158639	10	SAMPLE	102464010	B27MK2		Anions by Ion Chromatography (Solid)
158637	158639	11	SAMPLE	102464011	B27MP3		Anions by Ion Chromatography (Solid)
158637	158639	12	SAMPLE	102464012	B27MP5		Anions by Ion Chromatography (Solid)
160834	160838	4	BLANK	38214	BLANK		ICP-2008 MS All possible metal
160834	160838	5	LCS	38215	LCS		ICP-2008 MS All possible metal
160834	160838	7	MS	38216	B27M35(102445001MS)	102445001	ICP-2008 MS All possible metal
160834	160838	8	MSD	38217	B27M35(102445001MSD)	102445001	ICP-2008 MS All possible metal
160834	160838	16	SAMPLE	102464001	B27M37		ICP-2008 MS All possible metal
160834	160838	17	SAMPLE	102464002	B27MB9		ICP-2008 MS All possible metal
160834	160838	18	SAMPLE	102464003	B27MK0		ICP-2008 MS All possible metal
160834	160838	19	SAMPLE	102464004	B27M38		ICP-2008 MS All possible metal

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Group # WSCF102464

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
160834	160838	20	SAMPLE	102464005	B27MB7		ICP-2008 MS All possible metal
160834	160838	21	SAMPLE	102464006	B27MB8		ICP-2008 MS All possible metal
160834	160838	22	SAMPLE	102464007	B27MK1		ICP-2008 MS All possible metal
160834	160838	23	SAMPLE	102464008	B27MP4		ICP-2008 MS All possible metal
160834	160838	24	SAMPLE	102464009	B27M39		ICP-2008 MS All possible metal
160834	160838	25	SAMPLE	102464010	B27MK2		ICP-2008 MS All possible metal
160834	160838	28	SAMPLE	102464011	B27MP3		ICP-2008 MS All possible metal
160834	160838	29	SAMPLE	102464012	B27MP5		ICP-2008 MS All possible metal
169038	169039	1	BLANK	40795	BLANK		Hexavalent chromium
169038	169039	6	LCS	40796	LCS		Hexavalent chromium
169038	169039	7	DUP	40797	B27M37(102464001DUP)	102464001	Hexavalent chromium
169038	169039	8	MS	40798	B27M37(102464001MS)	102464001	Hexavalent chromium
169038	169039	9	PSTSPK	40799	PSTSPK		Hexavalent chromium
169038	169039	10	IMS	40800	B27M37(102464001IMS)	102464001	Hexavalent chromium
169038	169039	11	SAMPLE	102464001	B27M37		Hexavalent chromium
169038	169039	12	SAMPLE	102464002	B27MB9		Hexavalent chromium
169038	169039	13	SAMPLE	102464003	B27MK0		Hexavalent chromium
169038	169039	14	SAMPLE	102464004	B27M38		Hexavalent chromium
169038	169039	15	SAMPLE	102464005	B27MB7		Hexavalent chromium
169038	169039	16	SAMPLE	102464006	B27MB8		Hexavalent chromium
169038	169039	17	SAMPLE	102464007	B27MK1		Hexavalent chromium
169038	169039	18	SAMPLE	102464008	B27MP4		Hexavalent chromium
169038	169039	19	SAMPLE	102464009	B27M39		Hexavalent chromium

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Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF102464

QC Batch 158541 **Test** ICP-6010 - All possible metals
Associated Samples 102464001, 102464002, 102464003, 102464004, 102464005, 102464006, 102464007, 102464008, 102464009, 102464010, 102464011, 102464012

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #38121**							
Lithium	7439-93-2		<4.0	ug/L					U	09/22/10
Boron	7440-42-8		<41	ug/L					U	09/22/10
LCS			**QC Sample #38122**							
Lithium	7439-93-2		6.17	mg/kg	73.5	48 - 119				09/22/10
Boron	7440-42-8		116	mg/kg	101.7	76 - 151				09/22/10
MS			**QC Sample #38123**							
			Original 102464001							
Lithium	7439-93-2	5.89	95.9	mg/kg	95.3	75 - 125				09/22/10
Boron	7440-42-8	4.65	190	mg/kg	94.3	75 - 125				09/22/10
MSD			**QC Sample #38124**							
			Original 102464001					**Paired**	**38123**	
Lithium	7439-93-2	5.89	95.6	mg/kg	96.2	75 - 125	0.90	30		09/22/10
Boron	7440-42-8	4.65	188	mg/kg	94.7	75 - 125	0.40	30		09/22/10

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF102464

QC Batch 160834 **Test** ICP-2008 MS All possible metal
Associated Samples 102464001, 102464002, 102464003, 102464004, 102464005, 102464006, 102464007, 102464008, 102464009, 102464010, 102464011, 102464012

Analyte	CAS #	Original Found	QC Found	Units	% Recov Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #38214**						
Manganese	7439-96-5		<0.10	ug/L				U	09/14/10
Nickel	7440-02-0		<0.20	ug/L				U	09/14/10
Silver	7440-22-4		<0.10	ug/L				U	09/14/10
Antimony	7440-36-0		<0.30	ug/L				U	09/14/10
Barium	7440-39-3		<0.20	ug/L				U	09/14/10
Beryllium	7440-41-7		<0.050	ug/L				U	09/14/10
Cadmium	7440-43-9		<0.10	ug/L				U	09/14/10
Chromium	7440-47-3		<0.50	ug/L				U	09/14/10
Cobalt	7440-48-4		<0.050	ug/L				U	09/14/10
Copper	7440-50-8		<0.10	ug/L				U	09/14/10
Vanadium	7440-62-2		<0.20	ug/L				U	09/14/10
Zinc	7440-66-6		<0.80	ug/L				U	09/14/10
Lead	7439-92-1		<0.10	ug/L				U	09/14/10
Mercury	7439-97-6		<0.050	ug/L				U	09/14/10
Molybdenum	7439-98-7		<0.050	ug/L				U	09/14/10
Strontium	7440-24-6		<0.10	ug/L				U	09/14/10
Tin	7440-31-5		<0.050	ug/L				U	09/14/10
Uranium	7440-61-1		<0.050	ug/L				U	09/14/10

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Group # WSCF102464

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Arsenic	7440-38-2		<0.40	ug/L					U	09/14/10
Selenium	7782-49-2		<0.30	ug/L					U	09/14/10
LCS			**QC Sample #38215**							
Manganese	7439-96-5		396	mg/kg	87.9	75 - 121				09/14/10
Nickel	7440-02-0		49.1	mg/kg	88.8	74 - 122				09/14/10
Silver	7440-22-4		98.9	mg/kg	98.4	83 - 127				09/14/10
Antimony	7440-36-0		83.7	mg/kg	93.2	62 - 205				09/14/10
Barium	7440-39-3		301	mg/kg	94.8	78 - 118				09/14/10
Beryllium	7440-41-7		82.7	mg/kg	92.8	77 - 120				09/14/10
Cadmium	7440-43-9		64.0	mg/kg	96.8	76 - 129				09/14/10
Chromium	7440-47-3		57.8	mg/kg	79.6	68 - 119				09/14/10
Cobalt	7440-48-4		66.6	mg/kg	91.6	77 - 122				09/14/10
Copper	7440-50-8		59.5	mg/kg	96	67 - 120				09/14/10
Vanadium	7440-62-2		67.3	mg/kg	81.5	67 - 122				09/14/10
Zinc	7440-66-6		163	mg/kg	92.8	73 - 131				09/14/10
Lead	7439-92-1		121	mg/kg	93.3	79 - 124				09/14/10
Mercury	7439-97-6		7.44	mg/kg	90.1	69 - 124				09/14/10
Molybdenum	7439-98-7		44.8	mg/kg	92.4	80 - 125				09/14/10
Strontium	7440-24-6		48.5	mg/kg	89.6	78 - 119				09/14/10
Tin	7440-31-5		173	mg/kg	100.3	84 - 130				09/14/10
Uranium	7440-61-1		384	mg/kg	96.4	86 - 113				09/14/10
Arsenic	7440-38-2		128	mg/kg	97.1	79 - 125				09/14/10
Selenium	7782-49-2		176	mg/kg	109.8	82 - 133				09/14/10

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Group # WSCF102464

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
MS			**QC Sample #38216**							
			Original	**102445001**						
Manganese	7439-96-5		92.8	mg/kg	93.5	70 - 130				09/14/10
Nickel	7440-02-0		88.7	mg/kg	89.4	70 - 130				09/14/10
Silver	7440-22-4		94.8	mg/kg	95.5	70 - 130				09/14/10
Antimony	7440-36-0		77.1	mg/kg	77.7	70 - 130				09/14/10
Barium	7440-39-3		94.6	mg/kg	95.3	70 - 130				09/14/10
Beryllium	7440-41-7		93.4	mg/kg	94.1	70 - 130				09/14/10
Cadmium	7440-43-9		96.5	mg/kg	97.2	70 - 130				09/14/10
Chromium	7440-47-3		89.9	mg/kg	90.6	70 - 130				09/14/10
Cobalt	7440-48-4		89.6	mg/kg	90.3	70 - 130				09/14/10
Copper	7440-50-8		87.8	mg/kg	88.5	70 - 130				09/14/10
Vanadium	7440-62-2		91.1	mg/kg	91.8	70 - 130				09/14/10
Zinc	7440-66-6		91.5	mg/kg	92.2	70 - 130				09/14/10
Lead	7439-92-1		96.4	mg/kg	97.1	70 - 130				09/14/10
Mercury	7439-97-6		1.97	mg/kg	99	70 - 130				09/14/10
Molybdenum	7439-98-7		92.9	mg/kg	93.6	70 - 130				09/14/10
Strontium	7440-24-6		96.7	mg/kg	97.4	70 - 130				09/14/10
Tin	7440-31-5		95.0	mg/kg	95.7	70 - 130				09/14/10
Uranium	7440-61-1		99.0	mg/kg	99.7	70 - 130				09/14/10
Arsenic	7440-38-2		99.8	mg/kg	100.5	70 - 130				09/14/10
Selenium	7782-49-2		105	mg/kg	105.4	70 - 130				09/14/10
MSD			**QC Sample #38217**							
			Original	**102445001**					**Paired**	**38216**
Manganese	7439-96-5		77.5	mg/kg	77.7	70 - 130	18.50	30		09/14/10

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Quality Control Report

Attention Michael Neely
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Group # WSCF102464

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Nickel	7440-02-0		89.4	mg/kg	89.5	70 - 130	0.10	30		09/14/10
Silver	7440-22-4		98.2	mg/kg	98.4	70 - 130	3.00	30		09/14/10
Antimony	7440-36-0		82.5	mg/kg	82.6	70 - 130	6.10	30		09/14/10
Barium	7440-39-3		99.5	mg/kg	99.7	70 - 130	4.50	30		09/14/10
Beryllium	7440-41-7		97.0	mg/kg	97.2	70 - 130	3.20	30		09/14/10
Cadmium	7440-43-9		100	mg/kg	100.4	70 - 130	3.20	30		09/14/10
Chromium	7440-47-3		91.2	mg/kg	91.4	70 - 130	0.90	30		09/14/10
Cobalt	7440-48-4		90.3	mg/kg	90.5	70 - 130	0.20	30		09/14/10
Copper	7440-50-8		88.4	mg/kg	88.6	70 - 130	0.10	30		09/14/10
Vanadium	7440-62-2		91.4	mg/kg	91.6	70 - 130	0.20	30		09/14/10
Zinc	7440-66-6		89.8	mg/kg	89.9	70 - 130	2.50	30		09/14/10
Lead	7439-92-1		100	mg/kg	100.2	70 - 130	3.10	30		09/14/10
Mercury	7439-97-6		2.18	mg/kg	109	70 - 130	9.60	30		09/14/10
Molybdenum	7439-98-7		97.7	mg/kg	97.9	70 - 130	4.50	30		09/14/10
Strontium	7440-24-6		100	mg/kg	100.6	70 - 130	3.20	30		09/14/10
Tin	7440-31-5		97.9	mg/kg	98.1	70 - 130	2.50	30		09/14/10
Uranium	7440-61-1		102	mg/kg	102.3	70 - 130	2.60	30		09/14/10
Arsenic	7440-38-2		104	mg/kg	104	70 - 130	3.40	30		09/14/10
Selenium	7782-49-2		103	mg/kg	103.6	70 - 130	1.70	30		09/14/10

Batch QC List

Attention Michael Neely
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Group # WSCF102473

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
160033	166433	1	BLANK	38168	BLANK		ICP-6010 - All possible metals
160033	166433	2	LCS	38169	LCS		ICP-6010 - All possible metals
160033	166433	3	MS	38170	B27MC0(102473001MS)	102473001	ICP-6010 - All possible metals
160033	166433	4	MSD	38171	B27MC0(102473001MSD	102473001	ICP-6010 - All possible metals
160033	166433	5	SAMPLE	102473001	B27MC0		ICP-6010 - All possible metals
160033	166433	6	SAMPLE	102473002	B27MC1		ICP-6010 - All possible metals
160033	166433	7	SAMPLE	102473003	B27M40		ICP-6010 - All possible metals
160033	166433	8	SAMPLE	102473004	B27M41		ICP-6010 - All possible metals
160033	166433	9	SAMPLE	102473005	B27MP6		ICP-6010 - All possible metals
160033	166433	10	SAMPLE	102473006	B27MP7		ICP-6010 - All possible metals
160033	166433	11	SAMPLE	102473007	B27MK3		ICP-6010 - All possible metals
160033	166433	12	SAMPLE	102473008	B27MK4		ICP-6010 - All possible metals
160834	160838	4	BLANK	38214	BLANK		ICP-2008 MS All possible metal
160834	160838	5	LCS	38215	LCS		ICP-2008 MS All possible metal
160834	160838	7	MS	38216	B27M35(102445001MS)	102445001	ICP-2008 MS All possible metal
160834	160838	8	MSD	38217	B27M35(102445001MSD)	102445001	ICP-2008 MS All possible metal
160834	160838	30	SAMPLE	102473001	B27MC0		ICP-2008 MS All possible metal
160834	160838	31	SAMPLE	102473002	B27MC1		ICP-2008 MS All possible metal
160836	160840	4	BLANK	38222	BLANK		ICP-2008 MS All possible metal
160836	160840	5	LCS	38223	LCS		ICP-2008 MS All possible metal
160836	160840	6	SAMPLE	102473003	B27M40		ICP-2008 MS All possible metal
160836	160840	7	MS	38224	B27M40(102473003MS)	102473003	ICP-2008 MS All possible metal
160836	160840	8	MSD	38225	B27M40(102473003MSD)	102473003	ICP-2008 MS All possible metal

Batch QC List

Attention Michael Neely
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Group # WSCF102473

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
160836	160840	11	SAMPLE	102473004	B27M41		ICP-2008 MS All possible metal
160836	160840	12	SAMPLE	102473005	B27MP6		ICP-2008 MS All possible metal
160836	160840	13	SAMPLE	102473006	B27MP7		ICP-2008 MS All possible metal
160836	160840	14	SAMPLE	102473007	B27MK3		ICP-2008 MS All possible metal
160836	160840	15	SAMPLE	102473008	B27MK4		ICP-2008 MS All possible metal
161134	161137	2	BLANK	38335	BLANK		Anions by Ion Chromatography (Solid)
161134	161137	3	LCS	38336	LCS		Anions by Ion Chromatography (Solid)
161134	161137	4	MS	38337	B27MP6(102473005MS)	102473005	Anions by Ion Chromatography (Solid)
161134	161137	5	MSD	38338	B27MP6(102473005MSD	102473005	Anions by Ion Chromatography (Solid)
161134	161137	6	DUP	38339	B27MP6(102473005DUP)	102473005	Anions by Ion Chromatography (Solid)
161134	161137	7	SAMPLE	102473001	B27MC0		Anions by Ion Chromatography (Solid)
161134	161137	8	SAMPLE	102473002	B27MC1		Anions by Ion Chromatography (Solid)
161134	161137	9	SAMPLE	102473003	B27M40		Anions by Ion Chromatography (Solid)
161134	161137	10	SAMPLE	102473004	B27M41		Anions by Ion Chromatography (Solid)
161134	161137	11	SAMPLE	102473005	B27MP6		Anions by Ion Chromatography (Solid)
161134	161137	12	SAMPLE	102473006	B27MP7		Anions by Ion Chromatography (Solid)
161134	161137	13	SAMPLE	102473007	B27MK3		Anions by Ion Chromatography (Solid)
161134	161137	14	SAMPLE	102473008	B27MK4		Anions by Ion Chromatography (Solid)
164278	164537	1	BLANK	39016	BLANK		Hexavalent chromium
164278	164537	6	LCS	39017	LCS		Hexavalent chromium
164278	164537	7	DUP	39018	B27M35(102445001DUP)	102445001	Hexavalent chromium
164278	164537	8	MS	39019	B27M35(102445001MS)	102445001	Hexavalent chromium
164278	164537	9	PSTSPK	39020	PSTSPK		Hexavalent chromium

Quality Control Report

Attention Michael Neely
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Group # WSCF102473

QC Batch 160033 **Test** ICP-6010 - All possible metals
Associated Samples 102473001, 102473002, 102473003, 102473004, 102473005, 102473006, 102473007, 102473008

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #38168**							
Lithium	7439-93-2		<4.0	ug/L					U	09/22/10
Boron	7440-42-8		<41	ug/L					U	09/22/10
LCS			**QC Sample #38169**							
Lithium	7439-93-2		6.17	mg/kg	73.5	48 - 119				09/22/10
Boron	7440-42-8		116	mg/kg	101.7	76 - 151				09/22/10
MS			**QC Sample #38170**							
			Original 102473001							
Lithium	7439-93-2	8.24	91.0	mg/kg	91.3	75 - 125				09/22/10
Boron	7440-42-8	<4.2	187	mg/kg	94	75 - 125				09/22/10
MSD			**QC Sample #38171**							
			Original 102473001					**Paired**	**38170**	
Lithium	7439-93-2	8.24	95.0	mg/kg	95.1	75 - 125	4.10	30		09/22/10
Boron	7440-42-8	<4.2	197	mg/kg	98.5	75 - 125	4.70	30		09/22/10

Quality Control Report

Attention Michael Neely
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Group # WSCF102473

QC Batch 160834
Associated Samples 102473001, 102473002

Test ICP-2008 MS All possible metal

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #38214**							
Manganese	7439-96-5		<0.10	ug/L					U	09/14/10
Nickel	7440-02-0		<0.20	ug/L					U	09/14/10
Silver	7440-22-4		<0.10	ug/L					U	09/14/10
Antimony	7440-36-0		<0.30	ug/L					U	09/14/10
Barium	7440-39-3		<0.20	ug/L					U	09/14/10
Beryllium	7440-41-7		<0.050	ug/L					U	09/14/10
Cadmium	7440-43-9		<0.10	ug/L					U	09/14/10
Chromium	7440-47-3		<0.50	ug/L					U	09/14/10
Cobalt	7440-48-4		<0.050	ug/L					U	09/14/10
Copper	7440-50-8		<0.10	ug/L					U	09/14/10
Vanadium	7440-62-2		<0.20	ug/L					U	09/14/10
Zinc	7440-66-6		<0.80	ug/L					U	09/14/10
Lead	7439-92-1		<0.10	ug/L					U	09/14/10
Mercury	7439-97-6		<0.050	ug/L					U	09/14/10
Molybdenum	7439-98-7		<0.050	ug/L					U	09/14/10
Strontium	7440-24-6		<0.10	ug/L					U	09/14/10
Tin	7440-31-5		<0.050	ug/L					U	09/14/10
Uranium	7440-61-1		<0.050	ug/L					U	09/14/10
Arsenic	7440-38-2		<0.40	ug/L					U	09/14/10

Quality Control Report

Attention Michael Neely
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Group # WSCF102473

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Selenium	7782-49-2		<0.30	ug/L					U	09/14/10
LCS			**QC Sample #38215**							
Manganese	7439-96-5		396	mg/kg	87.9	75 - 121				09/14/10
Nickel	7440-02-0		49.1	mg/kg	88.8	74 - 122				09/14/10
Silver	7440-22-4		98.9	mg/kg	98.4	83 - 127				09/14/10
Antimony	7440-36-0		83.7	mg/kg	93.2	62 - 205				09/14/10
Barium	7440-39-3		301	mg/kg	94.8	78 - 118				09/14/10
Beryllium	7440-41-7		82.7	mg/kg	92.8	77 - 120				09/14/10
Cadmium	7440-43-9		64.0	mg/kg	96.8	76 - 129				09/14/10
Chromium	7440-47-3		57.8	mg/kg	79.6	68 - 119				09/14/10
Cobalt	7440-48-4		66.6	mg/kg	91.6	77 - 122				09/14/10
Copper	7440-50-8		59.5	mg/kg	96	67 - 120				09/14/10
Vanadium	7440-62-2		67.3	mg/kg	81.5	67 - 122				09/14/10
Zinc	7440-66-6		163	mg/kg	92.8	73 - 131				09/14/10
Lead	7439-92-1		121	mg/kg	93.3	79 - 124				09/14/10
Mercury	7439-97-6		7.44	mg/kg	90.1	69 - 124				09/14/10
Molybdenum	7439-98-7		44.8	mg/kg	92.4	80 - 125				09/14/10
Strontium	7440-24-6		48.5	mg/kg	89.6	78 - 119				09/14/10
Tin	7440-31-5		173	mg/kg	100.3	84 - 130				09/14/10
Uranium	7440-61-1		384	mg/kg	96.4	86 - 113				09/14/10
Arsenic	7440-38-2		128	mg/kg	97.1	79 - 125				09/14/10
Selenium	7782-49-2		176	mg/kg	109.8	82 - 133				09/14/10
MS			**QC Sample #38216**							
			Original 102445001							

Quality Control Report

Attention Michael Neely
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Group # WSCF102473

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Manganese	7439-96-5		92.8	mg/kg	93.5	70 - 130				09/14/10
Nickel	7440-02-0		88.7	mg/kg	89.4	70 - 130				09/14/10
Silver	7440-22-4		94.8	mg/kg	95.5	70 - 130				09/14/10
Antimony	7440-36-0		77.1	mg/kg	77.7	70 - 130				09/14/10
Barium	7440-39-3		94.6	mg/kg	95.3	70 - 130				09/14/10
Beryllium	7440-41-7		93.4	mg/kg	94.1	70 - 130				09/14/10
Cadmium	7440-43-9		96.5	mg/kg	97.2	70 - 130				09/14/10
Chromium	7440-47-3		89.9	mg/kg	90.6	70 - 130				09/14/10
Cobalt	7440-48-4		89.6	mg/kg	90.3	70 - 130				09/14/10
Copper	7440-50-8		87.8	mg/kg	88.5	70 - 130				09/14/10
Vanadium	7440-62-2		91.1	mg/kg	91.8	70 - 130				09/14/10
Zinc	7440-66-6		91.5	mg/kg	92.2	70 - 130				09/14/10
Lead	7439-92-1		96.4	mg/kg	97.1	70 - 130				09/14/10
Mercury	7439-97-6		1.97	mg/kg	99	70 - 130				09/14/10
Molybdenum	7439-98-7		92.9	mg/kg	93.6	70 - 130				09/14/10
Strontium	7440-24-6		96.7	mg/kg	97.4	70 - 130				09/14/10
Tin	7440-31-5		95.0	mg/kg	95.7	70 - 130				09/14/10
Uranium	7440-61-1		99.0	mg/kg	99.7	70 - 130				09/14/10
Arsenic	7440-38-2		99.8	mg/kg	100.5	70 - 130				09/14/10
Selenium	7782-49-2		105	mg/kg	105.4	70 - 130				09/14/10
MSD			**QC Sample #38217**							
			Original 102445001						**Paired 38216**	
Manganese	7439-96-5		77.5	mg/kg	77.7	70 - 130	18.50	30		09/14/10
Nickel	7440-02-0		89.4	mg/kg	89.5	70 - 130	0.10	30		09/14/10
Silver	7440-22-4		98.2	mg/kg	98.4	70 - 130	3.00	30		09/14/10

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF102473

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Antimony	7440-36-0		82.5	mg/kg	82.6	70 - 130	6.10	30		09/14/10
Barium	7440-39-3		99.5	mg/kg	99.7	70 - 130	4.50	30		09/14/10
Beryllium	7440-41-7		97.0	mg/kg	97.2	70 - 130	3.20	30		09/14/10
Cadmium	7440-43-9		100	mg/kg	100.4	70 - 130	3.20	30		09/14/10
Chromium	7440-47-3		91.2	mg/kg	91.4	70 - 130	0.90	30		09/14/10
Cobalt	7440-48-4		90.3	mg/kg	90.5	70 - 130	0.20	30		09/14/10
Copper	7440-50-8		88.4	mg/kg	88.6	70 - 130	0.10	30		09/14/10
Vanadium	7440-62-2		91.4	mg/kg	91.6	70 - 130	0.20	30		09/14/10
Zinc	7440-66-6		89.8	mg/kg	89.9	70 - 130	2.50	30		09/14/10
Lead	7439-92-1		100	mg/kg	100.2	70 - 130	3.10	30		09/14/10
Mercury	7439-97-6		2.18	mg/kg	109	70 - 130	9.60	30		09/14/10
Molybdenum	7439-98-7		97.7	mg/kg	97.9	70 - 130	4.50	30		09/14/10
Strontium	7440-24-6		100	mg/kg	100.6	70 - 130	3.20	30		09/14/10
Tin	7440-31-5		97.9	mg/kg	98.1	70 - 130	2.50	30		09/14/10
Uranium	7440-61-1		102	mg/kg	102.3	70 - 130	2.60	30		09/14/10
Arsenic	7440-38-2		104	mg/kg	104	70 - 130	3.40	30		09/14/10
Selenium	7782-49-2		103	mg/kg	103.6	70 - 130	1.70	30		09/14/10

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF102473

QC Batch 160836 **Test** ICP-2008 MS All possible metal
Associated Samples 102473003, 102473004, 102473005, 102473006, 102473007, 102473008

Analyte	CAS #	Original Found	QC Found	Units	% Recov Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #38222**						
Manganese	7439-96-5		<0.10	ug/L				U	09/14/10
Nickel	7440-02-0		<0.20	ug/L				U	09/14/10
Silver	7440-22-4		<0.10	ug/L				U	09/14/10
Antimony	7440-36-0		<0.30	ug/L				U	09/14/10
Barium	7440-39-3		<0.20	ug/L				U	09/14/10
Beryllium	7440-41-7		<0.050	ug/L				U	09/14/10
Cadmium	7440-43-9		<0.10	ug/L				U	09/14/10
Chromium	7440-47-3		<0.50	ug/L				U	09/14/10
Cobalt	7440-48-4		<0.050	ug/L				U	09/14/10
Copper	7440-50-8		<0.10	ug/L				U	09/14/10
Vanadium	7440-62-2		<0.20	ug/L				U	09/14/10
Zinc	7440-66-6		<0.80	ug/L				U	09/14/10
Lead	7439-92-1		<0.10	ug/L				U	09/14/10
Mercury	7439-97-6		<0.050	ug/L				U	09/14/10
Molybdenum	7439-98-7		<0.050	ug/L				U	09/14/10
Strontium	7440-24-6		<0.10	ug/L				U	09/14/10
Tin	7440-31-5		<0.050	ug/L				U	09/14/10
Uranium	7440-61-1		<0.050	ug/L				U	09/14/10
Arsenic	7440-38-2		<0.40	ug/L				U	09/14/10

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF102473

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Selenium	7782-49-2		<0.30	ug/L					U	09/14/10
LCS			**QC Sample #38223**							
Manganese	7439-96-5		405	mg/kg	89.8	75 - 121				09/14/10
Nickel	7440-02-0		49.3	mg/kg	89	74 - 122				09/14/10
Silver	7440-22-4		101	mg/kg	100	83 - 127				09/14/10
Antimony	7440-36-0		85.7	mg/kg	95.5	62 - 205				09/14/10
Barium	7440-39-3		305	mg/kg	96	78 - 118				09/14/10
Beryllium	7440-41-7		86.0	mg/kg	96.6	77 - 120				09/14/10
Cadmium	7440-43-9		65.4	mg/kg	98.8	76 - 129				09/14/10
Chromium	7440-47-3		59.1	mg/kg	81.4	68 - 119				09/14/10
Cobalt	7440-48-4		67.7	mg/kg	93.1	77 - 122				09/14/10
Copper	7440-50-8		60.4	mg/kg	97.4	67 - 120				09/14/10
Vanadium	7440-62-2		68.2	mg/kg	82.6	67 - 122				09/14/10
Zinc	7440-66-6		166	mg/kg	94.1	73 - 131				09/14/10
Lead	7439-92-1		122	mg/kg	94.3	79 - 124				09/14/10
Mercury	7439-97-6		7.33	mg/kg	88.7	69 - 124				09/14/10
Molybdenum	7439-98-7		45.3	mg/kg	93.3	80 - 125				09/14/10
Strontium	7440-24-6		49.5	mg/kg	91.4	78 - 119				09/14/10
Tin	7440-31-5		176	mg/kg	102	84 - 130				09/14/10
Uranium	7440-61-1		387	mg/kg	97.2	86 - 113				09/14/10
Arsenic	7440-38-2		130	mg/kg	99.1	79 - 125				09/14/10
Selenium	7782-49-2		180	mg/kg	112.1	82 - 133				09/14/10
MS			**QC Sample #38224**							
			Original 102473003							

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF102473

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Manganese	7439-96-5	311	138	mg/kg	138.7	70 - 130			N	09/14/10
Nickel	7440-02-0	9.62	96.1	mg/kg	96.5	70 - 130				09/14/10
Silver	7440-22-4	<0.10	101	mg/kg	101.6	70 - 130				09/14/10
Antimony	7440-36-0	<0.31	82.8	mg/kg	83.2	70 - 130				09/14/10
Barium	7440-39-3	64.2	107	mg/kg	107.9	70 - 130				09/14/10
Beryllium	7440-41-7	0.299	100	mg/kg	100.8	70 - 130				09/14/10
Cadmium	7440-43-9	<0.10	102	mg/kg	102.8	70 - 130				09/14/10
Chromium	7440-47-3	7.37	98.1	mg/kg	98.6	70 - 130				09/14/10
Cobalt	7440-48-4	7.44	96.8	mg/kg	97.2	70 - 130				09/14/10
Copper	7440-50-8	15.6	96.7	mg/kg	97.1	70 - 130				09/14/10
Vanadium	7440-62-2	29.7	97.0	mg/kg	97.4	70 - 130				09/14/10
Zinc	7440-66-6	35.4	100	mg/kg	100.8	70 - 130				09/14/10
Lead	7439-92-1	5.21	101	mg/kg	101.4	70 - 130				09/14/10
Mercury	7439-97-6	<0.052	2.10	mg/kg	105.5	70 - 130				09/14/10
Molybdenum	7439-98-7	0.240	99.8	mg/kg	100.3	70 - 130				09/14/10
Strontium	7440-24-6	29.6	106	mg/kg	106.3	70 - 130				09/14/10
Tin	7440-31-5	0.367	102	mg/kg	102.9	70 - 130				09/14/10
Uranium	7440-61-1	0.414	102	mg/kg	102.4	70 - 130				09/14/10
Arsenic	7440-38-2	3.39	106	mg/kg	106.1	70 - 130				09/14/10
Selenium	7782-49-2	1.40	112	mg/kg	112.3	70 - 130				09/14/10
MSD			**QC Sample #38225**							
			Original 102473003					**Paired**	**38224**	
Manganese	7439-96-5	311	117	mg/kg	119.4	70 - 130	15.00	30		09/14/10
Nickel	7440-02-0	9.62	90.7	mg/kg	92.4	70 - 130	4.30	30		09/14/10
Silver	7440-22-4	<0.10	94.9	mg/kg	96.8	70 - 130	4.80	30		09/14/10

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF102473

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Antimony	7440-36-0	<0.31	77.2	mg/kg	78.8	70 - 130	5.40	30		09/14/10
Barium	7440-39-3	64.2	98.8	mg/kg	100.7	70 - 130	6.90	30		09/14/10
Beryllium	7440-41-7	0.299	95.7	mg/kg	97.6	70 - 130	3.20	30		09/14/10
Cadmium	7440-43-9	<0.10	97.6	mg/kg	99.5	70 - 130	3.30	30		09/14/10
Chromium	7440-47-3	7.37	92.5	mg/kg	94.4	70 - 130	4.40	30		09/14/10
Cobalt	7440-48-4	7.44	91.2	mg/kg	93	70 - 130	4.40	30		09/14/10
Copper	7440-50-8	15.6	90.0	mg/kg	91.7	70 - 130	5.70	30		09/14/10
Vanadium	7440-62-2	29.7	90.5	mg/kg	92.3	70 - 130	5.40	30		09/14/10
Zinc	7440-66-6	35.4	93.4	mg/kg	95.2	70 - 130	5.70	30		09/14/10
Lead	7439-92-1	5.21	97.2	mg/kg	99.1	70 - 130	2.30	30		09/14/10
Mercury	7439-97-6	<0.052	2.00	mg/kg	102	70 - 130	3.40	30		09/14/10
Molybdenum	7439-98-7	0.240	93.4	mg/kg	95.3	70 - 130	5.10	30		09/14/10
Strontium	7440-24-6	29.6	97.1	mg/kg	99	70 - 130	7.10	30		09/14/10
Tin	7440-31-5	0.367	96.6	mg/kg	98.5	70 - 130	4.40	30		09/14/10
Uranium	7440-61-1	0.414	99.7	mg/kg	101.7	70 - 130	0.70	30		09/14/10
Arsenic	7440-38-2	3.39	97.7	mg/kg	99.6	70 - 130	6.30	30		09/14/10
Selenium	7782-49-2	1.40	106	mg/kg	107.7	70 - 130	4.20	30		09/14/10

Batch QC List

Attention Michael Neely
Department Inorganic

Group # WSCF102515

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
162434	162842	4	BLANK	38475	BLANK		ICP-2008 MS All possible metal
162434	162842	5	LCS	38476	LCS		ICP-2008 MS All possible metal
162434	162842	6	SAMPLE	102515001	B27MK8		ICP-2008 MS All possible metal
162434	162842	7	MS	38477	B27MK8(102515001MS)	102515001	ICP-2008 MS All possible metal
162434	162842	8	MSD	38478	B27MK8(102515001MSD	102515001	ICP-2008 MS All possible metal
162434	162842	9	SAMPLE	102515002	B27MC5		ICP-2008 MS All possible metal
162434	162842	10	SAMPLE	102515003	B27M45		ICP-2008 MS All possible metal
162434	162842	11	SAMPLE	102515004	B27MR0		ICP-2008 MS All possible metal
162434	162842	12	SAMPLE	102515005	B27MK7		ICP-2008 MS All possible metal
162434	162842	13	SAMPLE	102515006	B27MC4		ICP-2008 MS All possible metal
162434	162842	16	SAMPLE	102515007	B27MP8		ICP-2008 MS All possible metal
162434	162842	17	SAMPLE	102515008	B27M44		ICP-2008 MS All possible metal
162434	162842	18	SAMPLE	102515009	B27MK5		ICP-2008 MS All possible metal
162434	162842	19	SAMPLE	102515010	B27MC2		ICP-2008 MS All possible metal
162434	162842	20	SAMPLE	102515011	B27MR1		ICP-2008 MS All possible metal
162434	162842	21	SAMPLE	102515012	B27M42		ICP-2008 MS All possible metal
162852	167133	1	BLANK	38553	BLANK		ICP-6010 - All possible metals
162852	167133	2	LCS	38554	LCS		ICP-6010 - All possible metals
162852	167133	3	MS	38555	B27MK8(102515001MS)	102515001	ICP-6010 - All possible metals
162852	167133	4	MSD	38556	B27MK8(102515001MSD	102515001	ICP-6010 - All possible metals
162852	167133	5	SAMPLE	102515001	B27MK8		ICP-6010 - All possible metals
162852	167133	6	SAMPLE	102515002	B27MC5		ICP-6010 - All possible metals
162852	167133	7	SAMPLE	102515003	B27M45		ICP-6010 - All possible metals

Batch QC List

Attention Michael Neely
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Group # WSCF102515

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
162852	167133	8	SAMPLE	102515004	B27MR0		ICP-6010 - All possible metals
162852	167133	9	SAMPLE	102515005	B27MK7		ICP-6010 - All possible metals
162852	167133	10	SAMPLE	102515006	B27MC4		ICP-6010 - All possible metals
162852	167133	11	SAMPLE	102515007	B27MP8		ICP-6010 - All possible metals
162852	167133	12	SAMPLE	102515008	B27M44		ICP-6010 - All possible metals
162852	167133	13	SAMPLE	102515009	B27MK5		ICP-6010 - All possible metals
162852	167133	14	SAMPLE	102515010	B27MC2		ICP-6010 - All possible metals
162852	167133	15	SAMPLE	102515011	B27MR1		ICP-6010 - All possible metals
162852	167133	16	SAMPLE	102515012	B27M42		ICP-6010 - All possible metals
162938	162945	2	BLANK	38599	BLANK		Anions by Ion Chromatography (Solid)
162938	162945	3	LCS	38600	LCS		Anions by Ion Chromatography (Solid)
162938	162945	4	MS	38601	B27MR0(102515004MS)	102515004	Anions by Ion Chromatography (Solid)
162938	162945	5	MSD	38602	B27MR0(102515004MSD	102515004	Anions by Ion Chromatography (Solid)
162938	162945	6	DUP	38603	B27MR0(102515004DUP)	102515004	Anions by Ion Chromatography (Solid)
162938	162945	7	SAMPLE	102515001	B27MK8		Anions by Ion Chromatography (Solid)
162938	162945	8	SAMPLE	102515002	B27MC5		Anions by Ion Chromatography (Solid)
162938	162945	9	SAMPLE	102515003	B27M45		Anions by Ion Chromatography (Solid)
162938	162945	10	SAMPLE	102515004	B27MR0		Anions by Ion Chromatography (Solid)
162938	162945	11	SAMPLE	102515005	B27MK7		Anions by Ion Chromatography (Solid)
162938	162945	12	SAMPLE	102515006	B27MC4		Anions by Ion Chromatography (Solid)
162938	162945	13	SAMPLE	102515008	B27M44		Anions by Ion Chromatography (Solid)
162938	162945	14	SAMPLE	102515009	B27MK5		Anions by Ion Chromatography (Solid)
162938	162945	15	SAMPLE	102515010	B27MC2		Anions by Ion Chromatography (Solid)

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF102515

QC Batch 162434 **Test** ICP-2008 MS All possible metal
Associated Samples 102515001, 102515002, 102515003, 102515004, 102515005, 102515006, 102515007, 102515008, 102515009, 102515010, 102515011, 102515012

Analyte	CAS #	Original Found	QC Found	Units	% Recov Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #38475**						
Manganese	7439-96-5		<0.10	ug/L				U	09/16/10
Nickel	7440-02-0		<0.20	ug/L				U	09/16/10
Silver	7440-22-4		<0.10	ug/L				U	09/16/10
Antimony	7440-36-0		<0.30	ug/L				U	09/16/10
Barium	7440-39-3		<0.20	ug/L				U	09/16/10
Beryllium	7440-41-7		<0.050	ug/L				U	09/16/10
Cadmium	7440-43-9		<0.10	ug/L				U	09/16/10
Chromium	7440-47-3		<0.50	ug/L				U	09/16/10
Cobalt	7440-48-4		<0.050	ug/L				U	09/16/10
Copper	7440-50-8		<0.10	ug/L				U	09/16/10
Vanadium	7440-62-2		<0.20	ug/L				U	09/16/10
Zinc	7440-66-6		<0.80	ug/L				U	09/16/10
Lead	7439-92-1		<0.10	ug/L				U	09/16/10
Mercury	7439-97-6		<0.050	ug/L				U	09/16/10
Molybdenum	7439-98-7		0.0549	ug/L				B	09/16/10
Strontium	7440-24-6		<0.10	ug/L				U	09/16/10
Tin	7440-31-5		<0.050	ug/L				U	09/16/10
Uranium	7440-61-1		<0.050	ug/L				U	09/16/10

Quality Control Report

Attention Michael Neely
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Group # WSCF102515

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Arsenic	7440-38-2		<0.40	ug/L					U	09/16/10
Selenium	7782-49-2		<0.30	ug/L					U	09/16/10
LCS			**QC Sample #38476**							
Manganese	7439-96-5		420	mg/kg	93.2	75 - 121				09/16/10
Nickel	7440-02-0		51.4	mg/kg	92.9	74 - 122				09/16/10
Silver	7440-22-4		101	mg/kg	100.1	83 - 127				09/16/10
Antimony	7440-36-0		87.8	mg/kg	97.8	62 - 205				09/16/10
Barium	7440-39-3		303	mg/kg	95.4	78 - 118				09/16/10
Beryllium	7440-41-7		89.0	mg/kg	100	77 - 120				09/16/10
Cadmium	7440-43-9		67.2	mg/kg	101.5	76 - 129				09/16/10
Chromium	7440-47-3		62.6	mg/kg	86.3	68 - 119				09/16/10
Cobalt	7440-48-4		68.7	mg/kg	94.5	77 - 122				09/16/10
Copper	7440-50-8		61.6	mg/kg	99.4	67 - 120				09/16/10
Vanadium	7440-62-2		72.5	mg/kg	87.8	67 - 122				09/16/10
Zinc	7440-66-6		172	mg/kg	97.7	73 - 131				09/16/10
Lead	7439-92-1		128	mg/kg	99	79 - 124				09/16/10
Mercury	7439-97-6		7.88	mg/kg	95.4	69 - 124				09/16/10
Molybdenum	7439-98-7		45.5	mg/kg	94	80 - 125				09/16/10
Strontium	7440-24-6		51.0	mg/kg	94.2	78 - 119				09/16/10
Tin	7440-31-5		173	mg/kg	100.8	84 - 130				09/16/10
Uranium	7440-61-1		406	mg/kg	102.2	86 - 113				09/16/10
Arsenic	7440-38-2		133	mg/kg	100.9	79 - 125				09/16/10
Selenium	7782-49-2		174	mg/kg	108.8	82 - 133				09/16/10

Quality Control Report

Attention Michael Neely
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Group # WSCF102515

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
MS			**QC Sample #38477**							
			Original	**102515001**						
Manganese	7439-96-5	366	89.0	mg/kg	89.6	70 - 130				09/16/10
Nickel	7440-02-0	9.62	88.0	mg/kg	88.7	70 - 130				09/16/10
Silver	7440-22-4	<0.10	93.2	mg/kg	93.9	70 - 130				09/16/10
Antimony	7440-36-0	<0.31	75.9	mg/kg	76.4	70 - 130				09/16/10
Barium	7440-39-3	71.3	92.1	mg/kg	92.8	70 - 130				09/16/10
Beryllium	7440-41-7	0.457	91.2	mg/kg	91.9	70 - 130				09/16/10
Cadmium	7440-43-9	<0.10	96.7	mg/kg	97.4	70 - 130				09/16/10
Chromium	7440-47-3	7.47	90.2	mg/kg	90.9	70 - 130				09/16/10
Cobalt	7440-48-4	8.89	88.2	mg/kg	88.9	70 - 130				09/16/10
Copper	7440-50-8	16.7	86.6	mg/kg	87.2	70 - 130				09/16/10
Vanadium	7440-62-2	38.5	86.8	mg/kg	87.4	70 - 130				09/16/10
Zinc	7440-66-6	39.9	90.7	mg/kg	91.3	70 - 130				09/16/10
Lead	7439-92-1	7.50	95.6	mg/kg	96.3	70 - 130				09/16/10
Mercury	7439-97-6	<0.052	2.08	mg/kg	105	70 - 130				09/16/10
Molybdenum	7439-98-7	0.286	97.5	mg/kg	98.2	70 - 130				09/16/10
Strontium	7440-24-6	33.1	103	mg/kg	103.7	70 - 130				09/16/10
Tin	7440-31-5	0.405	101	mg/kg	101.8	70 - 130				09/16/10
Uranium	7440-61-1	0.553	98.6	mg/kg	99.4	70 - 130				09/16/10
Arsenic	7440-38-2	3.97	101	mg/kg	101.5	70 - 130				09/16/10
Selenium	7782-49-2	1.64	108	mg/kg	108.4	70 - 130				09/16/10
MSD			**QC Sample #38478**							
			Original	**102515001**					**Paired**	**38477**
Manganese	7439-96-5	366	74.5	mg/kg	74.7	70 - 130	18.10	30		09/16/10

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF102515

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Nickel	7440-02-0	9.62	91.4	mg/kg	91.7	70 - 130	3.30	30		09/16/10
Silver	7440-22-4	<0.10	96.2	mg/kg	96.5	70 - 130	2.70	30		09/16/10
Antimony	7440-36-0	<0.31	77.8	mg/kg	78	70 - 130	2.10	30		09/16/10
Barium	7440-39-3	71.3	90.2	mg/kg	90.5	70 - 130	2.50	30		09/16/10
Beryllium	7440-41-7	0.457	99.2	mg/kg	99.5	70 - 130	7.90	30		09/16/10
Cadmium	7440-43-9	<0.10	98.8	mg/kg	99.2	70 - 130	1.80	30		09/16/10
Chromium	7440-47-3	7.47	95.3	mg/kg	95.6	70 - 130	5.00	30		09/16/10
Cobalt	7440-48-4	8.89	93.0	mg/kg	93.3	70 - 130	4.80	30		09/16/10
Copper	7440-50-8	16.7	91.8	mg/kg	92.2	70 - 130	5.60	30		09/16/10
Vanadium	7440-62-2	38.5	92.8	mg/kg	93.2	70 - 130	6.40	30		09/16/10
Zinc	7440-66-6	39.9	94.6	mg/kg	95	70 - 130	4.00	30		09/16/10
Lead	7439-92-1	7.50	101	mg/kg	101.2	70 - 130	5.00	30		09/16/10
Mercury	7439-97-6	<0.052	2.25	mg/kg	113	70 - 130	7.30	30		09/16/10
Molybdenum	7439-98-7	0.286	97.2	mg/kg	97.5	70 - 130	0.70	30		09/16/10
Strontium	7440-24-6	33.1	105	mg/kg	105.3	70 - 130	1.50	30		09/16/10
Tin	7440-31-5	0.405	101	mg/kg	101.8	70 - 130	0.00	30		09/16/10
Uranium	7440-61-1	0.553	105	mg/kg	105.4	70 - 130	5.90	30		09/16/10
Arsenic	7440-38-2	3.97	106	mg/kg	106.1	70 - 130	4.40	30		09/16/10
Selenium	7782-49-2	1.64	111	mg/kg	111.2	70 - 130	2.60	30		09/16/10

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF102515

QC Batch 162852 **Test** ICP-6010 - All possible metals
Associated Samples 102515001, 102515002, 102515003, 102515004, 102515005, 102515006, 102515007, 102515008, 102515009, 102515010, 102515011, 102515012

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #38553**							
Lithium	7439-93-2		<4.0	ug/L					U	09/23/10
Boron	7440-42-8		<41	ug/L					U	09/23/10
LCS			**QC Sample #38554**							
Lithium	7439-93-2		5.82	mg/kg	68.7	48 - 119				09/23/10
Boron	7440-42-8		122	mg/kg	106.1	76 - 151				09/23/10
MS			**QC Sample #38555**							
			Original 102515001							
Lithium	7439-93-2	6.61	85.0	mg/kg	85.6	75 - 125				09/23/10
Boron	7440-42-8	19.6	191	mg/kg	96.1	75 - 125				09/23/10
MSD			**QC Sample #38556**							
			Original 102515001					**Paired**	**38555**	
Lithium	7439-93-2	6.61	83.4	mg/kg	84.5	75 - 125	1.30	30		09/23/10
Boron	7440-42-8	19.6	185	mg/kg	93.6	75 - 125	2.60	30		09/23/10

Batch QC List

Attention Michael Neely
Department Inorganic

Group # WSCF102537

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
162853	166434	1	BLANK	38557	BLANK		ICP-6010 - All possible metals
162853	166434	2	LCS	38558	LCS		ICP-6010 - All possible metals
162853	166434	3	MS	38559	B27M46(102537001MS)	102537001	ICP-6010 - All possible metals
162853	166434	4	MSD	38560	B27M46(102537001MSD)	102537001	ICP-6010 - All possible metals
162853	166434	5	SAMPLE	102537001	B27M46		ICP-6010 - All possible metals
162853	166434	6	SAMPLE	102537003	B27M49		ICP-6010 - All possible metals
162853	166434	7	SAMPLE	102537004	B27MC6		ICP-6010 - All possible metals
162853	166434	8	SAMPLE	102537005	B27MC7		ICP-6010 - All possible metals
162853	166434	9	SAMPLE	102537006	B27MC9		ICP-6010 - All possible metals
162853	166434	10	SAMPLE	102537007	B27MK9		ICP-6010 - All possible metals
162853	166434	11	SAMPLE	102537008	B27ML2		ICP-6010 - All possible metals
162853	166434	12	SAMPLE	102537009	B27MR5		ICP-6010 - All possible metals
162853	166434	14	SAMPLE	102537002	B27M47		ICP-6010 - All possible metals
163533	163553	4	BLANK	38681	BLANK		ICP-2008 MS All possible metal
163533	163553	5	LCS	38682	LCS		ICP-2008 MS All possible metal
163533	163553	6	SAMPLE	102537001	B27M46		ICP-2008 MS All possible metal
163533	163553	7	MS	38683	B27M46(102537001MS)	102537001	ICP-2008 MS All possible metal
163533	163553	8	MSD	38684	B27M46(102537001MSD)	102537001	ICP-2008 MS All possible metal
163533	163553	9	SAMPLE	102537002	B27M47		ICP-2008 MS All possible metal
163533	163553	10	SAMPLE	102537003	B27M49		ICP-2008 MS All possible metal
163533	163553	11	SAMPLE	102537004	B27MC6		ICP-2008 MS All possible metal
163533	163553	12	SAMPLE	102537005	B27MC7		ICP-2008 MS All possible metal
163533	163553	13	SAMPLE	102537006	B27MC9		ICP-2008 MS All possible metal

Batch QC List

Attention Michael Neely
Department Inorganic

Group # WSCF102537

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
163533	163553	16	SAMPLE	102537007	B27MK9		ICP-2008 MS All possible metal
163533	163553	17	SAMPLE	102537008	B27ML2		ICP-2008 MS All possible metal
163533	163553	18	SAMPLE	102537009	B27MR5		ICP-2008 MS All possible metal
163549	163551	1	BLANK	38759	BLANK		Anions by Ion Chromatography (Solid)
163549	163551	3	LCS	38761	LCS		Anions by Ion Chromatography (Solid)
163549	163551	4	MS	38762	B27M46(102537001MS)	102537001	Anions by Ion Chromatography (Solid)
163549	163551	5	MSD	38763	B27M46(102537001MSD)	102537001	Anions by Ion Chromatography (Solid)
163549	163551	6	DUP	38764	B27M46(102537001DUP)	102537001	Anions by Ion Chromatography (Solid)
163549	163551	7	SAMPLE	102537001	B27M46		Anions by Ion Chromatography (Solid)
163549	163551	8	SAMPLE	102537002	B27M47		Anions by Ion Chromatography (Solid)
163549	163551	9	SAMPLE	102537003	B27M49		Anions by Ion Chromatography (Solid)
163549	163551	10	SAMPLE	102537004	B27MC6		Anions by Ion Chromatography (Solid)
163549	163551	11	SAMPLE	102537005	B27MC7		Anions by Ion Chromatography (Solid)
163549	163551	12	SAMPLE	102537006	B27MC9		Anions by Ion Chromatography (Solid)
163549	163551	13	SAMPLE	102537007	B27MK9		Anions by Ion Chromatography (Solid)
163549	163551	14	SAMPLE	102537008	B27ML2		Anions by Ion Chromatography (Solid)
163549	163551	15	SAMPLE	102537009	B27MR5		Anions by Ion Chromatography (Solid)
167140	167141	1	BLANK	39473	BLANK		Hexavalent chromium
167140	167141	6	LCS	39474	LCS		Hexavalent chromium
167140	167141	7	DUP	39475	B25H74(102544001DUP)	102544001	Hexavalent chromium
167140	167141	8	MS	39476	B25H74(102544001MS)	102544001	Hexavalent chromium
167140	167141	9	IMS	39477	B25H74(102544001IMS)	102544001	Hexavalent chromium
167140	167141	10	PSTSPK	39478	PSTSPK		Hexavalent chromium

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF102537

QC Batch 162853 **Test** ICP-6010 - All possible metals
Associated Samples 102537001, 102537002, 102537003, 102537004, 102537005, 102537006, 102537007, 102537008, 102537009

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #38557**							
Lithium	7439-93-2		<4.0	ug/L					U	09/22/10
Boron	7440-42-8		<41	ug/L					U	09/22/10
LCS			**QC Sample #38558**							
Lithium	7439-93-2		6.77	mg/kg	80.6	48 - 119				09/22/10
Boron	7440-42-8		128	mg/kg	112.2	76 - 151				09/22/10
MS			**QC Sample #38559**							
			Original 102537001							
Lithium	7439-93-2	6.18	90.5	mg/kg	91.2	75 - 125				09/22/10
Boron	7440-42-8	12.6	182	mg/kg	91.8	75 - 125				09/22/10
MSD			**QC Sample #38560**							
			Original 102537001					**Paired**	**38559**	
Lithium	7439-93-2	6.18	91.0	mg/kg	91.3	75 - 125	0.10	30		09/22/10
Boron	7440-42-8	12.6	188	mg/kg	94.3	75 - 125	2.70	30		09/22/10

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF102537

QC Batch 163533 **Test** ICP-2008 MS All possible metal
Associated Samples 102537001, 102537002, 102537003, 102537004, 102537005, 102537006, 102537007, 102537008, 102537009

Analyte	CAS #	Original Found	QC Found	Units	% Recov Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #38681**						
Manganese	7439-96-5		<0.10	ug/L				U	09/20/10
Nickel	7440-02-0		<0.20	ug/L				U	09/20/10
Silver	7440-22-4		<0.10	ug/L				U	09/20/10
Antimony	7440-36-0		<0.30	ug/L				U	09/20/10
Barium	7440-39-3		<0.20	ug/L				U	09/20/10
Beryllium	7440-41-7		<0.050	ug/L				U	09/20/10
Cadmium	7440-43-9		<0.10	ug/L				U	09/20/10
Chromium	7440-47-3		<0.50	ug/L				U	09/20/10
Cobalt	7440-48-4		<0.050	ug/L				U	09/20/10
Copper	7440-50-8		<0.10	ug/L				U	09/20/10
Vanadium	7440-62-2		<0.20	ug/L				U	09/20/10
Zinc	7440-66-6		<0.80	ug/L				U	09/20/10
Lead	7439-92-1		<0.10	ug/L				U	09/20/10
Mercury	7439-97-6		<0.050	ug/L				U	09/20/10
Molybdenum	7439-98-7		<0.050	ug/L				U	09/20/10
Strontium	7440-24-6		<0.10	ug/L				U	09/20/10
Tin	7440-31-5		<0.050	ug/L				U	09/20/10
Uranium	7440-61-1		<0.050	ug/L				U	09/20/10
Arsenic	7440-38-2		<0.40	ug/L				U	09/20/10

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF102537

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Selenium	7782-49-2		0.355	ug/L					B	09/20/10
LCS			**QC Sample #38682**							
Manganese	7439-96-5		432	mg/kg	95.5	75 - 121				09/20/10
Nickel	7440-02-0		51.2	mg/kg	92.1	74 - 122				09/20/10
Silver	7440-22-4		104	mg/kg	102.7	83 - 127				09/20/10
Antimony	7440-36-0		110	mg/kg	122.5	62 - 205				09/20/10
Barium	7440-39-3		311	mg/kg	97.6	78 - 118				09/20/10
Beryllium	7440-41-7		88.7	mg/kg	99.2	77 - 120				09/20/10
Cadmium	7440-43-9		71.5	mg/kg	107.7	76 - 129				09/20/10
Chromium	7440-47-3		64.6	mg/kg	88.7	68 - 119				09/20/10
Cobalt	7440-48-4		71.1	mg/kg	97.3	77 - 122				09/20/10
Copper	7440-50-8		62.5	mg/kg	100.4	67 - 120				09/20/10
Vanadium	7440-62-2		74.5	mg/kg	89.9	67 - 122				09/20/10
Zinc	7440-66-6		171	mg/kg	96.4	73 - 131				09/20/10
Lead	7439-92-1		132	mg/kg	102	79 - 124				09/20/10
Mercury	7439-97-6		7.63	mg/kg	92	69 - 124				09/20/10
Molybdenum	7439-98-7		48.8	mg/kg	100.4	80 - 125				09/20/10
Strontium	7440-24-6		50.4	mg/kg	92.6	78 - 119				09/20/10
Tin	7440-31-5		183	mg/kg	106.2	84 - 130				09/20/10
Uranium	7440-61-1		405	mg/kg	101.4	86 - 113				09/20/10
Arsenic	7440-38-2		132	mg/kg	99.9	79 - 125				09/20/10
Selenium	7782-49-2		161	mg/kg	99.8	82 - 133				09/20/10
MS			**QC Sample #38683**							
			Original 102537001							

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF102537

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Manganese	7439-96-5	229	61.0	mg/kg	61.2	70 - 130			N	09/20/10
Nickel	7440-02-0	9.53	90.2	mg/kg	90.4	70 - 130				09/20/10
Silver	7440-22-4	<0.10	92.9	mg/kg	93.2	70 - 130				09/20/10
Antimony	7440-36-0	<0.30	82.0	mg/kg	82.2	70 - 130				09/20/10
Barium	7440-39-3	54.2	91.4	mg/kg	91.6	70 - 130				09/20/10
Beryllium	7440-41-7	0.174	96.6	mg/kg	96.9	70 - 130				09/20/10
Cadmium	7440-43-9	0.109	94.2	mg/kg	94.5	70 - 130				09/20/10
Chromium	7440-47-3	7.35	91.1	mg/kg	91.4	70 - 130				09/20/10
Cobalt	7440-48-4	4.64	90.9	mg/kg	91.2	70 - 130				09/20/10
Copper	7440-50-8	12.0	87.4	mg/kg	87.7	70 - 130				09/20/10
Vanadium	7440-62-2	25.3	86.8	mg/kg	87.1	70 - 130				09/20/10
Zinc	7440-66-6	38.0	84.6	mg/kg	84.9	70 - 130				09/20/10
Lead	7439-92-1	5.43	97.2	mg/kg	97.4	70 - 130				09/20/10
Mercury	7439-97-6	<0.051	1.95	mg/kg	98	70 - 130				09/20/10
Molybdenum	7439-98-7	0.213	91.9	mg/kg	92.2	70 - 130				09/20/10
Strontium	7440-24-6	17.6	97.1	mg/kg	97.4	70 - 130				09/20/10
Tin	7440-31-5	0.254	95.4	mg/kg	95.6	70 - 130				09/20/10
Uranium	7440-61-1	0.304	101	mg/kg	100.9	70 - 130				09/20/10
Arsenic	7440-38-2	2.03	92.6	mg/kg	92.8	70 - 130				09/20/10
Selenium	7782-49-2	1.37	97.2	mg/kg	97.5	70 - 130				09/20/10
MSD			**QC Sample #38684**							
			Original 102537001					**Paired**	**38683**	
Manganese	7439-96-5	229	74.2	mg/kg	75.3	70 - 130	20.70	30		09/20/10
Nickel	7440-02-0	9.53	93.6	mg/kg	95	70 - 130	5.00	30		09/20/10
Silver	7440-22-4	<0.10	95.6	mg/kg	97	70 - 130	4.00	30		09/20/10

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF102537

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Antimony	7440-36-0	<0.30	87.4	mg/kg	88.6	70 - 130	7.50	30		09/20/10
Barium	7440-39-3	54.2	92.6	mg/kg	94	70 - 130	2.60	30		09/20/10
Beryllium	7440-41-7	0.174	99.5	mg/kg	100.9	70 - 130	4.00	30		09/20/10
Cadmium	7440-43-9	0.109	97.4	mg/kg	98.8	70 - 130	4.40	30		09/20/10
Chromium	7440-47-3	7.35	94.7	mg/kg	96.1	70 - 130	5.00	30		09/20/10
Cobalt	7440-48-4	4.64	93.5	mg/kg	94.9	70 - 130	4.00	30		09/20/10
Copper	7440-50-8	12.0	90.3	mg/kg	91.6	70 - 130	4.40	30		09/20/10
Vanadium	7440-62-2	25.3	92.6	mg/kg	94	70 - 130	7.60	30		09/20/10
Zinc	7440-66-6	38.0	86.3	mg/kg	87.5	70 - 130	3.00	30		09/20/10
Lead	7439-92-1	5.43	99.3	mg/kg	100.8	70 - 130	3.40	30		09/20/10
Mercury	7439-97-6	<0.051	2.08	mg/kg	105.5	70 - 130	7.40	30		09/20/10
Molybdenum	7439-98-7	0.213	96.0	mg/kg	97.4	70 - 130	5.50	30		09/20/10
Strontium	7440-24-6	17.6	98.8	mg/kg	100.3	70 - 130	2.90	30		09/20/10
Tin	7440-31-5	0.254	101	mg/kg	102.3	70 - 130	6.80	30		09/20/10
Uranium	7440-61-1	0.304	104	mg/kg	105.3	70 - 130	4.30	30		09/20/10
Arsenic	7440-38-2	2.03	98.5	mg/kg	100	70 - 130	7.50	30		09/20/10
Selenium	7782-49-2	1.37	95.5	mg/kg	96.9	70 - 130	0.60	30		09/20/10

Date: 12 December 2011
To: CH2M Hill (technical representative)
From: Analytical Quality Associates, Inc.
Project: 100-K-63 Pothole Samples
Subject: General Chemistry - Sample Data Groups (SDGs) WSCF102445, WSCF102425, WSCF102473, WSCF102537, WSCF102515 and WSCF102464

INTRODUCTION

This memorandum presents the results of data validation for SDGs WSCF102445, WSCF102425, WSCF102473, WSCF102537, WSCF102515 and WSCF102464 prepared by WSCF Analytical Laboratories. A list of samples validated along with the analytical methods is provided in the following table.

Sample ID	Sample Date	Media	Validation Level	Analytical Methods
B27M35	09/02/10	Soil	C	7196A (Cr VI)
B27MJ8	09/02/10	Soil	C	7196A (Cr VI)
B27MB5	09/02/10	Soil	C	7196A (Cr VI)
B27MR7	09/02/10	Water	C	7196A (Cr VI)
B27MB6	09/07/10	Soil	C	7196A (Cr VI) & 300.0
B27M36	09/07/10	Soil	C	7196A (Cr VI) & 300.0
B27MJ9	09/07/10	Soil	C	7196A (Cr VI) & 300.0
B27M37	09/08/10	Soil	C	7196A (Cr VI) & 300.0
B27MB9	09/08/10	Soil	C	7196A (Cr VI) & 300.0
B27MK0	09/08/10	Soil	C	7196A (Cr VI) & 300.0
B27M38	09/08/10	Soil	C	7196A (Cr VI) & 300.0
B27MB7	09/08/10	Soil	C	7196A (Cr VI) & 300.0
B27MB8	09/08/10	Soil	C	7196A (Cr VI) & 300.0
B27MK1	09/08/10	Soil	C	7196A (Cr VI) & 300.0
B27MP4	09/08/10	Soil	C	7196A (Cr VI) & 300.0
B27M39	09/08/10	Soil	C	7196A (Cr VI) & 300.0
B27MK2	09/08/10	Soil	C	7196A (Cr VI) & 300.0
B27MP3	09/08/10	Soil	C	7196A (Cr VI) & 300.0
B27MP5	09/08/10	Soil	C	7196A (Cr VI) & 300.0
B27MC0	09/09/10	Soil	C	7196A (Cr VI) & 300.0
B27MC1	09/09/10	Soil	C	7196A (Cr VI) & 300.0
B27M40	09/09/10	Soil	C	7196A (Cr VI) & 300.0
B27M41	09/09/10	Soil	C	7196A (Cr VI) & 300.0
B27MP6	09/09/10	Soil	C	7196A (Cr VI) & 300.0
B27MP7	09/09/10	Soil	C	7196A (Cr VI) & 300.0
B27MK3	09/09/10	Soil	C	7196A (Cr VI) & 300.0
B27MK4	09/09/10	Soil	C	7196A (Cr VI) & 300.0
B27MK8	09/13/10	Soil	C	7196A (Cr VI) & 300.0
B27MC5	09/13/10	Soil	C	7196A (Cr VI) & 300.0
B27M45	09/13/10	Soil	C	7196A (Cr VI) & 300.0

B27MR0	09/13/10	Soil	C	7196A (Cr VI) & 300.0
B27MK7	09/13/10	Soil	C	7196A (Cr VI) & 300.0
B27MC4	09/13/10	Soil	C	7196A (Cr VI) & 300.0
B27MP8	09/13/10	Soil	C	7196A (Cr VI) & 300.0
B27M44	09/13/10	Soil	C	7196A (Cr VI) & 300.0
B27MK5	09/13/10	Soil	C	7196A (Cr VI) & 300.0
B27MC2	09/13/10	Soil	C	7196A (Cr VI) & 300.0
B27MR1	09/13/10	Soil	C	7196A (Cr VI) & 300.0
B27M42	09/13/10	Soil	C	7196A (Cr VI) & 300.0
B27M46	09/14/10	Soil	C	7196A (Cr VI) & 300.0
B27M47	09/14/10	Soil	C	7196A (Cr VI) & 300.0
B27M49	09/14/10	Soil	C	7196A (Cr VI) & 300.0
B27MC6	09/14/10	Soil	C	7196A (Cr VI) & 300.0
B27MC7	09/14/10	Soil	C	7196A (Cr VI) & 300.0
B27MC9	09/14/10	Soil	C	7196A (Cr VI) & 300.0
B27MK9	09/14/10	Soil	C	7196A (Cr VI) & 300.0
B27ML2	09/14/10	Soil	C	7196A (Cr VI) & 300.0
B27MR5	09/14/10	Soil	C	7196A (Cr VI) & 300.0

Data validation was conducted in accordance with the CHPRC validation statement of work and the 100 Area Remedial Action Sampling and Analysis Plan, DOE/RL-96-22, Rev. 5 (SAP). Appendices 1 through 6 provide the following information as indicated below:

Appendix 1. Glossary of Data Reporting Qualifiers
Appendix 2. Summary of Data Qualification
Appendix 3. Annotated Laboratory Reports
Appendix 4. Laboratory Narrative and Chain-of-Custody Documentation
Appendix 5. Data Validation Supporting Documentation
Appendix 6. Additional Documentation Requested By Client

DATA QUALITY OBJECTIVES

- **Holding Times and Sample Preservation**

Holding times are calculated from Chain-of-Custody forms to determine the validity of the results. The holding time requirement for hexavalent chromium is analysis of soils within 30 days of sample collection and analysis of waters within 24 hours of sample collection.

The holding time requirement for chloride, fluoride and sulfate is analysis within 28 days of sample collection. The holding time requirement for nitrate and nitrite is extraction of soils within 28 days of sample collection and analyses within 48 hours of extraction.

Sample preservation requires chilling to 4 degrees Celsius.

The samples were analyzed within the prescribed holding times and properly preserved with the following exceptions.

For SDG WSCF102425, sample B27MR7 was analyzed for hexavalent chromium beyond 2X the holding time. The hexavalent chromium result was a non-detect and should be qualified as unusable and flagged "UR".

For SDG WSCF102464, all samples were analyzed for hexavalent chromium beyond the holding time but within 2X the holding time. The associated hexavalent chromium results were non-detects and should be qualified as unusable and flagged "UR". See the table in Appendix 2 for a listing of all affected sample results.

- **Blanks**

The blank data results are reviewed to assess the extent of contamination introduced through sampling, sample preparation, and analysis.

Laboratory Blanks

All laboratory blank results were acceptable.

Trip Blanks

No trip blanks were submitted for validation.

Field Blanks

No field blanks were submitted for validation.

Equipment Blanks

The hexavalent chromium result had been qualified as unusable and flagged "UR" due to analysis >2X the holding time.

- **Accuracy**

Accuracy is evaluated by reviewing matrix spike sample results and laboratory control sample results. According to the SAP, the soil matrix spike accuracy limits are 70% to 130%. The soil laboratory control sample accuracy limits are the ones specified by the DV procedure. Water accuracy limits were not provided in the SAP and are therefore specified by the DV procedure. The accuracy limits for reported analytes not listed in the SAP are specified by the DV procedure.

Matrix Spike/Matrix Spike Duplicate (MS/MSD) Samples

All MS/MSD recoveries were acceptable with the following exceptions.

For SDG WSCF102473, batch 167140, the MS recovery for hexavalent Cr was below the lower acceptance limit. The hexavalent Cr result for associated sample B27MC0 was a non-detect and should be qualified as an estimate and flagged "UJ."

For SDG WSCF102537, batch 167140, the MS recovery for hexavalent Cr was below the lower acceptance limit. The hexavalent Cr result for associated sample B27MR5 was a non-detect and should be qualified as an estimate and flagged "UJ."

Laboratory Control Samples (LCSs)

All LCS recoveries were acceptable.

- **Precision**

Precision is evaluated by reviewing MS/MSD results, laboratory duplicate sample results, field duplicate sample results, and field split sample results. These QC results provide information on the laboratory reproducibility and whether sampling activities are adequate to acquire consistent sample results. According to the SAP, the relative percent difference (RPD) limits are ±30%. The limits for reported analytes not listed in the SAP are specified by the DV procedure. When duplicate RPDs exceed the limits and have associated results <5X the reporting limits with differences <1X the water reporting limits or differences <2X the soil reporting limits no precision infraction occurred.

MS/MSD Samples

All MS/MSD RPD values were acceptable.

Laboratory Duplicate Samples

All laboratory duplicate results were acceptable.

Field Duplicate Samples

All field duplicate results were acceptable.

Field Split Samples

No field splits were submitted for validation.

- **Detection Limits**

Reported MDLs are compared against the contractually required detection limits (CRDLs) to ensure that laboratory detection limits meet the required criteria.

All reported sample MDLs with associated non-detected sample results for hexavalent chromium were below the CRDLs. CRDLs for anions were not provided in the SAP.

- **Completeness**

SDGs WSCF102445, WSCF102102473, WSCF102537, and WSCF102515 were submitted for validation and verified for completeness. Completeness is based on the percentage of data determined to be valid (i.e., not rejected). The completion percentage was 100%.

SDGs WSCF102425 and WSCF102464 were submitted for validation and verified for completeness. Completeness is based on the percentage of data determined to be valid (i.e., not rejected). The completion percentage for method 7196A was 0%. The completion percentages for all remaining analyses were 100%.

MAJOR DEFICIENCIES

Major deficiencies leading to qualification of hexavalent chromium sample results as unusable were due to holding time infractions. See the table in Appendix 2 for a listing of all affected sample results.

MINOR DEFICIENCIES

Minor deficiencies leading to qualification of hexavalent chromium sample results as estimates were due matrix spike recovery infractions. See the table in Appendix 2 for a listing of all affected sample results.

REFERENCES

GRP-GD-003, Rev. 0, Change 0, *Data Validation for Chemical Analyses*, August 2010.

DOE/RL-96-22, Rev. 5, *100 Area Remedial Action Sampling and Analysis Plan*, September 2009.

Appendix 1

Glossary of Data Reporting Qualifiers

Qualifiers that may be applied by data validators in compliance with the CHPRC statement of work are as follows:

- **U** — The constituent was analyzed for, but was not detected. The data should be considered usable for decision-making purposes.

- **UJ** — The constituent was analyzed for and was not detected. Due to a quality control deficiency identified during data validation the value reported may not accurately reflect the RL. The data should be considered usable for decision-making purposes.

- **J** — Indicates the constituent was analyzed for and detected. The associated value is estimated due to a quality control deficiency identified during data validation. The data should be considered usable for decision-making purposes.

- **J+** — Indicates the constituent was analyzed for and detected. The associated value is estimated with a suspected positive bias due to a quality control deficiency identified during data validation. The data should be considered usable for decision-making purposes.

- **J-** — Indicates the constituent was analyzed for and detected. The associated value is estimated with a suspected negative bias due to a quality control deficiency identified during data validation. The data should be considered usable for decision-making purposes.

- **N** — The analysis indicates the presence of an analyte that has been tentatively identified.

- **NJ** — The analysis indicates the presence of an analyte that has been tentatively identified and the associated numerical value represents its approximate concentration.

- **NJ+** — The analysis indicates the presence of an analyte that has been tentatively identified. The associated value is estimated with a suspected positive bias due to a quality control deficiency identified during data validation.

- **NJ-** — The analysis indicates the presence of an analyte that has been tentatively identified. The associated value is estimated with a suspected negative bias due to a quality control deficiency identified during data validation.

- **UR** — Indicates the constituent was analyzed for and not detected; however, due to an identified quality control deficiency the data should be considered unusable for decision-making purposes.

- **R** — Indicates the constituent was analyzed for and detected; however, due to an identified quality control deficiency the data should be considered unusable for decision-making purposes.

Appendix 2

Summary of Data Qualification

General Chemistry Data Qualification Summary			
SDG: WSCF102445, WSCF102425, WSCF102473, WSCF102537, WSCF102515, WSCF102464	Reviewer: AQA	Project: 100-K-63 Pothole Samples	Page 1 of 1
Analyte(s)	**DV Flag**	**Samples Affected**	**Reason**
Cr(VI)	**UR**	B27MR7	Analysis beyond 2X the holding time
Cr(VI)	UJ	B27MC0, B27MR5	Low MS recovery
Cr(VI)	**UR**	B27M37, B27MB9, B27MK0, B27M38, B27MB7, B27MB8, B27MK1, B27MP4, B27M39, B27MK2, B27MP3, B27MP5	Analysis near 2X the holding time

Comments: None

Appendix 3

Annotated Laboratory Reports

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102425

Sample # 102425001
SAF# F10-268
Sample ID B27MR7

Matrix WATER
Sampled 09/02/10
Received 09/07/10

Test Performed	CAS #	Method	RQ		Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI)											**09/07/10**
Cr(VI)											
Hexavalent chromium	18540-29-9	LA-265-403	U	UR	<0.0020		mg/L	1	0.0020	0.0050	09/07/10
ICP Prep											**09/10/10**
ICP-AES											
Lithium	7439-93-2	LA-505-411	U		<4.0		ug/L	1	4.0	20	09/14/10
Boron	7440-42-8	LA-505-411	U		<41		ug/L	1	41	95	09/14/10
ICPMS Prep											**09/16/10**
ICP-MS											
Manganese	7439-96-5	LA-505-412	D		24.0		ug/L	2	0.20	2.0	09/16/10
Nickel	7440-02-0	LA-505-412	BD		0.480		ug/L	2	0.40	4.0	09/16/10
Silver	7440-22-4	LA-505-412	UD		<0.20		ug/L	2	0.20	2.0	09/16/10
Antimony	7440-36-0	LA-505-412	UD		<0.60		ug/L	2	0.60	6.0	09/16/10
Barium	7440-39-3	LA-505-412	D		5.90		ug/L	2	0.40	4.0	09/16/10
Beryllium	7440-41-7	LA-505-412	UD		<0.10		ug/L	2	0.10	1.0	09/16/10
Cadmium	7440-43-9	LA-505-412	UD		<0.20		ug/L	2	0.20	2.0	09/16/10
Chromium	7440-47-3	LA-505-412	UD		<1.0		ug/L	2	1.0	10	09/16/10
Cobalt	7440-48-4	LA-505-412	BD		0.324		ug/L	2	0.10	0.50	09/16/10
Copper	7440-50-8	LA-505-412	BD		1.06		ug/L	2	0.20	2.0	09/16/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102445

Sample # 102445001
SAF# F10-256
Sample ID B27M35

Matrix SOIL
Sampled 09/02/10
Received 09/07/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep										**09/17/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.52	09/17/10
ICP Prep										**09/08/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		7.38		mg/kg	1	0.42	2.1	09/10/10
Boron	7440-42-8	LA-505-411	EX	19.3		mg/kg	1	4.3	9.9	09/10/10
ICPMS Prep										**09/13/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		316		mg/kg	1	0.10	1.0	09/14/10
Nickel	7440-02-0	LA-505-412		10.2		mg/kg	1	0.20	2.0	09/14/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10
Antimony	7440-36-0	LA-505-412	U	<0.31		mg/kg	1	0.31	3.1	09/14/10
Barium	7440-39-3	LA-505-412		63.1		mg/kg	1	0.20	2.0	09/14/10
Beryllium	7440-41-7	LA-505-412	B	0.399		mg/kg	1	0.10	0.51	09/14/10
Cadmium	7440-43-9	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10
Chromium	7440-47-3	LA-505-412		8.43		mg/kg	1	0.51	5.1	09/14/10
Cobalt	7440-48-4	LA-505-412		7.23		mg/kg	1	0.10	0.51	09/14/10
Copper	7440-50-8	LA-505-412		15.2		mg/kg	1	0.10	1.0	09/14/10

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)

REVISED

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102445

Sample # 102445002
SAF# F10-256
Sample ID B27MJ8

Matrix SOIL
Sampled 09/02/10
Received 09/07/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep										**09/17/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.52	09/17/10
ICP Prep										**09/08/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		8.07		mg/kg	1	0.41	2.1	09/10/10
Boron	7440-42-8	LA-505-411	EX	19.6		mg/kg	1	4.2	9.8	09/10/10
ICPMS Prep										**09/13/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		260		mg/kg	1	0.10	1.0	09/14/10
Nickel	7440-02-0	LA-505-412		10.5		mg/kg	1	0.21	2.1	09/14/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10
Antimony	7440-36-0	LA-505-412	U	<0.31		mg/kg	1	0.31	3.1	09/14/10
Barium	7440-39-3	LA-505-412		63.2		mg/kg	1	0.21	2.1	09/14/10
Beryllium	7440-41-7	LA-505-412	B	0.387		mg/kg	1	0.10	0.51	09/14/10
Cadmium	7440-43-9	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10
Chromium	7440-47-3	LA-505-412		8.63		mg/kg	1	0.51	5.1	09/14/10
Cobalt	7440-48-4	LA-505-412		6.45		mg/kg	1	0.10	0.51	09/14/10
Copper	7440-50-8	LA-505-412		14.3		mg/kg	1	0.10	1.0	09/14/10

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)

REVISED

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102445

Sample # 102445003
SAF# F10-256
Sample ID B27MB5

Matrix SOIL
Sampled 09/02/10
Received 09/07/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep										**09/17/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.52	09/17/10
ICP Prep										**09/08/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		7.35		mg/kg	1	0.42	2.1	09/10/10
Boron	7440-42-8	LA-505-411	EX	21.0		mg/kg	1	4.3	10	09/10/10
ICPMS Prep										**09/13/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		285		mg/kg	1	0.10	1.0	09/14/10
Nickel	7440-02-0	LA-505-412		8.77		mg/kg	1	0.20	2.0	09/14/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10
Antimony	7440-36-0	LA-505-412	U	<0.31		mg/kg	1	0.31	3.1	09/14/10
Barium	7440-39-3	LA-505-412		58.5		mg/kg	1	0.20	2.0	09/14/10
Beryllium	7440-41-7	LA-505-412	B	0.275		mg/kg	1	0.10	0.51	09/14/10
Cadmium	7440-43-9	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10
Chromium	7440-47-3	LA-505-412		6.76		mg/kg	1	0.51	5.1	09/14/10
Cobalt	7440-48-4	LA-505-412		7.45		mg/kg	1	0.10	0.51	09/14/10
Copper	7440-50-8	LA-505-412		15.1		mg/kg	1	0.10	1.0	09/14/10

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)

REVISED

MJ
12/12/11

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102445

Sample # 102445004
SAF# F10-256
Sample ID B27MB6

Matrix SOIL
Sampled 09/07/10
Received 09/07/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/08/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<7.7		mg/kg	5	7.7	51	09/08/10
Chloride	16887-00-6	LA-533-410	UD	<11		mg/kg	5	11	100	09/08/10
Nitrite-N	NO2-N	LA-533-410	UD	<4.7		mg/kg	5	4.7	26	09/08/10
Nitrate-N	NO3-N	LA-533-410	UD	<7.9		mg/kg	5	7.9	26	09/08/10
Sulfate	14808-79-8	LA-533-410	UD	<17		mg/kg	5	17	260	09/08/10
Cr(VI) Prep										**09/17/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.52	09/17/10
ICP Prep										**09/08/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		8.59		mg/kg	1	0.41	2.1	09/10/10
Boron	7440-42-8	LA-505-411	EX	20.2		mg/kg	1	4.2	9.8	09/10/10
ICPMS Prep										**09/13/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		322		mg/kg	1	0.10	1.0	09/14/10
Nickel	7440-02-0	LA-505-412		11.1		mg/kg	1	0.21	2.1	09/14/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10

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)

REVISED

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102445

Sample # 102445005
SAF# F10-256
Sample ID B27M36

Matrix SOIL
Sampled 09/07/10
Received 09/07/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/08/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<7.8		mg/kg	5	7.8	51	09/08/10
Chloride	16887-00-6	LA-533-410	UD	<11		mg/kg	5	11	100	09/08/10
Nitrite-N	NO2-N	LA-533-410	UD	<4.7		mg/kg	5	4.7	26	09/08/10
Nitrate-N	NO3-N	LA-533-410	UD	<8.0		mg/kg	5	8.0	26	09/08/10
Sulfate	14808-79-8	LA-533-410	UD	<17		mg/kg	5	17	260	09/08/10
Cr(VI) Prep										**09/17/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.51	09/17/10
ICP Prep										**09/08/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		8.27		mg/kg	1	0.41	2.1	09/10/10
Boron	7440-42-8	LA-505-411	EX	21.7		mg/kg	1	4.2	9.8	09/10/10
ICPMS Prep										**09/13/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		360		mg/kg	1	0.10	1.0	09/14/10
Nickel	7440-02-0	LA-505-412		10.9		mg/kg	1	0.20	2.0	09/14/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10

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)

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12/12/11

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102445

Sample # 102445006
SAF# F10-256
Sample ID B27MJ9

Matrix SOIL
Sampled 09/07/10
Received 09/07/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/08/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<8.0		mg/kg	5	8.0	53	09/08/10
Chloride	16887-00-6	LA-533-410	UD	<11		mg/kg	5	11	110	09/08/10
Nitrite-N	NO2-N	LA-533-410	UD	<4.8		mg/kg	5	4.8	26	09/08/10
Nitrate-N	NO3-N	LA-533-410	UD	<8.2		mg/kg	5	8.2	26	09/08/10
Sulfate	14808-79-8	LA-533-410	UD	<17		mg/kg	5	17	260	09/08/10
Cr(VI) Prep										**09/17/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.11		ug/g	1	0.11	0.53	09/17/10
ICP Prep										**09/08/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		8.78		mg/kg	1	0.43	2.1	09/10/10
Boron	7440-42-8	LA-505-411	EX	21.1		mg/kg	1	4.4	10	09/10/10
ICPMS Prep										**09/13/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		306		mg/kg	1	0.10	1.0	09/14/10
Nickel	7440-02-0	LA-505-412		9.88		mg/kg	1	0.21	2.1	09/14/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10

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)

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WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102464

Sample # 102464001
SAF# F10-256
Sample ID B27M37

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/08/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<7.7		mg/kg	5	7.7	51	09/08/10
Chloride	16887-00-6	LA-533-410	UD	<11		mg/kg	5	11	100	09/08/10
Nitrite-N	NO2-N	LA-533-410	UD	<4.6		mg/kg	5	4.6	25	09/08/10
Nitrate-N	NO3-N	LA-533-410	UD	<7.9		mg/kg	5	7.9	25	09/08/10
Sulfate	14808-79-8	LA-533-410	UD	<17		mg/kg	5	17	250	09/08/10
Cr(VI) Prep										**10/22/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.10	UR	ug/g	1	0.10	0.51	10/22/10
ICP Prep										**09/13/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		5.89		mg/kg	1	0.41	2.1	09/22/10
Boron	7440-42-8	LA-505-411	BEX	4.65		mg/kg	1	4.2	21	09/22/10
ICPMS Prep										**09/13/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		249		mg/kg	1	0.10	1.0	09/14/10
Nickel	7440-02-0	LA-505-412		7.22		mg/kg	1	0.20	2.0	09/14/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10

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)

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WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102464

Sample # 102464002
SAF# F10-256
Sample ID B27MB9

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/08/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<7.7		mg/kg	5	7.7	51	09/08/10
Chloride	16887-00-6	LA-533-410	UD	<11		mg/kg	5	11	100	09/08/10
Nitrite-N	NO2-N	LA-533-410	UD	<4.6		mg/kg	5	4.6	25	09/08/10
Nitrate-N	NO3-N	LA-533-410	UD	<7.9		mg/kg	5	7.9	25	09/08/10
Sulfate	14808-79-8	LA-533-410	UD	<17		mg/kg	5	17	250	09/08/10
Cr(VI) Prep										**10/22/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.10	UR	ug/g	1	0.10	0.51	10/22/10
~~**ICP Prep**~~										~~**09/13/10**~~
ICP-AES										
Lithium	7439-93-2	LA-505-411		6.31		mg/kg	1	0.41	2.0	09/22/10
Boron	7440-42-8	LA-505-411	UEX	<4.2		mg/kg	1	4.2	21	09/22/10
ICPMS Prep										**09/13/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		281		mg/kg	1	0.099	0.99	09/14/10
Nickel	7440-02-0	LA-505-412		8.18		mg/kg	1	0.20	2.0	09/14/10
Silver	7440-22-4	LA-505-412	U	<0.099		mg/kg	1	0.099	0.99	09/14/10

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)

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WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102464

Sample # 102464003
SAF# F10-256
Sample ID B27MK0

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/08/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<7.8		mg/kg	5	7.8	51	09/08/10
Chloride	16887-00-6	LA-533-410	UD	<11		mg/kg	5	11	100	09/08/10
Nitrite-N	NO2-N	LA-533-410	UD	<4.7		mg/kg	5	4.7	26	09/08/10
Nitrate-N	NO3-N	LA-533-410	UD	<8.0		mg/kg	5	8.0	26	09/08/10
Sulfate	14808-79-8	LA-533-410	UD	<17		mg/kg	5	17	260	09/08/10
Cr(VI) Prep										**10/22/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.10	UR	ug/g	1	0.10	0.52	10/22/10
ICP Prep										**09/13/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		6.42		mg/kg	1	0.41	2.1	09/22/10
Boron	7440-42-8	LA-505-411	UEX	<4.2		mg/kg	1	4.2	21	09/22/10
ICPMS Prep										**09/13/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		304		mg/kg	1	0.10	1.0	09/14/10
Nickel	7440-02-0	LA-505-412		9.14		mg/kg	1	0.20	2.0	09/14/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10

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)

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WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102464

Sample # 102464004
SAF# F10-256
Sample ID B27M38

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/08/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<7.7		mg/kg	5	7.7	51	09/08/10
Chloride	16887-00-6	LA-533-410	UD	<11		mg/kg	5	11	100	09/08/10
Nitrite-N	NO2-N	LA-533-410	UD	<4.6		mg/kg	5	4.6	25	09/08/10
Nitrate-N	NO3-N	LA-533-410	UD	<7.9		mg/kg	5	7.9	25	09/08/10
Sulfate	14808-79-8	LA-533-410	UD	<17		mg/kg	5	17	250	09/08/10
Cr(VI) Prep										**10/22/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.10	UR	ug/g	1	0.10	0.51	10/22/10
~~**ICP Prep**~~										~~**09/13/10**~~
ICP-AES										
Lithium	7439-93-2	LA-505-411		3.76		mg/kg	1	0.41	2.0	09/22/10
Boron	7440-42-8	LA-505-411	UEX	<4.2		mg/kg	1	4.2	21	09/22/10
ICPMS Prep										**09/13/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		219		mg/kg	1	0.10	1.0	09/14/10
Nickel	7440-02-0	LA-505-412		6.68		mg/kg	1	0.20	2.0	09/14/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10

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)

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12/12/11

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102464

Sample # 102464005
SAF# F10-256
Sample ID B27MB7

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/08/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<7.9		mg/kg	5	7.9	52	09/08/10
Chloride	16887-00-6	LA-533-410	UD	<11		mg/kg	5	11	100	09/08/10
Nitrite-N	NO2-N	LA-533-410	UD	<4.7		mg/kg	5	4.7	26	09/08/10
Nitrate-N	NO3-N	LA-533-410	UD	<8.1		mg/kg	5	8.1	26	09/08/10
Sulfate	14808-79-8	LA-533-410	UD	<17		mg/kg	5	17	260	09/08/10
Cr(VI) Prep										**10/22/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.10	UR	ug/g	1	0.10	0.52	10/22/10
ICP Prep										**09/13/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		4.22		mg/kg	1	0.42	2.1	09/22/10
Boron	7440-42-8	LA-505-411	UEX	<4.3		mg/kg	1	4.3	22	09/22/10
ICPMS Prep										**09/13/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		292		mg/kg	1	0.10	1.0	09/14/10
Nickel	7440-02-0	LA-505-412		7.40		mg/kg	1	0.20	2.0	09/14/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10

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)

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WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102464

Sample # 102464006
SAF# F10-256
Sample ID B27MB8

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/08/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<7.7		mg/kg	5	7.7	51	09/08/10
Chloride	16887-00-6	LA-533-410	UD	<11		mg/kg	5	11	100	09/08/10
Nitrite-N	NO2-N	LA-533-410	UD	<4.6		mg/kg	5	4.6	26	09/08/10
Nitrate-N	NO3-N	LA-533-410	UD	<7.9		mg/kg	5	7.9	26	09/08/10
Sulfate	14808-79-8	LA-533-410	UD	<17		mg/kg	5	17	260	09/08/10
Cr(VI) Prep										**10/22/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.10	UR	ug/g	1	0.10	0.51	10/22/10
~~**ICP Prep**~~										~~**09/13/10**~~
ICP-AES										
Lithium	7439-93-2	LA-505-411		5.18		mg/kg	1	0.41	2.1	09/22/10
Boron	7440-42-8	LA-505-411	UEX	<4.2		mg/kg	1	4.2	21	09/22/10
ICPMS Prep										**09/13/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		200		mg/kg	1	0.10	1.0	09/14/10
Nickel	7440-02-0	LA-505-412		5.59		mg/kg	1	0.20	2.0	09/14/10
~~Silver~~	~~7440-22-4~~	~~LA-505-412~~	~~U~~	~~<0.10~~		~~mg/kg~~	~~1~~	~~0.10~~	~~1.0~~	~~09/14/10~~

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)

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WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102464

Sample # 102464007
SAF# F10-256
Sample ID B27MK1

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/09/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<7.7		mg/kg	5	7.7	51	09/09/10
Chloride	16887-00-6	LA-533-410	UD	<11		mg/kg	5	11	100	09/09/10
Nitrite-N	NO2-N	LA-533-410	UD	<4.6		mg/kg	5	4.6	25	09/09/10
Nitrate-N	NO3-N	LA-533-410	UD	<7.9		mg/kg	5	7.9	25	09/09/10
Sulfate	14808-79-8	LA-533-410	UD	<17		mg/kg	5	17	250	09/09/10
Cr(VI) Prep										**10/22/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.10	UR	ug/g	1	0.10	0.51	10/22/10
ICP Prep										**09/13/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		5.35		mg/kg	1	0.41	2.1	09/22/10
Boron	7440-42-8	LA-505-411	UEX	<4.2		mg/kg	1	4.2	21	09/22/10
ICPMS Prep										**09/13/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		216		mg/kg	1	0.10	1.0	09/14/10
Nickel	7440-02-0	LA-505-412		7.79		mg/kg	1	0.20	2.0	09/14/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10

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)

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WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102464

Sample # 102464008
SAF# F10-256
Sample ID B27MP4

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/09/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<7.8		mg/kg	5	7.8	52	09/09/10
Chloride	16887-00-6	LA-533-410	UD	<11		mg/kg	5	11	100	09/09/10
Nitrite-N	NO2-N	LA-533-410	UD	<4.7		mg/kg	5	4.7	26	09/09/10
Nitrate-N	NO3-N	LA-533-410	UD	<8.0		mg/kg	5	8.0	26	09/09/10
Sulfate	14808-79-8	LA-533-410	UD	<17		mg/kg	5	17	260	09/09/10
Cr(VI) Prep										**10/22/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.10	UR	ug/g	1	0.10	0.52	10/22/10
~~**ICP Prep**~~										~~**09/13/10**~~
ICP-AES										
Lithium	7439-93-2	LA-505-411		8.85		mg/kg	1	0.41	2.1	09/22/10
Boron	7440-42-8	LA-505-411	UEX	<4.2		mg/kg	1	4.2	21	09/22/10
ICPMS Prep										**09/13/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		213		mg/kg	1	0.10	1.0	09/14/10
Nickel	7440-02-0	LA-505-412		12.0		mg/kg	1	0.21	2.1	09/14/10
~~Silver~~	~~7440-22-4~~	~~LA-505-412~~	~~U~~	~~<0.10~~		~~mg/kg~~	~~1~~	~~0.10~~	~~1.0~~	~~09/14/10~~

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)

REVISED102464 -

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102464

Sample # 102464009
SAF# F10-256
Sample ID B27M39

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/09/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<7.7		mg/kg	5	7.7	51	09/09/10
Chloride	16887-00-6	LA-533-410	UD	<11		mg/kg	5	11	100	09/09/10
Nitrite-N	NO2-N	LA-533-410	UD	<4.6		mg/kg	5	4.6	26	09/09/10
Nitrate-N	NO3-N	LA-533-410	UD	<7.9		mg/kg	5	7.9	26	09/09/10
Sulfate	14808-79-8	LA-533-410	UD	<17		mg/kg	5	17	260	09/09/10
Cr(VI) Prep										**10/22/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.10	UR	ug/g	1	0.10	0.51	10/22/10
ICP Prep										**09/13/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		6.06		mg/kg	1	0.41	2.1	09/22/10
Boron	7440-42-8	LA-505-411	UEX	<4.2		mg/kg	1	4.2	21	09/22/10
ICPMS Prep										**09/13/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		293		mg/kg	1	0.10	1.0	09/14/10
Nickel	7440-02-0	LA-505-412		9.98		mg/kg	1	0.20	2.0	09/14/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10

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)

REVISED102464 -

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102464

Sample # 102464010
SAF# F10-256
Sample ID B27MK2

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/09/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<7.7		mg/kg	5	7.7	51	09/09/10
Chloride	16887-00-6	LA-533-410	UD	<11		mg/kg	5	11	100	09/09/10
Nitrite-N	NO2-N	LA-533-410	UD	<4.6		mg/kg	5	4.6	25	09/09/10
Nitrate-N	NO3-N	LA-533-410	UD	<7.9		mg/kg	5	7.9	25	09/09/10
Sulfate	14808-79-8	LA-533-410	UD	<17		mg/kg	5	17	250	09/09/10
Cr(VI) Prep										**10/22/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.10	UR	ug/g	1	0.10	0.51	10/22/10
ICP Prep										**09/13/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		6.16		mg/kg	1	0.41	2.1	09/22/10
Boron	7440-42-8	LA-505-411	UEX	<4.2		mg/kg	1	4.2	21	09/22/10
ICPMS Prep										**09/13/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		291		mg/kg	1	0.10	1.0	09/14/10
Nickel	7440-02-0	LA-505-412		8.69		mg/kg	1	0.20	2.0	09/14/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10

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)

REVISED102464 -

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102464

Sample # 102464011
SAF# F10-256
Sample ID B27MP3

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/09/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<7.8		mg/kg	5	7.8	52	09/09/10
Chloride	16887-00-6	LA-533-410	UD	<11		mg/kg	5	11	100	09/09/10
Nitrite-N	NO2-N	LA-533-410	UD	<4.7		mg/kg	5	4.7	26	09/09/10
Nitrate-N	NO3-N	LA-533-410	UD	<8.0		mg/kg	5	8.0	26	09/09/10
Sulfate	14808-79-8	LA-533-410	UD	<17		mg/kg	5	17	260	09/09/10
Cr(VI) Prep										**10/22/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.10	UR	ug/g	1	0.10	0.52	10/22/10
ICP Prep										**09/13/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		8.88		mg/kg	1	0.41	2.1	09/22/10
Boron	7440-42-8	LA-505-411	UEX	<4.2		mg/kg	1	4.2	21	09/22/10
ICPMS Prep										**09/13/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		209		mg/kg	1	0.10	1.0	09/14/10
Nickel	7440-02-0	LA-505-412		12.4		mg/kg	1	0.20	2.0	09/14/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10

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)

REVISED102464 -

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102464

Sample # 102464012
SAF# F10-256
Sample ID B27MP5

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/09/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<7.7		mg/kg	5	7.7	51	09/09/10
Chloride	16887-00-6	LA-533-410	UD	<11		mg/kg	5	11	100	09/09/10
Nitrite-N	NO2-N	LA-533-410	UD	<4.6		mg/kg	5	4.6	26	09/09/10
Nitrate-N	NO3-N	LA-533-410	UD	<7.9		mg/kg	5	7.9	26	09/09/10
Sulfate	14808-79-8	LA-533-410	UD	<17		mg/kg	5	17	260	09/09/10
Cr(VI) Prep										**10/22/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.10	UR	ug/g	1	0.10	0.51	10/22/10
ICP Prep										**09/13/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		7.33		mg/kg	1	0.41	2.0	09/22/10
Boron	7440-42-8	LA-505-411	UEX	<4.2		mg/kg	1	4.2	21	09/22/10
ICPMS Prep										**09/13/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		234		mg/kg	1	0.10	1.0	09/14/10
Nickel	7440-02-0	LA-505-412		10.8		mg/kg	1	0.20	2.0	09/14/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10

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)

REVISED102464 -

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102473

Sample # 102473001
SAF# F10-256
Sample ID B27MC0

Matrix SOIL
Sampled 09/09/10
Received 09/09/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/10/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<7.8		mg/kg	5	7.8	52	09/10/10
Chloride	16887-00-6	LA-533-410	UD	<11		mg/kg	5	11	100	09/10/10
Nitrite-N	NO2-N	LA-533-410	UD	<4.7		mg/kg	5	4.7	26	09/10/10
Nitrate-N	NO3-N	LA-533-410	UD	<8.0		mg/kg	5	8.0	26	09/10/10
Sulfate	14808-79-8	LA-533-410	UD	<17		mg/kg	5	17	260	09/10/10
Cr(VI) Prep										**09/23/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.10	UJ	ug/g	1	0.10	0.51	09/23/10
ICP Prep										**09/13/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		8.24		mg/kg	1	0.41	2.1	09/22/10
Boron	7440-42-8	LA-505-411	UEX	<4.2		mg/kg	1	4.2	21	09/22/10
ICPMS Prep										**09/13/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		376		mg/kg	1	0.10	1.0	09/14/10
Nickel	7440-02-0	LA-505-412		11.9		mg/kg	1	0.20	2.0	09/14/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10

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. (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.

MJ
12/12/11

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102473

Sample # 102473002
SAF# F10-256
Sample ID B27MC1

Matrix SOIL
Sampled 09/09/10
Received 09/09/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/10/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<8.1		mg/kg	5	8.1	53	09/10/10
Chloride	16887-00-6	LA-533-410	UD	<11		mg/kg	5	11	110	09/10/10
Nitrite-N	NO2-N	LA-533-410	UD	<4.8		mg/kg	5	4.8	27	09/10/10
Nitrate-N	NO3-N	LA-533-410	BD	13.2		mg/kg	5	8.3	27	09/10/10
Sulfate	14808-79-8	LA-533-410	UD	<18		mg/kg	5	18	270	09/10/10
Cr(VI) Prep										**09/17/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.11		ug/g	1	0.11	0.53	09/17/10
ICP Prep										**09/13/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		6.55		mg/kg	1	0.43	2.1	09/22/10
Boron	7440-42-8	LA-505-411	UEX	<4.4		mg/kg	1	4.4	22	09/22/10
ICPMS Prep										**09/13/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		318		mg/kg	1	0.10	1.0	09/14/10
Nickel	7440-02-0	LA-505-412		9.99		mg/kg	1	0.21	2.1	09/14/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10

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. (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.

MJ
12/12/11

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102473

Sample # 102473003
SAF# F10-256
Sample ID B27M40

Matrix SOIL
Sampled 09/09/10
Received 09/09/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/10/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<7.8		mg/kg	5	7.8	52	09/10/10
Chloride	16887-00-6	LA-533-410	UD	<11		mg/kg	5	11	100	09/10/10
Nitrite-N	NO2-N	LA-533-410	UD	<4.7		mg/kg	5	4.7	26	09/10/10
Nitrate-N	NO3-N	LA-533-410	UD	<8.0		mg/kg	5	8.0	26	09/10/10
Sulfate	14808-79-8	LA-533-410	UD	<17		mg/kg	5	17	260	09/10/10
Cr(VI) Prep										**09/17/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.52	09/17/10
ICP Prep										**09/13/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		6.84		mg/kg	1	0.41	2.1	09/22/10
Boron	7440-42-8	LA-505-411	UEX	<4.2		mg/kg	1	4.2	21	09/22/10
ICPMS Prep										**09/13/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412	N	311		mg/kg	1	0.10	1.0	09/14/10
Nickel	7440-02-0	LA-505-412		9.62		mg/kg	1	0.21	2.1	09/14/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102473

Sample # 102473004
SAF# F10-256
Sample ID B27M41

Matrix SOIL
Sampled 09/09/10
Received 09/09/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/10/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<8.6		mg/kg	5	8.6	57	09/10/10
Chloride	16887-00-6	LA-533-410	UD	<12		mg/kg	5	12	110	09/10/10
Nitrite-N	NO2-N	LA-533-410	UD	<5.2		mg/kg	5	5.2	28	09/10/10
Nitrate-N	NO3-N	LA-533-410	D	73.6		mg/kg	5	8.8	28	09/10/10
Sulfate	14808-79-8	LA-533-410	UD	<19		mg/kg	5	19	280	09/10/10
Cr(VI) Prep										**09/17/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.11		ug/g	1	0.11	0.57	09/17/10
ICP Prep										**09/13/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		6.35		mg/kg	1	0.45	2.3	09/22/10
Boron	7440-42-8	LA-505-411	UEX	<4.7		mg/kg	1	4.7	23	09/22/10
ICPMS Prep										**09/13/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412	N	286		mg/kg	1	0.11	1.1	09/14/10
Nickel	7440-02-0	LA-505-412		11.0		mg/kg	1	0.23	2.3	09/14/10
Silver	7440-22-4	LA-505-412	U	<0.11		mg/kg	1	0.11	1.1	09/14/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102473

Sample # 102473005
SAF# F10-256
Sample ID B27MP6

Matrix SOIL
Sampled 09/09/10
Received 09/09/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/10/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<7.8		mg/kg	5	7.8	52	09/10/10
Chloride	16887-00-6	LA-533-410	UD	<11		mg/kg	5	11	100	09/10/10
Nitrite-N	NO2-N	LA-533-410	UD	<4.7		mg/kg	5	4.7	26	09/10/10
Nitrate-N	NO3-N	LA-533-410	UD	<8.0		mg/kg	5	8.0	26	09/10/10
Sulfate	14808-79-8	LA-533-410	BD	28.6		mg/kg	5	17	260	09/10/10
Cr(VI) Prep										**09/17/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.52	09/17/10
ICP Prep										**09/13/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		9.83		mg/kg	1	0.41	2.1	09/22/10
Boron	7440-42-8	LA-505-411	UEX	<4.2		mg/kg	1	4.2	21	09/22/10
ICPMS Prep										**09/13/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412	N	301		mg/kg	1	0.10	1.0	09/14/10
Nickel	7440-02-0	LA-505-412		16.8		mg/kg	1	0.21	2.1	09/14/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102473

Sample # 102473006
SAF# F10-256
Sample ID B27MP7

Matrix SOIL
Sampled 09/09/10
Received 09/09/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/10/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<7.9		mg/kg	5	7.9	52	09/10/10
Chloride	16887-00-6	LA-533-410	UD	<11		mg/kg	5	11	100	09/10/10
Nitrite-N	NO2-N	LA-533-410	UD	<4.7		mg/kg	5	4.7	26	09/10/10
Nitrate-N	NO3-N	LA-533-410	BD	24.2		mg/kg	5	8.1	26	09/10/10
Sulfate	14808-79-8	LA-533-410	BD	32.7		mg/kg	5	17	260	09/10/10
Cr(VI) Prep										**09/17/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.52	09/17/10
ICP Prep										**09/13/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		9.94		mg/kg	1	0.42	2.1	09/22/10
Boron	7440-42-8	LA-505-411	UEX	<4.3		mg/kg	1	4.3	21	09/22/10
ICPMS Prep										**09/13/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412	N	308		mg/kg	1	0.10	1.0	09/14/10
Nickel	7440-02-0	LA-505-412		15.8		mg/kg	1	0.21	2.1	09/14/10
Silver	7440-22-4	LA-505-412	B	0.146		mg/kg	1	0.10	1.0	09/14/10

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. (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.

MJ
12/12/11

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102473

Sample # 102473007
SAF# F10-256
Sample ID B27MK3

Matrix SOIL
Sampled 09/09/10
Received 09/09/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/10/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<7.9		mg/kg	5	7.9	53	09/10/10
Chloride	16887-00-6	LA-533-410	UD	<11		mg/kg	5	11	110	09/10/10
Nitrite-N	NO2-N	LA-533-410	UD	<4.8		mg/kg	5	4.8	26	09/10/10
Nitrate-N	NO3-N	LA-533-410	UD	<8.1		mg/kg	5	8.1	26	09/10/10
Sulfate	14808-79-8	LA-533-410	UD	<17		mg/kg	5	17	260	09/10/10
Cr(VI) Prep										**09/17/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.11		ug/g	1	0.11	0.53	09/17/10
ICP Prep										**09/13/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		6.54		mg/kg	1	0.42	2.1	09/22/10
Boron	7440-42-8	LA-505-411	UEX	<4.3		mg/kg	1	4.3	22	09/22/10
ICPMS Prep										**09/13/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412	N	332		mg/kg	1	0.10	1.0	09/14/10
Nickel	7440-02-0	LA-505-412		10.1		mg/kg	1	0.21	2.1	09/14/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102473

Sample # 102473008
SAF# F10-256
Sample ID B27MK4

Matrix SOIL
Sampled 09/09/10
Received 09/09/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/10/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<7.9		mg/kg	5	7.9	52	09/10/10
Chloride	16887-00-6	LA-533-410	UD	<11		mg/kg	5	11	100	09/10/10
Nitrite-N	NO2-N	LA-533-410	UD	<4.8		mg/kg	5	4.8	26	09/10/10
Nitrate-N	NO3-N	LA-533-410	UD	<8.1		mg/kg	5	8.1	26	09/10/10
Sulfate	14808-79-8	LA-533-410	UD	<17		mg/kg	5	17	260	09/10/10
Cr(VI) Prep										**09/17/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.11		ug/g	1	0.11	0.53	09/17/10
ICP Prep										**09/13/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		7.16		mg/kg	1	0.42	2.1	09/22/10
Boron	7440-42-8	LA-505-411	UEX	<4.3		mg/kg	1	4.3	22	09/22/10
ICPMS Prep										**09/13/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412	N	324		mg/kg	1	0.10	1.0	09/14/10
Nickel	7440-02-0	LA-505-412		9.65		mg/kg	1	0.20	2.0	09/14/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/14/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102515

Sample # 102515001
SAF# F10-256
Sample ID B27MK8

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/14/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	U	<1.6		mg/kg	1	1.6	11	09/14/10
Chloride	16887-00-6	LA-533-410	B	6.30		mg/kg	1	2.3	21	09/14/10
Nitrite-N	NO2-N	LA-533-410	U	<0.95		mg/kg	1	0.95	5.3	09/14/10
Nitrate-N	NO3-N	LA-533-410	U	<1.6		mg/kg	1	1.6	5.3	09/14/10
Sulfate	14808-79-8	LA-533-410	B	11.8		mg/kg	1	3.4	53	09/14/10
Cr(VI) Prep										**09/24/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	BN	0.121		ug/g	1	0.10	0.52	09/24/10
ICP Prep										**09/20/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		6.61		mg/kg	1	0.42	2.1	09/23/10
Boron	7440-42-8	LA-505-411	BEX	19.6		mg/kg	1	4.3	22	09/23/10
ICPMS Prep										**09/15/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		366		mg/kg	1	0.10	1.0	09/16/10
Nickel	7440-02-0	LA-505-412		9.62		mg/kg	1	0.21	2.1	09/16/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/16/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102515

Sample # 102515002
SAF# F10-256
Sample ID B27MC5

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/14/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	U	<1.5		mg/kg	1	1.5	10	09/14/10
Chloride	16887-00-6	LA-533-410	B	4.57		mg/kg	1	2.2	21	09/14/10
Nitrite-N	NO2-N	LA-533-410	U	<0.93		mg/kg	1	0.93	5.1	09/14/10
Nitrate-N	NO3-N	LA-533-410	U	<1.6		mg/kg	1	1.6	5.1	09/14/10
Sulfate	14808-79-8	LA-533-410	B	10.2		mg/kg	1	3.4	51	09/14/10
Cr(VI) Prep										**09/24/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.10		ug/g	1	0.10	0.51	09/24/10
ICP Prep										**09/20/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		7.34		mg/kg	1	0.41	2.0	09/23/10
Boron	7440-42-8	LA-505-411	BEX	19.4		mg/kg	1	4.2	21	09/23/10
ICPMS Prep										**09/15/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		414		mg/kg	1	0.10	1.0	09/16/10
Nickel	7440-02-0	LA-505-412		10.6		mg/kg	1	0.20	2.0	09/16/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/16/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102515

Sample # 102515003
SAF# F10-256
Sample ID B27M45

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/14/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	U	<1.6		mg/kg	1	1.6	10	09/14/10
Chloride	16887-00-6	LA-533-410	B	2.49		mg/kg	1	2.2	21	09/14/10
Nitrite-N	NO2-N	LA-533-410	U	<0.93		mg/kg	1	0.93	5.1	09/14/10
Nitrate-N	NO3-N	LA-533-410	B	2.84		mg/kg	1	1.6	5.1	09/14/10
Sulfate	14808-79-8	LA-533-410	B	4.26		mg/kg	1	3.4	51	09/14/10
Cr(VI) Prep										**09/24/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.099		ug/g	1	0.099	0.50	09/24/10
ICP Prep										**09/20/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		6.91		mg/kg	1	0.41	2.0	09/23/10
Boron	7440-42-8	LA-505-411	BEX	19.4		mg/kg	1	4.2	21	09/23/10
ICPMS Prep										**09/15/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		381		mg/kg	1	0.10	1.0	09/16/10
Nickel	7440-02-0	LA-505-412		10.3		mg/kg	1	0.20	2.0	09/16/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/16/10

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. (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.

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12/12/11

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102515

Sample # 102515004
SAF# F10-256
Sample ID B27MR0

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/14/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	U	<1.6		mg/kg	1	1.6	10	09/14/10
Chloride	16887-00-6	LA-533-410	B	7.08		mg/kg	1	2.2	21	09/14/10
Nitrite-N	NO2-N	LA-533-410	U	<0.93		mg/kg	1	0.93	5.1	09/14/10
Nitrate-N	NO3-N	LA-533-410	U	<1.6		mg/kg	1	1.6	5.1	09/14/10
Sulfate	14808-79-8	LA-533-410	B	6.75		mg/kg	1	3.4	51	09/14/10
Cr(VI) Prep										**09/24/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	BN	0.133		ug/g	1	0.10	0.52	09/24/10
~~**ICP Prep**~~										~~**09/20/10**~~
ICP-AES										
Lithium	7439-93-2	LA-505-411		10.6		mg/kg	1	0.41	2.1	09/23/10
Boron	7440-42-8	LA-505-411	BEX	13.8		mg/kg	1	4.2	21	09/23/10
ICPMS Prep										**09/15/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		308		mg/kg	1	0.10	1.0	09/16/10
Nickel	7440-02-0	LA-505-412		16.1		mg/kg	1	0.20	2.0	09/16/10
~~Silver~~	~~7440-22-4~~	~~LA-505-412~~	~~U~~	~~<0.10~~		~~mg/kg~~	~~1~~	~~0.10~~	~~1.0~~	~~09/16/10~~

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102515

Sample # 102515005
SAF# F10-256
Sample ID B27MK7

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/14/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	U	<1.5		mg/kg	1	1.5	10	09/14/10
Chloride	16887-00-6	LA-533-410	B	7.46		mg/kg	1	2.2	21	09/14/10
Nitrite-N	NO2-N	LA-533-410	U	<0.93		mg/kg	1	0.93	5.1	09/14/10
Nitrate-N	NO3-N	LA-533-410	U	<1.6		mg/kg	1	1.6	5.1	09/14/10
Sulfate	14808-79-8	LA-533-410	B	6.66		mg/kg	1	3.4	51	09/14/10
Cr(VI) Prep										**09/24/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	BN	0.132		ug/g	1	0.10	0.51	09/24/10
ICP Prep										**09/20/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		6.77		mg/kg	1	0.41	2.1	09/23/10
Boron	7440-42-8	LA-505-411	BEX	16.9		mg/kg	1	4.2	21	09/23/10
ICPMS Prep										**09/15/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		306		mg/kg	1	0.10	1.0	09/16/10
Nickel	7440-02-0	LA-505-412		10.1		mg/kg	1	0.20	2.0	09/16/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/16/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102515

Sample # 102515006
SAF# F10-256
Sample ID B27MC4

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/14/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	U	<1.5		mg/kg	1	1.5	10	09/14/10
Chloride	16887-00-6	LA-533-410	B	6.85		mg/kg	1	2.2	21	09/14/10
Nitrite-N	NO2-N	LA-533-410	U	<0.93		mg/kg	1	0.93	5.1	09/14/10
Nitrate-N	NO3-N	LA-533-410	B	2.46		mg/kg	1	1.6	5.1	09/14/10
Sulfate	14808-79-8	LA-533-410	B	7.98		mg/kg	1	3.4	51	09/14/10
Cr(VI) Prep										**09/24/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	BN	0.133		ug/g	1	0.10	0.51	09/24/10
ICP Prep										**09/20/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		6.88		mg/kg	1	0.41	2.1	09/23/10
Boron	7440-42-8	LA-505-411	BEX	16.1		mg/kg	1	4.2	21	09/23/10
ICPMS Prep										**09/15/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		304		mg/kg	1	0.10	1.0	09/16/10
Nickel	7440-02-0	LA-505-412		10.3		mg/kg	1	0.20	2.0	09/16/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/16/10

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. (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.

MJ
12/12/11

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102515

Sample # 102515007
SAF# F10-256
Sample ID B27MP8

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/14/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	U	<1.5		mg/kg	1	1.5	10	09/14/10
Chloride	16887-00-6	LA-533-410	U	<2.2		mg/kg	1	2.2	20	09/14/10
Nitrite-N	NO2-N	LA-533-410	U	<0.92		mg/kg	1	0.92	5.1	09/14/10
Nitrate-N	NO3-N	LA-533-410		16.6		mg/kg	1	1.6	5.1	09/14/10
Sulfate	14808-79-8	LA-533-410	B	32.1		mg/kg	1	3.3	51	09/14/10
Cr(VI) Prep										**09/24/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	BN	0.118		ug/g	1	0.10	0.51	09/24/10
ICP Prep										**09/20/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		9.45		mg/kg	1	0.41	2.0	09/23/10
Boron	7440-42-8	LA-505-411	BEX	12.0		mg/kg	1	4.2	21	09/23/10
ICPMS Prep										**09/15/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		264		mg/kg	1	0.10	1.0	09/16/10
Nickel	7440-02-0	LA-505-412		13.5		mg/kg	1	0.20	2.0	09/16/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/16/10

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. (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.

MJ
12/12/11

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102515

Sample # 102515008
SAF# F10-256
Sample ID B27M44

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/14/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	U	<1.5		mg/kg	1	1.5	10	09/14/10
Chloride	16887-00-6	LA-533-410	B	3.51		mg/kg	1	2.2	20	09/14/10
Nitrite-N	NO2-N	LA-533-410	U	<0.93		mg/kg	1	0.93	5.1	09/14/10
Nitrate-N	NO3-N	LA-533-410	B	2.34		mg/kg	1	1.6	5.1	09/14/10
Sulfate	14808-79-8	LA-533-410	B	4.76		mg/kg	1	3.4	51	09/14/10
Cr(VI) Prep										**09/24/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.10		ug/g	1	0.10	0.51	09/24/10
ICP Prep										**09/20/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		6.86		mg/kg	1	0.41	2.0	09/23/10
Boron	7440-42-8	LA-505-411	BEX	13.7		mg/kg	1	4.2	21	09/23/10
ICPMS Prep										**09/15/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		356		mg/kg	1	0.10	1.0	09/16/10
Nickel	7440-02-0	LA-505-412		12.8		mg/kg	1	0.21	2.1	09/16/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/16/10

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. (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.

MJ
12/12/11

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102515

Sample # 102515009
SAF# F10-256
Sample ID B27MK5

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/14/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	U	<1.6		mg/kg	1	1.6	10	09/14/10
Chloride	16887-00-6	LA-533-410	B	3.75		mg/kg	1	2.2	21	09/14/10
Nitrite-N	NO2-N	LA-533-410	U	<0.93		mg/kg	1	0.93	5.2	09/14/10
Nitrate-N	NO3-N	LA-533-410	U	<1.6		mg/kg	1	1.6	5.2	09/14/10
Sulfate	14808-79-8	LA-533-410	B	6.40		mg/kg	1	3.4	52	09/14/10
Cr(VI) Prep										**09/24/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	BN	0.133		ug/g	1	0.10	0.51	09/24/10
ICP Prep										**09/20/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		6.72		mg/kg	1	0.41	2.1	09/23/10
Boron	7440-42-8	LA-505-411	BEX	18.0		mg/kg	1	4.2	21	09/23/10
ICPMS Prep										**09/15/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		305		mg/kg	1	0.10	1.0	09/16/10
Nickel	7440-02-0	LA-505-412		8.42		mg/kg	1	0.21	2.1	09/16/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/16/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102515

Sample # 102515010
SAF# F10-256
Sample ID B27MC2

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/14/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	U	<1.5		mg/kg	1	1.5	10	09/14/10
Chloride	16887-00-6	LA-533-410	U	<2.2		mg/kg	1	2.2	20	09/14/10
Nitrite-N	NO2-N	LA-533-410	U	<0.92		mg/kg	1	0.92	5.1	09/14/10
Nitrate-N	NO3-N	LA-533-410	U	<1.6		mg/kg	1	1.6	5.1	09/14/10
Sulfate	14808-79-8	LA-533-410	B	3.47		mg/kg	1	3.3	51	09/14/10
Cr(VI) Prep										**09/24/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.10		ug/g	1	0.10	0.51	09/24/10
ICP Prep										**09/20/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		7.14		mg/kg	1	0.41	2.0	09/23/10
Boron	7440-42-8	LA-505-411	BEX	17.0		mg/kg	1	4.2	21	09/23/10
ICPMS Prep										**09/15/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		277		mg/kg	1	0.10	1.0	09/16/10
Nickel	7440-02-0	LA-505-412		7.84		mg/kg	1	0.20	2.0	09/16/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/16/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102515

Sample # 102515011
SAF# F10-256
Sample ID B27MR1

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/14/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	U	<1.6		mg/kg	1	1.6	10	09/14/10
Chloride	16887-00-6	LA-533-410	B	4.29		mg/kg	1	2.2	21	09/14/10
Nitrite-N	NO2-N	LA-533-410	U	<0.94		mg/kg	1	0.94	5.2	09/14/10
Nitrate-N	NO3-N	LA-533-410		79.1		mg/kg	1	1.6	5.2	09/14/10
Sulfate	14808-79-8	LA-533-410	B	50.6		mg/kg	1	3.4	52	09/14/10
Cr(VI) Prep										**09/24/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	BN	0.120		ug/g	1	0.10	0.52	09/24/10
ICP Prep										**09/20/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		12.2		mg/kg	1	0.41	2.1	09/23/10
Boron	7440-42-8	LA-505-411	BEX	13.7		mg/kg	1	4.2	21	09/23/10
ICPMS Prep										**09/15/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		290		mg/kg	1	0.10	1.0	09/16/10
Nickel	7440-02-0	LA-505-412		13.5		mg/kg	1	0.20	2.0	09/16/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/16/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102515

Sample # 102515012
SAF# F10-256
Sample ID B27M42

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/14/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	U	<1.6		mg/kg	1	1.6	10	09/14/10
Chloride	16887-00-6	LA-533-410	U	<2.2		mg/kg	1	2.2	21	09/14/10
Nitrite-N	NO2-N	LA-533-410	U	<0.94		mg/kg	1	0.94	5.2	09/14/10
Nitrate-N	NO3-N	LA-533-410	B	3.09		mg/kg	1	1.6	5.2	09/14/10
Sulfate	14808-79-8	LA-533-410	B	4.26		mg/kg	1	3.4	52	09/14/10
Cr(VI) Prep										**09/24/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.10		ug/g	1	0.10	0.50	09/24/10
ICP Prep										**09/20/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		7.06		mg/kg	1	0.41	2.0	09/23/10
Boron	7440-42-8	LA-505-411	BEX	18.2		mg/kg	1	4.2	21	09/23/10
ICPMS Prep										**09/15/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		326		mg/kg	1	0.10	1.0	09/16/10
Nickel	7440-02-0	LA-505-412		9.15		mg/kg	1	0.20	2.0	09/16/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/16/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102537

Sample # 102537001
SAF# F10-256
Sample ID B27M46

Matrix SOIL
Sampled 09/14/10
Received 09/14/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/15/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	U	<1.5		mg/kg	1	1.5	10	09/15/10
Chloride	16887-00-6	LA-533-410	B	2.81		mg/kg	1	2.2	20	09/15/10
Nitrite-N	NO2-N	LA-533-410	U	<0.92		mg/kg	1	0.92	5.1	09/15/10
Nitrate-N	NO3-N	LA-533-410	B	2.10		mg/kg	1	1.6	5.1	09/15/10
Sulfate	14808-79-8	LA-533-410	U	<3.3		mg/kg	1	3.3	51	09/15/10
Cr(VI) Prep										**09/24/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.098		ug/g	1	0.098	0.49	09/24/10
ICP Prep										**09/20/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		6.18		mg/kg	1	0.41	2.0	09/22/10
Boron	7440-42-8	LA-505-411	B	12.6		mg/kg	1	4.2	21	09/22/10
ICPMS Prep										**09/17/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412	N	229		mg/kg	1	0.10	1.0	09/20/10
Nickel	7440-02-0	LA-505-412		9.53		mg/kg	1	0.20	2.0	09/20/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/20/10

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. (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.

MJ
12/12/11

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102537

Sample # 102537002
SAF# F10-256
Sample ID B27M47

Matrix SOIL
Sampled 09/14/10
Received 09/14/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/15/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	U	<1.5		mg/kg	1	1.5	10	09/15/10
Chloride	16887-00-6	LA-533-410	U	<2.2		mg/kg	1	2.2	20	09/15/10
Nitrite-N	NO2-N	LA-533-410	U	<0.92		mg/kg	1	0.92	5.1	09/15/10
Nitrate-N	NO3-N	LA-533-410	U	<1.6		mg/kg	1	1.6	5.1	09/15/10
Sulfate	14808-79-8	LA-533-410	U	<3.3		mg/kg	1	3.3	51	09/15/10
Cr(VI) Prep										**09/24/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.10		ug/g	1	0.10	0.51	09/24/10
ICP Prep										**09/23/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		5.90		mg/kg	1	0.41	2.0	09/23/10
Boron	7440-42-8	LA-505-411	B	18.0		mg/kg	1	4.2	21	09/23/10
ICPMS Prep										**09/17/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412	N	275		mg/kg	1	0.10	1.0	09/20/10
Nickel	7440-02-0	LA-505-412		7.94		mg/kg	1	0.20	2.0	09/20/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/20/10

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. (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.

MJ
12/12/11

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102537

Sample # 102537003
SAF# F10-256
Sample ID B27M49

Matrix SOIL
Sampled 09/14/10
Received 09/14/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/15/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	U	<1.5		mg/kg	1	1.5	10	09/15/10
Chloride	16887-00-6	LA-533-410	U	<2.2		mg/kg	1	2.2	21	09/15/10
Nitrite-N	NO2-N	LA-533-410	U	<0.93		mg/kg	1	0.93	5.1	09/15/10
Nitrate-N	NO3-N	LA-533-410	U	<1.6		mg/kg	1	1.6	5.1	09/15/10
Sulfate	14808-79-8	LA-533-410	U	<3.4		mg/kg	1	3.4	51	09/15/10
Cr(VI) Prep										**09/24/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.098		ug/g	1	0.098	0.49	09/24/10
ICP Prep										**09/20/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		7.91		mg/kg	1	0.41	2.1	09/22/10
Boron	7440-42-8	LA-505-411	B	14.5		mg/kg	1	4.2	21	09/22/10
ICPMS Prep										**09/17/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412	N	287		mg/kg	1	0.098	0.98	09/20/10
Nickel	7440-02-0	LA-505-412		13.2		mg/kg	1	0.20	2.0	09/20/10
Silver	7440-22-4	LA-505-412	U	<0.098		mg/kg	1	0.098	0.98	09/20/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102537

Sample # 102537004
SAF# F10-256
Sample ID B27MC6

Matrix SOIL
Sampled 09/14/10
Received 09/14/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/15/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	U	<1.5		mg/kg	1	1.5	10	09/15/10
Chloride	16887-00-6	LA-533-410	U	<2.2		mg/kg	1	2.2	20	09/15/10
Nitrite-N	NO2-N	LA-533-410	U	<0.92		mg/kg	1	0.92	5.1	09/15/10
Nitrate-N	NO3-N	LA-533-410	U	<1.6		mg/kg	1	1.6	5.1	09/15/10
Sulfate	14808-79-8	LA-533-410	U	<3.3		mg/kg	1	3.3	51	09/15/10
Cr(VI) Prep										**09/24/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.099		ug/g	1	0.099	0.49	09/24/10
ICP Prep										**09/20/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		6.02		mg/kg	1	0.41	2.0	09/22/10
Boron	7440-42-8	LA-505-411	B	8.26		mg/kg	1	4.2	21	09/22/10
ICPMS Prep										**09/17/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412	N	183		mg/kg	1	0.10	1.0	09/20/10
Nickel	7440-02-0	LA-505-412		9.02		mg/kg	1	0.20	2.0	09/20/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/20/10

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. (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.

MJ
12/12/11

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102537

Sample # 102537005
SAF# F10-256
Sample ID B27MC7

Matrix SOIL
Sampled 09/14/10
Received 09/14/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/15/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	U	<1.6		mg/kg	1	1.6	10	09/15/10
Chloride	16887-00-6	LA-533-410	U	<2.2		mg/kg	1	2.2	21	09/15/10
Nitrite-N	NO2-N	LA-533-410	U	<0.94		mg/kg	1	0.94	5.2	09/15/10
Nitrate-N	NO3-N	LA-533-410	B	3.73		mg/kg	1	1.6	5.2	09/15/10
Sulfate	14808-79-8	LA-533-410	B	4.37		mg/kg	1	3.4	52	09/15/10
Cr(VI) Prep										**09/24/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.10		ug/g	1	0.10	0.52	09/24/10
ICP Prep										**09/20/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		8.13		mg/kg	1	0.42	2.1	09/22/10
Boron	7440-42-8	LA-505-411	B	12.6		mg/kg	1	4.3	22	09/22/10
ICPMS Prep										**09/17/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412	N	291		mg/kg	1	0.10	1.0	09/20/10
Nickel	7440-02-0	LA-505-412		12.9		mg/kg	1	0.21	2.1	09/20/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/20/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102537

Sample # 102537006
SAF# F10-256
Sample ID B27MC9

Matrix SOIL
Sampled 09/14/10
Received 09/14/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/15/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	U	<1.5		mg/kg	1	1.5	10	09/15/10
Chloride	16887-00-6	LA-533-410	U	<2.2		mg/kg	1	2.2	20	09/15/10
Nitrite-N	NO2-N	LA-533-410	U	<0.93		mg/kg	1	0.93	5.1	09/15/10
Nitrate-N	NO3-N	LA-533-410	B	3.58		mg/kg	1	1.6	5.1	09/15/10
Sulfate	14808-79-8	LA-533-410	B	4.06		mg/kg	1	3.4	51	09/15/10
Cr(VI) Prep										**09/24/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.10		ug/g	1	0.10	0.50	09/24/10
ICP Prep										**09/20/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		7.10		mg/kg	1	0.41	2.1	09/22/10
Boron	7440-42-8	LA-505-411	B	18.3		mg/kg	1	4.2	21	09/22/10
ICPMS Prep										**09/17/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412	N	283		mg/kg	1	0.10	1.0	09/20/10
Nickel	7440-02-0	LA-505-412		8.05		mg/kg	1	0.21	2.1	09/20/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/20/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102537

Sample # 102537007
SAF# F10-256
Sample ID B27MK9

Matrix SOIL
Sampled 09/14/10
Received 09/14/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/15/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	U	<1.6		mg/kg	1	1.6	11	09/15/10
Chloride	16887-00-6	LA-533-410	U	<2.3		mg/kg	1	2.3	21	09/15/10
Nitrite-N	NO2-N	LA-533-410	U	<0.95		mg/kg	1	0.95	5.3	09/15/10
Nitrate-N	NO3-N	LA-533-410	U	<1.6		mg/kg	1	1.6	5.3	09/15/10
Sulfate	14808-79-8	LA-533-410	U	<3.4		mg/kg	1	3.4	53	09/15/10
Cr(VI) Prep										**09/24/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.10		ug/g	1	0.10	0.52	09/24/10
ICP Prep										**09/20/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		10.9		mg/kg	1	0.42	2.1	09/22/10
Boron	7440-42-8	LA-505-411	B	12.7		mg/kg	1	4.3	21	09/22/10
ICPMS Prep										**09/17/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412	N	276		mg/kg	1	0.10	1.0	09/20/10
Nickel	7440-02-0	LA-505-412		15.0		mg/kg	1	0.21	2.1	09/20/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/20/10

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. (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.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102537

Sample # 102537008
SAF# F10-256
Sample ID B27ML2

Matrix SOIL
Sampled 09/14/10
Received 09/14/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/15/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	U	<1.5		mg/kg	1	1.5	10	09/15/10
Chloride	16887-00-6	LA-533-410	U	<2.2		mg/kg	1	2.2	20	09/15/10
Nitrite-N	NO2-N	LA-533-410	U	<0.93		mg/kg	1	0.93	5.1	09/15/10
Nitrate-N	NO3-N	LA-533-410	B	2.41		mg/kg	1	1.6	5.1	09/15/10
Sulfate	14808-79-8	LA-533-410	U	<3.3		mg/kg	1	3.3	51	09/15/10
Cr(VI) Prep										**09/24/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.10		ug/g	1	0.10	0.52	09/24/10
ICP Prep										**09/20/10**
ICP-AES										
Lithium	7439-93-2	LA-505-411		5.31		mg/kg	1	0.42	2.1	09/22/10
Boron	7440-42-8	LA-505-411	B	18.1		mg/kg	1	4.3	21	09/22/10
ICPMS Prep										**09/17/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412	N	331		mg/kg	1	0.10	1.0	09/20/10
Nickel	7440-02-0	LA-505-412		8.90		mg/kg	1	0.20	2.0	09/20/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/20/10

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. (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.

MJ
12/12/11

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102537

Sample # 102537009
SAF# F10-256
Sample ID B27MR5

Matrix SOIL
Sampled 09/14/10
Received 09/14/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**09/15/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	U	<1.6		mg/kg	1	1.6	10	09/15/10
Chloride	16887-00-6	LA-533-410	B	5.86		mg/kg	1	2.2	21	09/15/10
Nitrite-N	NO2-N	LA-533-410	U	<0.94		mg/kg	1	0.94	5.2	09/15/10
Nitrate-N	NO3-N	LA-533-410		5.50		mg/kg	1	1.6	5.2	09/15/10
Sulfate	14808-79-8	LA-533-410	B	6.54		mg/kg	1	3.4	52	09/15/10
Cr(VI) Prep										**09/23/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.096	UJ	ug/g	1	0.096	0.48	09/23/10
~~**ICP Prep**~~										~~**09/20/10**~~
ICP-AES										
Lithium	7439-93-2	LA-505-411		11.3		mg/kg	1	0.42	2.1	09/22/10
Boron	7440-42-8	LA-505-411	B	15.8		mg/kg	1	4.3	21	09/22/10
ICPMS Prep										**09/17/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412	N	359		mg/kg	1	0.10	1.0	09/20/10
Nickel	7440-02-0	LA-505-412		19.7		mg/kg	1	0.21	2.1	09/20/10
~~Silver~~	~~7440-22-4~~	~~LA-505-412~~	~~U~~	~~<0.10~~		~~mg/kg~~	~~1~~	~~0.10~~	~~1.0~~	~~09/20/10~~

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. (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.

Appendix 4

Laboratory Narrative and Chain-of-Custody Documentation

Attachment 2
Narrative
WSCF102425

Introduction

One (1) S&GRP sample was received at the WSCF Laboratory on September 7, 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. Also is attached an Issue Resolution Form (IRF) pertaining to out of specification holding times for hexavalent chromium.

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

ICP-AES 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 159733 analyzed on sample# B27MR7 (102425001)

- All QC controls are within the established limits.

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

- Batch QC 163538 analyzed on sample# B275R1 (102400007)
  - Strontium – MS/MSD Relative Percent Difference(s) (RPD) did not meet the established laboratory limits. No flags issued on sample results. RPD failure was "X" flagged on the Quality Control Report.
  - Zinc - was detected in the Blank. Affected sample results in this batch were "C" Flagged.
  - All other QC controls are within the established limits.

Hexavalent Chromium – The hold time requirements for this analysis were not met (Refer to analytical note below). A Duplicate, Matrix Spike, Blank and Laboratory Control Sample were analyzed with this delivery group. Analytical Note(s):

- Batch QC 157641 analyzed on sample# B27749 (102431001)
  - An Issue Resolution Form (CHPRC Tracking Number: 10-217) was issued for sample B27MR7 (102425001) for exceedance of the 24 hour hold time for hexavalnet chromium.
  - All other QC controls are within the established limits.

Radiochemistry Comments

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

- 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 161435 analyzed on sample# B26F38 (102059001)
    - 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.

Attachment 2
Narrative
WSCF102425

- Strontium-89/90:
  - Batch QC 157347 analyzed on sample# B26TV9 (102123008)
    - Duplicate Relative Percent Difference(s) (RPD) did not meet the established laboratory limits. All other QC was acceptable so the batch was accepted. No flags issued on sample results. RPD failure was "X" flagged on the Quality Control Report.
    - All other QC controls are within the established limits.
- Isotopic Plutonium analysis:
  - Batch QC 157368 analyzed on sample# B27MR7 (102425001)
    - Plutonium-238 and 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 157368 analyzed on sample# B27MR7 (102425001)
    - All QC controls are within the established limits.

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

Attachment 2
Narrative
WSCF102425

ISSUE RESOLUTION FORM

CHPRC TRACKING NUMBER: 10-217

Date: **9/10/2010** SAF No. **F10-268**

SDG: **WSCF102425** LOGIN No.: TEST: HEXAVALENT CHROMIUM (CR+6)

Sample No.(s) B27MR7 **102425-001**

Submitted By: H Medley Submitted To: S Champoux

Phone No. 372-1488 Phone No. 373-5290

Fax No. 372-0456 Fax No

ISSUE	PROPOSED RESOLUTION
The 24hr regulatory hold time was missed for the Groundwater samples identified above. The sample was collected on September 2, 2010 and received at WSCF on September 7, 2010.	Accept analytical results (accept as-is) and note in narrative.

GRP COMMENTS

Accept proposed resolution.

J. G. Douglas 9/10/2010

Signature and Date

4

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-268-001	PAGE 1 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 7C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 In-Process EB	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - QC Sampling		SAF NO.: F10-268	AIR QUALITY: ☐	
ICE CHEST NO.: SML-107	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: N/A	COA: 301966ES10	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)

102425

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	HNO3 to pH <2	Cool-4C	HNO3 to pH <2	HNO3 to pH <2	HNO3 to pH <2	HNO3 to pH <2
HOLDING TIME	6 Months	24 Hours	6 Months	180 Days	6 Months	6 Months
TYPE OF CONTAINER	G/P	aG	G/P	P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1	1
VOLUME	500mL	500mL	500mL	1000mL	1000mL	1L
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS	SEE ITEM (4) IN SPECIAL INSTRUCTIONS	Strontium-89,90 Total Sr

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME						
B27MR7	WATER	SEP 02 2010	1218	✓	✓	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 02 2010 1440	RECEIVED BY/STORED IN: M01109 SSU #1	DATE/TIME: SEP 02 2010 1440
RELINQUISHED BY/REMOVED FROM: M01109 SSU #1	DATE/TIME: SEP 07 2010 0815	RECEIVED BY/STORED IN: FM Hall CHPRC	DATE/TIME: SEP 07 2010 0815
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 07 2010 0850	RECEIVED BY/STORED IN: VILTER	DATE/TIME: SEP 07 2010 0850
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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-268-001	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT WIDRIG, DL	TELEPHONE NO. 376-2858	PROJECT COORDINATOR WIDRIG, DL	PRICE CODE 7C AIR QUALITY ☐	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 100-K-63 In-Process EB	PROJECT DESIGNATION ARRA 100-K-63 KW Floodplain In Process Sampling - QC Sampling		SAF NO. F10-268		
ICE CHEST NO. SML-107	FIELD LOGBOOK NO. HNF-N-507-B	ACTUAL SAMPLE DEPTH N/A	COA 301966ES10	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 WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.The CACN for WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring S
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium};
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Isotopic Plutonium {Plutonium-238, Plutonium-239/240};
(4) Isotopic Uranium {Uranium-233/234, Uranium-235};

ORIGINAL

A-6003-618(01/06)

Attachment 2
Narrative Rev.2
WSCF102445

Revision 2 – Case Narrative Replaces The Prior Submittal in its Entirety

Introduction

Six (6) S&GRP samples were received at the WSCF Laboratory on September 7, 2010. The samples were analyzed for the analytes indicated on the attached copy of the chain of custody (COC) form in accordance with the *Statement of Work (SOW), Modification No. 2 to Agreement 36587, Release 3, "FH WSCF ANALYTICAL SERVICES FOR GROUNDWATER."*

The narrative (Attachment 2) will address sample characteristics, analyses requested and general information in performance of the analytical methods. Also attached is P&D SDG WSCF102445 which deals with incorrect sample collection dates. A Data Summary Report (Attachment 3) includes analytical results, a comment report detailing method abnormalities, tentatively identified peaks if applicable, method references, and Laboratory QC information as applicable. Copies of the chain of custody and sample receipt documentation are included as Attachment 4.

It should be noted that the attached chain of custody was not stamped "ICED" by the WSCF Laboratory Sample Custodian during sample receiving. However, based on procedure LO-090-403 form "NOTICE OF IMPROPER SAMPLE SUBMITTAL" was not submitted and was not stamped "NOT ICED". No anomaly was noted during sample receipt.

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

- **B** – Sample results with a concentration greater than the MDL but less than the PQL are B flagged (applies to inorganic and wet chemical analyses), as appropriate.
- **D** – Sample results are D flagged if dilution(s) were required, as appropriate.
- **J** – Sample results with a concentration greater than the MDL but less than the PQL are J flagged (applies to organic analyses), as appropriate.
- **U** – Analyzed for but not detected above limiting criteria. Relative Percent Difference (RPD) values associated with an analyte qualified with a "U" are not applicable.

Analytical Methodology for Requested Analyses

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

Inorganic Comments

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

- Batch QC 157734 analyzed on sample# B27MB6 (102445004)

Attachment 2
Narrative Rev.2
WSCF102445

All QC controls are within the established limits.

ICP-AES 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 157435 analyzed on sample# B27M35 (102445001)
    - Boron – Samples are "E" Flagged due to Iron interference.

All other 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 160834 analyzed on sample# B27M35 (102445001)

All QC controls are within the established limits.

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 164278 analyzed on sample# B27M35 (102445001)
    - Duplicate Relative Percent Difference(s) (RPD) did not meet the established laboratory limits. Duplicate Relative Percent Difference (RPD) does not apply to results near or below the minimum detectable level. No flags issued.

All other QC controls are within the established limits.

Radiochemistry Comments

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

- 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 162635 analyzed on sample# B26VN7 (102157001)
    - Radium-226 and Radium-228 were found in the blank. These are naturally occurring radioactive isotopes.

All other QC controls are within the established limits.

Attachment 2
Narrative Rev.2
WSCF102445

- Strontium-89/90:
  - Batch QC 157635 analyzed on sample# B27M35 (102445001)

  All QC controls are within the established limits.

- Americium-241:
  - Batch QC 157479 analyzed on sample# B27MB6 (102445004)
  - 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.
  - Americium-243 – The tracer is slightly high but the batch was accepted.

  All other QC controls are within the established limits.

- Isotopic Plutonium analysis:
  - Batch QC 157479 analyzed on sample# B27MB6 (102445004)

  All QC controls are within the established limits.

- Isotopic Uranium analysis:
  - Batch QC 157479 analyzed on sample# B27MB6 (102445004)
  - Uranium-235 - 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.
  - Uranium-234 - The Blank is less than two times the MDC. "B" Flag not required.

  All other QC controls are within the established limits.

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

Attachment 2
Narrative Rev.2
WSCF102445

10/11/2010

Problem and Discrepancy Report

WSCF

SDG WSCF102445

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1. The data package has the following issues:

a) SAF Number Cross Reference (page 3 of 76) and Acknowledgement of Sample Received (page 64 of 76) – Sample collection date is not correct for samples B27MB6 (102445 -004), B27M36 (102445 -005) and B27MJ9 (102445 -006). Sample collection date should be 9/7/2010. Refer to COCs (pages 71, 73 and 75 of 76) for sample collection date detail.

Resolution: *Provide corrections.*

Lab Response: **Collection dates are corrected.**

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

4

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-191 | PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K-63 location 1 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256
AIR QUALITY: ☐			
ICE CHEST NO.: SML - 107	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 0 - 1 ft	COA: 301966ES10
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: 102445

PRESERVATION	Cool~4C	None	None
HOLDING TIME	6 Months	6 Months	6 Months
TYPE OF CONTAINER	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B27M35	SOIL	SEP 02 2010	1233	✓	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 02 2010 / 1400	M01109 SSU #1	SEP 02 2010 / 1400
M01109 SSU #1	9-7-10 / 1400	FM Hall	9-7-10 / 1400
FM Hall	9-7-10 / 1300	Vicky Bins	9-7-10 / 1300

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-6002-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-191	PAGE 2 OF 2
COLLECTOR: FM Hal CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 1 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SAXL-107	FIELD LOGBOOK NO.: HNF-N-507-T3	ACTUAL SAMPLE DEPTH: 0-1'	COA: 301965ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr;

ORIGINAL

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-313	PAGE 1 OF 2
COLLECTOR: FM Hall	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: CHPRC 100-K-63 location 1 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-107	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 10'	COA: 301966ES10	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	None	None
HOLDING TIME	6 Months	6 Months	6 Months
TYPE OF CONTAINER	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B27MJ8 002	SOIL	SEP 02 2010	1320	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: FM Hall	DATE/TIME: SEP 02 2010 1400	RECEIVED BY/STORED IN: MN1109 SML #1	DATE/TIME: SEP 02 2010 1400	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: MN 1109 SML #1	DATE/TIME: 9-7-10 1400	RECEIVED BY/STORED IN: FM Hall	DATE/TIME: 9-7-10 1400	
RELINQUISHED BY/REMOVED FROM: FM Hall	DATE/TIME: 9-7-10 1400	RECEIVED BY/STORED IN: VLMN	DATE/TIME: 9-7-10 1400	
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-6003-518(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-313	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 1 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML- 107	FIELD LOGBOOK NO.: HNF -N-507- 3	ACTUAL SAMPLE DEPTH: 10'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr;

ORIGINAL

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-260	PAGE 1 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 1 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML - 107	FIELD LOGBOOK NO.: HNF-N-507-13.	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10	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	None	None
HOLDING TIME	6 Months	6 Months	6 Months
TYPE OF CONTAINER	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B27MB5 003	SOIL	SEP 02 2010	1244	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 02 2010 / 1440	RECEIVED BY/STORED IN: M01109 SSU #1	DATE/TIME: SEP 02 2010 / 1440
RELINQUISHED BY/REMOVED FROM: M01109 SSU #	DATE/TIME: 9-7-10	RECEIVED BY/STORED IN: FM Hall	DATE/TIME: 9-7-10 1400
RELINQUISHED BY/REMOVED FROM: FM Hall	DATE/TIME: 9-7-10 1430	RECEIVED BY/STORED IN: Rick Bivins Jr	DATE/TIME: 9-7-10 1430
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-5003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-260	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 1 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-107	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr;

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-261

PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: WIDRIG, DL

TELEPHONE NO.: 376-2858

PROJECT COORDINATOR: WIDRIG, DL

PRICE CODE: 8C

DATA TURNAROUND: 15 Days / 15 Days

SAMPLING LOCATION: 100-K-63 location 2 5ft

PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

SAF NO.: F10-256

AIR QUALITY:

ICE CHEST NO.: SML-107

FIELD LOGBOOK NO.: HNF-N-807-13

ACTUAL SAMPLE DEPTH: 5'

COA: 301966E51D

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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MB6	604	SOIL	SEP 07 2010	1225	✓	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 07 2010 1430	[illegible]	SEP 07 2010 1430

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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-261	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 2 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML - 107	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-192	PAGE 1 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 2 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-107	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: ~~N/A~~ 1'	COA: 301966ES10	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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27M36 005	SOIL	SEP 07 2010	1204	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 07 2010 1430	RECEIVED BY/STORED IN: VLDX Sm	DATE/TIME: SEP 07 2010 1430	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	ORIGINAL
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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-192	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 2 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-107	FIELD LOGBOOK NO.: HNF-N-507-	ACTUAL SAMPLE DEPTH: 0-6"	COA: 301966ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-618(01/06)

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-314 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K-63 location 2 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256
AIR QUALITY:	ICE CHEST NO.: SML-107	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 10'
COA: 301966ES10	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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MJ9 006	SOIL	SEP 07 2010	1235	✓	✓	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 07 2010 1430	[illegible]	SEP 07 2010 1430

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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-314 — PAGE 2 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C
SAMPLING LOCATION: 100-K-63 location 2 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY:
ICE CHEST NO.: SAL - 107	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 10'	COA: 301966ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A	

DATA TURNAROUND: 15 Days / 15 Days

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-018(01/06)

Attachment 2
Narrative, Rev.1
WSCF102464

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

Twelve (12) S&GRP samples were received at the WSCF Laboratory on September 8, 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. **Additionally, a copy of the completed P&D # WSCF102464 is included with this case narrative. Also is attached an Issue Resolution Form (IRF) pertaining to missing results for Hexavalent Chromium that were then scheduled to be analyzed outside the 30 day hold time.**

It should be noted that the attached chain of custody was not stamped "ICED" by the WSCF Laboratory Sample Custodian during sample receiving. However, based on procedure LO-090-403 form "NOTICE OF IMPROPER SAMPLE SUBMITTAL" was not submitted and was not stamped "NOT ICED". No anomaly was noted during sample receipt.

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

- **B** – Sample results with a concentration greater than the MDL but less than the PQL are B flagged (applies to inorganic and wet chemical analyses), as appropriate.
- **D** – Sample results are D flagged if dilution(s) were required, as appropriate.
- **J** – Sample results with a concentration greater than the MDL but less than the PQL are J flagged (applies to organic analyses), as appropriate.
- **U** – Analyzed for but not detected above limiting criteria. Relative Percent Difference (RPD) values associated with an analyte qualified with a "U" are not applicable.

Analytical Methodology for Requested Analyses

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

Inorganic Comments

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

- Batch QC 157734 analyzed on sample# B27MB6 (102445004)
  - All QC controls are within the established limits.
- Batch QC 158637 analyzed on sample# B27MP5 (102464012)
  - All QC controls are within the established limits.

Hexavalent Chromium – The hold time requirement for this analysis was not met. A Duplicate, Matrix Spike, Insoluble Matrix Spike, Blank and Laboratory Control Sample were analyzed with this delivery group. Analytical Note(s):

Batch QC 169038 analyzed on sample# B27M37 (102464001)

- Matrix Spike recovery was not within the established laboratory limits. Affected sample results in this batch were N flagged.
- An Issue Resolution Form regarding the analysis of the Hexavalent Chromium beyond the regulatory hold time is attached.

All other QC controls are within the established limits.

ICP-AES 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 158541 QC analyzed on sample# B27M37 (102464001)
  - Boron – Sample concentrations are estimated. "E"-Flagged are applied to samples. Samples are also "X" flagged to indicate iron interference.
  - All other 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 160834 analyzed on sample# B27M35 (102445001)
  - All QC controls are within the established limits.

Radiochemistry Comments

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

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

- Americium-241:
  - Batch QC 158433 analyzed on sample# B27M37 (102464001)
    - The Blank is less than two times the MDC. "B" Flag not required.
    - All other QC controls are within the established limits.
  - Batch QC 158434 analyzed on sample# B27MP4 (102464008)
    - All QC controls are within the established limits.
- Gamma Energy Analysis:
  - Batch QC 162635 analyzed on sample# B26VN7 (102157001)
    - Radium-226 and Radium-228 were detected in blank. These are Naturally Occurring Radioactive Materials (NORM). No flags assigned to sample results.
    - Cesium-137, cobalt-60, europium-152, europium-154, and europium-155 - 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.
  - Batch QC 162636 analyzed on sample# B27MK0 (102464003)
    - Radium-226 and Radium-228 were detected in blank. These are Naturally Occurring Radioactive Materials (NORM). No flags assigned to sample results.
    - Cesium-137, cobalt-60, europium-152, europium-154, radium-226 and radium-228- 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.
  - Batch QC 162637 analyzed on sample# B27MP5 (102464012)
    - Radium-226 and Radium-228 were detected in blank. These are Naturally Occurring Radioactive Materials (NORM). No flags assigned to sample results.

- Cesium-137, cobalt-60, europium-152, and europium-154 - 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 Plutonium analysis:
  - Batch QC 158433 analyzed on sample# B27M37 (102464001)
    - Plutonium-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.
    - All other QC controls are within the established limits.
  - Batch QC 158434 analyzed on sample# B27MP4 (102464008)
    - Plutonium 239/240—The Blank is less than two times the MDC. "B" Flag not required.
    - Plutonium-238—Duplicate RPD and Percent Recovery Limits are not shown due to the inability of the LIMS system to calculate a value when the results from the Sample and the Duplicate add up to zero.
    - All other QC controls are within the established limits.
- Isotopic Uranium analysis:
  - Batch QC 158433 analyzed on sample# B27M37 (102464001)
    - Uranium-235 - 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 other controls are within the established limits.
  - Batch QC 158434 analyzed on sample# B27MP4 (102464008)
    - The Blank is less than two times the MDC. "B" Flag not required.
    - Uranium-235 - 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.

- Strontium-89/90:
  - Batch QC 161633 analyzed on sample# B27M37 (102464001)
    - All QC controls are within the established limits.
  - Batch QC 161634 analyzed on sample# B27MP4 (102464008)
    - All QC controls are within the established limits.

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

Attachment 2
Narrative, Rev.1
WSCF102464

10/11/2010

Problem and Discrepancy Report

WSCF

SDG WSCF102464

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1. The data package has the following issues:

a) Hexavalent chromium was not reported in hard copy or electronic files for all samples.

Resolution: *Provide missing results.*

Lab Response: **The Hexavalent chromium results are provided in the hard copy report and in the corresponding EDD.**

b) Quality Control Report, Duplicate, Plutonium-238, page 93 of 140 – Duplicate RPD and RPD limit for Plutonium-238 are missing/ not reported in the "hard copy" data package. Please evaluate problem and submit missing QC data.

Resolution: *Provide missing results.*

Lab Response: **Upon review of the analytical report, it was found that duplicate RPD and Percent Recovery Limits are not shown due to the inability of the LIMS system to calculate a value when the results from the Sample and the Duplicate add up to zero.**

Please correct the issues and resubmit the hard copy and electronic data packages.

6

Sample Receipt

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-193 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K-63 location 3 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	SAF NO.: F10-256	AIR QUALITY: ☐
ICE CHEST NO.: SML-700	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 0-1'	COA: 301966ES10
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)

102464

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION			Cool<4C	Cool<4C	None	None	
HOLDING TIME			6 Months	28 Days/48 Hours	6 Months	6 Months	
TYPE OF CONTAINER			G/P	G/P	Square Bottle - Poly	G/P	
NO. OF CONTAINER(S)			1	1	1	1	
VOLUME			250mL	60mL	500mL	120mL	
SAMPLE ANALYSIS			SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27M37	SOIL	SEP 08 2010	0815	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 08 2010 1530	TA Frazier	SEP 08 2010 1530
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-6033-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-193	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376 2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 3 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-700	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 0-1'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-618(01/06)

Thursday, October 21, 2010 7:13:30 PM
Page 4 of 26

ChemWare

Sample Receipt

Chain of Custody

CHZMHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-264 PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K-63 location 5 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	SAF NO.: F10-256	AIR QUALITY: ☐
ICE CHEST NO.: SAIL-700	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966E510
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27M89 2	SOIL	SEP 08 2010	1233	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 08 2010 1530	TA Ensizm	SEP 08 2010 1530
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(01/06)

Thursday, October 21, 2010 7:13:30 PM
Page 5 of 26

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-264 PAGE 2 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 5 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-700	FIELD LOGBOOK NO.: ~~HNF-N-507-~~ 13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-518(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | F10-256-315 | PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: WIDRIG, DL

TELEPHONE NO.: 376-2858

PROJECT COORDINATOR: WIDRIG, DL

PRICE CODE: 8C

DATA TURNAROUND: 15 Days / 15 Days

SAMPLING LOCATION: 100-K-63 location 3 10ft

PROJECT DESIGNATION: ARRA 100-K 63 KW Floodplain In Process Sampling - Soil

SAF NO.: F10-256

AIR QUALITY: ☐

ICE CHEST NO.: SML-700

FIELD LOGBOOK NO.: HNF-N-607-13.

ACTUAL SAMPLE DEPTH: 10'

COA: 301966ES10

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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MK0	3	SOIL	SEP 08 2010	0848	✓	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 08 2010 1530	TA Finazzi	SEP 08 2010 1530

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-6003-918(01/06)

ChemWare

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Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-315 — PAGE 2 OF 2

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** WIDRIG, DL	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DL
PRICE CODE 8C	**DATA TURNAROUND** 15 Days / 15 Days		
SAMPLING LOCATION 100-K-63 location 3 10ft	**PROJECT DESIGNATION** ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	**SAF NO.** F10-256	**AIR QUALITY** ☐
ICE CHEST NO. SML-700	**FIELD LOGBOOK NO.** HNF-N-507-13	**ACTUAL SAMPLE DEPTH** 10'	**COA** 301966ES10
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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 - Total Sr; Americium-241;

A-6003 618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-194

PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: WIDRIG, DL

TELEPHONE NO.: 376-2853

PROJECT COORDINATOR: WIDRIG, DL

PRICE CODE: 8C

DATA TURNAROUND: 15 Days / 15 Days

SAMPLING LOCATION: 100-K-63 location 4 Surface

PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

SAF NO.: F10-256

AIR QUALITY: ☐

ICE CHEST NO.: SML-700

FIELD LOGBOOK NO.: HNF-N-507-13

ACTUAL SAMPLE DEPTH: 0 - 1'

COA: 301966ES10

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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250ml	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27M38	4 SOIL	SEP 08 2010	0905	✓	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 08 2010 1530	[illegible]	SEP 08 2010 1530

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(01/06)

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Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/ SAMPLE ANALYSIS REQUEST			F10-256-194	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K 63 location 4 Surface	PROJECT DESIGNATION: ARRA 100 K 63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY:	
ICE CHEST NO.: SML-700	FIELD LOGBOOK NO.: HNF-N-607-13	ACTUAL SAMPLE DEPTH: 0-1'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-610(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-262 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K-63 location 3 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256
AIR QUALITY: ☐			
ICE CHEST NO.: SAIL - 700	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 9-15 BGS	COA: 301966E510
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 transportaton per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400 5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool<4C	Cool<4C	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Scuare Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250ml	60ml	500ml	120ml
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MB7	5	SOIL	SEP 08 2010	0830	✓	✓	✓	✓

CHAIN OF POSSESSION — **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 08 2010 1530	TA Brazier	SEP 08 2010 1530

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(01/06)

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Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-262	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 3 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML - 700	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-618(01/06)

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Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-263 PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K-63 location 4 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256
AIR QUALITY: ☐	ICE CHEST NO.: SAL-700	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 5'
COA: 301966ES10	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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	50mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MB8	6 SOIL	SEP 08 2010	0925	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 08 2010 1530	RECEIVED BY/STORED IN: TA Fragua	DATE/TIME: SEP 08 2010 1530
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 6002-618(01/06)

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Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-263	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 4 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-700	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-316 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
SAMPLING LOCATION: 100-K-63 location 4 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256
ICE CHEST NO.: SML-700	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 10'	COA: 301986ES10
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: BC — DATA TURNAROUND: 15 Days / 15 Days — AIR QUALITY: [ ] — METHOD OF SHIPMENT: GOVERNMENT VEHICLE

MATRIX*: A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegetation, W=Water, WI=Wipe, X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS: Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool~4C	Cool~4C	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MK1 7	SOIL	SEP 08 2010	0950	✓	✓	✓	✓

CHAIN OF POSSESSION — **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 08 2010 1530	TA Frazier	SEP 08 2010 1530
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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-316 — PAGE 2 OF 2

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** WIDRIG, DL	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DL
SAMPLING LOCATION 100-K-63 location 4 10ft	**PROJECT DESIGNATION** ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		**SAF NO.** F10-256
ICE CHEST NO. SML-700	**FIELD LOGBOOK NO.** HNF-N-507-13	**ACTUAL SAMPLE DEPTH** 10'	**COA** 301966ES10
SHIPPED TO Waste Sampling & Characterization	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

PRICE CODE 8C — **AIR QUALITY** ☐ — **DATA TURNAROUND** 15 Days / 15 Days — **METHOD OF SHIPMENT** GOVERNMENT VEHICLE

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-355

PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K-63 location 4 15ft Dup	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	SAF NO.: F10-256	AIR QUALITY: ☐
ICE CHEST NO.: SML-700	FIELD LOGBOOK NO.: HNF-N-507-13.	ACTUAL SAMPLE DEPTH: 12'	COA: 301966E510
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MP4	8 SOIL	SEP 08 2010	1200	✓	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 08 2010 / 1530	TA FMAZIEN	SEP 08 2010 / 1530

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(01/06)

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Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-355	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 4 15ft Dup	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-700	FIELD LOGBOOK NO.: HNF-N-607-13	ACTUAL SAMPLE DEPTH: 12'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

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Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-195	PAGE 1 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 5 Surface	PROJECT DESIGNATION: AREA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML - 700	FIELD LOGBOOK NO.: HNF-N-607-13	ACTUAL SAMPLE DEPTH: 0-1	COA: 301966E510	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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250ml	60ml	500ml	120ml
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27M39	9 SOIL	SEP 08 2010	1220	✓	✓	✓	✓

CHAIN OF POSSESSION	DATE/TIME	SIGN/ PRINT NAMES	DATE/TIME
RELINQUISHED BY/REMOVED FROM: FM Hall	SEP 08 2010 1530	RECEIVED BY/STORED IN: TA Fleming	SEP 08 2010 1530
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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-195 — PAGE 2 OF 2

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** WIDRIG, DL	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** BC
DATA TURNAROUND 15 Days / 15 Days				
SAMPLING LOCATION 100-K-63 location 5 Surface	**PROJECT DESIGNATION** ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		**SAF NO.** F10-256	**AIR QUALITY** ☐
ICE CHEST NO. SML-700	**FIELD LOGBOOK NO.** HNF-N-507-___-___	**ACTUAL SAMPLE DEPTH** 0-1	**COA** 301966ES10	**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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

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Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-317 — PAGE 1 OF 2

COLLECTOR	FM Hall
SAMPLING LOCATION	CHPRC
	100-K-63 location S 10ft
ICE CHEST NO.	SML-700
SHIPPED TO	Waste Sampling & Characterization
COMPANY CONTACT	WIDRIG, DL
TELEPHONE NO.	376-2858
PROJECT DESIGNATION	ARRA 100-K-63 KW Floodplain To Process Sampling - Soil
FIELD LOGBOOK NO.	HNF-N-607-13
ACTUAL SAMPLE DEPTH	10'
OFFSITE PROPERTY NO.	N/A
PROJECT COORDINATOR	WIDRIG, DL
SAF NO.	F10-256
COA	301966ES10
BILL OF LADING/AIR BILL NO.	N/A
PRICE CODE	8C
AIR QUALITY	☐
DATA TURNAROUND	15 Days / 15 Days
METHOD OF SHIPMENT	GOVERNMENT VEHICLE

MATRIX*: A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegetation, W=Water, WI=Wipe, K=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS: Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool-4C	Cool-4C	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MK2	10 SOIL	SEP 08 2010	1231	✓	✓	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 08 2010 1530	TA Fitzgerald	SEP 08 2010 1530

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

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Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-317

PAGE 2 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 5 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY:	
ICE CHEST NO.: SAML-700	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 10'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

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Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-354 PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DI	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K-63 location 4 15ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	SAF NO.: F10-256	AIR QUALITY: ☐
ICE CHEST NO.: SML-700	FIELD LOGBOOK NO.: HNF-N-607-13	ACTUAL SAMPLE DEPTH: 12'	COA: 301966ES10
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250ml	60ml	500ml	120ml
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MP3	SOIL	SEP 08 2010	1200	✓	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 08 2010 1530	TA Franklin	SEP 08 2010 1530

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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-354	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 4 15ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY:	
ICE CHEST NO.: SML-700	FIELD LOGBOOK NO.: HNF-N-507-13-	ACTUAL SAMPLE DEPTH: 12'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

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Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-356

PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
SAMPLING LOCATION: 100-K-63 location 5 15ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256
ICE CHEST NO.: SMAL-700	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 13'	COA: 301966ES10
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: BC

AIR QUALITY: ☐

DATA TURNAROUND: 15 Days / 15 Days

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

MATRIX*: A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegetation, W=Water, WI=Wipe, X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS: Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool-4C	Cool-4C	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MP5	12 SOIL	SEP 08 2010	1310	✓	✓	✓	✓

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 08 2010 / 1530	TA Frazier	SEP 08 2010 / 1530

SIGN/ PRINT NAMES

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-6005-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-356	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 5 15ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-700	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 13'	COA: 301966ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: Waste Sampling & Characterization	~~HNF-N-507-OFFSITE PROPERTY NO.~~ N/A		BILL OF LADING/AIR BILL NO.: N/A		

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 – Total Sr; Americium-241;

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Attachment 2
Narrative
WSCF102473

Introduction

Eight (8) S&GRP samples were received at the WSCF Laboratory on September 9, 2010. The samples were analyzed for the analytes indicated on the attached copy of the chain of custody (COC) form in accordance with the *Statement of Work (SOW), Modification No. 2 to Agreement 36587, Release 3, "FH WSCF ANALYTICAL SERVICES FOR GROUNDWATER."*

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

It should be noted that the attached chain of custody was not stamped "ICED" by the WSCF Laboratory Sample Custodian during sample receiving. However, based on procedure LO-090-403 form "NOTICE OF IMPROPER SAMPLE SUBMITTAL" was not submitted and was not stamped "NOT ICED". No anomaly was noted during sample receipt.

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

- **B** – Sample results with a concentration greater than the MDL but less than the PQL are B flagged (applies to inorganic and wet chemical analyses), as appropriate.
- **D** – Sample results are D flagged if dilution(s) were required, as appropriate.
- **J** – Sample results with a concentration greater than the MDL but less than the PQL are J flagged (applies to organic analyses), as appropriate.
- **U** – Analyzed for but not detected above limiting criteria. Relative Percent Difference (RPD) values associated with an analyte qualified with a "U" are not applicable.

Analytical Methodology for Requested Analyses

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

Inorganic Comments

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

- Batch QC 161134 analyzed on sample# B27MP6 (102473005)

- Nitrate– Duplicate Relative Percent Difference(s) (RPD) did not meet the established laboratory limits. Duplicate Relative Percent Difference (RPD) does not apply to results near or below the minimum detectable level. No flags issued.
- All other QC controls are within the established limits.

ICP-AES 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 160033 analyzed on sample# B27MC0 (102473001)
  - Boron – Sample concentrations are estimated. "E"-Flagged are applied to samples. Samples are also "X" flagged to indicate iron interference.
  - All other 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 160834 analyzed on sample# B27M35 (102445001)
  - All QC controls are within the established limits.
- Batch QC 160836 analyzed on sample# B27M40 (102473003)
  - Manganese – Matrix Spike recovery exceeded established laboratory limits. Affected sample results in this batch were "N" flagged.
  - All other QC controls are within the established limits.

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 164278 analyzed on sample# B27M35 (102445001)
  - Duplicate Relative Percent Difference(s) (RPD) did not meet the established laboratory limits. Duplicate Relative Percent Difference (RPD) does not apply to results near or below the minimum detectable level. No flags issued.
  - All other QC controls are within the established limits.
- Batch QC 167140 analyzed on sample# B25H74 (102544001)

Attachment 2
Narrative
WSCF102473

- Duplicate Relative Percent Difference(s) (RPD) did not meet the established laboratory limits. Duplicate Relative Percent Difference (RPD) does not apply to results near or below the minimum detectable level. No flags issued.
- Matrix Spike and Insoluble Matrix Spike recoveries exceeded established laboratory limits. Affected sample results in this batch were "N" flagged.
- All other QC controls are within the established limits.

Radiochemistry Comments

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

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 162637 analyzed on sample# B27MP5 (102464012)
    - Radium-226 and Radium-228 - Duplicate Relative Percent Difference(s) (RPD) did not meet the established laboratory limits due to Naturally Occurring Radioactive Material. No flags issued on sample results.
    - Cesium-137, cobalt-60, europium-152 and europium-154 - 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.
- Strontium-89/90:
  - Batch QC 162438 analyzed on sample# B27MC0 (102473001)
    - 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.
- Americium-241:
  - Batch QC 160633 analyzed on sample# B27MC0 (102473001)

- The Blank is less than two times the MDC. "B" Flag not required.
- 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 Plutonium analysis:
  - Batch QC 160633 analyzed on sample# B27MC0 (102473001)
    - Plutonium-238 and 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 160633 analyzed on sample# B27MC0 (102473001)
    - All QC controls are within the established limits.

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

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-265 — PAGE 1 OF 2

COLLECTOR: J. Scales	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: 100-K-63 location 6 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	SAF NO.: F10-256	
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-13.	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10
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)

102473

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool<4C	Cool<4C	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS 2017 (A017)	SEE ITEM (2) IN SPECIAL INSTRUCTIONS IC	SEE ITEM (3) IN SPECIAL INSTRUCTIONS GEA	SEE ITEM (4) IN SPECIAL INSTRUCTIONS PU U Am SE

SAMPLE NO.	MATRIX*		SAMPLE DATE	SAMPLE TIME				
B27MC0	1	SOIL	HNF-N-507-	0738	✓	✓	✓	✓

SEP 09 2010

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
J. Scales	SEP 09 2010 / 13:3	M. Wilson	SEP 09 2010 / 13:32

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(03/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-265	PAGE 2 OF 2
COLLECTOR: J. Scales	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 6 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SMK-007	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-266	PAGE 1 OF 2
COLLECTOR: J. Scales	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 7 5ft.	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-13-	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

MATRIX*	POSSIBLE SAMPLE HAZARDS/ REMARKS					
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	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	None	None
		HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
		TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
		NO. OF CONTAINER(S)	1	1	1	1
		VOLUME	250mL	60mL	500mL	120mL
	SPECIAL HANDLING AND/OR STORAGE	SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MC1	2 SOIL	SEP 09 2010	0925	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: J. Scales	DATE/TIME: SEP 09 2010 1332	RECEIVED BY/STORED IN: M Nelson	DATE/TIME: SEP 09 2010 1332	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 (003-618(01/06))

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-266	PAGE 2 OF 2
COLLECTOR J. Scales	COMPANY CONTACT WIDRIG, DL	TELEPHONE NO. 376-2858	PROJECT COORDINATOR WIDRIG, DL	PRICE CODE 8C	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 100-K-63 location 7 5ft	PROJECT DESIGNATION ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO. F10-256	AIR QUALITY ☐	
ICE CHEST NO. SML-007	FIELD LOGBOOK NO. HNF-N-507-13	ACTUAL SAMPLE DEPTH 5'	COA 301966ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

D GIGN

A-6003-618(01/06)

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/ SAMPLE ANALYSIS REQUEST			F10-256-196	PAGE 1 OF 2
COLLECTOR: J. Scales	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 6 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-	ACTUAL SAMPLE DEPTH: 0-1'	COA: 301966ES10	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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27M40 3	SOIL	SEP 09 2010	0738	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: J. Scales	DATE/TIME: SEP 09 2010 13:32	RECEIVED BY/STORED IN: M. Nelson	DATE/TIME: SEP 09 2010 13:32
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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-196	PAGE 2 OF 2
COLLECTOR: J. Scales	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 6 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 0-1'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-518(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-197	PAGE 1 OF 2
COLLECTOR: J. Scales	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 7 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY:	
ICE CHEST NO.: SML - 007	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 0 - 1'	COA: 301966ES10	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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27M41	4	SOIL	SEP 09 2010	0908	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: J. Scales	DATE/TIME: SEP 09 2010 1332	RECEIVED BY/STORED IN: M. Nelson M. Nelson	DATE/TIME: SEP 09 2010 13:32
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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-197	PAGE 2 OF 2
COLLECTOR: J. Scales	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 7 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SALL - 007	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 0-1'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-357 — PAGE 1 OF 2

COLLECTOR: J. Scales	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K-63 location 6 15ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	SAF NO.: F10-256	AIR QUALITY: ☐
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 15'	COA: 301966ES10
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27VP6 5	SOIL	SEP 09 2010	0846	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
J. Scales	SEP 09 2010 13:32	M. Nelson M. Nelson	SEP 09 2010 13:32
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

COPY

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

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-357	PAGE 2 OF 2
COLLECTOR: J. Scales	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 6 15ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-607-13	ACTUAL SAMPLE DEPTH: 15'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST**

F10-256-358 — PAGE 1 OF 2

COLLECTOR: J. Scales	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
SAMPLING LOCATION: 100-K-63 location 7 15ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 15'	COA: 301966ES10
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: 8C — AIR QUALITY: ☐ — DATA TURNAROUND: 15 Days / 15 Days — METHOD OF SHIPMENT: GOVERNMENT VEHICLE

MATRIX*: A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegetation, W=Water, WI=Wipe, X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS: Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool-4C	Cool-4C	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MP7 6	SOIL	SEP 09 2010	1006	✓	✓	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
J. Scales	SEP 09 2010 13:32	M. Nelson M. Nelson	SEP 09 2010 13:32
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(01/05)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-358	PAGE 2 OF 2
COLLECTOR: J. Scales	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 7 15ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: ~~HNF-N507-~~ 15	ACTUAL SAMPLE DEPTH: 15'	COA: 301966ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.: ~~HNF-N507~~ N/A		BILL OF LADING/AIR BILL NO.: N/A		

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-318 — PAGE 1 OF 2

COLLECTOR: J. Scales	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days	AIR QUALITY: ☐	
SAMPLING LOCATION: 100-K-53 location 6 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	SAF NO.: F10-256	
ICE CHEST NO.: SML - 007	FIELD LOGBOOK NO.: HNF-N-507-13.	ACTUAL SAMPLE DEPTH: 10'	COA: 301966ES10
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MK3	7	SOIL	SEP 09 2010	0752	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
J. Scales	SEP 09 2010 13:32	M. Nelson	SEP 09 2010 13:32
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-5003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-318	PAGE 2 OF 2
COLLECTOR: J. Scales	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 6 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 10'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-319

PAGE 1 OF 2

COLLECTOR: J. Scales	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
SAMPLING LOCATION: 100-K-63 location 7 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256
ICE CHEST NO.: SAL-007	FIELD LOGBOOK NO.: HNF-N-607-13.	ACTUAL SAMPLE DEPTH: 10'	COA: 301966ES10
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: 8C

AIR QUALITY: ☐

DATA TURNAROUND: 15 Days / 15 Days

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

MATRIX*: A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegetation, W=Water, WI=Wipe, X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS: Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool~4C	Cool~4C	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MK4	8	SOIL	SEP 09 2010	0945	✓	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
J. Scales	SEP 09 2010 13:32	M. Nelson	SEP 09 2010 13:32

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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-319	PAGE 2 OF 2
COLLECTOR: J. Scales	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 7 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SAML-007	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 10'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-618(01/06)

Attachment 2
Narrative
WSCF102515

Introduction

Twelve (12) S&GRP sample was received at the WSCF Laboratory on September 13, 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

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

- Batch QC 162938 analyzed on sample# B27MR0 (102515004)
- Batch QC 162939 analyzed on sample# B27MP8 (102515007)

- Chloride - Duplicate Relative Percent Difference (RPD) did not meet the established laboratory limits. The RPD criterion does not apply to results near or below the minimum detection limit.

All QC controls are within the established limits.

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

- Batch QC 167375 analyzed on sample# B27MK8 (102515001)
  - Matrix Spike and/or Matrix Spike (along with post spike) Duplicate recoveries exceeded established laboratory limits. Affected sample results in this batch were "N" flagged.

All QC controls are within the established limits.

ICP-AES 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 162852 QC analyzed on sample# B27MK8 (102515001)
  - Estimated Boron results due to Iron interference. Sample results are "E" flagged.

All other 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 162434 QC analyzed on sample# B27MK8 (102515001)
  - Molybdenum - was detected in the Blank and was evaluated. Affected sample results in this batch were "C" Flagged.

All other QC controls are within the established limits.

Radiochemistry Comments

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

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

Attachment 2
Narrative
WSCF102515

- Americium-241:
  - Batch QC 162840 analyzed on sample# B27MK8 (102515001)
    - The blank is less than 2 times the MDC and is acceptable. "B" flag not required.
  - Batch QC 162841 analyzed on sample# B27MP8 (102515007)
    - The blank is less than 2 times the MDC and is acceptable. "B" flag not required.
    - 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 QC controls are within the established limits.

- Gamma Energy Analysis:
  - Batch QC 163840 analyzed on sample# B27MK8 (102515001)
    - Radium-226 and 228 contaminations were detected in the Blank and was evaluated. These isotopes are Naturally Occurring Radioactive Material (NORM) and no flags were assigned.
  - Batch QC 163934 analyzed on sample# B27MC2 (102515010)

All QC controls are within the established limits.

- Isotopic Plutonium analysis:
  - Batch QC 162840 analyzed on sample# B27MK8 (102515001)
  - Batch QC 162841 analyzed on sample# B27MP8 (102515007)
    - Plutonium-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.

All QC controls are within the established limits.

- Isotopic Uranium analysis:
  - Batch QC 162840 analyzed on sample# B27MK8 (102515001)
    - 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 162841 analyzed on sample# B27MP8 (102515007)

All QC controls are within the established limits.

- Strontium-89/90:
  - Batch QC 165533 analyzed on sample# B27MK8 (102515001)
  - Batch QC 165534 analyzed on sample# B27MP8 (102515007)

All QC controls are within the established limits.

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

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-323

PAGE 1 OF 2

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** WIDRIG, DL	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DL
SAMPLING LOCATION 100-K-63 location 11 10ft	**PROJECT DESIGNATION** ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		**SAF NO.** F10-256
ICE CHEST NO. SML-007	**FIELD LOGBOOK NO.** HNF -N-507- 13	**ACTUAL SAMPLE DEPTH** 10'	**COA** 301966E510
SHIPPED TO Waste Sampling & Characterization	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

PRICE CODE 8C

AIR QUALITY ☐

DATA TURNAROUND 15 Days / 15 Days

METHOD OF SHIPMENT GOVERNMENT VEHICLE

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WT=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)

102515

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool~4C	Cool~4C	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60ml	500ml	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MK8	SOIL	SEP 13 2010	1040	✓	✓	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 13 2010 1430	Markson Williams	SEP 13 2010 1430
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-6003-518(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-323 — PAGE 2 OF 2

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** WIDRIG, DL	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DL
PRICE CODE 8C	**DATA TURNAROUND** 15 Days / 15 Days		
SAMPLING LOCATION 100-K-63 location 11 10ft	**PROJECT DESIGNATION** ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		**SAF NO.** F10-256
AIR QUALITY ☐			
ICE CHEST NO. SML-007	**FIELD LOGBOOK NO.** HNF-N-507-13.	**ACTUAL SAMPLE DEPTH** 10'	**COA** 301966ES10
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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6003-618(01/06)

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Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-270 PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: WIDRIG, DL

TELEPHONE NO.: 376-2858

PROJECT COORDINATOR: WIDRIG, DL

PRICE CODE: 8C

DATA TURNAROUND: 15 Days / 15 Days

AIR QUALITY: ☐

SAMPLING LOCATION: 100-K-63 location 11.5ft

PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

SAF NO.: F10-256

ICE CHEST NO.: SML-007

FIELD LOGBOOK NO.: HNF-N-507-13

ACTUAL SAMPLE DEPTH: 5'

COA: 301966ES10

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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MC5	2 SOIL	SEP 13 2010	1015	✓	✓	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 13 2010 1430	Mannison Manoja	SEP 13 2010 1430

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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-270	PAGE 2 OF 2
COLLECTOR: FM Hal CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 11 50	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8 HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-201 PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

SAMPLING LOCATION: 100-K-63 location 11 Surface

ICE CHEST NO.: SML-007

SHIPPED TO: Waste Sampling & Characterization

COMPANY CONTACT: WIDRIG, DL

TELEPHONE NO.: 376-2658

PROJECT COORDINATOR: WIDRIG, DL

PRICE CODE: 8C

DATA TURNAROUND: 15 Days / 15 Days

AIR QUALITY: ☐

PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

SAF NO.: F10-256

FIELD LOGBOOK NO.: ~~HNF-N-507~~ 13

ACTUAL SAMPLE DEPTH: 0-1'

COA: 301966ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

~~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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250ml	60mL	500ml	120ml
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27M45	3 SOIL	SEP 13 2010	1000	✓	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 13 2010 1430	MANRISON	SEP 13 2010 1430

SPECIAL INSTRUCTIONS: SEE PAGE 2 FOR ALL SINGLE INSTRUCTIONS

LABORATORY SECTION: RECEIVED BY | TITLE | DATE/TIME

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

A-6005-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-201 PAGE 2 OF 2

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** WIDRIG, DL	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DL
SAMPLING LOCATION 100-K-63 location 11 Surface	**PROJECT DESIGNATION** ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		**SAF NO.** F10-256
TCF CHEST NO. SML-007	**FIELD LOGBOOK NO.** HNF-N-507-13	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 301966ES10
SHIPPED TO Waste Sampling & Characterization	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

PRICE CODE 8C

AIR QUALITY ☐

DATA TURNAROUND 15 Days / 15 Days

METHOD OF SHIPMENT GOVERNMENT VEHICLE

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium 239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6003-618(01/06)

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST**

F10-256-361 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K-63 location 10 15ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256
AIR QUALITY:			
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-13.	ACTUAL SAMPLE DEPTH: 13'	COA: 301966ES10
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
E27MR0	4	SOIL	SEP 13 2010	0940	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 13 2010 1430	RECEIVED BY/STORED IN: MARKSON Minock	DATE/TIME: SEP 13 2010 1430
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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-361 — PAGE 2 OF 2

COLLECTOR: FM Hall	COMPANY CONTACT: WIDRIG, DI	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DI
SAMPLING LOCATION: CHPRC 100-K-63 location 10 15ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 13'	COA: 301966ES10
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: 8C — AIR QUALITY: ☐ — DATA TURNAROUND: 15 Days / 15 Days — METHOD OF SHIPMENT: GOVERNMENT VEHICLE

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-322 PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: WIDRIG, DL

TELEPHONE NO.: 376-2858

PROJECT COORDINATOR: WIDRIG, DL

PRICE CODE: 8C

DATA TURNAROUND: 15 Days / 15 Days

SAMPLING LOCATION: 100-K-63 location 10 10ft

PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

SAF NO.: F10-256

AIR QUALITY: ☐

ICE CHEST NO.: SML-007

FIELD LOGBOOK NO.: HNF-N-507-13

ACTUAL SAMPLE DEPTH: 10'

COA: 301966ES10

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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MK7	5	SOIL	SEP 13 2010	0925	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 13 2010 1430	M Nelson	SEP 13 2010 1430
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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F10-256-322	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C
SAMPLING LOCATION: 100-K-63 location 10 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY:
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 10'	COA: 301966ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A	

DATA TURNAROUND: 15 Days / 15 Days

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-269 — PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K 63 location 10 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	SAF NO.: F10-256	AIR QUALITY: ☐
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MC4	6 SOIL	SEP 13 2010	0900	✓	✓	✓	✓

CHAIN OF POSSESSION: RELINQUISHED BY/REMOVED FROM	DATE/TIME	SIGN/ PRINT NAMES: RECEIVED BY/STORED IN	DATE/TIME
FM Hall	SEP 13 2010 1430	Marlon Mends	SEP 13 2010 1430
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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-269	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 10 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-807-13	ACTUAL SAMPLE DEPTH: 5	COA: 301966ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GK1 applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

☐ ORIGINAL

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-359 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: BC	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K-63 location 8 15ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	SAF NO.: F10-256	AIR QUALITY: ☐
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-13.	ACTUAL SAMPLE DEPTH: 13'	COA: 301966ES10
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27VP8 7	SOIL	SEP 13 2010	0831	✓	✓	✓	✓

CHAIN OF POSSESSION — **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 13 2010 1430	Marelson Morales	SEP 13 2010 1430
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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-359	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 8 15ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 13'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6003-018(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-200 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
SAMPLING LOCATION: 100-K-63 location 10 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain Ir Process Sampling - Soil		SAF NO.: F10-256
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 0-1'	COA: 301966ES10
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

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

MATRIX*: A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegetation, W=Water, WT=Wipe, X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS: Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool~4C	Cool~4C	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27M44	8	SOIL	SEP 13 2010	0845	✓	✓	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 13 2010 1430	Maneia MANASM	SEP 13 2010 1430

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(01/05)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-200 — PAGE 2 OF 2

COLLECTOR	**COMPANY CONTACT** WIDRIG, DI	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DI
SAMPLING LOCATION FM Hall CHPRC 100-K-63 location 10 Surface	**PROJECT DESIGNATION** ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		**SAF NO.** F10-256
ICE CHEST NO. SAL-007	**FIELD LOGBOOK NO.** HNF-N-507-13	**ACTUAL SAMPLE DEPTH** G-1	**COA** 301966ES10
SHIPPED TO Waste Sampling & Characterization	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

PRICE CODE 8C — **AIR QUALITY** ☐ — **DATA TURNAROUND** 15 Days / 15 Days — **METHOD OF SHIPMENT** GOVERNMENT VEHICLE

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-320

PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K-63 location 8 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	SAF NO.: F10-256	AIR QUALITY: ☐
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-13.	ACTUAL SAMPLE DEPTH: 10'	COA: 301966ES10
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MK5	9 SOIL	SEP 13 2010	0815	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 13 2010 1430	RECEIVED BY/STORED IN: Marvison Manes	DATE/TIME: SEP 13 2010 1430
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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-320

PAGE 2 OF 2

COLLECTOR: FM Hal CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
SAMPLING LOCATION: 100-K-63 location 8 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 10'	COA: 301966ES10
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: 8C

AIR QUALITY: ☐

DATA TURNAROUND: 15 Days / 15 Days

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-267 PAGE 1 OF 2

COLLECTOR	FM Hall CHPRC
SAMPLING LOCATION	100-K-63 location 8 5ft
ICE CHEST NO.	SAIL-007
SHIPPED TO	Waste Sampling & Characterization
COMPANY CONTACT	WIDRIG, DL
TELEPHONE NO.	376-2858
PROJECT COORDINATOR	WIDRIG, DL
PRICE CODE	8C
DATA TURNAROUND	15 Days / 15 Days
PROJECT DESIGNATION	ARRA 100-K-63 KW Floodplain In Process Sampling - Soil
SAF NO.	F10-256
AIR QUALITY	☐
FIELD LOGBOOK NO.	HNF-N-507-13
ACTUAL SAMPLE DEPTH	0-5'
COA	301966ES10
METHOD OF SHIPMENT	GOVERNMENT VEHICLE
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MC2	10	SOIL	SEP 13 2010	0800	✓	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 13 2010 1430	Marlon Marlon	SEP 13 2010 1430

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

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-267	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 8 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: [ ]	
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-607-13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6023-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-362 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 375-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days	AIR QUALITY: ☐	
SAMPLING LOCATION: 100-K-63 location 11 15ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	SAF NO.: F10-256	
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 141	COA: 301966ES10
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MR1	SOIL	SEP 13 2010	1220	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 13 2010 1430	RECEIVED BY/STORED IN: Marvin Marvin	DATE/TIME: SEP 13 2010 1430
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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-362

PAGE 2 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K-63 location 11 15ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256
AIR QUALITY: ☐			
ICE CHEST NO.: SMC-007	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 141	COA: 301966ES10
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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-198 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
SAMPLING LOCATION: 100-K-63 location 8 Surface	PROJECT DESIGNATION: ARRA 100-K 63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 0 - 1	COA: 301966ES10
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: 8C — AIR QUALITY: ☐ — DATA TURNAROUND: 15 Days / 15 Days — METHOD OF SHIPMENT: GOVERNMENT VEHICLE

MATRIX*: A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegetation, W=Water, WI=Wipe, X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS: Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool~4C	Cool~4C	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27M42	12 SOIL	SEP 13 2010	0740	✓	✓	✓	✓

CHAIN OF POSSESSION — **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 13 2010 1430	MAWebson	SEP 13 2010 1430

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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-198 PAGE 2 OF 2

COLLECTOR
FM Hall
CHPRC

COMPANY CONTACT
WIDRIG, DL

TELEPHONE NO.
376-2858

PROJECT COORDINATOR
WIDRIG, DL

PRICE CODE 8C

DATA TURNAROUND
15 Days / 15 Days

AIR QUALITY ☐

SAMPLING LOCATION
100-K-63 location 8 Surface

PROJECT DESIGNATION
ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

SAF NO.
F10-256

ICE CHEST NO.
SML-007

FIELD LOGBOOK NO.
HNF-N-507-13

ACTUAL SAMPLE DEPTH
0-1

COA
301966ES10

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 WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-618(01/06)

Attachment 2
Narrative
WSCF102537

Introduction

Nine (9) S&GRP samples were received at the WSCF Laboratory on September 14, 2010. The samples were analyzed for the analytes indicated on the attached copy of the chain of custody (COC) form in accordance with the *Statement of Work (SOW), Modification No. 2 to Agreement 36587, Release 3, "FH WSCF ANALYTICAL SERVICES FOR GROUNDWATER."*

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

It should be noted that the attached chain of custody was not stamped "ICED" by the WSCF Laboratory Sample Custodian during sample receiving. However, based on procedure LO-090-403 form "NOTICE OF IMPROPER SAMPLE SUBMITTAL" was not submitted and was not stamped "NOT ICED". No anomaly was noted during sample receipt.

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

- **B** – Sample results with a concentration greater than the MDL but less than the PQL are B flagged (applies to inorganic and wet chemical analyses), as appropriate.
- **D** – Sample results are D flagged if dilution(s) were required, as appropriate.
- **J** – Sample results with a concentration greater than the MDL but less than the PQL are J flagged (applies to organic analyses), as appropriate.
- **U** – Analyzed for but not detected above limiting criteria. Relative Percent Difference (RPD) values associated with an analyte qualified with a "U" are not applicable.

Analytical Methodology for Requested Analyses

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

Inorganic Comments

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

- Batch QC 163549 analyzed on sample# B27M46 (102537001)

All QC controls are within the established limits.

Attachment 2
Narrative
WSCF102537

ICP-AES 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 162853 analyzed on sample# B27M46 (102537001)

All QC controls are within the established limits.

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

- Batch QC 163533 analyzed on sample# B27M46 (102537001)
  - Manganese – Matrix Spike recovery was not within the established laboratory limits. Affected sample results in this batch were N flagged.
  - Selenium - was detected in the Blank. Affected sample results in this batch were "C" Flagged.

All other QC controls are within the established limits.

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 167140 analyzed on sample# B25H74 (102544001)
  - Matrix Spike and Insoluble Matrix Spike recoveries exceeded established laboratory limits. Affected sample results in this batch were N flagged.
  - Duplicate Relative Percent Difference(s) (RPD) did not meet the established laboratory limits. Duplicate Relative Percent Difference (RPD) does not apply to results near or below the minimum detectable level. No flags issued.
- Batch QC 167375 analyzed on sample# B27MK8 (102515001)
  - Matrix Spike, Matrix Spike Duplicate and Post Spike recoveries exceeded established laboratory limits. Affected sample results in this batch were N flagged.

All other QC controls are within the established limits.

Attachment 2
Narrative
WSCF102537

Radiochemistry Comments

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

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 163934 analyzed on sample# B27MC2 (102515010)
    - Radium-226—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 163942 analyzed on sample# B26FB7 (102197001)
    - Radium-226 and Radium-228 – The Blank was above established laboratory limits due to Naturally Occurring Radioactive Material.
    - Radium-226 - Duplicate Relative Percent Difference(s) (RPD) did not meet the established laboratory limits due to Naturally Occurring Radioactive Material.

All other QC controls are within the established limits.

- Strontium-89/90:
  - Batch QC 165535 analyzed on sample# B27M46 (102537001)

All QC controls are within the established limits.

- Americium-241:
  - Batch QC 163237 analyzed on sample# B27M46 (102537001)
    - The Blank is less than two times the MDC. "B" Flag not required.
    - 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 163238 analyzed on sample# B27MC9 (102537006)
    - The Blank is less than two times the MDC. "B" Flag not required.

All other QC controls are within the established limits.

Attachment 2
Narrative
WSCF102537

- Isotopic Plutonium analysis:
  - Batch QC 163237 analyzed on sample# B27M46 (102537001)
    - Plutonium-238 and 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.
  - Batch QC 163238 analyzed on sample# B27MC9 (102537006)
    - Plutonium-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.

  All other QC controls are within the established limits.

- Isotopic Uranium analysis:
  - Batch QC 163237 analyzed on sample# B27M46 (102537001)
  - Batch QC 163238 analyzed on sample# B27MC9 (102537006)

  All QC controls are within the established limits.

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

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-202 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
SAMPLING LOCATION: 100-K-63 location 12 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256
ICE CHEST NO.: SAXL-777	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 0-1	COA: 301966ES10
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: 8C — AIR QUALITY: ☐ — DATA TURNAROUND: 15 Days / 15 Days — METHOD OF SHIPMENT: GOVERNMENT VEHICLE

MATRIX*: A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegetation, W=Water, WI=Wipe, X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS: Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE: 102537

PRESERVATION	Cool-4C	Cool-4C	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27M46	SOIL	SEP 14 2010	0800	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 14 2010 1400	RECEIVED BY/STORED IN: Marvelson Mendoza	DATE/TIME: SEP 14 2010 1400
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(01/06)

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-202	PAGE 2 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: BC	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 12 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-777	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 0-1	COA: 301966ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-203 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K-63 location 13 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256
AIR QUALITY:			
ICE CHEST NO.: SML-777	FIELD LOGBOOK NO.: HNF-N-507-13-	ACTUAL SAMPLE DEPTH: 0 - 1	COA: 301966ES10
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27M47	S SOIL	SEP 14 2010	0845	✓	✓	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 14 2010 1400	Marvelson Manoch	SEP 14 2010 1400
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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-203	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 13 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-777	FIELD LOGBOOK NO.: HNF-N-807-13	ACTUAL SAMPLE DEPTH: 0 - 1	COA: 301966ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-205 PAGE 1 OF 2

COLLECTOR	FM Hall CHPRC
SAMPLING LOCATION	100-K-63 location 15 Surface
ICE CHEST NO.	SML-777
SHIPPED TO	Waste Sampling & Characterization
COMPANY CONTACT	WIDRIG, DL
TELEPHONE NO.	376-2858
PROJECT COORDINATOR	WIDRIG, DL
PRICE CODE	8C
DATA TURNAROUND	15 Days / 15 Days
PROJECT DESIGNATION	ARRA 100-K-63 KW Floodplain In Process Sampling - Soil
SAF NO.	F10-256
AIR QUALITY	
FIELD LOGBOOK NO.	HNF-N-607-13
ACTUAL SAMPLE DEPTH	0-1
COA	301966ES10
METHOD OF SHIPMENT	GOVERNMENT VEHICLE
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27M49	3	SOIL	SEP 14 2010	09:25	✓	✓	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 14 2010 1400	MANCISON	SEP 14 2010 1400

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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-205	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 15 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: [ ]	
ICE CHEST NO.: SML-777	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 0-1'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-5003-618(01/06)

Wednesday, September 15, 2010 7:19:12 PM
Page 8 of 20
ChemVare

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	F10-256-271	PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days	AIR QUALITY: ☐	
SAMPLING LOCATION: 100-K-63 location 12.5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	SAF NO.: F10-256	
ICE CHEST NO.: SML-777	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27M06	4 SOIL	SEP 14 2010	0820	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 14 2010 1400	RECEIVED BY/STORED IN: MANSON Monda	DATE/TIME: SEP 14 2010 1400
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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-271	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 12 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SMIL-777	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-272 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K-63 location 13 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	SAF NO.: F10-256	AIR QUALITY:
ICE CHEST NO.: SML-777	FIELD LOGBOOK NO.: HNF-N-507-13.	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10
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=Wipe, X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS: Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool~4C	Cool~4C	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MC7	5	SOIL	SEP 14 2010	~~SEP 14 2010~~ 0905	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 14 2010 1400	MAJackson	SEP 14 2010 1400
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-6003-018(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-272 — PAGE 2 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
SAMPLING LOCATION: 100-K-63 location 13 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256
ICE CHEST NO.: SXL-777	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: 8C — AIR QUALITY: ☐ — DATA TURNAROUND: 15 Days / 15 Days — METHOD OF SHIPMENT: GOVERNMENT VEHICLE

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6003-618(01/06)

ChemVare

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-274 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K-63 location 15 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	SAF NO.: F10-256	AIR QUALITY: ☐
ICE CHEST NO.: SMC-777	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MC9	6	SOIL	SEP 14 2010	0940	✓	✓	✓	✓

CHAIN OF POSSESSION — **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 14 2010 1400	MANelson	SEP 14 2010 1400

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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-274	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 15 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-777	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966E510	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 WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-324	PAGE 1 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 12 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: [ ]	
ICE CHEST NO.: SML-777	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 7'	COA: 301966ES10	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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MK9	7 SOIL	SEP 14 2010	0830	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 14 2010 1400	RECEIVED BY/STORED IN: Manuel Manuel	DATE/TIME: SEP 14 2010 1400	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	ORIGINAL
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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-324

PAGE 2 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K-63 location 12 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	SAF NO.: F10-256	AIR QUALITY: ☐
ICE CHEST NO.: SML-777	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 7'	COA: 301966ES10
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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-327

PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K-63 location 15 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	SAF NO.: F10-256	AIR QUALITY: ☐
ICE CHEST NO.: SAIL-777	FIELD LOGBOOK NO.: HNF-N-607-13	ACTUAL SAMPLE DEPTH: 10'	COA: 301966ES10
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27ML2	8	SOIL	SEP 14 2010	0950	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 14 2010 1400	RECEIVED BY/STORED IN: Marie Gon	DATE/TIME: SEP 14 2010 1400
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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-327	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 15 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-777	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 10'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-356 PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: WIDRIG, DL

TELEPHONE NO.: 376-2858

PROJECT COORDINATOR: WIDRIG, DL

PRICE CODE: 8C

DATA TURNAROUND: 15 Days / 15 Days

SAMPLING LOCATION: 100-K-63 location 15 15ft

PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

SAF NO.: F10-256

AIR QUALITY: ☐

ICE CHEST NO.: SAL-777

FIELD LOGBOOK NO.: HNF-N-507-13

ACTUAL SAMPLE DEPTH: 141

COA: 301966ES10

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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MR5	9	SOIL	SEP 14 2010	1005	✓	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 14 2010 1400	[illegible]	SEP 14 2010 1400

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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-366	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 15 15ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodpain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SAM-777	FIELD LOGBOOK NO.: HNF-N-607-13	ACTUAL SAMPLE DEPTH: 14'	COA: 301966ES10	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 WSCF Analytical is 402111ES20. ** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-618(01/06)

Appendix 5

Data Validation Supporting Documentation

VALIDATION LEVEL:	A	B	(C)	D	E
PROJECT: 100-K-63 Pothole Samples			DATA PACKAGE: VSR12-005		
VALIDATOR: Maryann Jordan		LAB: WSCF		DATE: 12-12-2011	
			SDG: WSCF102445, WSCF102425, WSCF102473, WSCF102537, WSCF102515, WSCF102464		
ANALYSES PERFORMED					
Anions/IC X	TOC	TOX	TPH-418.1	Oil and Grease	Alkalinity
Ammonia	BOD/COD	Chloride	Chromium-VI X	pH	NO_3/NO_2
Sulfate	TDS	TKN	Phosphate	Cyanide	

SAMPLES/MATRIX Soil and Water samples

SDG WSCF102445: B27M35, B27MJ8, B27MB5, B27MB6, B27M36, B27MJ9
SDG WSCF102425: B27MR7
SDG WSCF102473: B27MC0, B27MC1, B27M40, B27M41, B27MP6, B27MP7, B27MK3, B27MK4
SDG WSCF102537: B27M46, B27M47, B27M49, B27MC6, B27MC7, B27MC9, B27MK9, B27ML2, B27MR5
SDG WSCF102515: B27MK8, B27MC5, B27M45, B27MR0, B27MK7, B27MC4, B27MP8, B27M44, B27MK5, B27MC2, B27MR1, B27M42
SDG WSCF102464: B27M37, B27MB9, B27MK0, B27M38, B27MB7, B27MB8, B27MK1, B27MP4, B27M39, B27MK2, B27MP3, B27MP5

1. DATA PACKAGE COMPLETENESS AND CASE NARRATIVE

Technical verification documentation present?.....(Yes) No N/A

Comments: None

2. INSTRUMENT PERFORMANCE AND CALIBRATIONS (Levels D and E)

Initial calibrations performed on all instruments? ..... Yes No N/A

Initial calibrations acceptable? ..... Yes No N/A

ICV and CCV checks performed on all instruments? ..... Yes No N/A

ICV and CCV checks acceptable? ..... Yes No N/A

Standards traceable? ..... Yes No N/A

Standards expired? ..... Yes No N/A

Calculation check acceptable? ..... Yes No N/A

Comments:

3. BLANKS (Levels B, C, D, and E)

ICB and CCB checks performed for all applicable analyses? (Levels D, E) ..... Yes No N/A

ICB and CCB results acceptable? (Levels D, E) ..... Yes No N/A

Laboratory blanks analyzed? ..... Yes No N/A

Laboratory blank results acceptable? ..... Yes No N/A

Field blanks analyzed? (Levels C, D, E) ..... Yes No N/A

Field blank results acceptable? (Levels C, D, E) ..... Yes No N/A

Transcription/calculation errors? (Levels D, E) ..... Yes No N/A

Comments: None

4. ACCURACY (Levels C, D, and E)

Spike samples analyzed? ..... Yes No N/A

Spike recoveries acceptable? ..... Yes No N/A

Spike standards NIST traceable? (Levels D, E) ..... Yes No N/A

Spike standards expired? (Levels D, E) ..... Yes No N/A

LCS/BSS samples analyzed? ..... Yes No N/A

LCS/BSS results acceptable? ..... Yes No N/A

Standards traceable? (Levels D, E) ..... Yes No N/A

Standards expired? (Levels D, E) ..... Yes No N/A

Transcription/calculation errors? (Levels D, E) ..... Yes No N/A

Performance audit sample(s) analyzed? ..... Yes No N/A

Performance audit sample results acceptable? ..... Yes No N/A

Comments:

SDG WSCF102473: MS: hexavalent Cr 42.8% (batch 167140)
SDG WSCF102537: MS: hexavalent Cr 42.8% (batch 167140)

5. PRECISION (Levels C, D, and E)

Duplicate RPD values acceptable?.....Yes No N/A

Duplicate results acceptable?.....Yes No N/A

MS/MSD standards NIST traceable? (Levels D, E)..... Yes No N/A

MS/MSD standards expired? (Levels D, E) ..... Yes No N/A

Field duplicate RPD values acceptable? .....Yes No N/A

Field split RPD values acceptable? ..... Yes No N/A

Transcription/calculation errors? (Levels D, E)..... Yes No N/A

Comments: None

6. HOLDING TIMES (all levels)

Samples properly preserved? .....Yes No N/A

Sample holding times acceptable? ..... Yes No N/A

Comments:

WSCF102425: Hexavalent Cr in sample B27MR7 analyzed >2X out of holding time
WSCF102464: Hexavalent Cr in all samples analyzed >1X, almost 2X out of holding time

7. RESULT QUANTITATION AND DETECTION LIMITS (all levels)

Results reported for all requested analyses?.....Yes No N/A

Results supported in the raw data? (Levels D, E) ..... Yes No N/A

Samples properly prepared? (Levels D, E)..... Yes No N/A

Detection limits meet RDL?.....Yes No N/A

Transcription/calculation errors? (Levels D, E) ..... Yes No N/A

Comments: None

Comments (attach additional sheets as necessary):

Appendix 6

Additional Documentation Requested By Client

Batch QC List

Attention Michael Neely
Department Inorganic

Group # WSCF102425

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
157641	157641	1	BLANK	37963	BLANK		Hexavalent chromium Discrete Analyzer
157641	157641	3	LCS	37965	LCS		Hexavalent chromium Discrete Analyzer
157641	157641	4	DUP	37966	B27749(102431001DUP)	102431001	Hexavalent chromium Discrete Analyzer
157641	157641	5	MS	37967	B27749(102431001MS)	102431001	Hexavalent chromium Discrete Analyzer
157641	157641	6	SAMPLE	102425001	B27MR7		Hexavalent chromium Discrete Analyzer
159733	162254	1	BLANK	38160	BLANK		ICP-6010 - All possible metals
159733	162254	2	LCS	38161	LCS		ICP-6010 - All possible metals
159733	162254	3	MS	38162	B27MR7(102425001MS)	102425001	ICP-6010 - All possible metals
159733	162254	4	MSD	38163	B27MR7(102425001MSD	102425001	ICP-6010 - All possible metals
159733	162254	5	SAMPLE	102425001	B27MR7		ICP-6010 - All possible metals
163538	163539	4	BLANK	38715	BLANK		ICP-2008 MS All possible metal
163538	163539	5	LCS	38716	LCS		ICP-2008 MS All possible metal
163538	163539	6	MS	38717	B275R1(102400007MS)	102400007	ICP-2008 MS All possible metal
163538	163539	7	MSD	38718	B275R1(102400007MSD)	102400007	ICP-2008 MS All possible metal
163538	163539	22	SAMPLE	102425001	B27MR7		ICP-2008 MS All possible metal

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF102425

QC Batch 157641
Associated Samples 102425001

Test Hexavalent chromium Discrete Analyzer

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #37963**							
Hexavalent chromium	18540-29-9		<0.0020	mg/L					U	09/07/10
LCS			**QC Sample #37965**							
Hexavalent chromium	18540-29-9		0.0483	mg/L	96.6	90 - 110				09/07/10
DUP			**QC Sample #37966**							
			Original 102431001							
Hexavalent chromium	18540-29-9		0.0119	mg/L			0.00	20		09/07/10
MS			**QC Sample #37967**							
			Original 102431001							
Hexavalent chromium	18540-29-9		0.0356	mg/L	89	85 - 115				09/07/10

Batch QC List

Attention Michael Neely
Department Inorganic

Group # WSCF102445

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
157435	158733	1	BLANK	37787	BLANK		ICP-6010 - All possible metals
157435	158733	2	LCS	37788	LCS		ICP-6010 - All possible metals
157435	158733	3	MS	37789	B27M35(102445001MS)	102445001	ICP-6010 - All possible metals
157435	158733	4	MSD	37790	B27M35(102445001MSD)	102445001	ICP-6010 - All possible metals
157435	158733	5	SAMPLE	102445001	B27M35		ICP-6010 - All possible metals
157435	158733	6	SAMPLE	102445002	B27MJ8		ICP-6010 - All possible metals
157435	158733	7	SAMPLE	102445003	B27MB5		ICP-6010 - All possible metals
157435	158733	8	SAMPLE	102445004	B27MB6		ICP-6010 - All possible metals
157435	158733	9	SAMPLE	102445005	B27M36		ICP-6010 - All possible metals
157435	158733	10	SAMPLE	102445006	B27MJ9		ICP-6010 - All possible metals
157734	157833	2	BLANK	37997	BLANK		Anions by Ion Chromatography (Solid)
157734	157833	3	LCS	37998	LCS		Anions by Ion Chromatography (Solid)
157734	157833	4	MS	37999	B27MB6(102445004MS)	102445004	Anions by Ion Chromatography (Solid)
157734	157833	5	MSD	38000	B27MB6(102445004MSD	102445004	Anions by Ion Chromatography (Solid)
157734	157833	6	DUP	38001	B27MB6(102445004DUP)	102445004	Anions by Ion Chromatography (Solid)
157734	157833	7	SAMPLE	102445004	B27MB6		Anions by Ion Chromatography (Solid)
157734	157833	8	SAMPLE	102445005	B27M36		Anions by Ion Chromatography (Solid)
157734	157833	9	SAMPLE	102445006	B27MJ9		Anions by Ion Chromatography (Solid)
160834	160838	4	BLANK	38214	BLANK		ICP-2008 MS All possible metal
160834	160838	5	LCS	38215	LCS		ICP-2008 MS All possible metal
160834	160838	6	SAMPLE	102445001	B27M35		ICP-2008 MS All possible metal
160834	160838	7	MS	38216	B27M35(102445001MS)	102445001	ICP-2008 MS All possible metal
160834	160838	8	MSD	38217	B27M35(102445001MSD)	102445001	ICP-2008 MS All possible metal

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Batch QC List

Attention Michael Neely
Department Inorganic

Group # WSCF102445

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
160834	160838	9	SAMPLE	102445002	B27MJ8		ICP-2008 MS All possible metal
160834	160838	10	SAMPLE	102445003	B27MB5		ICP-2008 MS All possible metal
160834	160838	11	SAMPLE	102445004	B27MB6		ICP-2008 MS All possible metal
160834	160838	12	SAMPLE	102445005	B27M36		ICP-2008 MS All possible metal
160834	160838	13	SAMPLE	102445006	B27MJ9		ICP-2008 MS All possible metal
164278	164537	1	BLANK	39016	BLANK		Hexavalent chromium
164278	164537	6	LCS	39017	LCS		Hexavalent chromium
164278	164537	7	DUP	39018	B27M35(102445001DUP)	102445001	Hexavalent chromium
164278	164537	8	MS	39019	B27M35(102445001MS)	102445001	Hexavalent chromium
164278	164537	9	PSTSPK	39020	PSTSPK		Hexavalent chromium
164278	164537	10	IMS	39021	B27M35(102445001IMS)	102445001	Hexavalent chromium
164278	164537	16	SAMPLE	102445001	B27M35		Hexavalent chromium
164278	164537	17	SAMPLE	102445002	B27MJ8		Hexavalent chromium
164278	164537	18	SAMPLE	102445003	B27MB5		Hexavalent chromium
164278	164537	19	SAMPLE	102445004	B27MB6		Hexavalent chromium
164278	164537	20	SAMPLE	102445005	B27M36		Hexavalent chromium
164278	164537	21	SAMPLE	102445006	B27MJ9		Hexavalent chromium

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF102445

QC Batch 157734
Associated Samples 102445004, 102445005, 102445006

Test Anions by Ion Chromatography (Solid)

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #37997**							
Fluoride	16984-48-8		<0.044	ug/mL					U	09/08/10
Chloride	16887-00-6		<0.042	ug/mL					U	09/08/10
Nitrite-N	NO2-N		<0.018	ug/mL					U	09/08/10
Nitrate-N	NO3-N		<9.7E-3	ug/mL					U	09/08/10
Sulfate	14808-79-8		<0.083	ug/mL					U	09/08/10
LCS			**QC Sample #37998**							
Fluoride	16984-48-8		0.932	ug/mL	94.1	90 - 110				09/08/10
Chloride	16887-00-6		1.83	ug/mL	92.4	90 - 110				09/08/10
Nitrite-N	NO2-N		0.943	ug/mL	96.4	90 - 110				09/08/10
Nitrate-N	NO3-N		0.885	ug/mL	100	90 - 110				09/08/10
Sulfate	14808-79-8		3.68	ug/mL	93.7	90 - 110				09/08/10
MS			**QC Sample #37999**							
			Original 102445004							
Fluoride	16984-48-8	<7.7	20.5	mg/kg	81.3	80 - 120			BD	09/08/10
Chloride	16887-00-6	<11	43.6	mg/kg	86.6	80 - 120			BD	09/08/10
Nitrite-N	NO2-N	<4.7	22.3	mg/kg	89.6	80 - 120			BD	09/08/10
Nitrate-N	NO3-N	<7.9	21.5	mg/kg	95.4	80 - 120			BD	09/08/10
Sulfate	14808-79-8	<17	90.5	mg/kg	90.8	80 - 120			BD	09/08/10

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Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF102445

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
MSD			**QC Sample #38000**							
			Original	**102445004**				**Paired**	**37999**	
Fluoride	16984-48-8	<7.7	20.5	mg/kg	81.8	80 - 120	0.60	30	BD	09/08/10
Chloride	16887-00-6	<11	43.7	mg/kg	87.3	80 - 120	0.80	30	BD	09/08/10
Nitrite-N	NO2-N	<4.7	22.2	mg/kg	89.6	80 - 120	0.00	30	BD	09/08/10
Nitrate-N	NO3-N	<7.9	21.6	mg/kg	96.4	80 - 120	1.00	30	BD	09/08/10
Sulfate	14808-79-8	<17	90.6	mg/kg	91.4	80 - 120	0.70	30	BD	09/08/10
DUP			**QC Sample #38001**							
			Original	**102445004**						
Fluoride	16984-48-8	<7.7	<7.8	mg/kg			0.00	30	UD	09/08/10
Chloride	16887-00-6	<11	<11	mg/kg			8.80	30	UD	09/08/10
Nitrite-N	NO2-N	<4.7	<4.7	mg/kg			0.00	30	UD	09/08/10
Nitrate-N	NO3-N	<7.9	<8.0	mg/kg			11.70	30	UD	09/08/10
Sulfate	14808-79-8	<17	<17	mg/kg			1.60	30	UD	09/08/10

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Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF102445

QC Batch 164278 **Test** Hexavalent chromium
Associated Samples 102445001, 102445002, 102445003, 102445004, 102445005, 102445006

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
BLANK			**QC Sample #39016**								
Hexavalent chromium	18540-29-9		<0.10	ug/g						U	09/17/10
LCS			**QC Sample #39017**								
Hexavalent chromium	18540-29-9		3.54	ug/g	88.6	80 - 120					09/17/10
DUP			**QC Sample #39018**								
			Original 102445001								
Hexavalent chromium	18540-29-9	<0.10	<0.10	ug/g			53.10	20	*	UX	09/17/10
MS			**QC Sample #39019**								
			Original 102445001								
Hexavalent chromium	18540-29-9	<0.10	3.20	ug/g	80	75 - 125					09/17/10
PSTSPK			**QC Sample #39020**								
Hexavalent chromium	18540-29-9		0.0521	ug/g	97.9	85 - 115					09/17/10
IMS			**QC Sample #39021**								
			Original 102445001								
Hexavalent chromium	18540-29-9	<0.10	328	ug/g	80.3	75 - 125				D	09/17/10

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Batch QC List

Attention Michael Neely
Department Inorganic

Group # WSCF102464

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
157734	157833	2	BLANK	37997	BLANK		Anions by Ion Chromatography (Solid)
157734	157833	3	LCS	37998	LCS		Anions by Ion Chromatography (Solid)
157734	157833	4	MS	37999	B27MB6(102445004MS)	102445004	Anions by Ion Chromatography (Solid)
157734	157833	5	MSD	38000	B27MB6(102445004MSD	102445004	Anions by Ion Chromatography (Solid)
157734	157833	6	DUP	38001	B27MB6(102445004DUP)	102445004	Anions by Ion Chromatography (Solid)
157734	157833	10	SAMPLE	102464001	B27M37		Anions by Ion Chromatography (Solid)
157734	157833	11	SAMPLE	102464002	B27MB9		Anions by Ion Chromatography (Solid)
157734	157833	12	SAMPLE	102464003	B27MK0		Anions by Ion Chromatography (Solid)
157734	157833	13	SAMPLE	102464004	B27M38		Anions by Ion Chromatography (Solid)
157734	157833	14	SAMPLE	102464005	B27MB7		Anions by Ion Chromatography (Solid)
157734	157833	15	SAMPLE	102464006	B27MB8		Anions by Ion Chromatography (Solid)
158541	166233	1	BLANK	38121	BLANK		ICP-6010 - All possible metals
158541	166233	2	LCS	38122	LCS		ICP-6010 - All possible metals
158541	166233	3	MS	38123	B27M37(102464001MS)	102464001	ICP-6010 - All possible metals
158541	166233	4	MSD	38124	B27M37(102464001MSD)	102464001	ICP-6010 - All possible metals
158541	166233	5	SAMPLE	102464001	B27M37		ICP-6010 - All possible metals
158541	166233	6	SAMPLE	102464002	B27MB9		ICP-6010 - All possible metals
158541	166233	7	SAMPLE	102464003	B27MK0		ICP-6010 - All possible metals
158541	166233	8	SAMPLE	102464004	B27M38		ICP-6010 - All possible metals
158541	166233	9	SAMPLE	102464005	B27MB7		ICP-6010 - All possible metals
158541	166233	10	SAMPLE	102464006	B27MB8		ICP-6010 - All possible metals
158541	166233	11	SAMPLE	102464007	B27MK1		ICP-6010 - All possible metals
158541	166233	12	SAMPLE	102464008	B27MP4		ICP-6010 - All possible metals

REVISED102464 -

Batch QC List

Attention Michael Neely
Department Inorganic

Group # WSCF102464

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
158541	166233	13	SAMPLE	102464009	B27M39		ICP-6010 - All possible metals
158541	166233	14	SAMPLE	102464010	B27MK2		ICP-6010 - All possible metals
158541	166233	15	SAMPLE	102464011	B27MP3		ICP-6010 - All possible metals
158541	166233	16	SAMPLE	102464012	B27MP5		ICP-6010 - All possible metals
158637	158639	2	BLANK	38154	BLANK		Anions by Ion Chromatography (Solid)
158637	158639	3	LCS	38155	LCS		Anions by Ion Chromatography (Solid)
158637	158639	4	MS	38156	B27MP5(102464012MS)	102464012	Anions by Ion Chromatography (Solid)
158637	158639	5	MSD	38157	B27MP5(102464012MSD	102464012	Anions by Ion Chromatography (Solid)
158637	158639	6	DUP	38158	B27MP5(102464012DUP)	102464012	Anions by Ion Chromatography (Solid)
158637	158639	7	SAMPLE	102464007	B27MK1		Anions by Ion Chromatography (Solid)
158637	158639	8	SAMPLE	102464008	B27MP4		Anions by Ion Chromatography (Solid)
158637	158639	9	SAMPLE	102464009	B27M39		Anions by Ion Chromatography (Solid)
158637	158639	10	SAMPLE	102464010	B27MK2		Anions by Ion Chromatography (Solid)
158637	158639	11	SAMPLE	102464011	B27MP3		Anions by Ion Chromatography (Solid)
158637	158639	12	SAMPLE	102464012	B27MP5		Anions by Ion Chromatography (Solid)
160834	160838	4	BLANK	38214	BLANK		ICP-2008 MS All possible metal
160834	160838	5	LCS	38215	LCS		ICP-2008 MS All possible metal
160834	160838	7	MS	38216	B27M35(102445001MS)	102445001	ICP-2008 MS All possible metal
160834	160838	8	MSD	38217	B27M35(102445001MSD)	102445001	ICP-2008 MS All possible metal
160834	160838	16	SAMPLE	102464001	B27M37		ICP-2008 MS All possible metal
160834	160838	17	SAMPLE	102464002	B27MB9		ICP-2008 MS All possible metal
160834	160838	18	SAMPLE	102464003	B27MK0		ICP-2008 MS All possible metal
160834	160838	19	SAMPLE	102464004	B27M38		ICP-2008 MS All possible metal

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Batch QC List

Attention Michael Neely
Department Inorganic

Group # WSCF102464

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
160834	160838	20	SAMPLE	102464005	B27MB7		ICP-2008 MS All possible metal
160834	160838	21	SAMPLE	102464006	B27MB8		ICP-2008 MS All possible metal
160834	160838	22	SAMPLE	102464007	B27MK1		ICP-2008 MS All possible metal
160834	160838	23	SAMPLE	102464008	B27MP4		ICP-2008 MS All possible metal
160834	160838	24	SAMPLE	102464009	B27M39		ICP-2008 MS All possible metal
160834	160838	25	SAMPLE	102464010	B27MK2		ICP-2008 MS All possible metal
160834	160838	28	SAMPLE	102464011	B27MP3		ICP-2008 MS All possible metal
160834	160838	29	SAMPLE	102464012	B27MP5		ICP-2008 MS All possible metal
169038	169039	1	BLANK	40795	BLANK		Hexavalent chromium
169038	169039	6	LCS	40796	LCS		Hexavalent chromium
169038	169039	7	DUP	40797	B27M37(102464001DUP)	102464001	Hexavalent chromium
169038	169039	8	MS	40798	B27M37(102464001MS)	102464001	Hexavalent chromium
169038	169039	9	PSTSPK	40799	PSTSPK		Hexavalent chromium
169038	169039	10	IMS	40800	B27M37(102464001IMS)	102464001	Hexavalent chromium
169038	169039	11	SAMPLE	102464001	B27M37		Hexavalent chromium
169038	169039	12	SAMPLE	102464002	B27MB9		Hexavalent chromium
169038	169039	13	SAMPLE	102464003	B27MK0		Hexavalent chromium
169038	169039	14	SAMPLE	102464004	B27M38		Hexavalent chromium
169038	169039	15	SAMPLE	102464005	B27MB7		Hexavalent chromium
169038	169039	16	SAMPLE	102464006	B27MB8		Hexavalent chromium
169038	169039	17	SAMPLE	102464007	B27MK1		Hexavalent chromium
169038	169039	18	SAMPLE	102464008	B27MP4		Hexavalent chromium
169038	169039	19	SAMPLE	102464009	B27M39		Hexavalent chromium

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Batch QC List

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Group # WSCF102464

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
169038	169039	20	SAMPLE	102464010	B27MK2		Hexavalent chromium
169038	169039	21	SAMPLE	102464011	B27MP3		Hexavalent chromium
169038	169039	22	SAMPLE	102464012	B27MP5		Hexavalent chromium

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF102464

QC Batch 157734 **Test** Anions by Ion Chromatography (Solid)
Associated Samples 102464001, 102464002, 102464003, 102464004, 102464005, 102464006

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #37997**							
Fluoride	16984-48-8		<0.044	ug/mL					U	09/08/10
Chloride	16887-00-6		<0.042	ug/mL					U	09/08/10
Nitrite-N	NO2-N		<0.018	ug/mL					U	09/08/10
Nitrate-N	NO3-N		<9.7E-3	ug/mL					U	09/08/10
Sulfate	14808-79-8		<0.083	ug/mL					U	09/08/10
LCS			**QC Sample #37998**							
Fluoride	16984-48-8		0.932	ug/mL	94.1	90 - 110				09/08/10
Chloride	16887-00-6		1.83	ug/mL	92.4	90 - 110				09/08/10
Nitrite-N	NO2-N		0.943	ug/mL	96.4	90 - 110				09/08/10
Nitrate-N	NO3-N		0.885	ug/mL	100	90 - 110				09/08/10
Sulfate	14808-79-8		3.68	ug/mL	93.7	90 - 110				09/08/10
MS			**QC Sample #37999**							
			Original 102445004							
Fluoride	16984-48-8		20.5	mg/kg	81.3	80 - 120			BD	09/08/10
Chloride	16887-00-6		43.6	mg/kg	86.6	80 - 120			BD	09/08/10
Nitrite-N	NO2-N		22.3	mg/kg	89.6	80 - 120			BD	09/08/10
Nitrate-N	NO3-N		21.5	mg/kg	95.4	80 - 120			BD	09/08/10
Sulfate	14808-79-8		90.5	mg/kg	90.8	80 - 120			BD	09/08/10

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Quality Control Report

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Group # WSCF102464

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
MSD			**QC Sample #38000**							
			Original	**102445004**				**Paired**	**37999**	
Fluoride	16984-48-8		20.5	mg/kg	81.8	80 - 120	0.60	30	BD	09/08/10
Chloride	16887-00-6		43.7	mg/kg	87.3	80 - 120	0.80	30	BD	09/08/10
Nitrite-N	NO2-N		22.2	mg/kg	89.6	80 - 120	0.00	30	BD	09/08/10
Nitrate-N	NO3-N		21.6	mg/kg	96.4	80 - 120	1.00	30	BD	09/08/10
Sulfate	14808-79-8		90.6	mg/kg	91.4	80 - 120	0.70	30	BD	09/08/10
DUP			**QC Sample #38001**							
			Original	**102445004**						
Fluoride	16984-48-8		<7.8	mg/kg			0.00	30	UD	09/08/10
Chloride	16887-00-6		<11	mg/kg			8.80	30	UD	09/08/10
Nitrite-N	NO2-N		<4.7	mg/kg			0.00	30	UD	09/08/10
Nitrate-N	NO3-N		<8.0	mg/kg			11.70	30	UD	09/08/10
Sulfate	14808-79-8		<17	mg/kg			1.60	30	UD	09/08/10

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF102464

QC Batch 158637 **Test** Anions by Ion Chromatography (Solid)
Associated Samples 102464007, 102464008, 102464009, 102464010, 102464011, 102464012

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #38154**							
Fluoride	16984-48-8		<0.044	ug/mL					U	09/09/10
Chloride	16887-00-6		<0.042	ug/mL					U	09/09/10
Nitrite-N	NO2-N		<0.018	ug/mL					U	09/09/10
Nitrate-N	NO3-N		<9.7E-3	ug/mL					U	09/09/10
Sulfate	14808-79-8		<0.083	ug/mL					U	09/09/10
LCS			**QC Sample #38155**							
Fluoride	16984-48-8		0.914	ug/mL	92.4	90 - 110				09/09/10
Chloride	16887-00-6		1.79	ug/mL	90.5	90 - 110				09/09/10
Nitrite-N	NO2-N		0.927	ug/mL	94.8	90 - 110				09/09/10
Nitrate-N	NO3-N		0.872	ug/mL	98.5	90 - 110				09/09/10
Sulfate	14808-79-8		3.65	ug/mL	93.1	90 - 110				09/09/10
MS			**QC Sample #38156**							
			Original 102464012							
Fluoride	16984-48-8	<7.7	21.1	mg/kg	83.6	80 - 120			BD	09/09/10
Chloride	16887-00-6	<11	44.7	mg/kg	88.7	80 - 120			BD	09/09/10
Nitrite-N	NO2-N	<4.6	23.1	mg/kg	92.6	80 - 120			BD	09/09/10
Nitrate-N	NO3-N	<7.9	22.2	mg/kg	98.5	80 - 120			BD	09/09/10
Sulfate	14808-79-8	<17	90.5	mg/kg	90.6	80 - 120			BD	09/09/10

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Quality Control Report

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Group # WSCF102464

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
MSD			**QC Sample #38157**							
			Original 102464012					**Paired**	**38156**	
Fluoride	16984-48-8	<7.7	20.6	mg/kg	82	80 - 120	1.90	30	BD	09/09/10
Chloride	16887-00-6	<11	43.4	mg/kg	86.2	80 - 120	2.90	30	BD	09/09/10
Nitrite-N	NO2-N	<4.6	22.9	mg/kg	92	80 - 120	0.70	30	BD	09/09/10
Nitrate-N	NO3-N	<7.9	21.9	mg/kg	97.3	80 - 120	1.20	30	BD	09/09/10
Sulfate	14808-79-8	<17	88.8	mg/kg	89	80 - 120	1.80	30	BD	09/09/10
DUP			**QC Sample #38158**							
			Original 102464012							
Fluoride	16984-48-8	<7.7	<7.6	mg/kg			0.00	30	UD	09/09/10
Chloride	16887-00-6	<11	<11	mg/kg			8.40	30	UD	09/09/10
Nitrite-N	NO2-N	<4.6	<4.6	mg/kg			0.00	30	UD	09/09/10
Nitrate-N	NO3-N	<7.9	<7.8	mg/kg			1.00	30	UD	09/09/10
Sulfate	14808-79-8	<17	<17	mg/kg			0.60	30	UD	09/09/10

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF102464

QC Batch 169038 **Test** Hexavalent chromium
Associated Samples 102464001, 102464002, 102464003, 102464004, 102464005, 102464006, 102464007, 102464008, 102464009, 102464010, 102464011, 102464012

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #40795**							
Hexavalent chromium	18540-29-9		<0.10	ug/g					U	10/22/10
LCS			**QC Sample #40796**							
Hexavalent chromium	18540-29-9		3.97	ug/g	99.4	80 - 120				10/22/10
DUP			**QC Sample #40797**							
			Original 102464001							
Hexavalent chromium	18540-29-9	<0.10	<0.10	ug/g			0.00	20	U	10/22/10
MS			**QC Sample #40798**							
			Original 102464001							
Hexavalent chromium	18540-29-9	<0.10	2.97	ug/g	74.2	75 - 125			DN	10/22/10
PSTSPK			**QC Sample #40799**							
Hexavalent chromium	18540-29-9		0.0491	ug/g	92.3	85 - 115			U	10/22/10
IMS			**QC Sample #40800**							
			Original 102464001							
Hexavalent chromium	18540-29-9	<0.10	302	ug/g	87.7	75 - 125			D	10/22/10

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Batch QC List

Attention Michael Neely
Department Inorganic

Group # WSCF102473

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
160836	160840	11	SAMPLE	102473004	B27M41		ICP-2008 MS All possible metal
160836	160840	12	SAMPLE	102473005	B27MP6		ICP-2008 MS All possible metal
160836	160840	13	SAMPLE	102473006	B27MP7		ICP-2008 MS All possible metal
160836	160840	14	SAMPLE	102473007	B27MK3		ICP-2008 MS All possible metal
160836	160840	15	SAMPLE	102473008	B27MK4		ICP-2008 MS All possible metal
161134	161137	2	BLANK	38335	BLANK		Anions by Ion Chromatography (Solid)
161134	161137	3	LCS	38336	LCS		Anions by Ion Chromatography (Solid)
161134	161137	4	MS	38337	B27MP6(102473005MS)	102473005	Anions by Ion Chromatography (Solid)
161134	161137	5	MSD	38338	B27MP6(102473005MSD	102473005	Anions by Ion Chromatography (Solid)
161134	161137	6	DUP	38339	B27MP6(102473005DUP)	102473005	Anions by Ion Chromatography (Solid)
161134	161137	7	SAMPLE	102473001	B27MC0		Anions by Ion Chromatography (Solid)
161134	161137	8	SAMPLE	102473002	B27MC1		Anions by Ion Chromatography (Solid)
161134	161137	9	SAMPLE	102473003	B27M40		Anions by Ion Chromatography (Solid)
161134	161137	10	SAMPLE	102473004	B27M41		Anions by Ion Chromatography (Solid)
161134	161137	11	SAMPLE	102473005	B27MP6		Anions by Ion Chromatography (Solid)
161134	161137	12	SAMPLE	102473006	B27MP7		Anions by Ion Chromatography (Solid)
161134	161137	13	SAMPLE	102473007	B27MK3		Anions by Ion Chromatography (Solid)
161134	161137	14	SAMPLE	102473008	B27MK4		Anions by Ion Chromatography (Solid)
164278	164537	1	BLANK	39016	BLANK		Hexavalent chromium
164278	164537	6	LCS	39017	LCS		Hexavalent chromium
164278	164537	7	DUP	39018	B27M35(102445001DUP)	102445001	Hexavalent chromium
164278	164537	8	MS	39019	B27M35(102445001MS)	102445001	Hexavalent chromium
164278	164537	9	PSTSPK	39020	PSTSPK		Hexavalent chromium

Batch QC List

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Group # WSCF102473

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
164278	164537	10	IMS	39021	B27M35(102445001IMS)	102445001	Hexavalent chromium
164278	164537	23	SAMPLE	102473002	B27MC1		Hexavalent chromium
164278	164537	24	SAMPLE	102473003	B27M40		Hexavalent chromium
164278	164537	25	SAMPLE	102473004	B27M41		Hexavalent chromium
164278	164537	26	SAMPLE	102473005	B27MP6		Hexavalent chromium
164278	164537	27	SAMPLE	102473006	B27MP7		Hexavalent chromium
164278	164537	28	SAMPLE	102473007	B27MK3		Hexavalent chromium
164278	164537	29	SAMPLE	102473008	B27MK4		Hexavalent chromium
167140	167141	1	BLANK	39473	BLANK		Hexavalent chromium
167140	167141	6	LCS	39474	LCS		Hexavalent chromium
167140	167141	7	DUP	39475	B25H74(102544001DUP)	102544001	Hexavalent chromium
167140	167141	8	MS	39476	B25H74(102544001MS)	102544001	Hexavalent chromium
167140	167141	9	IMS	39477	B25H74(102544001IMS)	102544001	Hexavalent chromium
167140	167141	10	PSTSPK	39478	PSTSPK		Hexavalent chromium
167140	167141	11	SAMPLE	102473001	B27MC0		Hexavalent chromium

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF102473

QC Batch 161134 **Test** Anions by Ion Chromatography (Solid)
Associated Samples 102473001, 102473002, 102473003, 102473004, 102473005, 102473006, 102473007, 102473008

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #38335**							
Fluoride	16984-48-8		<0.044	ug/mL					U	09/10/10
Chloride	16887-00-6		<0.042	ug/mL					U	09/10/10
Nitrite-N	NO2-N		<0.018	ug/mL					U	09/10/10
Nitrate-N	NO3-N		<9.7E-3	ug/mL					U	09/10/10
Sulfate	14808-79-8		<0.083	ug/mL					U	09/10/10
LCS			**QC Sample #38336**							
Fluoride	16984-48-8		0.944	ug/mL	95.4	90 - 110				09/10/10
Chloride	16887-00-6		1.84	ug/mL	92.8	90 - 110				09/10/10
Nitrite-N	NO2-N		0.966	ug/mL	98.7	90 - 110				09/10/10
Nitrate-N	NO3-N		0.887	ug/mL	100.2	90 - 110				09/10/10
Sulfate	14808-79-8		3.69	ug/mL	94	90 - 110				09/10/10
MS			**QC Sample #38337**							
			Original 102473005							
Fluoride	16984-48-8	<7.8	21.2	mg/kg	84.1	80 - 120			BD	09/10/10
Chloride	16887-00-6	<11	46.1	mg/kg	91.4	80 - 120			BD	09/10/10
Nitrite-N	NO2-N	<4.7	23.7	mg/kg	95.3	80 - 120			BD	09/10/10
Nitrate-N	NO3-N	<8.0	24.3	mg/kg	107.6	80 - 120			BD	09/10/10
Sulfate	14808-79-8	28.6	91.8	mg/kg	91.9	80 - 120			BD	09/10/10

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF102473

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
MSD			**QC Sample #38338**								
			Original	**102473005**					**Paired**	**38337**	
Fluoride	16984-48-8	<7.8	20.9	mg/kg	82.9	80 - 120	1.40	30		BD	09/10/10
Chloride	16887-00-6	<11	45.7	mg/kg	90.9	80 - 120	0.50	30		BD	09/10/10
Nitrite-N	NO2-N	<4.7	23.7	mg/kg	95.5	80 - 120	0.20	30		BD	09/10/10
Nitrate-N	NO3-N	<8.0	24.3	mg/kg	108.2	80 - 120	0.60	30		BD	09/10/10
Sulfate	14808-79-8	28.6	91.4	mg/kg	91.8	80 - 120	0.10	30		BD	09/10/10
DUP			**QC Sample #38339**								
			Original	**102473005**							
Fluoride	16984-48-8	<7.8	<7.7	mg/kg			4.20	30		UD	09/10/10
Chloride	16887-00-6	<11	<11	mg/kg			9.30	30		UD	09/10/10
Nitrite-N	NO2-N	<4.7	<4.7	mg/kg			0.00	30		UD	09/10/10
Nitrate-N	NO3-N	<8.0	<8.0	mg/kg			44.20	30	*	UXD	09/10/10
Sulfate	14808-79-8	28.6	27.6	mg/kg			3.70	30		BD	09/10/10

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF102473

QC Batch 164278 **Test** Hexavalent chromium
Associated Samples 102473002, 102473003, 102473004, 102473005, 102473006, 102473007, 102473008

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
BLANK			**QC Sample #39016**								
Hexavalent chromium	18540-29-9		<0.10	ug/g						U	09/17/10
LCS			**QC Sample #39017**								
Hexavalent chromium	18540-29-9		3.54	ug/g	88.6	80 - 120					09/17/10
DUP			**QC Sample #39018**								
			Original 102445001								
Hexavalent chromium	18540-29-9		0.0322	ug/g			53.10	20	*	BX	09/17/10
MS			**QC Sample #39019**								
			Original 102445001								
Hexavalent chromium	18540-29-9		3.20	ug/g	80	75 - 125					09/17/10
PSTSPK			**QC Sample #39020**								
Hexavalent chromium	18540-29-9		0.0521	ug/g	97.9	85 - 115				B	09/17/10
IMS			**QC Sample #39021**								
			Original 102445001								
Hexavalent chromium	18540-29-9		328	ug/g	80.3	75 - 125				D	09/17/10

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF102473

QC Batch 167140
Associated Samples 102473001

Test Hexavalent chromium

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
BLANK			**QC Sample #39473**								
Hexavalent chromium	18540-29-9		<0.096	ug/g						U	09/23/10
LCS			**QC Sample #39474**								
Hexavalent chromium	18540-29-9		3.84	ug/g	95.7	80 - 120					09/23/10
DUP			**QC Sample #39475**								
			Original 102544001								
Hexavalent chromium	18540-29-9		0.0476	ug/g			141.60	20	*	BX	09/23/10
MS			**QC Sample #39476**								
			Original 102544001								
Hexavalent chromium	18540-29-9		1.70	ug/g	42.8	75 - 125				N	09/23/10
IMS			**QC Sample #39477**								
			Original 102544001								
Hexavalent chromium	18540-29-9		232	ug/g	64.9	75 - 125				DN	09/23/10
PSTSPK			**QC Sample #39478**								
Hexavalent chromium	18540-29-9		0.0517	ug/g	97.2	85 - 115				B	09/23/10

Batch QC List

Attention Michael Neely
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Group # WSCF102515

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
162852	167133	8	SAMPLE	102515004	B27MR0		ICP-6010 - All possible metals
162852	167133	9	SAMPLE	102515005	B27MK7		ICP-6010 - All possible metals
162852	167133	10	SAMPLE	102515006	B27MC4		ICP-6010 - All possible metals
162852	167133	11	SAMPLE	102515007	B27MP8		ICP-6010 - All possible metals
162852	167133	12	SAMPLE	102515008	B27M44		ICP-6010 - All possible metals
162852	167133	13	SAMPLE	102515009	B27MK5		ICP-6010 - All possible metals
162852	167133	14	SAMPLE	102515010	B27MC2		ICP-6010 - All possible metals
162852	167133	15	SAMPLE	102515011	B27MR1		ICP-6010 - All possible metals
162852	167133	16	SAMPLE	102515012	B27M42		ICP-6010 - All possible metals
162938	162945	2	BLANK	38599	BLANK		Anions by Ion Chromatography (Solid)
162938	162945	3	LCS	38600	LCS		Anions by Ion Chromatography (Solid)
162938	162945	4	MS	38601	B27MR0(102515004MS)	102515004	Anions by Ion Chromatography (Solid)
162938	162945	5	MSD	38602	B27MR0(102515004MSD	102515004	Anions by Ion Chromatography (Solid)
162938	162945	6	DUP	38603	B27MR0(102515004DUP)	102515004	Anions by Ion Chromatography (Solid)
162938	162945	7	SAMPLE	102515001	B27MK8		Anions by Ion Chromatography (Solid)
162938	162945	8	SAMPLE	102515002	B27MC5		Anions by Ion Chromatography (Solid)
162938	162945	9	SAMPLE	102515003	B27M45		Anions by Ion Chromatography (Solid)
162938	162945	10	SAMPLE	102515004	B27MR0		Anions by Ion Chromatography (Solid)
162938	162945	11	SAMPLE	102515005	B27MK7		Anions by Ion Chromatography (Solid)
162938	162945	12	SAMPLE	102515006	B27MC4		Anions by Ion Chromatography (Solid)
162938	162945	13	SAMPLE	102515008	B27M44		Anions by Ion Chromatography (Solid)
162938	162945	14	SAMPLE	102515009	B27MK5		Anions by Ion Chromatography (Solid)
162938	162945	15	SAMPLE	102515010	B27MC2		Anions by Ion Chromatography (Solid)

Batch QC List

Attention Michael Neely
Department Inorganic

Group # WSCF102515

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
162939	162944	2	BLANK	38606	BLANK		Anions by Ion Chromatography (Solid)
162939	162944	3	LCS	38607	LCS		Anions by Ion Chromatography (Solid)
162939	162944	4	MS	38608	B27MP8(102515007MS)	102515007	Anions by Ion Chromatography (Solid)
162939	162944	5	MSD	38609	B27MP8(102515007MSD	102515007	Anions by Ion Chromatography (Solid)
162939	162944	6	DUP	38610	B27MP8(102515007DUP)	102515007	Anions by Ion Chromatography (Solid)
162939	162944	7	SAMPLE	102515007	B27MP8		Anions by Ion Chromatography (Solid)
162939	162944	8	SAMPLE	102515011	B27MR1		Anions by Ion Chromatography (Solid)
162939	162944	9	SAMPLE	102515012	B27M42		Anions by Ion Chromatography (Solid)
167375	167379	1	BLANK	39709	BLANK		Hexavalent chromium
167375	167379	6	PSTSPK	39722	PSTSPK		Hexavalent chromium
167375	167379	7	IMS	39723	B27MK8(102515001IMS)	102515001	Hexavalent chromium
167375	167379	8	LCS	39710	LCS		Hexavalent chromium
167375	167379	9	DUP	39711	B27MK8(102515001DUP)	102515001	Hexavalent chromium
167375	167379	10	MS	39712	B27MK8(102515001MS)	102515001	Hexavalent chromium
167375	167379	11	MSD	39713	B27MK8(102515001MSD	102515001	Hexavalent chromium
167375	167379	12	SAMPLE	102515001	B27MK8		Hexavalent chromium
167375	167379	13	SAMPLE	102515002	B27MC5		Hexavalent chromium
167375	167379	14	SAMPLE	102515003	B27M45		Hexavalent chromium
167375	167379	15	SAMPLE	102515004	B27MR0		Hexavalent chromium
167375	167379	16	SAMPLE	102515005	B27MK7		Hexavalent chromium
167375	167379	17	SAMPLE	102515006	B27MC4		Hexavalent chromium
167375	167379	18	SAMPLE	102515007	B27MP8		Hexavalent chromium
167375	167379	19	SAMPLE	102515008	B27M44		Hexavalent chromium

Batch QC List

Attention Michael Neely
Department Inorganic

Group # WSCF102515

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
167375	167379	20	SAMPLE	102515009	B27MK5		Hexavalent chromium
167375	167379	21	SAMPLE	102515010	B27MC2		Hexavalent chromium
167375	167379	22	SAMPLE	102515011	B27MR1		Hexavalent chromium
167375	167379	23	SAMPLE	102515012	B27M42		Hexavalent chromium

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF102515

QC Batch 162938 **Test** Anions by Ion Chromatography (Solid)
Associated Samples 102515001, 102515002, 102515003, 102515004, 102515005, 102515006, 102515008, 102515009, 102515010

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #38599**							
Fluoride	16984-48-8		<0.044	ug/mL					U	09/14/10
Chloride	16887-00-6		<0.042	ug/mL					U	09/14/10
Nitrite-N	NO2-N		<0.018	ug/mL					U	09/14/10
Nitrate-N	NO3-N		<9.7E-3	ug/mL					U	09/14/10
Sulfate	14808-79-8		<0.083	ug/mL					U	09/14/10
LCS			**QC Sample #38600**							
Fluoride	16984-48-8		0.938	ug/mL	94.7	90 - 110				09/14/10
Chloride	16887-00-6		1.82	ug/mL	91.9	90 - 110				09/14/10
Nitrite-N	NO2-N		0.951	ug/mL	97.2	90 - 110				09/14/10
Nitrate-N	NO3-N		0.881	ug/mL	99.5	90 - 110				09/14/10
Sulfate	14808-79-8		3.69	ug/mL	94.1	90 - 110				09/14/10
MS			**QC Sample #38601**							
			Original 102515004							
Fluoride	16984-48-8	<1.6	20.9	mg/kg	83.1	80 - 120				09/14/10
Chloride	16887-00-6	7.08	44.5	mg/kg	88.3	80 - 120				09/14/10
Nitrite-N	NO2-N	<0.93	23.6	mg/kg	94.7	80 - 120				09/14/10
Nitrate-N	NO3-N	<1.6	22.5	mg/kg	99.8	80 - 120				09/14/10
Sulfate	14808-79-8	6.75	90.8	mg/kg	91.1	80 - 120				09/14/10

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF102515

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
MSD			**QC Sample #38602**							
			Original	**102515004**				**Paired**	**38601**	
Fluoride	16984-48-8	<1.6	21.1	mg/kg	84.4	80 - 120	1.60	30		09/14/10
Chloride	16887-00-6	7.08	44.5	mg/kg	88.8	80 - 120	0.60	30		09/14/10
Nitrite-N	NO2-N	<0.93	24.0	mg/kg	96.9	80 - 120	2.30	30		09/14/10
Nitrate-N	NO3-N	<1.6	22.7	mg/kg	101.6	80 - 120	1.80	30		09/14/10
Sulfate	14808-79-8	6.75	90.9	mg/kg	91.7	80 - 120	0.70	30		09/14/10
DUP			**QC Sample #38603**							
			Original	**102515004**						
Fluoride	16984-48-8	<1.6	<1.5	mg/kg			0.00	30	U	09/14/10
Chloride	16887-00-6	7.08	7.98	mg/kg			11.90	30	B	09/14/10
Nitrite-N	NO2-N	<0.93	<0.93	mg/kg			0.00	30	U	09/14/10
Nitrate-N	NO3-N	<1.6	<1.6	mg/kg			10.60	30	U	09/14/10
Sulfate	14808-79-8	6.75	7.16	mg/kg			5.90	30	B	09/14/10

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF102515

QC Batch 162939
Associated Samples 102515007, 102515011, 102515012

Test Anions by Ion Chromatography (Solid)

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #38606**							
Fluoride	16984-48-8		<0.044	ug/mL					U	09/14/10
Chloride	16887-00-6		<0.042	ug/mL					U	09/14/10
Nitrite-N	NO2-N		<0.018	ug/mL					U	09/14/10
Nitrate-N	NO3-N		<9.7E-3	ug/mL					U	09/14/10
Sulfate	14808-79-8		<0.083	ug/mL					U	09/14/10
LCS			**QC Sample #38607**							
Fluoride	16984-48-8		0.937	ug/mL	94.6	90 - 110				09/14/10
Chloride	16887-00-6		1.85	ug/mL	93.5	90 - 110				09/14/10
Nitrite-N	NO2-N		0.967	ug/mL	98.8	90 - 110				09/14/10
Nitrate-N	NO3-N		0.888	ug/mL	100.2	90 - 110				09/14/10
Sulfate	14808-79-8		3.68	ug/mL	93.7	90 - 110				09/14/10
MS			**QC Sample #38608**							
			Original 102515007							
Fluoride	16984-48-8	<1.5	20.9	mg/kg	83.2	80 - 120				09/14/10
Chloride	16887-00-6	<2.2	46.6	mg/kg	92.8	80 - 120				09/14/10
Nitrite-N	NO2-N	<0.92	24.0	mg/kg	96.7	80 - 120				09/14/10
Nitrate-N	NO3-N	16.6	22.5	mg/kg	100.2	80 - 120				09/14/10
Sulfate	14808-79-8	32.1	93.7	mg/kg	94.2	80 - 120				09/14/10

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF102515

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
MSD			**QC Sample #38609**								
			Original	**102515007**					**Paired**	**38608**	
Fluoride	16984-48-8	<1.5	21.2	mg/kg	84.3	80 - 120	1.30	30			09/14/10
Chloride	16887-00-6	<2.2	47.1	mg/kg	93.4	80 - 120	0.60	30			09/14/10
Nitrite-N	NO2-N	<0.92	24.0	mg/kg	96.4	80 - 120	0.30	30			09/14/10
Nitrate-N	NO3-N	16.6	23.3	mg/kg	103.6	80 - 120	3.30	30			09/14/10
Sulfate	14808-79-8	32.1	94.3	mg/kg	94.5	80 - 120	0.30	30			09/14/10
DUP			**QC Sample #38610**								
			Original	**102515007**							
Fluoride	16984-48-8	<1.5	<1.5	mg/kg			0.00	30		U	09/14/10
Chloride	16887-00-6	<2.2	2.97	mg/kg			32.20	30	*	BX	09/14/10
Nitrite-N	NO2-N	<0.92	<0.92	mg/kg			0.00	30		U	09/14/10
Nitrate-N	NO3-N	16.6	17.4	mg/kg			4.20	30			09/14/10
Sulfate	14808-79-8	32.1	32.3	mg/kg			0.90	30		B	09/14/10

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF102515

QC Batch 167375 **Test** Hexavalent chromium
Associated Samples 102515001, 102515002, 102515003, 102515004, 102515005, 102515006, 102515007, 102515008, 102515009, 102515010, 102515011, 102515012

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
BLANK			**QC Sample #39709**								
Hexavalent chromium	18540-29-9		<0.10	ug/g						U	09/24/10
LCS			**QC Sample #39710**								
Hexavalent chromium	18540-29-9		3.48	ug/g	87.6	80 - 120					09/24/10
DUP			**QC Sample #39711**								
			Original 102515001								
Hexavalent chromium	18540-29-9	0.121	0.107	ug/g			12.00	20		B	09/24/10
MS			**QC Sample #39712**								
			Original 102515001								
Hexavalent chromium	18540-29-9	0.121	2.90	ug/g	72.7	75 - 125				N	09/24/10
MSD			**QC Sample #39713**								
			Original 102515001						**Paired**	**39712**	
Hexavalent chromium	18540-29-9	0.121	2.91	ug/g	72.7	75 - 125	0.00	20		N	09/24/10
PSTSPK			**QC Sample #39722**								
Hexavalent chromium	18540-29-9		0.0434	ug/g	81.6	85 - 115				BN	09/24/10
IMS			**QC Sample #39723**								
			Original 102515001								
Hexavalent chromium	18540-29-9	0.121	3670	ug/g	113.5	75 - 125					09/24/10

Batch QC List

Attention Michael Neely
Department Inorganic

Group # WSCF102537

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
163533	163553	16	SAMPLE	102537007	B27MK9		ICP-2008 MS All possible metal
163533	163553	17	SAMPLE	102537008	B27ML2		ICP-2008 MS All possible metal
163533	163553	18	SAMPLE	102537009	B27MR5		ICP-2008 MS All possible metal
163549	163551	1	BLANK	38759	BLANK		Anions by Ion Chromatography (Solid)
163549	163551	3	LCS	38761	LCS		Anions by Ion Chromatography (Solid)
163549	163551	4	MS	38762	B27M46(102537001MS)	102537001	Anions by Ion Chromatography (Solid)
163549	163551	5	MSD	38763	B27M46(102537001MSD)	102537001	Anions by Ion Chromatography (Solid)
163549	163551	6	DUP	38764	B27M46(102537001DUP)	102537001	Anions by Ion Chromatography (Solid)
163549	163551	7	SAMPLE	102537001	B27M46		Anions by Ion Chromatography (Solid)
163549	163551	8	SAMPLE	102537002	B27M47		Anions by Ion Chromatography (Solid)
163549	163551	9	SAMPLE	102537003	B27M49		Anions by Ion Chromatography (Solid)
163549	163551	10	SAMPLE	102537004	B27MC6		Anions by Ion Chromatography (Solid)
163549	163551	11	SAMPLE	102537005	B27MC7		Anions by Ion Chromatography (Solid)
163549	163551	12	SAMPLE	102537006	B27MC9		Anions by Ion Chromatography (Solid)
163549	163551	13	SAMPLE	102537007	B27MK9		Anions by Ion Chromatography (Solid)
163549	163551	14	SAMPLE	102537008	B27ML2		Anions by Ion Chromatography (Solid)
163549	163551	15	SAMPLE	102537009	B27MR5		Anions by Ion Chromatography (Solid)
167140	167141	1	BLANK	39473	BLANK		Hexavalent chromium
167140	167141	6	LCS	39474	LCS		Hexavalent chromium
167140	167141	7	DUP	39475	B25H74(102544001DUP)	102544001	Hexavalent chromium
167140	167141	8	MS	39476	B25H74(102544001MS)	102544001	Hexavalent chromium
167140	167141	9	IMS	39477	B25H74(102544001IMS)	102544001	Hexavalent chromium
167140	167141	10	PSTSPK	39478	PSTSPK		Hexavalent chromium

Batch QC List

Attention Michael Neely
Department Inorganic

Group # WSCF102537

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
167140	167141	12	SAMPLE	102537009	B27MR5		Hexavalent chromium
167375	167379	1	BLANK	39709	BLANK		Hexavalent chromium
167375	167379	6	PSTSPK	39722	PSTSPK		Hexavalent chromium
167375	167379	7	IMS	39723	B27MK8(102515001IMS)	102515001	Hexavalent chromium
167375	167379	8	LCS	39710	LCS		Hexavalent chromium
167375	167379	9	DUP	39711	B27MK8(102515001DUP)	102515001	Hexavalent chromium
167375	167379	10	MS	39712	B27MK8(102515001MS)	102515001	Hexavalent chromium
167375	167379	11	MSD	39713	B27MK8(102515001MSD	102515001	Hexavalent chromium
167375	167379	24	SAMPLE	102537001	B27M46		Hexavalent chromium
167375	167379	25	SAMPLE	102537002	B27M47		Hexavalent chromium
167375	167379	26	SAMPLE	102537003	B27M49		Hexavalent chromium
167375	167379	27	SAMPLE	102537004	B27MC6		Hexavalent chromium
167375	167379	28	SAMPLE	102537005	B27MC7		Hexavalent chromium
167375	167379	29	SAMPLE	102537006	B27MC9		Hexavalent chromium
167375	167379	30	SAMPLE	102537007	B27MK9		Hexavalent chromium
167375	167379	31	SAMPLE	102537008	B27ML2		Hexavalent chromium

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF102537

QC Batch 163549 **Test** Anions by Ion Chromatography (Solid)
Associated Samples 102537001, 102537002, 102537003, 102537004, 102537005, 102537006, 102537007, 102537008, 102537009

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #38759**							
Fluoride	16984-48-8		<0.044	ug/mL					U	09/15/10
Chloride	16887-00-6		<0.042	ug/mL					U	09/15/10
Nitrite-N	NO2-N		<0.018	ug/mL					U	09/15/10
Nitrate-N	NO3-N		<9.7E-3	ug/mL					U	09/15/10
Sulfate	14808-79-8		<0.083	ug/mL					U	09/15/10
LCS			**QC Sample #38761**							
Fluoride	16984-48-8		0.911	ug/mL	92	90 - 110				09/15/10
Chloride	16887-00-6		1.81	ug/mL	91.4	90 - 110				09/15/10
Nitrite-N	NO2-N		0.961	ug/mL	98.3	90 - 110				09/15/10
Nitrate-N	NO3-N		0.879	ug/mL	99.3	90 - 110				09/15/10
Sulfate	14808-79-8		3.53	ug/mL	90.1	90 - 110				09/15/10
MS			**QC Sample #38762**							
			Original 102537001							
Fluoride	16984-48-8	<1.5	20.3	mg/kg	80.5	80 - 120				09/15/10
Chloride	16887-00-6	2.81	41.6	mg/kg	82.4	80 - 120				09/15/10
Nitrite-N	NO2-N	<0.92	23.7	mg/kg	95.1	80 - 120				09/15/10
Nitrate-N	NO3-N	2.10	21.6	mg/kg	95.6	80 - 120				09/15/10
Sulfate	14808-79-8	<3.3	88.3	mg/kg	88.4	80 - 120				09/15/10

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF102537

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
MSD			**QC Sample #38763**							
			Original	**102537001**				**Paired**	**38762**	
Fluoride	16984-48-8	<1.5	20.2	mg/kg	80.7	80 - 120	0.20	30		09/15/10
Chloride	16887-00-6	2.81	42.4	mg/kg	84.5	80 - 120	2.50	30		09/15/10
Nitrite-N	NO2-N	<0.92	24.3	mg/kg	98.1	80 - 120	3.10	30		09/15/10
Nitrate-N	NO3-N	2.10	21.7	mg/kg	96.8	80 - 120	1.20	30		09/15/10
Sulfate	14808-79-8	<3.3	87.2	mg/kg	87.8	80 - 120	0.70	30		09/15/10
DUP			**QC Sample #38764**							
			Original	**102537001**						
Fluoride	16984-48-8	<1.5	<1.5	mg/kg			0.00	30	U	09/15/10
Chloride	16887-00-6	2.81	2.34	mg/kg			18.10	30	B	09/15/10
Nitrite-N	NO2-N	<0.92	<0.91	mg/kg			0.00	30	U	09/15/10
Nitrate-N	NO3-N	2.10	1.96	mg/kg			7.00	30	B	09/15/10
Sulfate	14808-79-8	<3.3	<3.3	mg/kg			15.00	30	U	09/15/10

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF102537

QC Batch 167140
Associated Samples 102537009

Test Hexavalent chromium

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
BLANK			**QC Sample #39473**								
Hexavalent chromium	18540-29-9		<0.096	ug/g						U	09/23/10
LCS			**QC Sample #39474**								
Hexavalent chromium	18540-29-9		3.84	ug/g	95.7	80 - 120					09/23/10
DUP			**QC Sample #39475**								
			Original 102544001								
Hexavalent chromium	18540-29-9		0.0476	ug/g			141.60	20	*	BX	09/23/10
MS			**QC Sample #39476**								
			Original 102544001								
Hexavalent chromium	18540-29-9		1.70	ug/g	42.8	75 - 125				N	09/23/10
IMS			**QC Sample #39477**								
			Original 102544001								
Hexavalent chromium	18540-29-9		232	ug/g	64.9	75 - 125				DN	09/23/10
PSTSPK			**QC Sample #39478**								
Hexavalent chromium	18540-29-9		0.0517	ug/g	97.2	85 - 115				B	09/23/10

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF102537

QC Batch 167375 **Test** Hexavalent chromium
Associated Samples 102537001, 102537002, 102537003, 102537004, 102537005, 102537006, 102537007, 102537008

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
BLANK			**QC Sample #39709**								
Hexavalent chromium	18540-29-9		<0.10	ug/g						U	09/24/10
LCS			**QC Sample #39710**								
Hexavalent chromium	18540-29-9		3.48	ug/g	87.6	80 - 120					09/24/10
DUP			**QC Sample #39711**								
			Original 102515001								
Hexavalent chromium	18540-29-9		0.107	ug/g			12.00	20		B	09/24/10
MS			**QC Sample #39712**								
			Original 102515001								
Hexavalent chromium	18540-29-9		2.90	ug/g	72.7	75 - 125				N	09/24/10
MSD			**QC Sample #39713**								
			Original 102515001						**Paired**	**39712**	
Hexavalent chromium	18540-29-9		2.91	ug/g	72.7	75 - 125	0.00	20		N	09/24/10
PSTSPK			**QC Sample #39722**								
Hexavalent chromium	18540-29-9		0.0434	ug/g	81.6	85 - 115				BN	09/24/10
IMS			**QC Sample #39723**								
			Original 102515001								
Hexavalent chromium	18540-29-9		3670	ug/g	113.5	75 - 125					09/24/10

Date: 11 January 2012
To: CH2M Hill (technical representative)
From: Analytical Quality Associates, Inc.
Project: 100-K-63 Pothole Samples
Subject: Radiochemical - Sample Data Groups (SDGs) WSCF102425, WSCF102445, WSCF102464, WSCF102473, WSCF102515, WSCF102537, H4381, H4383, H4393 and H4407

INTRODUCTION

This memorandum presents the results of data validation for SDGs WSCF102425, WSCF102445, WSCF102464, WSCF102473, WSCF102515 and WSCF102537 prepared by WSCF Analytical Laboratories and SDGs H4381, H4382, H4383, H4393 and H4407 prepared by Eberline Services. A list of samples validated along with the analytical methods is provided in the following table.

Sample ID	Sample Date	Media	Validation Level	Analytical Methods
B27MR7	09/02/10	Water	C	See note 1
B27M35	09/02/10	Soil	C	See note 1
B27MJ8	09/02/10	Soil	C	See note 1
B27MB5	09/02/10	Soil	C	See note 1
B27MB6	09/07/10	Soil	C	See note 2
B27M36	09/07/10	Soil	C	See note 2
B27MJ9	09/07/10	Soil	C	See note 2
B27M37	09/08/10	Soil	C	See note 2
B27MB9	09/08/10	Soil	C	See note 2
B27MK0	09/08/10	Soil	C	See note 2
B27M38	09/08/10	Soil	C	See note 2
B27MB7	09/08/10	Soil	C	See note 2
B27MB8	09/08/10	Soil	C	See note 2
B27MK1	09/08/10	Soil	C	See note 2
B27MP4	09/08/10	Soil	C	See note 2
B27M39	09/08/10	Soil	C	See note 2
B27MK2	09/08/10	Soil	C	See note 2
B27MP3	09/08/10	Soil	C	See note 2
B27MP5	09/08/10	Soil	C	See note 2
B27MC0	09/09/10	Soil	C	See note 2
B27MC1	09/09/10	Soil	C	See note 2
B27M40	09/09/10	Soil	C	See note 2
B27M41	09/09/10	Soil	C	See note 2
B27MP6	09/09/10	Soil	C	See note 2
B27MP7	09/09/10	Soil	C	See note 2
B27MK3	09/09/10	Soil	C	See note 2
B27MK4	09/09/10	Soil	C	See note 2
B27MK8	09/13/10	Soil	C	See note 2

B27MC5	09/13/10	Soil	C	See note 2
B27M45	09/13/10	Soil	C	See note 2
B27MR0	09/13/10	Soil	C	See note 2
B27MK7	09/13/10	Soil	C	See note 2
B27MC4	09/13/10	Soil	C	See note 2
B27MP8	09/13/10	Soil	C	See note 2
B27M44	09/13/10	Soil	C	See note 2
B27MK5	09/13/10	Soil	C	See note 2
B27MC2	09/13/10	Soil	C	See note 2
B27MR1	09/13/10	Soil	C	See note 2
B27M42	09/13/10	Soil	C	See note 2
B27M46	09/14/10	Soil	C	See note 2
B27M47	09/14/10	Soil	C	See note 2
B27M49	09/14/10	Soil	C	See note 2
B27MC6	09/14/10	Soil	C	See note 2
B27MC7	09/14/10	Soil	C	See note 2
B27MC9	09/14/10	Soil	C	See note 2
B27MK9	09/14/10	Soil	C	See note 2
B27ML2	09/14/10	Soil	C	See note 2
B27MR5	09/14/10	Soil	C	See note 2
B27M03	09/02/10	Soil	C	Ni-63
B27M04	09/07/10	Soil	C	H3, C-14, Ni-63 & Iso-Th
B27M05	09/08/10	Soil	C	H3, C-14, Ni-63 & Iso-Th
B27M06	09/08/10	Soil	C	H3, C-14, Ni-63 & Iso-Th
B27M07	09/08/10	Soil	C	H3, C-14, Ni-63 & Iso-Th
B27M08	09/09/10	Soil	C	H3, C-14, Ni-63 & Iso-Th
B27M09	09/09/10	Soil	C	H3, C-14, Ni-63 & Iso-Th
B27M82	09/02/10	Soil	C	Ni-63
B27M83	09/07/10	Soil	C	H3, C-14, Ni-63 & Iso-Th
B27M84	09/08/10	Soil	C	H3, C-14, Ni-63 & Iso-Th
B27M85	09/08/10	Soil	C	H3, C-14, Ni-63 & Iso-Th
B27M86	09/08/10	Soil	C	H3, C-14, Ni-63 & Iso-Th
B27M87	09/09/10	Soil	C	H3, C-14, Ni-63 & Iso-Th
B28M88	09/09/10	Soil	C	H3, C-14, Ni-63 & Iso-Th
B27MH3	09/02/10	Soil	C	Ni-63
B27MH4	09/07/10	Soil	C	H3, C-14, Ni-63 & Iso-Th
B27MH5	09/08/10	Soil	C	H3, C-14, Ni-63 & Iso-Th
B27MH6	09/08/10	Soil	C	H3, C-14, Ni-63 & Iso-Th
B27MH7	09/08/10	Soil	C	H3, C-14, Ni-63 & Iso-Th
B27MH8	09/09/10	Soil	C	H3, C-14, Ni-63 & Iso-Th
B27MH9	09/09/10	Soil	C	H3, C-14, Ni-63 & Iso-Th
B27MM8	09/08/10	Soil	C	H3, C-14, Ni-63 & Iso-Th
B27MM9	09/08/10	Soil	C	H3, C-14, Ni-63 & Iso-Th
B27MN0	09/08/10	Soil	C	H3, C-14, Ni-63 & Iso-Th
B27MN1	09/09/10	Soil	C	H3, C-14, Ni-63 & Iso-Th

B27MN2	09/09/10	Soil	C	H3, C-14, Ni-63 & Iso-Th
B27MR8	09/02/10	Water	C	Ni-63
B27M10	09/13/10	Soil	C	H3, C-14, Ni-63 & Iso-Th
B27M12	09/13/10	Soil	C	H3, C-14, Ni-63 & Iso-Th
B27M13	09/13/10	Soil	C	H3, C-14, Ni-63 & Iso-Th
B27M14	09/14/10	Soil	C	H3, C-14, Ni-63 & Iso-Th
B27M15	09/14/10	Soil	C	H3, C-14, Ni-63 & Iso-Th
B27M17	09/14/10	Soil	C	H3, C-14, Ni-63 & Iso-Th
B27M89	09/13/10	Soil	C	H3, C-14, Ni-63 & Iso-Th
B27M91	09/13/10	Soil	C	H3, C-14, Ni-63 & Iso-Th
B27M92	09/13/10	Soil	C	H3, C-14, Ni-63 & Iso-Th
B27M93	09/14/10	Soil	C	H3, C-14, Ni-63 & Iso-Th
B27M94	09/14/10	Soil	C	H3, C-14, Ni-63 & Iso-Th
B27M96	09/14/10	Soil	C	H3, C-14, Ni-63 & Iso-Th
B27MJ0	09/13/10	Soil	C	H3, C-14, Ni-63 & Iso-Th
B27MJ2	09/13/10	Soil	C	H3, C-14, Ni-63 & Iso-Th
B27MJ3	09/13/10	Soil	C	H3, C-14, Ni-63 & Iso-Th
B27MJ4	09/14/10	Soil	C	H3, C-14, Ni-63 & Iso-Th
B27MJ7	09/14/10	Soil	C	H3, C-14, Ni-63 & Iso-Th
B27MN3	09/13/10	Soil	C	H3, C-14, Ni-63 & Iso-Th
B27MN5	09/13/10	Soil	C	H3, C-14, Ni-63 & Iso-Th
B27MN6	09/13/10	Soil	C	H3, C-14, Ni-63 & Iso-Th
B27MP0	09/14/10	Soil	C	H3, C-14, Ni-63 & Iso-Th
B27M18	09/20/10	Soil	C	H3, C-14, Ni-63 & Iso-Th
B27M19	09/20/10	Soil	C	H3, C-14, Ni-63 & Iso-Th
B27M20	09/20/10	Soil	C	H3, C-14, Ni-63 & Iso-Th
B27M21	09/20/10	Soil	C	H3, C-14, Ni-63 & Iso-Th
B27M22	09/20/10	Soil	C	H3, C-14, Ni-63 & Iso-Th
B27M97	09/20/10	Soil	C	H3, C-14, Ni-63 & Iso-Th
B27M98	09/20/10	Soil	C	H3, C-14, Ni-63 & Iso-Th
B27M99	09/20/10	Soil	C	H3, C-14, Ni-63 & Iso-Th
B27MB0	09/20/10	Soil	C	H3, C-14, Ni-63 & Iso-Th
B27MB1	09/20/10	Soil	C	H3, C-14, Ni-63 & Iso-Th
B27MB2	09/20/10	Soil	C	H3, C-14, Ni-63 & Iso-Th

1 - Gamma, Sr-89/90, Isotopic-Pu and Isotopic-U
2 - Gamma, Sr-89/90, Am-241, Isotopic-Pu and Isotopic-U

Data validation was conducted in accordance with the CHPRC validation statement of work and the 100 Area Remedial Action Sampling and Analysis Plan, DOE/RL-96-22, Rev. 5, Volume 1 (SAP). Appendices 1 through 6 provide the following information as indicated below:

Appendix 1. Glossary of Data Reporting Qualifiers
Appendix 2. Summary of Data Qualification
Appendix 3. Annotated Laboratory Reports
Appendix 4. Laboratory Narrative and Chain-of-Custody Documentation

Appendix 5. Data Validation Supporting Documentation
Appendix 6. Additional Documentation Requested By Client

DATA QUALITY OBJECTIVES

- **Holding Times and Sample Preservation**

Holding times are calculated from Chain-of-Custody forms to determine the validity of the results. The maximum holding time for radiochemical analysis is 180 days. Sample preservation for water samples for all requested analyses requires acid preservation with nitric acid to pH <2. There are no specific preservation requirements for radiochemical soil/solid analysis.

The samples were analyzed within the prescribed holding time and properly preserved.

- **Blanks**

The blank data results are reviewed to assess the extent of contamination introduced through sampling, sample preparation, and analysis.

Laboratory Blanks

All laboratory blank results were acceptable with the following exceptions.

For SDG WSCF102445, the U-234 laboratory blank result was > the minimum detectable concentrations (MDCs). The associated sample results were detects >5X the blank result and should not be qualified.

For SDG WSCF102464, batch 158433, the Am-241 and for batch 158434 the Pu-239/240 and U-238 laboratory blank results were > the MDCs. The associated Am-241 sample results and the Pu-239/240 results for samples B27MK2 and B27MP3 were detects ≥ the MDCs but <5X the blank result and should be qualified as estimates and flagged "J." See the table in Appendix 2 for a listing of all affected sample results.

For SDG WSCF102473, the Am-241 laboratory blank result was > the MDC. The associated Am-241 sample results that were detects ≥ the MDC but <5X the blank results should be qualified as estimates and flagged "J." See the table in Appendix 2 for a listing of all affected sample results.

For SDG WSCF102515, the Am-241 and for batch 163840, the Ra-228 laboratory blank results were > the MDCs. All associated Ra-228 sample results were detects >5X the blank result and, should not be qualified. The associated Am-241 sample results that were detects ≥ the MDC but <5X the blank results should be qualified as estimates and flagged "J." See the table in Appendix 2 for a listing of all affected sample results.

For SDG WSCF102537, the Am-241 and for batch 163942, the Ra-228, laboratory blank results were > the MDCs. The associated Am-241 and Ra-228 sample results that were detects ≥ the MDCs but <5X the blank results should be qualified as estimates and flagged "J." See the table in Appendix 2 for a listing of all affected sample results.
…..
The remaining sample results with associated blank contamination were either non-detects or detects >5X the laboratory blank results and should not be qualified. It should be noted that the presence of naturally occurring radioactive materials in the laboratory blank may signify that a solid matrix material (versus purified water) was used for the blank and that some of the listed detections are not due to contamination. This information could not be determined from documentation supplied in the data package.

Trip Blanks

No trip blanks were submitted for validation.

Field Blanks

No field blanks were submitted for validation.

Equipment Blanks

All equipment blank results were acceptable with the following exception. U-234 was detected in equipment blank sample B27MR7.

- **Accuracy**

Accuracy is evaluated by reviewing matrix spike sample results, laboratory control sample results, and chemical recovery factors. Chemical recovery factors are determined through use of a carrier or tracer and provide assessment of the chemical separation process that is affected by the laboratory procedure, sample matrix, and/or interference. Chemical recovery factors are used to correct sample concentration, uncertainty, and MDC results. According to the SAP, the laboratory control sample accuracy limits are 70% to 130%. The limits for reported analytes not listed in the SAP are specified by the DV procedure.

Matrix Spike (MS) Samples

MS analyses are not required for the methods performed.

Laboratory Control Samples (LCSs)

All LCS recoveries were acceptable.

Carrier/Tracer Recovery Factors

All carrier/tracer recovery factors were acceptable.

Other

The WSCF Ra-226 results for all samples were reported from Pb-214 and/or Bi-214 gamma lines. These radon daughters were not in secular equilibrium with Ra-226. In addition, the Pb-214 and Bi-214 results may have been greatly biased due to inaccurate detector background subtraction due to fluctuating concentrations of Rn-222. Per client request, all WSCF Ra-226 results should be qualified as unusable and flagged "R." See the table in Appendix 2 for a listing of the all affected sample results.

- **Precision**

Precision is evaluated by reviewing laboratory duplicate, field duplicate, and field split sample results. These QC results provide information on the laboratory reproducibility and whether sampling activities are adequate to acquire consistent sample results. According to the SAP, the relative percent difference (RPD) limits are ±30%. The RPD limits for reported analytes not listed in the SAP are specified by the DV procedure. When duplicate RPDs exceed the limits and have associated results <5X the SAP required detection limits (or <5X the laboratory required detection limits for analytes not listed in the SAP) with differences <2X the required detection limits no precision infraction occurred.

Laboratory Duplicate Samples

All laboratory duplicate results were acceptable with the following exceptions.

For SDG WSCF102464, batch 162636, the Ra-228 relative percent difference was > the acceptance limit. All associated sample results were detects and should be qualified as estimates and flagged "J." See the table in Appendix 2 for a listing of all affected sample results.

For SDG H4393, the sample result for C-14 was > the 5X the contractually required detection limit (CRDL) and the duplicate sample was <5X the CRDL and the difference between the results was >2X the CRDL. The C-14 result for sample B27M10 was a detect and should be qualified as an estimate and flagged "J." All other associated C-14 sample results were non-detects and should be qualified as estimates and flagged "UJ." See the table in Appendix 2 for a listing of all affected sample results.

Field Duplicate Samples

All field duplicate results were acceptable.

Field Split Samples

No field splits were submitted for validation.

- **Detection Limits**

Reported MDCs are compared against the contractually required detection limits (CRDLs) to ensure that laboratory detection limits meet the required criteria.

All reported sample MDCs with associated non-detected sample results were below the CRDLs with the following exceptions.

The Eu-154 MDCs for samples B27M35, B27MJ9, B27MP3, B27MP5, B27M41 and B27MP7 and the Eu-152 MDC for sample B27MP7 were > the CRDLs.

The Eu-155 MDCs for samples B27M35, B27MJ8, B27M36, B27MJ9, B27MB9, B27MK0, B27MB7, B27MB8, B27M39, B27MP3, B27MP5, B27MC0, B27MC1, B27M41, B27MP7, B27MK3, B27MK4, B27M45, B27MR0, B27MR1, B27M47, B27MC6, B27MC7 and B27MK9 were > the CRDLs.

The Th-230 for samples B27M12 and B27M91 and all the C-14 MDCs for all samples were > the CRDLs.

- **Completeness**

SDGs WSCF102425, WSCF102445. WSCF102464, WSCF102473, WSCF102515, WSCF102537, H4381, H4382, H4383, H4393 and H4407 were submitted for validation and verified for completeness. Completeness is based on the percentage of data determined to be valid (i.e., not rejected). The completion percentage for Ra-226 was 0%. The completion percentage for all remaining gamma analytes was 100%. The completion percentage of all other radiochemical analyses was 100%.

MAJOR DEFICIENCIES

Major deficiencies leading to qualification of all Ra-226 results as unusable were due to severe analytical limitations for this particular analyte. See the table in Appendix 2 for a listing of all affected sample results.

MINOR DEFICIENCIES

Minor deficiencies leading to qualification of sample results as estimates were due to laboratory blank contamination and laboratory duplicate infraction. See the table in Appendix 2 for a listing of all affected sample results.

REFERENCES

GRP-GD-002, Rev. 0, Change 0, *Data Validation for Radiochemical Analyses*, August 2010.

DOE/RL-96-22, Rev. 5, *100 Area Remedial Action Sampling and Analysis Plan*, September 2009.

Appendix 1

Glossary of Data Reporting Qualifiers

Qualifiers that may be applied by data validators in compliance with the CHPRC statement of work are as follows:

- **U** ─ The constituent was analyzed for and was not detected. The data should be considered usable for decision-making purposes.

- **UJ** ─ The constituent was analyzed for and was not detected. Due to a quality control deficiency identified during data validation the value reported may not accurately reflect the MDC. The data should be considered usable for decision-making purposes.

- **J** ─ Indicates the constituent was analyzed for and detected. The associated value is estimated due to a quality control deficiency identified during data validation. The data should be considered usable for decision-making purposes.

- **J+** ─ Indicates the constituent was analyzed for and detected. The associated value is estimated with a suspected positive bias due to a quality control deficiency identified during data validation. The data should be considered usable for decision-making purposes.

- **J-** ─ Indicates the constituent was analyzed for and detected. The associated value is estimated with a suspected negative bias due to a quality control deficiency identified during data validation. The data should be considered usable for decision-making purposes.

- **UR** ─ Indicates the constituent was analyzed for and not detected; however, due to an identified quality control deficiency the data should be considered unusable for decision-making purposes.

- **R** ─ Indicates the constituent was analyzed for and detected; however, due to an identified quality control deficiency the data should be considered unusable for decision-making purposes.

Appendix 2

Summary of Data Qualification

Radiochemical Data Qualification Summary			
SDGs: WSCF102425, WSCF102445, WSCF102464, WSCF102473, WSCF102515, WSCF102537, H4381, H4382, H4383, H4393 & H4407	Reviewer: AQA	Project: 100 K-63 Pothole Samples	Page 1 of 1
Analyte(s)	**Qualifier**	**Samples Affected**	**Reason**
Ra-226	**R**	B27MB6, B27M36, B27MJ9, B27M37, B27MB9, B27MK0, B27M38, B27MB7, B27MB8, B27MK1, B27MP4, B27M39, B27MK2, B27MP3, B27MP5, B27MC0, B27MC1, B27M40, B27M41, B27MP6, B27MP7, B27MK3, B27MK4, B27MK8, B27MC5, B27M45, B27MR0, B27MK7, B27MC4, B27MP8, B27M44, B27MK5, B27MC2, B27MR1, B27M42, B27M46, B27M47, B27M49, B27MC6, B27MC7, B27MC9, B27MK9, B27ML2, B27MR5,	Severe analytical limitations
Am-241	J	B27M37, B27MB9, B27MK0, B27M38, B27MB7, B27MB8, B27MK1, B27MC1, B27M40, B27MP6, B27MP7, B27MK3, B27MK4, B27MK8, B27MC5, B27M45, B27MR0, B27MK7, B27M44, B27MK5,	Laboratory blank contamination

		B27MC2, B27M42, B27M46, B27M47, B27M49, B27MC6, B27MC9, B27MK9, B27ML2, B27MR5	
Pu-239/240	J	B27MK2, B27MP3,	Laboratory blank contamination
Ra-228	J	B27MK0, B27M38, B27MB7, B27MB8, B27MK1, B27MP4, B27M39, B27MK2, B27MP3	Poor laboratory precision
C-14	J	B27M10	Poor laboratory precision
C-14	UJ	B27M12, B27M13, B27M14, B27M15, B27M17, B27M89, B27M91, B27M92, B27M93, B27M94, B27M96, B27MJ0, B27MJ2, B27MJ3, B27MJ4, B27MJ7, B27MN3, B27MN5, B27MN6, B27MP0,	Poor laboratory precision

Comments: None

Appendix 3

Annotated Laboratory Reports

WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102425

Sample # 102425001
SAF# F10-268
Sample ID B27MR7

Matrix WATER
Sampled 09/02/10
Received 09/07/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/13/10**
GEA										
Cesium-137	10045-97-3	LA-508-481	U	-1.0	10	pCi/L	1	18		09/15/10
Cobalt-60	10198-40-0	LA-508-481	U	-0.12	9.4	pCi/L	1	17		09/15/10
Europium-152	14683-23-9	LA-508-481	U	19	30	pCi/L	1	52		09/15/10
Europium-154	15585-10-1	LA-508-481	U	12	26	pCi/L	1	47		09/15/10
Europium-155	14391-16-3	LA-508-481	U	-2.1	28	pCi/L	1	45		09/15/10
SR-89/90										**09/14/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-1.7	4	pCi/L	1	2.0		09/20/10
Th/Pu/Am/U Teva										**09/09/10**
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	-0.23	.23	pCi/L	1	0.42		09/10/10
Plutonium-239/240	PU-239/240	LA-508-471	U	9.6E-3	.054	pCi/L	1	0.11		09/10/10
Uranium Iso										
Uranium-234	U-233/234	LA-508-471		0.11	.073	pCi/L	1	0.063		09/10/10
Uranium-235	15117-96-1	LA-508-471	U	0.066	.052	pCi/L	1	0.069		09/10/10

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 # WSCF102445

Sample # 102445001
SAF# F10-256
Sample ID B27M35

Matrix SOIL
Sampled 09/02/10
Received 09/07/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/14/10**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.13	.05	pCi/g	1	0.048		09/21/10
Cobalt-60	10198-40-0	LA-508-481	U	-1.4E-3	.023	pCi/g	1	0.042		09/21/10
Europium-152	14683-23-9	LA-508-481	U	-0.071	.093	pCi/g	1	0.13		09/21/10
Europium-154	15585-10-1	LA-508-481	U	-7.5E-3	.082	pCi/g	1	0.15		09/21/10
Europium-155	14391-16-3	LA-508-481	U	0.11	.12	pCi/g	1	0.18		09/21/10
SR-89/90										**09/10/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-1.1	1.1	pCi/g	1	0.40		09/14/10
Th/Pu/Am/U Teva										**09/09/10**
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	-2.1E-3	.038	pCi/g	1	0.072		09/14/10
Plutonium-239/240	PU-239/240	LA-508-471	U	-4.2E-3	.0081	pCi/g	1	0.023		09/14/10
Uranium Iso										
Uranium-234	U-233/234	LA-508-471		0.17	.054	pCi/g	1	0.014		09/14/10
Uranium-235	15117-96-1	LA-508-471		0.017	.012	pCi/g	1	5.6E-3		09/14/10

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

B - Analyte was detected in both the BLANK and SAMPLE
U - Analyzed for but not detected above limiting criteria.
N - Spike Recovery is Outside Control Limits.
X,Y or Z - See comment detail and/or narrative.

REVISED

WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102445

Sample # 102445002
SAF# F10-256
Sample ID B27MJ8

Matrix SOIL
Sampled 09/02/10
Received 09/07/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/14/10**
GEA										
Cesium-137	10045-97-3	LA-508-481	U	-6.4E-3	.025	pCi/g	1	0.045		09/21/10
Cobalt-60	10198-40-0	LA-508-481	U	0.0030	.019	pCi/g	1	0.037		09/21/10
Europium-152	14683-23-9	LA-508-481	U	0.061	.096	pCi/g	1	0.13		09/21/10
Europium-154	15585-10-1	LA-508-481	U	-0.017	.077	pCi/g	1	0.12		09/21/10
Europium-155	14391-16-3	LA-508-481	U	0.062	.12	pCi/g	1	0.21		09/21/10
SR-89/90										**09/10/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-1.5	.97	pCi/g	1	0.40		09/14/10
Th/Pu/Am/U Teva										**09/09/10**
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	1.3E-5	.035	pCi/g	1	0.065		09/14/10
Plutonium-239/240	PU-239/240	LA-508-471	U	3.9E-3	.0075	pCi/g	1	0.014		09/14/10
Uranium Iso										
Uranium-234	U-233/234	LA-508-471		0.15	.051	pCi/g	1	5.2E-3		09/14/10
Uranium-235	15117-96-1	LA-508-471		0.015	.011	pCi/g	1	5.7E-3		09/14/10

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
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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.

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WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102445

Sample # 102445003
SAF# F10-256
Sample ID B27MB5

Matrix SOIL
Sampled 09/02/10
Received 09/07/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/14/10**
GEA										
Cesium-137	10045-97-3	LA-508-481	U	-0.0030	.014	pCi/g	1	0.025		09/21/10
Cobalt-60	10198-40-0	LA-508-481	U	9.7E-3	.013	pCi/g	1	0.025		09/21/10
Europium-152	14683-23-9	LA-508-481	U	-0.014	.04	pCi/g	1	0.064		09/21/10
Europium-154	15585-10-1	LA-508-481	U	-0.014	.038	pCi/g	1	0.067		09/21/10
Europium-155	14391-16-3	LA-508-481	U	0.035	.054	pCi/g	1	0.096		09/21/10
SR-89/90										**09/10/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	0.094	1	pCi/g	1	0.43		09/14/10
Th/Pu/Am/U Teva										**09/09/10**
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	2.1E-3	.035	pCi/g	1	0.066		09/14/10
Plutonium-239/240	PU-239/240	LA-508-471	U	2.1E-3	.011	pCi/g	1	0.022		09/14/10
Uranium Iso										
Uranium-234	U-233/234	LA-508-471		0.17	.056	pCi/g	1	0.025		09/14/10
Uranium-235	15117-96-1	LA-508-471		0.0090	.0089	pCi/g	1	6.1E-3		09/14/10

MDL = Minimum Detection
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WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102445

Sample # 102445004
SAF# F10-256
Sample ID B27MB6

Matrix SOIL
Sampled 09/07/10
Received 09/07/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/14/10**
GEA										
Cesium-137	10045-97-3	LA-508-481	U	-0.018	.025	pCi/g	1	0.042		09/21/10
Cobalt-60	10198-40-0	LA-508-481	U	-0.019	.022	pCi/g	1	0.038		09/21/10
Europium-152	14683-23-9	LA-508-481	U	0.030	.11	pCi/g	1	0.12		09/21/10
Europium-154	15585-10-1	LA-508-481	U	-0.036	.076	pCi/g	1	0.13		09/21/10
Europium-155	14391-16-3	LA-508-481	U	8.2E-3	.078	pCi/g	1	0.13		09/21/10
Radium-226	13982-63-3	LA-508-481	R	0.58	.12	pCi/g	1	0.080		09/21/10
Radium-228	15262-20-1	LA-508-481		0.89	.19	pCi/g	1	0.13		09/21/10
SR-89/90										**09/10/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-1.7	.92	pCi/g	1	0.35		09/14/10
Th/Pu/Am/U Teva										**09/09/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471	U	9.5E-3	.012	pCi/g	1	0.019		09/14/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	0.011	.036	pCi/g	1	0.064		09/14/10
Plutonium-239/240	PU-239/240	LA-508-471	U	3.8E-3	.013	pCi/g	1	0.025		09/14/10
Uranium Iso										

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WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102445

Sample # 102445004
SAF# F10-256
Sample ID B27MB6

Matrix SOIL
Sampled 09/07/10
Received 09/07/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium-234	U-233/234	LA-508-471		0.13	.046	pCi/g	1	0.019		09/14/10
Uranium-235	15117-96-1	LA-508-471	U	0.011	.012	pCi/g	1	0.016		09/14/10

MDL = Minimum Detection
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X,Y or Z - See comment detail and/or narrative.

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WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102445

Sample # 102445005
SAF# F10-256
Sample ID B27M36

Matrix SOIL
Sampled 09/07/10
Received 09/07/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/14/10**
GEA										
Cesium-137	10045-97-3	LA-508-481	U	-3.8E-3	.024	pCi/g	1	0.042		09/21/10
Cobalt-60	10198-40-0	LA-508-481	U	-1.1E-3	.022	pCi/g	1	0.040		09/21/10
Europium-152	14683-23-9	LA-508-481	U	0.022	.12	pCi/g	1	0.12		09/21/10
Europium-154	15585-10-1	LA-508-481	U	-4.9E-4	.08	pCi/g	1	0.14		09/21/10
Europium-155	14391-16-3	LA-508-481	U	-7.5E-3	.11	pCi/g	1	0.19		09/21/10
Radium-226	13982-63-3	LA-508-481	R	0.61	.11	pCi/g	1	0.081		09/21/10
Radium-228	15262-20-1	LA-508-481		0.87	.22	pCi/g	1	0.14		09/21/10
SR-89/90										**09/10/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-0.73	.85	pCi/g	1	0.40		09/14/10
Th/Pu/Am/U Teva										**09/09/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471		0.013	.01	pCi/g	1	0.013		09/14/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	0.017	.034	pCi/g	1	0.060		09/14/10
Plutonium-239/240	PU-239/240	LA-508-471	U	-3.7E-3	.0051	pCi/g	1	0.017		09/14/10
Uranium Iso										

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
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X,Y or Z - See comment detail and/or narrative.

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WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102445

Sample # 102445005
SAF# F10-256
Sample ID B27M36

Matrix SOIL
Sampled 09/07/10
Received 09/07/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium-234	U-233/234	LA-508-471		0.12	.041	pCi/g	1	0.022		09/14/10
Uranium-235	15117-96-1	LA-508-471		0.020	.013	pCi/g	1	5.3E-3		09/14/10

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WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102445

Sample # 102445006
SAF# F10-256
Sample ID B27MJ9

Matrix SOIL
Sampled 09/07/10
Received 09/07/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/14/10**
GEA										
Cesium-137	10045-97-3	LA-508-481	U	-0.024	.025	pCi/g	1	0.043		09/21/10
Cobalt-60	10198-40-0	LA-508-481	U	0.011	.023	pCi/g	1	0.047		09/21/10
Europium-152	14683-23-9	LA-508-481	U	-0.095	.088	pCi/g	1	0.12		09/21/10
Europium-154	15585-10-1	LA-508-481	U	0.026	.074	pCi/g	1	0.15		09/21/10
Europium-155	14391-16-3	LA-508-481	U	0.077	.11	pCi/g	1	0.20		09/21/10
Radium-226	13982-63-3	LA-508-481	R	0.63	.13	pCi/g	1	0.094		09/21/10
Radium-228	15262-20-1	LA-508-481		0.97	.21	pCi/g	1	0.15		09/21/10
SR-89/90										**09/10/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-1.8	.92	pCi/g	1	0.40		09/14/10
Th/Pu/Am/U Teva										**09/09/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471		0.028	.014	pCi/g	1	0.011		09/14/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	-9.7E-3	.031	pCi/g	1	0.062		09/14/10
Plutonium-239/240	PU-239/240	LA-508-471	U	7.7E-3	.01	pCi/g	1	0.018		09/14/10
Uranium Iso										

MDL = Minimum Detection
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X,Y or Z - See comment detail and/or narrative.

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WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102445

Sample # 102445006
SAF# F10-256
Sample ID B27MJ9

Matrix SOIL
Sampled 09/07/10
Received 09/07/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium-234	U-233/234	LA-508-471		0.13	.045	pCi/g	1	5.7E-3		09/14/10
Uranium-235	15117-96-1	LA-508-471	U	6.9E-3	.0097	pCi/g	1	0.017		09/14/10

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X,Y or Z - See comment detail and/or narrative.

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WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102464

Sample # 102464001
SAF# F10-256
Sample ID B27M37

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/14/10**
GEA										
Cesium-137	10045-97-3	LA-508-481	U	1.7E-3	.016	pCi/g	1	0.030		09/21/10
Cobalt-60	10198-40-0	LA-508-481	U	9.9E-3	.017	pCi/g	1	0.033		09/21/10
Europium-152	14683-23-9	LA-508-481	U	-0.051	.054	pCi/g	1	0.074		09/21/10
Europium-154	15585-10-1	LA-508-481	U	-3.5E-3	.067	pCi/g	1	0.10		09/21/10
Europium-155	14391-16-3	LA-508-481	U	7.4E-3	.064	pCi/g	1	0.11		09/21/10
Radium-226	13982-63-3	LA-508-481	R	0.38	.084	pCi/g	1	0.057		09/21/10
Radium-228	15262-20-1	LA-508-481		0.63	.16	pCi/g	1	0.089		09/21/10
SR-89/90										**09/16/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-0.93	.77	pCi/g	1	0.37		09/23/10
Th/Pu/Am/U Teva										**09/13/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471	J	0.014	.013	pCi/g	1	0.010		09/15/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	9.8E-3	.026	pCi/g	1	0.046		09/15/10
Plutonium-239/240	PU-239/240	LA-508-471	U	4.9E-3	.011	pCi/g	1	0.020		09/15/10
Uranium Iso										

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X,Y or Z - See comment detail and/or narrative.

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WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102464

Sample # 102464001
SAF# F10-256
Sample ID B27M37

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium-234	U-233/234	LA-508-471		0.12	.042	pCi/g	1	0.018		09/15/10
Uranium-235	15117-96-1	LA-508-471	U	8.4E-3	.01	pCi/g	1	0.015		09/15/10
Uranium-238	U-238	LA-508-471		0.11	.04	pCi/g	1	5.2E-3		09/15/10

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X,Y or Z - See comment detail and/or narrative.

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WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102464

Sample # 102464002
SAF# F10-256
Sample ID B27MB9

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/14/10**
GEA										
Cesium-137	10045-97-3	LA-508-481	U	0.016	.02	pCi/g	1	0.037		09/21/10
Cobalt-60	10198-40-0	LA-508-481	U	-0.012	.019	pCi/g	1	0.032		09/21/10
Europium-152	14683-23-9	LA-508-481	U	-0.058	.065	pCi/g	1	0.094		09/21/10
Europium-154	15585-10-1	LA-508-481	U	-0.033	.057	pCi/g	1	0.098		09/21/10
Europium-155	14391-16-3	LA-508-481	U	0.10	.099	pCi/g	1	0.18		09/21/10
Radium-226	13982-63-3	LA-508-481	R	0.54	.1	pCi/g	1	0.065		09/21/10
Radium-228	15262-20-1	LA-508-481		0.91	.2	pCi/g	1	0.11		09/21/10
SR-89/90										**09/16/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-0.86	.82	pCi/g	1	0.39		09/23/10
Th/Pu/Am/U Teva										**09/13/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471	J	0.016	.016	pCi/g	1	0.016		09/15/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	0.012	.029	pCi/g	1	0.051		09/15/10
Plutonium-239/240	PU-239/240	LA-508-471	U	0.0040	.011	pCi/g	1	0.021		09/15/10
Uranium Iso										

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X,Y or Z - See comment detail and/or narrative.

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WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102464

Sample # 102464002
SAF# F10-256
Sample ID B27MB9

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium-234	U-233/234	LA-508-471		0.11	.044	pCi/g	1	0.026		09/15/10
Uranium-235	15117-96-1	LA-508-471		0.019	.014	pCi/g	1	0.015		09/15/10
Uranium-238	U-238	LA-508-471		0.15	.051	pCi/g	1	5.8E-3		09/15/10

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TP Err = Total Propagated
DF = Dilution Factor
+ - Indicates more than nine qualifier

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U - Analyzed for but not detected above limiting criteria.
N - Spike Recovery is Outside Control Limits.
X,Y or Z - See comment detail and/or narrative.

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WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102464

Sample # 102464003
SAF# F10-256
Sample ID B27MK0

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/14/10**
GEA										
Cesium-137	10045-97-3	LA-508-481	U	-8.6E-3	.018	pCi/g	1	0.032		09/16/10
Cobalt-60	10198-40-0	LA-508-481	U	9.6E-3	.018	pCi/g	1	0.036		09/16/10
Europium-152	14683-23-9	LA-508-481	U	-0.0010	.071	pCi/g	1	0.11		09/16/10
Europium-154	15585-10-1	LA-508-481	U	0.017	.068	pCi/g	1	0.13		09/16/10
Europium-155	14391-16-3	LA-508-481	U	0.037	.086	pCi/g	1	0.15		09/16/10
Radium-226	13982-63-3	LA-508-481	R	0.46	.11	pCi/g	1	0.061		09/16/10
Radium-228	15262-20-1	LA-508-481	J	0.76	.17	pCi/g	1	0.11		09/16/10
SR-89/90										**09/16/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-0.61	.83	pCi/g	1	0.39		09/23/10
Th/Pu/Am/U Teva										**09/13/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471	J	0.017	.016	pCi/g	1	0.014		09/15/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	0.022	.032	pCi/g	1	0.054		09/15/10
Plutonium-239/240	PU-239/240	LA-508-471	U	0.011	.009	pCi/g	1	0.013		09/15/10
Uranium Iso										

MDL = Minimum Detection
RQ = Result Qualifier
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DF = Dilution Factor
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X,Y or Z - See comment detail and/or narrative.

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WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102464

Sample # 102464003
SAF# F10-256
Sample ID B27MK0

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium-234	U-233/234	LA-508-471		0.098	.037	pCi/g	1	5.8E-3		09/15/10
Uranium-235	15117-96-1	LA-508-471	U	4.7E-3	.0091	pCi/g	1	0.017		09/15/10
Uranium-238	U-238	LA-508-471		0.11	.039	pCi/g	1	5.8E-3		09/15/10

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

B - Analyte was detected in both the BLANK and SAMPLE
U - Analyzed for but not detected above limiting criteria.
N - Spike Recovery is Outside Control Limits.
X,Y or Z - See comment detail and/or narrative.

REVISED102464 -

WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102464

Sample # 102464004
SAF# F10-256
Sample ID B27M38

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/14/10**
GEA										
Cesium-137	10045-97-3	LA-508-481	U	0.016	.019	pCi/g	1	0.036		09/16/10
Cobalt-60	10198-40-0	LA-508-481	U	-2.3E-3	.018	pCi/g	1	0.032		09/16/10
Europium-152	14683-23-9	LA-508-481	U	-0.036	.074	pCi/g	1	0.087		09/16/10
Europium-154	15585-10-1	LA-508-481	U	0.011	.058	pCi/g	1	0.11		09/16/10
Europium-155	14391-16-3	LA-508-481	U	4.9E-4	.071	pCi/g	1	0.13		09/16/10
Radium-226	13982-63-3	LA-508-481	R	0.48	.09	pCi/g	1	0.063		09/16/10
Radium-228	15262-20-1	LA-508-481	J	0.65	.16	pCi/g	1	0.10		09/16/10
SR-89/90										**09/16/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-0.44	.9	pCi/g	1	0.42		09/23/10
Th/Pu/Am/U Teva										**09/13/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471	J	0.029	.019	pCi/g	1	0.015		09/21/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	0.012	.025	pCi/g	1	0.043		09/15/10
Plutonium-239/240	PU-239/240	LA-508-471	U	0.0020	.012	pCi/g	1	0.024		09/15/10
Uranium Iso										

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.

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WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102464

Sample # 102464004
SAF# F10-256
Sample ID B27M38

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium-234	U-233/234	LA-508-471		0.10	.038	pCi/g	1	0.018		09/15/10
Uranium-235	15117-96-1	LA-508-471		0.027	.016	pCi/g	1	5.7E-3		09/15/10
Uranium-238	U-238	LA-508-471		0.12	.043	pCi/g	1	5.2E-3		09/15/10

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

B - Analyte was detected in both the BLANK and SAMPLE
U - Analyzed for but not detected above limiting criteria.
N - Spike Recovery is Outside Control Limits.
X,Y or Z - See comment detail and/or narrative.

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WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102464

Sample # 102464005
SAF# F10-256
Sample ID B27MB7

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/14/10**
GEA										
Cesium-137	10045-97-3	LA-508-481	U	-0.010	.016	pCi/g	1	0.027		09/16/10
Cobalt-60	10198-40-0	LA-508-481	U	-0.0070	.014	pCi/g	1	0.026		09/16/10
Europium-152	14683-23-9	LA-508-481	U	-0.017	.067	pCi/g	1	0.082		09/16/10
Europium-154	15585-10-1	LA-508-481	U	-0.015	.047	pCi/g	1	0.086		09/16/10
Europium-155	14391-16-3	LA-508-481	U	0.011	.084	pCi/g	1	0.15		09/16/10
Radium-226	13982-63-3	LA-508-481	R	0.41	.084	pCi/g	1	0.052		09/16/10
Radium-228	15262-20-1	LA-508-481	J	0.61	.15	pCi/g	1	0.086		09/16/10
SR-89/90										**09/16/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-1.6	.76	pCi/g	1	0.41		09/23/10
Th/Pu/Am/U Teva										**09/13/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471	J	0.027	.016	pCi/g	1	0.010		09/21/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	0.012	.025	pCi/g	1	0.046		09/15/10
Plutonium-239/240	PU-239/240	LA-508-471	U	-0.0020	.011	pCi/g	1	0.026		09/15/10
Uranium Iso										

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

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U - Analyzed for but not detected above limiting criteria.
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X,Y or Z - See comment detail and/or narrative.

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WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102464

Sample # 102464005
SAF# F10-256
Sample ID B27MB7

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium-234	U-233/234	LA-508-471		0.13	.046	pCi/g	1	0.015		09/15/10
Uranium-235	15117-96-1	LA-508-471	U	0.013	.011	pCi/g	1	0.016		09/15/10
Uranium-238	U-238	LA-508-471		0.13	.043	pCi/g	1	5.4E-3		09/15/10

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

B - Analyte was detected in both the BLANK and SAMPLE
U - Analyzed for but not detected above limiting criteria.
N - Spike Recovery is Outside Control Limits.
X,Y or Z - See comment detail and/or narrative.

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WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102464

Sample # 102464006
SAF# F10-256
Sample ID B27MB8

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/14/10**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.042	.039	pCi/g	1	0.039		09/16/10
Cobalt-60	10198-40-0	LA-508-481	U	-1.5E-3	.021	pCi/g	1	0.038		09/16/10
Europium-152	14683-23-9	LA-508-481	U	0.051	.098	pCi/g	1	0.11		09/16/10
Europium-154	15585-10-1	LA-508-481	U	-0.094	.067	pCi/g	1	0.10		09/16/10
Europium-155	14391-16-3	LA-508-481	U	-0.036	.088	pCi/g	1	0.15		09/16/10
Radium-226	13982-63-3	LA-508-481	R	0.34	.096	pCi/g	1	0.064		09/16/10
Radium-228	15262-20-1	LA-508-481	J	0.54	.15	pCi/g	1	0.12		09/16/10
SR-89/90										**09/16/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-0.13	.85	pCi/g	1	0.45		09/23/10
Th/Pu/Am/U Teva										**09/13/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471	J	0.037	.02	pCi/g	1	0.013		09/21/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	-0.0030	.0071	pCi/g	1	0.018		09/15/10
Plutonium-239/240	PU-239/240	LA-508-471	U	8.9E-3	.0084	pCi/g	1	0.011		09/15/10
Uranium Iso										

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

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WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102464

Sample # 102464006
SAF# F10-256
Sample ID B27MB8

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium-234	U-233/234	LA-508-471		0.11	.038	pCi/g	1	0.0050		09/15/10
Uranium-235	15117-96-1	LA-508-471	U	0.016	.014	pCi/g	1	0.019		09/15/10
Uranium-238	U-238	LA-508-471		0.11	.039	pCi/g	1	0.014		09/15/10

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

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U - Analyzed for but not detected above limiting criteria.
N - Spike Recovery is Outside Control Limits.
X,Y or Z - See comment detail and/or narrative.

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WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102464

Sample # 102464007
SAF# F10-256
Sample ID B27MK1

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/14/10**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.040	.02	pCi/g	1	0.020		09/20/10
Cobalt-60	10198-40-0	LA-508-481	U	5.1E-3	.0097	pCi/g	1	0.018		09/20/10
Europium-152	14683-23-9	LA-508-481	U	3.2E-3	.038	pCi/g	1	0.059		09/20/10
Europium-154	15585-10-1	LA-508-481	U	0.011	.031	pCi/g	1	0.057		09/20/10
Europium-155	14391-16-3	LA-508-481	U	0.033	.047	pCi/g	1	0.082		09/20/10
Radium-226	13982-63-3	LA-508-481	R	0.52	.083	pCi/g	1	0.033		09/20/10
Radium-228	15262-20-1	LA-508-481	J	0.69	.13	pCi/g	1	0.058		09/20/10
SR-89/90										**09/16/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-0.94	.72	pCi/g	1	0.37		09/23/10
Th/Pu/Am/U Teva										**09/13/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471	J	0.010	.012	pCi/g	1	9.5E-3		09/21/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	7.9E-3	.014	pCi/g	1	0.024		09/15/10
Plutonium-239/240	PU-239/240	LA-508-471	U	0.011	.0095	pCi/g	1	0.012		09/15/10
Uranium Iso										

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

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WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102464

Sample # 102464007
SAF# F10-256
Sample ID B27MK1

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium-234	U-233/234	LA-508-471		0.13	.046	pCi/g	1	5.3E-3		09/15/10
Uranium-235	15117-96-1	LA-508-471	U	0.013	.012	pCi/g	1	0.016		09/15/10
Uranium-238	U-238	LA-508-471		0.13	.046	pCi/g	1	0.021		09/15/10

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

B - Analyte was detected in both the BLANK and SAMPLE
U - Analyzed for but not detected above limiting criteria.
N - Spike Recovery is Outside Control Limits.
X,Y or Z - See comment detail and/or narrative.

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WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102464

Sample # 102464008
SAF# F10-256
Sample ID B27MP4

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/14/10**
GEA										
Cesium-137	10045-97-3	LA-508-481	U	-1.9E-4	.0096	pCi/g	1	0.015		09/17/10
Cobalt-60	10198-40-0	LA-508-481	U	-6.1E-3	.008	pCi/g	1	0.014		09/17/10
Europium-152	14683-23-9	LA-508-481	U	-0.021	.028	pCi/g	1	0.044		09/17/10
Europium-154	15585-10-1	LA-508-481	U	-0.010	.029	pCi/g	1	0.044		09/17/10
Europium-155	14391-16-3	LA-508-481		0.076	.056	pCi/g	1	0.061		09/17/10
Radium-226	13982-63-3	LA-508-481	R	0.81	.11	pCi/g	1	0.029		09/17/10
Radium-228	15262-20-1	LA-508-481	J	1.2	.18	pCi/g	1	0.048		09/17/10
SR-89/90										**09/16/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-0.95	.76	pCi/g	1	0.42		09/23/10
Th/Pu/Am/U Teva										**09/15/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471	U	0.031	.033	pCi/g	1	0.053		09/20/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	8.2E-3	.039	pCi/g	1	0.070		09/20/10
Plutonium-239/240	PU-239/240	LA-508-471	U	0.018	.016	pCi/g	1	0.022		09/20/10
Uranium Iso										

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

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U - Analyzed for but not detected above limiting criteria.
N - Spike Recovery is Outside Control Limits.
X,Y or Z - See comment detail and/or narrative.

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WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102464

Sample # 102464008
SAF# F10-256
Sample ID B27MP4

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium-234	U-233/234	LA-508-471		0.27	.078	pCi/g	1	0.018		09/16/10
Uranium-235	15117-96-1	LA-508-471		0.017	.011	pCi/g	1	0.0050		09/16/10
Uranium-238	U-238	LA-508-471		0.23	.068	pCi/g	1	4.6E-3		09/16/10

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.

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WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102464

Sample # 102464009
SAF# F10-256
Sample ID B27M39

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/14/10**
GEA										
Cesium-137	10045-97-3	LA-508-481	U	-8.8E-4	.022	pCi/g	1	0.038		09/16/10
Cobalt-60	10198-40-0	LA-508-481	U	5.5E-3	.02	pCi/g	1	0.037		09/16/10
Europium-152	14683-23-9	LA-508-481	U	0.025	.11	pCi/g	1	0.11		09/16/10
Europium-154	15585-10-1	LA-508-481	U	0.063	.1	pCi/g	1	0.11		09/16/10
Europium-155	14391-16-3	LA-508-481	U	-0.014	.094	pCi/g	1	0.16		09/16/10
Radium-226	13982-63-3	LA-508-481	R	0.54	.1	pCi/g	1	0.065		09/16/10
Radium-228	15262-20-1	LA-508-481	J	0.67	.17	pCi/g	1	0.12		09/16/10
SR-89/90										**09/16/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-1.0	.74	pCi/g	1	0.39		09/23/10
Th/Pu/Am/U Teva										**09/15/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471	U	0.0020	.027	pCi/g	1	0.050		09/20/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	-0.049	.046	pCi/g	1	0.089		09/20/10
Plutonium-239/240	PU-239/240	LA-508-471	U	0.012	.015	pCi/g	1	0.025		09/20/10
Uranium Iso										

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.

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WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102464

Sample # 102464009
SAF# F10-256
Sample ID B27M39

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium-234	U-233/234	LA-508-471		0.11	.039	pCi/g	1	0.013		09/16/10
Uranium-235	15117-96-1	LA-508-471		9.3E-3	.0085	pCi/g	1	0.0050		09/16/10
Uranium-238	U-238	LA-508-471		0.15	.049	pCi/g	1	4.6E-3		09/16/10

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.

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WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102464

Sample # 102464010
SAF# F10-256
Sample ID B27MK2

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/14/10**
GEA										
Cesium-137	10045-97-3	LA-508-481	U	1.5E-3	.019	pCi/g	1	0.035		09/16/10
Cobalt-60	10198-40-0	LA-508-481	U	-3.4E-3	.02	pCi/g	1	0.035		09/16/10
Europium-152	14683-23-9	LA-508-481	U	-0.012	.064	pCi/g	1	0.095		09/16/10
Europium-154	15585-10-1	LA-508-481	U	-0.018	.064	pCi/g	1	0.11		09/16/10
Europium-155	14391-16-3	LA-508-481	U	0.044	.073	pCi/g	1	0.13		09/16/10
Radium-226	13982-63-3	LA-508-481	R	0.52	.11	pCi/g	1	0.065		09/16/10
Radium-228	15262-20-1	LA-508-481	J	0.76	.17	pCi/g	1	0.12		09/16/10
SR-89/90										**09/16/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-0.56	.66	pCi/g	1	0.38		09/23/10
Th/Pu/Am/U Teva										**09/15/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471		0.028	.018	pCi/g	1	0.013		09/20/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	-0.013	.04	pCi/g	1	0.075		09/20/10
Plutonium-239/240	PU-239/240	LA-508-471	J	0.017	.013	pCi/g	1	0.015		09/20/10
Uranium Iso										

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.

REVISED102464 -

WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102464

Sample # 102464010
SAF# F10-256
Sample ID B27MK2

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium-234	U-233/234	LA-508-471		0.095	.035	pCi/g	1	4.9E-3		09/16/10
Uranium-235	15117-96-1	LA-508-471		7.8E-3	.0079	pCi/g	1	5.3E-3		09/16/10
Uranium-238	U-238	LA-508-471		0.10	.037	pCi/g	1	0.013		09/16/10

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.

REVISED102464 -

WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102464

Sample # 102464011
SAF# F10-256
Sample ID B27MP3

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/14/10**
GEA										
Cesium-137	10045-97-3	LA-508-481	U	6.5E-3	.03	pCi/g	1	0.048		09/16/10
Cobalt-60	10198-40-0	LA-508-481	U	-0.010	.025	pCi/g	1	0.045		09/16/10
Europium-152	14683-23-9	LA-508-481	U	-0.076	.12	pCi/g	1	0.14		09/16/10
Europium-154	15585-10-1	LA-508-481	U	-0.060	.084	pCi/g	1	0.15		09/16/10
Europium-155	14391-16-3	LA-508-481	U	0.057	.14	pCi/g	1	0.25		09/16/10
Radium-226	13982-63-3	LA-508-481	R	0.81	.17	pCi/g	1	0.090		09/16/10
Radium-228	15262-20-1	LA-508-481	J	1.5	.28	pCi/g	1	0.15		09/16/10
SR-89/90										**09/16/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-0.24	.74	pCi/g	1	0.43		09/23/10
Th/Pu/Am/U Teva										**09/15/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471	U	7.2E-3	.016	pCi/g	1	0.028		09/20/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	-1.8E-3	.03	pCi/g	1	0.056		09/20/10
Plutonium-239/240	PU-239/240	LA-508-471	J	0.026	.015	pCi/g	1	0.013		09/20/10
Uranium Iso										

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.

REVISED102464 -

WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102464

Sample # 102464011
SAF# F10-256
Sample ID B27MP3

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium-234	U-233/234	LA-508-471		0.24	.076	pCi/g	1	0.026		09/16/10
Uranium-235	15117-96-1	LA-508-471		0.019	.014	pCi/g	1	6.4E-3		09/16/10
Uranium-238	U-238	LA-508-471		0.25	.078	pCi/g	1	5.9E-3		09/16/10

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.

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WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102464

Sample # 102464012
SAF# F10-256
Sample ID B27MP5

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/14/10**
GEA										
Cesium-137	10045-97-3	LA-508-481	U	-7.1E-3	.025	pCi/g	1	0.043		09/16/10
Cobalt-60	10198-40-0	LA-508-481	U	4.8E-3	.026	pCi/g	1	0.048		09/16/10
Europium-152	14683-23-9	LA-508-481	U	-0.11	.091	pCi/g	1	0.12		09/16/10
Europium-154	15585-10-1	LA-508-481	U	-0.017	.082	pCi/g	1	0.15		09/16/10
Europium-155	14391-16-3	LA-508-481	U	0.031	.11	pCi/g	1	0.19		09/16/10
Radium-226	13982-63-3	LA-508-481	R	0.80	.15	pCi/g	1	0.073		09/16/10
Radium-228	15262-20-1	LA-508-481		1.0	.21	pCi/g	1	0.15		09/16/10
SR-89/90										**09/16/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-0.51	.71	pCi/g	1	0.40		09/23/10
Th/Pu/Am/U Teva										**09/15/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471		0.035	.025	pCi/g	1	0.027		09/20/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471		0.080	.036	pCi/g	1	0.033		09/20/10
Plutonium-239/240	PU-239/240	LA-508-471	U	-0.032	.024	pCi/g	1	0.053		09/20/10
Uranium Iso										

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.

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WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102464

Sample # 102464012
SAF# F10-256
Sample ID B27MP5

Matrix SOIL
Sampled 09/08/10
Received 09/08/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium-234	U-233/234	LA-508-471		0.23	.071	pCi/g	1	0.013		09/16/10
Uranium-235	15117-96-1	LA-508-471	U	5.8E-3	.0086	pCi/g	1	0.014		09/16/10
Uranium-238	U-238	LA-508-471		0.22	.067	pCi/g	1	4.8E-3		09/16/10

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.

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WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102473

Sample # 102473001
SAF# F10-256
Sample ID B27MC0

Matrix SOIL
Sampled 09/09/10
Received 09/09/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/14/10**
GEA										
Cesium-137	10045-97-3	LA-508-481	U	7.9E-3	.024	pCi/g	1	0.044		09/16/10
Cobalt-60	10198-40-0	LA-508-481	U	7.7E-3	.023	pCi/g	1	0.045		09/16/10
Europium-152	14683-23-9	LA-508-481	U	0.020	.073	pCi/g	1	0.11		09/16/10
Europium-154	15585-10-1	LA-508-481	U	-0.019	.076	pCi/g	1	0.14		09/16/10
Europium-155	14391-16-3	LA-508-481	U	0.083	.092	pCi/g	1	0.17		09/16/10
Radium-226	13982-63-3	LA-508-481	R	0.67	.13	pCi/g	1	0.074		09/16/10
Radium-228	15262-20-1	LA-508-481		0.94	.2	pCi/g	1	0.14		09/16/10
SR-89/90										**09/16/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-0.34	.72	pCi/g	1	0.40		09/23/10
Th/Pu/Am/U Teva										**09/19/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471	U	0.027	.026	pCi/g	1	0.028		09/20/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	9.9E-3	.05	pCi/g	1	0.090		09/20/10
Plutonium-239/240	PU-239/240	LA-508-471	U	0.020	.017	pCi/g	1	0.023		09/20/10
Uranium Iso										

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 # WSCF102473

Sample # 102473001
SAF# F10-256
Sample ID B27MC0

Matrix SOIL
Sampled 09/09/10
Received 09/09/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium-234	U-233/234	LA-508-471		0.16	.051	pCi/g	1	0.017		09/21/10
Uranium-235	15117-96-1	LA-508-471	U	0.016	.014	pCi/g	1	0.018		09/21/10

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 # WSCF102473

Sample # 102473002
SAF# F10-256
Sample ID B27MC1

Matrix SOIL
Sampled 09/09/10
Received 09/09/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/14/10**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.098	.04	pCi/g	1	0.044		09/16/10
Cobalt-60	10198-40-0	LA-508-481	U	3.7E-3	.02	pCi/g	1	0.040		09/16/10
Europium-152	14683-23-9	LA-508-481		0.18	.1	pCi/g	1	0.15		09/16/10
Europium-154	15585-10-1	LA-508-481	U	-0.013	.064	pCi/g	1	0.12		09/16/10
Europium-155	14391-16-3	LA-508-481	U	0.027	.11	pCi/g	1	0.21		09/16/10
Radium-226	13982-63-3	LA-508-481	R	0.62	.13	pCi/g	1	0.075		09/16/10
Radium-228	15262-20-1	LA-508-481		0.91	.19	pCi/g	1	0.14		09/16/10
SR-89/90										**09/16/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-0.68	.82	pCi/g	1	0.48		09/23/10
Th/Pu/Am/U Teva										**09/19/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471	J	0.042	.024	pCi/g	1	0.019		09/20/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	0.036	.042	pCi/g	1	0.071		09/20/10
Plutonium-239/240	PU-239/240	LA-508-471		0.028	.017	pCi/g	1	0.016		09/20/10
Uranium Iso										

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 # WSCF102473

Sample # 102473002
SAF# F10-256
Sample ID B27MC1

Matrix SOIL
Sampled 09/09/10
Received 09/09/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium-234	U-233/234	LA-508-471		0.16	.051	pCi/g	1	0.014		09/21/10
Uranium-235	15117-96-1	LA-508-471		0.017	.012	pCi/g	1	5.7E-3		09/21/10

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 # WSCF102473

Sample # 102473003
SAF# F10-256
Sample ID B27M40

Matrix SOIL
Sampled 09/09/10
Received 09/09/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/14/10**
GEA										
Cesium-137	10045-97-3	LA-508-481	U	-0.011	.012	pCi/g	1	0.020		09/16/10
Cobalt-60	10198-40-0	LA-508-481	U	1.4E-3	.011	pCi/g	1	0.020		09/16/10
Europium-152	14683-23-9	LA-508-481	U	7.4E-3	.041	pCi/g	1	0.060		09/16/10
Europium-154	15585-10-1	LA-508-481	U	-0.025	.035	pCi/g	1	0.060		09/16/10
Europium-155	14391-16-3	LA-508-481	U	-0.017	.049	pCi/g	1	0.084		09/16/10
Radium-226	13982-63-3	LA-508-481	R	0.60	.091	pCi/g	1	0.037		09/16/10
Radium-228	15262-20-1	LA-508-481		0.83	.14	pCi/g	1	0.062		09/16/10
SR-89/90										**09/16/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-1.3	.73	pCi/g	1	0.42		09/23/10
Th/Pu/Am/U Teva										**09/19/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471	J	0.027	.019	pCi/g	1	0.017		09/20/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	-2.1E-3	.042	pCi/g	1	0.077		09/20/10
Plutonium-239/240	PU-239/240	LA-508-471		0.027	.019	pCi/g	1	0.025		09/20/10
Uranium Iso										

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 # WSCF102473

Sample # 102473003
SAF# F10-256
Sample ID B27M40

Matrix SOIL
Sampled 09/09/10
Received 09/09/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium-234	U-233/234	LA-508-471		0.19	.06	pCi/g	1	0.015		09/21/10
Uranium-235	15117-96-1	LA-508-471		0.019	.015	pCi/g	1	0.016		09/21/10

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 # WSCF102473

Sample # 102473004
SAF# F10-256
Sample ID B27M41

Matrix SOIL
Sampled 09/09/10
Received 09/09/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/14/10**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.64	.1	pCi/g	1	0.062		09/16/10
Cobalt-60	10198-40-0	LA-508-481	U	0.016	.027	pCi/g	1	0.059		09/16/10
Europium-152	14683-23-9	LA-508-481		1.1	.13	pCi/g	1	0.18		09/16/10
Europium-154	15585-10-1	LA-508-481	U	0.056	.096	pCi/g	1	0.20		09/16/10
Europium-155	14391-16-3	LA-508-481	U	-0.018	.14	pCi/g	1	0.26		09/16/10
Radium-226	13982-63-3	LA-508-481	R	0.47	.13	pCi/g	1	0.11		09/16/10
Radium-228	15262-20-1	LA-508-481		0.83	.22	pCi/g	1	0.19		09/16/10
SR-89/90										**09/16/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-1.1	.75	pCi/g	1	0.51		09/23/10
Th/Pu/Am/U Teva										**09/19/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471	U	0.017	.017	pCi/g	1	0.021		09/20/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	-1.0E-5	.039	pCi/g	1	0.080		09/20/10
Plutonium-239/240	PU-239/240	LA-508-471		0.056	.026	pCi/g	1	0.023		09/20/10
Uranium Iso										

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 # WSCF102473

Sample # 102473004
SAF# F10-256
Sample ID B27M41

Matrix SOIL
Sampled 09/09/10
Received 09/09/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium-234	U-233/234	LA-508-471		0.16	.049	pCi/g	1	0.020		09/21/10
Uranium-235	15117-96-1	LA-508-471		9.2E-3	.0083	pCi/g	1	6.2E-3		09/21/10

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 # WSCF102473

Sample # 102473005
SAF# F10-256
Sample ID B27MP6

Matrix SOIL
Sampled 09/09/10
Received 09/09/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/14/10**
GEA										
Cesium-137	10045-97-3	LA-508-481	U	-0.018	.014	pCi/g	1	0.023		09/16/10
Cobalt-60	10198-40-0	LA-508-481	U	-0.0020	.012	pCi/g	1	0.021		09/16/10
Europium-152	14683-23-9	LA-508-481	U	0.037	.046	pCi/g	1	0.069		09/16/10
Europium-154	15585-10-1	LA-508-481	U	4.0E-4	.045	pCi/g	1	0.070		09/16/10
Europium-155	14391-16-3	LA-508-481		0.13	.088	pCi/g	1	0.13		09/16/10
Radium-226	13982-63-3	LA-508-481	R	0.87	.12	pCi/g	1	0.044		09/16/10
Radium-228	15262-20-1	LA-508-481		1.2	.19	pCi/g	1	0.070		09/16/10
SR-89/90										**09/16/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-0.94	.62	pCi/g	1	0.39		09/23/10
Th/Pu/Am/U Teva										**09/19/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471	J	0.011	.011	pCi/g	1	0.011		09/20/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	-0.049	.052	pCi/g	1	0.098		09/20/10
Plutonium-239/240	PU-239/240	LA-508-471	U	0.012	.013	pCi/g	1	0.019		09/20/10
Uranium Iso										

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 # WSCF102473

Sample # 102473005
SAF# F10-256
Sample ID B27MP6

Matrix SOIL
Sampled 09/09/10
Received 09/09/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium-234	U-233/234	LA-508-471		0.25	.074	pCi/g	1	0.017		09/21/10
Uranium-235	15117-96-1	LA-508-471	U	0.014	.014	pCi/g	1	0.021		09/21/10

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 # WSCF102473

Sample # 102473006
SAF# F10-256
Sample ID B27MP7

Matrix SOIL
Sampled 09/09/10
Received 09/09/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/14/10**
GEA										
Cesium-137	10045-97-3	LA-508-481	U	-0.017	.03	pCi/g	1	0.053		09/20/10
Cobalt-60	10198-40-0	LA-508-481	U	-0.022	.028	pCi/g	1	0.048		09/20/10
Europium-152	14683-23-9	LA-508-481	U	-0.062	.15	pCi/g	1	0.15		09/20/10
Europium-154	15585-10-1	LA-508-481	U	-0.059	.088	pCi/g	1	0.15		09/20/10
Europium-155	14391-16-3	LA-508-481	U	0.049	.099	pCi/g	1	0.17		09/20/10
Radium-226	13982-63-3	LA-508-481	R	0.96	.17	pCi/g	1	0.096		09/20/10
Radium-228	15262-20-1	LA-508-481		1.3	.24	pCi/g	1	0.16		09/20/10
SR-89/90										**09/16/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-1.3	.7	pCi/g	1	0.42		09/23/10
Th/Pu/Am/U Teva										**09/19/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471	J	0.025	.02	pCi/g	1	0.017		09/20/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	0.014	.039	pCi/g	1	0.070		09/20/10
Plutonium-239/240	PU-239/240	LA-508-471		0.021	.016	pCi/g	1	0.017		09/20/10
Uranium Iso										

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 # WSCF102473

Sample # 102473006
SAF# F10-256
Sample ID B27MP7

Matrix SOIL
Sampled 09/09/10
Received 09/09/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium-234	U-233/234	LA-508-471		0.26	.077	pCi/g	1	0.014		09/21/10
Uranium-235	15117-96-1	LA-508-471	U	0.015	.016	pCi/g	1	0.025		09/21/10

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 # WSCF102473

Sample # 102473007
SAF# F10-256
Sample ID B27MK3

Matrix SOIL
Sampled 09/09/10
Received 09/09/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/14/10**
GEA										
Cesium-137	10045-97-3	LA-508-481	U	0.021	.025	pCi/g	1	0.049		09/16/10
Cobalt-60	10198-40-0	LA-508-481	U	1.3E-3	.021	pCi/g	1	0.041		09/16/10
Europium-152	14683-23-9	LA-508-481	U	-0.045	.12	pCi/g	1	0.13		09/16/10
Europium-154	15585-10-1	LA-508-481	U	-0.059	.078	pCi/g	1	0.13		09/16/10
Europium-155	14391-16-3	LA-508-481	U	-0.040	.12	pCi/g	1	0.20		09/16/10
Radium-226	13982-63-3	LA-508-481	R	0.47	.11	pCi/g	1	0.084		09/16/10
Radium-228	15262-20-1	LA-508-481		1.0	.23	pCi/g	1	0.14		09/16/10
SR-89/90										**09/16/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-0.48	.78	pCi/g	1	0.46		09/23/10
Th/Pu/Am/U Teva										**09/19/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471	J	0.079	.034	pCi/g	1	0.017		09/20/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	-0.023	.082	pCi/g	1	0.087		09/21/10
Plutonium-239/240	PU-239/240	LA-508-471		0.030	.016	pCi/g	1	0.017		09/21/10
Uranium Iso										

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 # WSCF102473

Sample # 102473007
SAF# F10-256
Sample ID B27MK3

Matrix SOIL
Sampled 09/09/10
Received 09/09/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium-234	U-233/234	LA-508-471		0.16	.053	pCi/g	1	0.019		09/21/10
Uranium-235	15117-96-1	LA-508-471		0.021	.015	pCi/g	1	0.017		09/21/10

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 # WSCF102473

Sample # 102473008
SAF# F10-256
Sample ID B27MK4

Matrix SOIL
Sampled 09/09/10
Received 09/09/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/14/10**
GEA										
Cesium-137	10045-97-3	LA-508-481	U	0.012	.027	pCi/g	1	0.051		09/16/10
Cobalt-60	10198-40-0	LA-508-481	U	-9.4E-3	.025	pCi/g	1	0.045		09/16/10
Europium-152	14683-23-9	LA-508-481	U	0.086	.083	pCi/g	1	0.14		09/16/10
Europium-154	15585-10-1	LA-508-481	U	-9.6E-3	.071	pCi/g	1	0.13		09/16/10
Europium-155	14391-16-3	LA-508-481	U	0.098	.11	pCi/g	1	0.19		09/16/10
Radium-226	13982-63-3	LA-508-481	R	0.62	.13	pCi/g	1	0.086		09/16/10
Radium-228	15262-20-1	LA-508-481		0.86	.25	pCi/g	1	0.14		09/16/10
SR-89/90										**09/16/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-1.4	.67	pCi/g	1	0.44		09/23/10
Th/Pu/Am/U Teva										**09/19/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471	J	0.028	.019	pCi/g	1	0.016		09/20/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	0.041	.041	pCi/g	1	0.068		09/20/10
Plutonium-239/240	PU-239/240	LA-508-471	U	0.015	.014	pCi/g	1	0.019		09/20/10
Uranium Iso										

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 # WSCF102473

Sample # 102473008
SAF# F10-256
Sample ID B27MK4

Matrix SOIL
Sampled 09/09/10
Received 09/09/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium-234	U-233/234	LA-508-471		0.16	.052	pCi/g	1	0.015		09/21/10
Uranium-235	15117-96-1	LA-508-471		0.022	.014	pCi/g	1	0.0060		09/21/10

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 # WSCF102515

Sample # 102515001
SAF# F10-256
Sample ID B27MK8

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/16/10**
GEA										
Cesium-137	10045-97-3	LA-508-481	U	-1.1E-3	.014	pCi/g	1	0.026		09/23/10
Cobalt-60	10198-40-0	LA-508-481	U	-8.9E-3	.013	pCi/g	1	0.024		09/23/10
Europium-152	14683-23-9	LA-508-481	U	0.013	.048	pCi/g	1	0.078		09/23/10
Europium-154	15585-10-1	LA-508-481	U	0.020	.048	pCi/g	1	0.094		09/23/10
Europium-155	14391-16-3	LA-508-481	U	-1.8E-3	.063	pCi/g	1	0.11		09/23/10
Radium-226	13982-63-3	LA-508-481	R	0.51	.088	pCi/g	1	0.050		09/23/10
Radium-228	15262-20-1	LA-508-481		0.72	.14	pCi/g	1	0.079		09/23/10
SR-89/90										**09/23/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-1.2	.73	pCi/g	1	0.39		09/29/10
Th/Pu/Am/U Teva										**09/21/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471	J	0.024	.017	pCi/g	1	0.016		09/27/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	-5.1E-3	.028	pCi/g	1	0.055		09/27/10
Plutonium-239/240	PU-239/240	LA-508-471		0.013	.011	pCi/g	1	0.012		09/27/10
Uranium Iso										

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 # WSCF102515

Sample # 102515001
SAF# F10-256
Sample ID B27MK8

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium-234	U-233/234	LA-508-471		0.15	.047	pCi/g	1	0.019		09/27/10
Uranium-235	15117-96-1	LA-508-471	U	0.013	.011	pCi/g	1	0.014		09/27/10
Uranium-238	U-238	LA-508-471		0.17	.053	pCi/g	1	0.013		09/27/10

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 # WSCF102515

Sample # 102515002
SAF# F10-256
Sample ID B27MC5

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/16/10**
GEA										
Cesium-137	10045-97-3	LA-508-481	U	-5.1E-3	.015	pCi/g	1	0.026		09/23/10
Cobalt-60	10198-40-0	LA-508-481	U	-4.1E-4	.014	pCi/g	1	0.025		09/23/10
Europium-152	14683-23-9	LA-508-481	U	5.5E-3	.048	pCi/g	1	0.076		09/23/10
Europium-154	15585-10-1	LA-508-481	U	-0.015	.053	pCi/g	1	0.081		09/23/10
Europium-155	14391-16-3	LA-508-481	U	-7.9E-3	.067	pCi/g	1	0.12		09/23/10
Radium-226	13982-63-3	LA-508-481	R	0.50	.093	pCi/g	1	0.049		09/23/10
Radium-228	15262-20-1	LA-508-481		0.80	.17	pCi/g	1	0.087		09/23/10
SR-89/90										**09/23/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-1.7	.77	pCi/g	1	0.40		09/29/10
Th/Pu/Am/U Teva										**09/21/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471	J	0.019	.017	pCi/g	1	0.016		09/27/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	-4.1E-3	.028	pCi/g	1	0.054		09/27/10
Plutonium-239/240	PU-239/240	LA-508-471	U	0.012	.012	pCi/g	1	0.015		09/27/10
Uranium Iso										

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 # WSCF102515

Sample # 102515002
SAF# F10-256
Sample ID B27MC5

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium-234	U-233/234	LA-508-471		0.16	.053	pCi/g	1	0.018		09/27/10
Uranium-235	15117-96-1	LA-508-471	U	4.2E-3	.0083	pCi/g	1	0.016		09/27/10
Uranium-238	U-238	LA-508-471		0.14	.048	pCi/g	1	0.014		09/27/10

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 # WSCF102515

Sample # 102515003
SAF# F10-256
Sample ID B27M45

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/16/10**
GEA										
Cesium-137	10045-97-3	LA-508-481	U	0.031	.024	pCi/g	1	0.045		09/23/10
Cobalt-60	10198-40-0	LA-508-481	U	0.013	.022	pCi/g	1	0.042		09/23/10
Europium-152	14683-23-9	LA-508-481	U	-0.041	.097	pCi/g	1	0.12		09/23/10
Europium-154	15585-10-1	LA-508-481	U	-3.8E-3	.061	pCi/g	1	0.11		09/23/10
Europium-155	14391-16-3	LA-508-481	U	0.15	.12	pCi/g	1	0.17		09/23/10
Radium-226	13982-63-3	LA-508-481	R	0.56	.11	pCi/g	1	0.071		09/23/10
Radium-228	15262-20-1	LA-508-481		0.72	.18	pCi/g	1	0.13		09/23/10
SR-89/90										**09/23/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-2.0	.68	pCi/g	1	0.34		09/29/10
Th/Pu/Am/U Teva										**09/21/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471	J	0.019	.014	pCi/g	1	0.010		09/27/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	6.2E-3	.0086	pCi/g	1	0.014		09/27/10
Plutonium-239/240	PU-239/240	LA-508-471	U	9.3E-3	.0076	pCi/g	1	0.011		09/27/10
Uranium Iso										

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 # WSCF102515

Sample # 102515003
SAF# F10-256
Sample ID B27M45

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium-234	U-233/234	LA-508-471		0.14	.045	pCi/g	1	0.013		09/27/10
Uranium-235	15117-96-1	LA-508-471		0.018	.013	pCi/g	1	0.015		09/27/10
Uranium-238	U-238	LA-508-471		0.16	.051	pCi/g	1	0.017		09/27/10

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 # WSCF102515

Sample # 102515004
SAF# F10-256
Sample ID B27MR0

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/16/10**
GEA										
Cesium-137	10045-97-3	LA-508-481	U	0.013	.027	pCi/g	1	0.050		09/27/10
Cobalt-60	10198-40-0	LA-508-481	U	4.1E-3	.028	pCi/g	1	0.045		09/27/10
Europium-152	14683-23-9	LA-508-481	U	-0.033	.1	pCi/g	1	0.14		09/27/10
Europium-154	15585-10-1	LA-508-481	U	0.022	.077	pCi/g	1	0.14		09/27/10
Europium-155	14391-16-3	LA-508-481	U	-0.023	.11	pCi/g	1	0.19		09/27/10
Radium-226	13982-63-3	LA-508-481	R	0.92	.16	pCi/g	1	0.092		09/27/10
Radium-228	15262-20-1	LA-508-481		1.3	.24	pCi/g	1	0.13		09/27/10
SR-89/90										**09/23/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-1.3	.7	pCi/g	1	0.35		09/29/10
Th/Pu/Am/U Teva										**09/21/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471	J	0.019	.016	pCi/g	1	0.014		09/27/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	-0.010	.013	pCi/g	1	0.030		09/27/10
Plutonium-239/240	PU-239/240	LA-508-471		0.015	.01	pCi/g	1	0.011		09/27/10
Uranium Iso										

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 # WSCF102515

Sample # 102515004
SAF# F10-256
Sample ID B27MR0

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium-234	U-233/234	LA-508-471		0.38	.11	pCi/g	1	5.3E-3		09/27/10
Uranium-235	15117-96-1	LA-508-471		0.025	.018	pCi/g	1	0.020		09/27/10
Uranium-238	U-238	LA-508-471		0.37	.11	pCi/g	1	5.3E-3		09/27/10

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 # WSCF102515

Sample # 102515005
SAF# F10-256
Sample ID B27MK7

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/16/10**
GEA										
Cesium-137	10045-97-3	LA-508-481	U	-0.018	.017	pCi/g	1	0.029		09/27/10
Cobalt-60	10198-40-0	LA-508-481	U	3.2E-3	.015	pCi/g	1	0.029		09/27/10
Europium-152	14683-23-9	LA-508-481	U	9.9E-3	.051	pCi/g	1	0.084		09/27/10
Europium-154	15585-10-1	LA-508-481	U	-0.032	.045	pCi/g	1	0.078		09/27/10
Europium-155	14391-16-3	LA-508-481	U	0.014	.07	pCi/g	1	0.12		09/27/10
Radium-226	13982-63-3	LA-508-481	R	0.59	.1	pCi/g	1	0.057		09/27/10
Radium-228	15262-20-1	LA-508-481		0.89	.17	pCi/g	1	0.087		09/27/10
SR-89/90										**09/23/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-1.2	.64	pCi/g	1	0.36		09/29/10
Th/Pu/Am/U Teva										**09/21/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471	J	0.028	.017	pCi/g	1	0.011		09/27/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	0.015	.014	pCi/g	1	0.020		09/27/10
Plutonium-239/240	PU-239/240	LA-508-471	U	9.3E-3	.0087	pCi/g	1	0.011		09/27/10
Uranium Iso										

MDL = Minimum Detection
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B - Analyte was detected in both the BLANK and SAMPLE
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X,Y or Z - See comment detail and/or narrative.

WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102515

Sample # 102515005
SAF# F10-256
Sample ID B27MK7

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium-234	U-233/234	LA-508-471		0.12	.042	pCi/g	1	0.016		09/27/10
Uranium-235	15117-96-1	LA-508-471	U	5.5E-3	.0063	pCi/g	1	0.014		09/27/10
Uranium-238	U-238	LA-508-471		0.14	.047	pCi/g	1	0.016		09/27/10

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 # WSCF102515

Sample # 102515006
SAF# F10-256
Sample ID B27MC4

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/16/10**
GEA										
Cesium-137	10045-97-3	LA-508-481	U	-6.7E-3	.015	pCi/g	1	0.027		09/23/10
Cobalt-60	10198-40-0	LA-508-481	U	-4.7E-3	.013	pCi/g	1	0.024		09/23/10
Europium-152	14683-23-9	LA-508-481	U	1.9E-3	.056	pCi/g	1	0.081		09/23/10
Europium-154	15585-10-1	LA-508-481	U	6.7E-3	.043	pCi/g	1	0.080		09/23/10
Europium-155	14391-16-3	LA-508-481	U	-0.040	.069	pCi/g	1	0.12		09/23/10
Radium-226	13982-63-3	LA-508-481	R	0.55	.1	pCi/g	1	0.051		09/23/10
Radium-228	15262-20-1	LA-508-481		0.78	.16	pCi/g	1	0.086		09/23/10
SR-89/90										**09/23/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-1.6	.7	pCi/g	1	0.35		09/29/10
Th/Pu/Am/U Teva										**09/21/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471	U	0.037	.029	pCi/g	1	0.044		09/27/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471		0.023	.014	pCi/g	1	0.016		09/27/10
Plutonium-239/240	PU-239/240	LA-508-471	U	4.1E-3	.0047	pCi/g	1	0.010		09/27/10
Uranium Iso										

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
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B - Analyte was detected in both the BLANK and SAMPLE
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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 # WSCF102515

Sample # 102515006
SAF# F10-256
Sample ID B27MC4

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium-234	U-233/234	LA-508-471		0.17	.055	pCi/g	1	0.020		09/27/10
Uranium-235	15117-96-1	LA-508-471	U	3.6E-3	.0087	pCi/g	1	0.017		09/27/10
Uranium-238	U-238	LA-508-471		0.18	.055	pCi/g	1	4.5E-3		09/27/10

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 # WSCF102515

Sample # 102515007
SAF# F10-256
Sample ID B27MP8

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/16/10**
GEA										
Cesium-137	10045-97-3	LA-508-481	U	-0.016	.018	pCi/g	1	0.030		09/27/10
Cobalt-60	10198-40-0	LA-508-481	U	-2.8E-3	.017	pCi/g	1	0.031		09/27/10
Europium-152	14683-23-9	LA-508-481	U	0.043	.057	pCi/g	1	0.092		09/27/10
Europium-154	15585-10-1	LA-508-481	U	9.8E-3	.053	pCi/g	1	0.097		09/27/10
Europium-155	14391-16-3	LA-508-481	U	0.022	.081	pCi/g	1	0.14		09/27/10
Radium-226	13982-63-3	LA-508-481	R	0.77	.13	pCi/g	1	0.057		09/27/10
Radium-228	15262-20-1	LA-508-481		1.2	.22	pCi/g	1	0.097		09/27/10
SR-89/90										**09/24/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-0.93	.78	pCi/g	1	0.38		09/29/10
Th/Pu/Am/U Teva										**09/21/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471	U	0.016	.016	pCi/g	1	0.018		09/27/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	0.024	.032	pCi/g	1	0.053		09/28/10
Plutonium-239/240	PU-239/240	LA-508-471	U	6.9E-3	.007	pCi/g	1	0.012		09/28/10
Uranium Iso										

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
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U - Analyzed for but not detected above limiting criteria.
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X,Y or Z - See comment detail and/or narrative.

WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102515

Sample # 102515007
SAF# F10-256
Sample ID B27MP8

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium-234	U-233/234	LA-508-471		0.22	.067	pCi/g	1	0.017		09/27/10
Uranium-235	15117-96-1	LA-508-471	U	0.016	.014	pCi/g	1	0.018		09/27/10
Uranium-238	U-238	LA-508-471		0.22	.067	pCi/g	1	0.017		09/27/10

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

WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102515

Sample # 102515008
SAF# F10-256
Sample ID B27M44

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/16/10**
GEA										
Cesium-137	10045-97-3	LA-508-481	U	-9.8E-3	.017	pCi/g	1	0.030		09/27/10
Cobalt-60	10198-40-0	LA-508-481	U	1.5E-3	.017	pCi/g	1	0.031		09/27/10
Europium-152	14683-23-9	LA-508-481	U	-0.012	.054	pCi/g	1	0.083		09/27/10
Europium-154	15585-10-1	LA-508-481	U	-0.026	.048	pCi/g	1	0.084		09/27/10
Europium-155	14391-16-3	LA-508-481	U	0.037	.069	pCi/g	1	0.12		09/27/10
Radium-226	13982-63-3	LA-508-481	R	0.59	.1	pCi/g	1	0.060		09/27/10
Radium-228	15262-20-1	LA-508-481		0.85	.17	pCi/g	1	0.083		09/27/10
SR-89/90										**09/24/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-1.9	.7	pCi/g	1	0.34		09/29/10
Th/Pu/Am/U Teva										**09/21/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471	J	0.013	.013	pCi/g	1	0.011		09/27/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	0.021	.03	pCi/g	1	0.050		09/28/10
Plutonium-239/240	PU-239/240	LA-508-471	U	-0.039	.022	pCi/g	1	0.049		09/28/10
Uranium Iso										

MDL = Minimum Detection
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TP Err = Total Propagated
DF = Dilution Factor
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U - Analyzed for but not detected above limiting criteria.
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X,Y or Z - See comment detail and/or narrative.

WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102515

Sample # 102515008
SAF# F10-256
Sample ID B27M44

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium-234	U-233/234	LA-508-471		0.14	.046	pCi/g	1	0.013		09/27/10
Uranium-235	15117-96-1	LA-508-471	U	7.8E-3	.0078	pCi/g	1	0.014		09/27/10
Uranium-238	U-238	LA-508-471		0.15	.049	pCi/g	1	0.013		09/27/10

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 # WSCF102515

Sample # 102515009
SAF# F10-256
Sample ID B27MK5

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/16/10**
GEA										
Cesium-137	10045-97-3	LA-508-481	U	7.4E-4	.014	pCi/g	1	0.026		09/27/10
Cobalt-60	10198-40-0	LA-508-481	U	4.0E-4	.013	pCi/g	1	0.024		09/27/10
Europium-152	14683-23-9	LA-508-481	U	-8.9E-4	.052	pCi/g	1	0.075		09/27/10
Europium-154	15585-10-1	LA-508-481	U	0.010	.042	pCi/g	1	0.079		09/27/10
Europium-155	14391-16-3	LA-508-481	U	0.032	.061	pCi/g	1	0.11		09/27/10
Radium-226	13982-63-3	LA-508-481	R	0.44	.091	pCi/g	1	0.047		09/27/10
Radium-228	15262-20-1	LA-508-481		0.70	.14	pCi/g	1	0.083		09/27/10
SR-89/90										**09/24/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-0.99	.68	pCi/g	1	0.36		09/29/10
Th/Pu/Am/U Teva										**09/21/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471	J	0.013	.014	pCi/g	1	0.011		09/27/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	0.032	.028	pCi/g	1	0.043		09/28/10
Plutonium-239/240	PU-239/240	LA-508-471	U	-5.9E-3	.015	pCi/g	1	0.033		09/28/10
Uranium Iso										

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

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U - Analyzed for but not detected above limiting criteria.
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WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102515

Sample # 102515009
SAF# F10-256
Sample ID B27MK5

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium-234	U-233/234	LA-508-471		0.10	.038	pCi/g	1	0.015		09/27/10
Uranium-235	15117-96-1	LA-508-471	U	6.7E-3	.0098	pCi/g	1	0.016		09/27/10
Uranium-238	U-238	LA-508-471		0.11	.039	pCi/g	1	0.015		09/27/10

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 # WSCF102515

Sample # 102515010
SAF# F10-256
Sample ID B27MC2

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/16/10**
GEA										
Cesium-137	10045-97-3	LA-508-481	U	-4.9E-3	.0094	pCi/g	1	0.016		09/21/10
Cobalt-60	10198-40-0	LA-508-481	U	-8.3E-3	.009	pCi/g	1	0.015		09/21/10
Europium-152	14683-23-9	LA-508-481	U	-9.1E-3	.035	pCi/g	1	0.053		09/21/10
Europium-154	15585-10-1	LA-508-481	U	-2.7E-3	.032	pCi/g	1	0.051		09/21/10
Europium-155	14391-16-3	LA-508-481	U	0.049	.049	pCi/g	1	0.077		09/21/10
Radium-226	13982-63-3	LA-508-481	R	0.43	.07	pCi/g	1	0.033		09/21/10
Radium-228	15262-20-1	LA-508-481		0.75	.13	pCi/g	1	0.051		09/21/10
SR-89/90										**09/24/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-1.8	.77	pCi/g	1	0.37		09/29/10
Th/Pu/Am/U Teva										**09/21/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471	J	0.033	.019	pCi/g	1	0.013		09/28/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	-9.9E-3	.034	pCi/g	1	0.064		09/28/10
Plutonium-239/240	PU-239/240	LA-508-471	U	0.012	.011	pCi/g	1	0.015		09/28/10
Uranium Iso										

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 # WSCF102515

Sample # 102515010
SAF# F10-256
Sample ID B27MC2

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium-234	U-233/234	LA-508-471		0.12	.043	pCi/g	1	0.017		09/27/10
Uranium-235	15117-96-1	LA-508-471	U	8.2E-3	.0082	pCi/g	1	0.014		09/27/10
Uranium-238	U-238	LA-508-471		0.12	.043	pCi/g	1	5.1E-3		09/27/10

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 # WSCF102515

Sample # 102515011
SAF# F10-256
Sample ID B27MR1

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/16/10**
GEA										
Cesium-137	10045-97-3	LA-508-481	U	-0.015	.027	pCi/g	1	0.046		09/21/10
Cobalt-60	10198-40-0	LA-508-481	U	-7.8E-3	.023	pCi/g	1	0.042		09/21/10
Europium-152	14683-23-9	LA-508-481	U	-0.075	.12	pCi/g	1	0.14		09/21/10
Europium-154	15585-10-1	LA-508-481	U	-0.091	.074	pCi/g	1	0.12		09/21/10
Europium-155	14391-16-3	LA-508-481	U	0.050	.13	pCi/g	1	0.23		09/21/10
Radium-226	13982-63-3	LA-508-481	R	0.90	.17	pCi/g	1	0.088		09/21/10
Radium-228	15262-20-1	LA-508-481		1.4	.28	pCi/g	1	0.13		09/21/10
SR-89/90										**09/24/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-1.1	.67	pCi/g	1	0.35		09/29/10
Th/Pu/Am/U Teva										**09/21/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471	U	0.014	.017	pCi/g	1	0.028		09/28/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	0.016	.024	pCi/g	1	0.041		09/28/10
Plutonium-239/240	PU-239/240	LA-508-471	U	-3.6E-3	.012	pCi/g	1	0.027		09/28/10
Uranium Iso										

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 # WSCF102515

Sample # 102515011
SAF# F10-256
Sample ID B27MR1

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium-234	U-233/234	LA-508-471		0.19	.059	pCi/g	1	0.017		09/27/10
Uranium-235	15117-96-1	LA-508-471	U	0.012	.014	pCi/g	1	0.022		09/27/10
Uranium-238	U-238	LA-508-471		0.18	.057	pCi/g	1	0.017		09/27/10

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 # WSCF102515

Sample # 102515012
SAF# F10-256
Sample ID B27M42

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/16/10**
GEA										
Cesium-137	10045-97-3	LA-508-481	U	-4.5E-3	.021	pCi/g	1	0.032		09/21/10
Cobalt-60	10198-40-0	LA-508-481	U	-0.010	.019	pCi/g	1	0.034		09/21/10
Europium-152	14683-23-9	LA-508-481	U	1.3E-3	.059	pCi/g	1	0.091		09/21/10
Europium-154	15585-10-1	LA-508-481	U	-3.9E-3	.059	pCi/g	1	0.11		09/21/10
Europium-155	14391-16-3	LA-508-481	U	0.078	.07	pCi/g	1	0.13		09/21/10
Radium-226	13982-63-3	LA-508-481	R	0.47	.099	pCi/g	1	0.065		09/21/10
Radium-228	15262-20-1	LA-508-481		0.66	.15	pCi/g	1	0.11		09/21/10
SR-89/90										**09/24/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-1.3	.73	pCi/g	1	0.36		09/29/10
Th/Pu/Am/U Teva										**09/21/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471	J	0.034	.021	pCi/g	1	0.019		09/28/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	-7.3E-3	.024	pCi/g	1	0.049		09/28/10
Plutonium-239/240	PU-239/240	LA-508-471	U	9.2E-3	.0096	pCi/g	1	0.014		09/28/10
Uranium Iso										

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 # WSCF102515

Sample # 102515012
SAF# F10-256
Sample ID B27M42

Matrix SOIL
Sampled 09/13/10
Received 09/13/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium-234	U-233/234	LA-508-471		0.13	.044	pCi/g	1	0.013		09/27/10
Uranium-235	15117-96-1	LA-508-471	U	0.0060	.013	pCi/g	1	0.024		09/27/10
Uranium-238	U-238	LA-508-471		0.12	.042	pCi/g	1	0.0050		09/27/10

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 # WSCF102537

Sample # 102537001
SAF# F10-256
Sample ID B27M46

Matrix SOIL
Sampled 09/14/10
Received 09/14/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/16/10**
GEA										
Cesium-137	10045-97-3	LA-508-481	U	0.015	.019	pCi/g	1	0.035		09/21/10
Cobalt-60	10198-40-0	LA-508-481	U	0.012	.018	pCi/g	1	0.035		09/21/10
Europium-152	14683-23-9	LA-508-481	U	-0.038	.063	pCi/g	1	0.088		09/21/10
Europium-154	15585-10-1	LA-508-481	U	0.029	.056	pCi/g	1	0.11		09/21/10
Europium-155	14391-16-3	LA-508-481	U	0.071	.076	pCi/g	1	0.14		09/21/10
Radium-226	13982-63-3	LA-508-481	R	0.44	.093	pCi/g	1	0.063		09/21/10
Radium-228	15262-20-1	LA-508-481		0.82	.18	pCi/g	1	0.11		09/21/10
SR-89/90										**09/23/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-1.8	.88	pCi/g	1	0.42		09/30/10
Th/Pu/Am/U Teva										**09/22/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471	J	0.033	.019	pCi/g	1	0.010		09/28/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	-1.6E-3	.0072	pCi/g	1	0.018		09/28/10
Plutonium-239/240	PU-239/240	LA-508-471	U	0.011	.0088	pCi/g	1	0.012		09/28/10
Uranium Iso										

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 # WSCF102537

Sample # 102537001
SAF# F10-256
Sample ID B27M46

Matrix SOIL
Sampled 09/14/10
Received 09/14/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium-234	U-233/234	LA-508-471		0.11	.043	pCi/g	1	0.020		09/28/10
Uranium-235	15117-96-1	LA-508-471	U	9.4E-3	.013	pCi/g	1	0.022		09/28/10
Uranium-238	U-238	LA-508-471		0.12	.045	pCi/g	1	0.020		09/28/10

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 # WSCF102537

Sample # 102537002
SAF# F10-256
Sample ID B27M47

Matrix SOIL
Sampled 09/14/10
Received 09/14/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/16/10**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.15	.057	pCi/g	1	0.036		09/21/10
Cobalt-60	10198-40-0	LA-508-481	U	5.3E-3	.021	pCi/g	1	0.039		09/21/10
Europium-152	14683-23-9	LA-508-481		0.56	.076	pCi/g	1	0.10		09/21/10
Europium-154	15585-10-1	LA-508-481	U	4.6E-3	.062	pCi/g	1	0.11		09/21/10
Europium-155	14391-16-3	LA-508-481	U	0.036	.093	pCi/g	1	0.16		09/21/10
Radium-226	13982-63-3	LA-508-481	R	0.37	.089	pCi/g	1	0.068		09/21/10
Radium-228	15262-20-1	LA-508-481		0.64	.17	pCi/g	1	0.12		09/21/10
SR-89/90										**09/23/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-2.2	.8	pCi/g	1	0.37		09/30/10
Th/Pu/Am/U Teva										**09/22/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471	J	0.032	.018	pCi/g	1	0.011		09/28/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	-1.6E-3	.0055	pCi/g	1	0.015		09/28/10
Plutonium-239/240	PU-239/240	LA-508-471		0.021	.013	pCi/g	1	0.012		09/28/10
Uranium Iso										

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 # WSCF102537

Sample # 102537002
SAF# F10-256
Sample ID B27M47

Matrix SOIL
Sampled 09/14/10
Received 09/14/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium-234	U-233/234	LA-508-471		0.19	.063	pCi/g	1	0.018		09/28/10
Uranium-235	15117-96-1	LA-508-471	U	0.018	.014	pCi/g	1	0.019		09/28/10
Uranium-238	U-238	LA-508-471		0.22	.071	pCi/g	1	0.018		09/28/10

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 # WSCF102537

Sample # 102537003
SAF# F10-256
Sample ID B27M49

Matrix SOIL
Sampled 09/14/10
Received 09/14/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/16/10**
GEA										
Cesium-137	10045-97-3	LA-508-481	U	-3.5E-3	.023	pCi/g	1	0.040		09/21/10
Cobalt-60	10198-40-0	LA-508-481	U	-6.3E-3	.021	pCi/g	1	0.037		09/21/10
Europium-152	14683-23-9	LA-508-481	U	0.030	.079	pCi/g	1	0.11		09/21/10
Europium-154	15585-10-1	LA-508-481	U	-0.028	.064	pCi/g	1	0.11		09/21/10
Europium-155	14391-16-3	LA-508-481	U	0.031	.072	pCi/g	1	0.12		09/21/10
Radium-226	13982-63-3	LA-508-481	R	0.57	.11	pCi/g	1	0.069		09/21/10
Radium-228	15262-20-1	LA-508-481		0.71	.19	pCi/g	1	0.11		09/21/10
SR-89/90										**09/23/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-1.8	.8	pCi/g	1	0.41		09/30/10
Th/Pu/Am/U Teva										**09/22/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471	J	0.027	.016	pCi/g	1	9.3E-3		09/28/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	-4.5E-3	.0066	pCi/g	1	0.018		09/28/10
Plutonium-239/240	PU-239/240	LA-508-471	U	0.0060	.0059	pCi/g	1	0.011		09/28/10
Uranium Iso										

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 # WSCF102537

Sample # 102537003
SAF# F10-256
Sample ID B27M49

Matrix SOIL
Sampled 09/14/10
Received 09/14/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium-234	U-233/234	LA-508-471		0.19	.062	pCi/g	1	0.014		09/28/10
Uranium-235	15117-96-1	LA-508-471	U	0.015	.013	pCi/g	1	0.016		09/28/10
Uranium-238	U-238	LA-508-471		0.20	.063	pCi/g	1	0.014		09/28/10

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 # WSCF102537

Sample # 102537004
SAF# F10-256
Sample ID B27MC6

Matrix SOIL
Sampled 09/14/10
Received 09/14/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/16/10**
GEA										
Cesium-137	10045-97-3	LA-508-481	U	-9.3E-3	.021	pCi/g	1	0.036		09/21/10
Cobalt-60	10198-40-0	LA-508-481	U	6.7E-3	.019	pCi/g	1	0.035		09/21/10
Europium-152	14683-23-9	LA-508-481	U	-0.045	.1	pCi/g	1	0.11		09/21/10
Europium-154	15585-10-1	LA-508-481	U	9.3E-3	.067	pCi/g	1	0.12		09/21/10
Europium-155	14391-16-3	LA-508-481	U	-0.037	.095	pCi/g	1	0.16		09/21/10
Radium-226	13982-63-3	LA-508-481	R	0.50	.1	pCi/g	1	0.064		09/21/10
Radium-228	15262-20-1	LA-508-481		0.76	.17	pCi/g	1	0.13		09/21/10
SR-89/90										**09/23/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-1.3	.8	pCi/g	1	0.43		09/30/10
Th/Pu/Am/U Teva										**09/22/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471	J	0.043	.021	pCi/g	1	0.011		09/28/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	4.3E-3	.0049	pCi/g	1	0.010		09/28/10
Plutonium-239/240	PU-239/240	LA-508-471	U	2.8E-3	.004	pCi/g	1	0.010		09/28/10
Uranium Iso										

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 # WSCF102537

Sample # 102537004
SAF# F10-256
Sample ID B27MC6

Matrix SOIL
Sampled 09/14/10
Received 09/14/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium-234	U-233/234	LA-508-471		0.080	.033	pCi/g	1	0.019		09/28/10
Uranium-235	15117-96-1	LA-508-471	U	0.011	.01	pCi/g	1	0.016		09/28/10
Uranium-238	U-238	LA-508-471		0.068	.029	pCi/g	1	0.015		09/28/10

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 # WSCF102537

Sample # 102537005
SAF# F10-256
Sample ID B27MC7

Matrix SOIL
Sampled 09/14/10
Received 09/14/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/16/10**
GEA										
Cesium-137	10045-97-3	LA-508-481	U	0.043	.03	pCi/g	1	0.044		09/21/10
Cobalt-60	10198-40-0	LA-508-481	U	-7.6E-3	.021	pCi/g	1	0.039		09/21/10
Europium-152	14683-23-9	LA-508-481		0.26	.1	pCi/g	1	0.14		09/21/10
Europium-154	15585-10-1	LA-508-481	U	0.050	.073	pCi/g	1	0.14		09/21/10
Europium-155	14391-16-3	LA-508-481	U	0.088	.12	pCi/g	1	0.22		09/21/10
Radium-226	13982-63-3	LA-508-481	R	0.83	.15	pCi/g	1	0.083		09/21/10
Radium-228	15262-20-1	LA-508-481		1.2	.23	pCi/g	1	0.13		09/21/10
SR-89/90										**09/23/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-1.6	.84	pCi/g	1	0.47		09/30/10
Th/Pu/Am/U Teva										**09/22/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471	U	0.016	.016	pCi/g	1	0.018		09/28/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	4.8E-3	.0082	pCi/g	1	0.015		09/28/10
Plutonium-239/240	PU-239/240	LA-508-471		0.013	.0091	pCi/g	1	0.012		09/28/10
Uranium Iso										

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 # WSCF102537

Sample # 102537005
SAF# F10-256
Sample ID B27MC7

Matrix SOIL
Sampled 09/14/10
Received 09/14/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium-234	U-233/234	LA-508-471		0.22	.07	pCi/g	1	0.023		09/28/10
Uranium-235	15117-96-1	LA-508-471	U	0.011	.016	pCi/g	1	0.029		09/28/10
Uranium-238	U-238	LA-508-471		0.21	.068	pCi/g	1	0.023		09/28/10

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 # WSCF102537

Sample # 102537006
SAF# F10-256
Sample ID B27MC9

Matrix SOIL
Sampled 09/14/10
Received 09/14/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/16/10**
GEA										
Cesium-137	10045-97-3	LA-508-481	U	4.8E-3	.011	pCi/g	1	0.018		09/21/10
Cobalt-60	10198-40-0	LA-508-481	U	2.8E-3	.0083	pCi/g	1	0.016		09/21/10
Europium-152	14683-23-9	LA-508-481	U	-3.0E-4	.035	pCi/g	1	0.051		09/21/10
Europium-154	15585-10-1	LA-508-481	U	-0.012	.029	pCi/g	1	0.052		09/21/10
Europium-155	14391-16-3	LA-508-481	U	0.010	.042	pCi/g	1	0.073		09/21/10
Radium-226	13982-63-3	LA-508-481	R	0.47	.074	pCi/g	1	0.033		09/21/10
Radium-228	15262-20-1	LA-508-481		0.58	.1	pCi/g	1	0.052		09/21/10
SR-89/90										**09/23/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-1.7	.78	pCi/g	1	0.40		09/30/10
Th/Pu/Am/U Teva										**09/22/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471	J	0.019	.016	pCi/g	1	0.016		09/23/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	4.2E-3	.0048	pCi/g	1	0.010		09/23/10
Plutonium-239/240	PU-239/240	LA-508-471	U	8.4E-3	.0087	pCi/g	1	0.013		09/23/10
Uranium Iso										

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 # WSCF102537

Sample # 102537006
SAF# F10-256
Sample ID B27MC9

Matrix SOIL
Sampled 09/14/10
Received 09/14/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium-234	U-233/234	LA-508-471		0.12	.045	pCi/g	1	0.017		09/28/10
Uranium-235	15117-96-1	LA-508-471	U	0.018	.014	pCi/g	1	0.019		09/28/10
Uranium-238	U-238	LA-508-471		0.15	.053	pCi/g	1	0.022		09/28/10

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 # WSCF102537

Sample # 102537007
SAF# F10-256
Sample ID B27MK9

Matrix SOIL
Sampled 09/14/10
Received 09/14/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/16/10**
GEA										
Cesium-137	10045-97-3	LA-508-481	U	-0.021	.021	pCi/g	1	0.037		09/21/10
Cobalt-60	10198-40-0	LA-508-481	U	8.9E-3	.019	pCi/g	1	0.039		09/21/10
Europium-152	14683-23-9	LA-508-481	U	-0.015	.074	pCi/g	1	0.12		09/21/10
Europium-154	15585-10-1	LA-508-481	U	0.031	.063	pCi/g	1	0.11		09/21/10
Europium-155	14391-16-3	LA-508-481	U	0.16	.17	pCi/g	1	0.18		09/21/10
Radium-226	13982-63-3	LA-508-481	R	0.97	.16	pCi/g	1	0.070		09/21/10
Radium-228	15262-20-1	LA-508-481		1.4	.24	pCi/g	1	0.13		09/21/10
SR-89/90										**09/23/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-1.0	.8	pCi/g	1	0.43		09/30/10
Th/Pu/Am/U Teva										**09/22/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471	J	0.016	.014	pCi/g	1	0.014		09/23/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	-1.6E-3	.0068	pCi/g	1	0.017		09/23/10
Plutonium-239/240	PU-239/240	LA-508-471	U	3.2E-3	.0043	pCi/g	1	0.012		09/23/10
Uranium Iso										

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 # WSCF102537

Sample # 102537007
SAF# F10-256
Sample ID B27MK9

Matrix SOIL
Sampled 09/14/10
Received 09/14/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium-234	U-233/234	LA-508-471		0.28	.082	pCi/g	1	0.028		09/28/10
Uranium-235	15117-96-1	LA-508-471		0.020	.013	pCi/g	1	0.015		09/28/10
Uranium-238	U-238	LA-508-471		0.25	.075	pCi/g	1	0.022		09/28/10

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

WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102537

Sample # 102537008
SAF# F10-256
Sample ID B27ML2

Matrix SOIL
Sampled 09/14/10
Received 09/14/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/16/10**
GEA										
Cesium-137	10045-97-3	LA-508-481	U	5.7E-3	.0087	pCi/g	1	0.016		09/20/10
Cobalt-60	10198-40-0	LA-508-481	U	-7.3E-4	.0078	pCi/g	1	0.014		09/20/10
Europium-152	14683-23-9	LA-508-481	U	0.030	.03	pCi/g	1	0.047		09/20/10
Europium-154	15585-10-1	LA-508-481	U	-0.027	.027	pCi/g	1	0.045		09/20/10
Europium-155	14391-16-3	LA-508-481	U	0.055	.051	pCi/g	1	0.064		09/20/10
Radium-226	13982-63-3	LA-508-481	R	0.40	.062	pCi/g	1	0.027		09/20/10
Radium-228	15262-20-1	LA-508-481		0.58	.11	pCi/g	1	0.049		09/20/10
SR-89/90										**09/23/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-2.0	.78	pCi/g	1	0.43		09/30/10
Th/Pu/Am/U Teva										**09/22/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471	J	0.011	.013	pCi/g	1	0.010		09/23/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	1.4E-3	.0048	pCi/g	1	0.010		09/23/10
Plutonium-239/240	PU-239/240	LA-508-471	U	4.3E-3	.0062	pCi/g	1	0.010		09/23/10
Uranium Iso										

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 # WSCF102537

Sample # 102537008
SAF# F10-256
Sample ID B27ML2

Matrix SOIL
Sampled 09/14/10
Received 09/14/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium-234	U-233/234	LA-508-471		0.14	.048	pCi/g	1	0.020		09/28/10
Uranium-235	15117-96-1	LA-508-471	U	0.012	.012	pCi/g	1	0.017		09/28/10
Uranium-238	U-238	LA-508-471		0.16	.055	pCi/g	1	0.016		09/28/10

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

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U - Analyzed for but not detected above limiting criteria.
N - Spike Recovery is Outside Control Limits.
X,Y or Z - See comment detail and/or narrative.

WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102537

Sample # 102537009
SAF# F10-256
Sample ID B27MR5

Matrix SOIL
Sampled 09/14/10
Received 09/14/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/16/10**
GEA										
Cesium-137	10045-97-3	LA-508-481	U	-0.023	.016	pCi/g	1	0.027		09/20/10
Cobalt-60	10198-40-0	LA-508-481	U	0.0040	.014	pCi/g	1	0.027		09/20/10
Europium-152	14683-23-9	LA-508-481	U	-0.025	.055	pCi/g	1	0.084		09/20/10
Europium-154	15585-10-1	LA-508-481	U	-0.012	.044	pCi/g	1	0.079		09/20/10
Europium-155	14391-16-3	LA-508-481	U	0.081	.068	pCi/g	1	0.12		09/20/10
Radium-226	13982-63-3	LA-508-481	R	1.0	.15	pCi/g	1	0.053		09/20/10
Radium-228	15262-20-1	LA-508-481		1.2	.19	pCi/g	1	0.085		09/20/10
SR-89/90										**09/23/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-0.79	.77	pCi/g	1	0.43		09/30/10
Th/Pu/Am/U Teva										**09/22/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471	J	0.031	.018	pCi/g	1	0.010		09/29/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	0.0050	.0071	pCi/g	1	0.012		09/23/10
Plutonium-239/240	PU-239/240	LA-508-471	U	9.9E-3	.008	pCi/g	1	0.013		09/23/10
Uranium Iso										

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 # WSCF102537

Sample # 102537009
SAF# F10-256
Sample ID B27MR5

Matrix SOIL
Sampled 09/14/10
Received 09/14/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium-234	U-233/234	LA-508-471		0.24	.074	pCi/g	1	0.016		09/28/10
Uranium-235	15117-96-1	LA-508-471	U	0.012	.012	pCi/g	1	0.017		09/28/10
Uranium-238	U-238	LA-508-471		0.23	.072	pCi/g	1	0.020		09/28/10

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.
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X,Y or Z - See comment detail and/or narrative.

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H4381

7896-001 B27M03

DATA SHEET

SDG	7896	Client/Case no	CHPRC	SDG_H4381
Contact	N. Joseph Verville	Contract	No. 33677	
Lab sample id	S009125-01	Client sample id	B27M03	
Dept sample id	7896-001	Location/Matrix	100-K-63 location 1 Surf	SOLID
Received	09/14/10	Collected/Weight	09/02/10 12:33	147 g
% solids	94.7	Custody/SAF No	F10-256-168	F10-256

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Nickel 63	13981-37-8	-0.543	1.8	3.07	30.0	U	NI_L

ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/07/10

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H4381

7896-002 B27M04

DATA SHEET

SDG	7896	Client/Case no	CHPRC	SDG_H4381
Contact	N. Joseph Verville	Contract	No. 33677	
Lab sample id	S009125-02	Client sample id	B27M04	
Dept sample id	7896-002	Location/Matrix	100-K-63 location 2 Surf	SOLID
Received	09/14/10	Collected/Weight	09/07/10 12:04	144 g
% solids	96.0	Custody/SAF No	F10-256-169	F10-256

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium	10028-17-8	-1.65	4.0	7.10	400	U	H
Carbon 14	14762-75-5	2.12	3.5	5.86	50.0	U	C
Nickel 63	13981-37-8	-0.345	1.8	3.01	30.0	U	NI_L
Thorium 228	14274-82-9	0.813	0.41	0.449	1.00		TH
Thorium 230	14269-63-7	0.686	0.49	0.714	1.00	U	TH
Thorium 232	TH-232	0.767	0.33	0.309	1.00		TH

ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/07/10

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H4381

7896-003 B27M05

DATA SHEET

SDG	7896	Client/Case no	CHPRC	SDG_H4381
Contact	N. Joseph Verville	Contract	No. 33677	
Lab sample id	S009125-03	Client sample id	B27M05	
Dept sample id	7896-003	Location/Matrix	100-K-63 location 3 Surf	SOLID
Received	09/14/10	Collected/Weight	09/08/10 08:13	167 g
% solids	96.1	Custody/SAF No	F10-256-170	F10-256

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium	10028-17-8	3.72	4.4	7.19	400	U	H
Carbon 14	14762-75-5	-1.25	3.2	5.55	50.0	U	C
Nickel 63	13981-37-8	-1.15	1.7	2.98	30.0	U	NI_L
Thorium 228	14274-82-9	0.801	0.41	0.493	1.00		TH
Thorium 230	14269-63-7	0.756	0.48	0.733	1.00		TH
Thorium 232	TH-232	0.716	0.32	0.304	1.00		TH

ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/07/10

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H4381

7896-004 B27M06

DATA SHEET

SDG	7896	Client/Case no	CHPRC SDG_H4381
Contact	N. Joseph Verville	Contract	No. 33677
Lab sample id	S009125-04	Client sample id	B27M06
Dept sample id	7896-004	Location/Matrix	100-K-63 location 4 Surf SOLID
Received	09/14/10	Collected/Weight	09/08/10 09:05 156 g
% solids	97.3	Custody/SAF No	F10-256-171 F10-256

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium	10028-17-8	3.77	4.3	7.04	400	U	H
Carbon 14	14762-75-5	-0.274	3.3	5.59	50.0	U	C
Nickel 63	13981-37-8	-0.602	1.7	2.89	30.0	U	NI_L
Thorium 228	14274-82-9	0.866	0.42	0.456	1.00		TH
Thorium 230	14269-63-7	0.041	0.41	0.725	1.00	U	TH
Thorium 232	TH-232	0.942	0.42	0.313	1.00		TH

ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/07/10

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H4381

7896-005 B27M07

DATA SHEET

SDG	7896	Client/Case no	CHPRC SDG_H4381
Contact	N. Joseph Verville	Contract	No. 33677
Lab sample id	S009125-05	Client sample id	B27M07
Dept sample id	7896-005	Location/Matrix	100-K-63 location 5 Surf SOLID
Received	09/14/10	Collected/Weight	09/08/10 12:20 165 g
% solids	97.1	Custody/SAF No	F10-256-172 F10-256

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium	10028-17-8	0.588	3.8	6.58	400	U	H
Carbon 14	14762-75-5	0.838	3.4	5.70	50.0	U	C
Nickel 63	13981-37-8	-0.269	1.7	2.88	30.0	U	NI_L
Thorium 228	14274-82-9	0.549	0.34	0.467	1.00		TH
Thorium 230	14269-63-7	0.336	0.42	0.742	1.00	U	TH
Thorium 232	TH-232	0.923	0.43	0.321	1.00		TH

ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/07/10

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H4381

7896-006 B27M08

DATA SHEET

SDG	7896	Client/Case no	CHPRC SDG_H4381
Contact	N. Joseph Verville	Contract	No. 33677
Lab sample id	S009125-06	Client sample id	B27M08
Dept sample id	7896-006	Location/Matrix	100-K-63 location 6 Surf SOLID
Received	09/14/10	Collected/Weight	09/09/10 07:38 125 g
% solids	96.0	Custody/SAF No	F10-256-173 F10-256

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium	10028-17-8	3.42	4.4	7.36	400	U	H
Carbon 14	14762-75-5	0.850	3.4	5.78	50.0	U	C
Nickel 63	13981-37-8	-0.608	1.5	2.66	30.0	U	NI_L
Thorium 228	14274-82-9	1.10	0.52	0.520	1.00		TH
Thorium 230	14269-63-7	0.671	0.51	0.773	1.00	U	TH
Thorium 232	TH-232	0.881	0.43	0.321	1.00		TH

ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/07/10

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H4381

7896-007 B27M09

DATA SHEET

SDG	7896	Client/Case no	CHPRC SDG_H4381
Contact	N. Joseph Verville	Contract	No. 33677
Lab sample id	S009125-07	Client sample id	B27M09
Dept sample id	7896-007	Location/Matrix	100-K-63 location 7 Surf SOLID
Received	09/14/10	Collected/Weight	09/09/10 09:08 92 g
% solids	86.7	Custody/SAF No	F10-256-174 F10-256

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium	10028-17-8	2.73	4.4	7.28	400	U	H
Carbon 14	14762-75-5	1.63	3.4	5.74	50.0	U	C
Nickel 63	13981-37-8	0.913	1.8	2.92	30.0	U	NI_L
Thorium 228	14274-82-9	1.24	0.54	0.423	1.00		TH
Thorium 230	14269-63-7	0.176	0.44	0.744	1.00	U	TH
Thorium 232	TH-232	0.307	0.26	0.336	1.00	U	TH

ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/07/10

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H4381

7896-008 B27M82

DATA SHEET

SDG	7896	Client/Case no	CHPRC	SDG_H4381
Contact	N. Joseph Verville	Contract	No. 33677	
Lab sample id	S009125-08	Client sample id	B27M82	
Dept sample id	7896-008	Location/Matrix	100-K-63 location 1 5ft	SOLID
Received	09/14/10	Collected/Weight	09/02/10 12:44	125 g
% solids	95.8	Custody/SAF No	F10-256-237	F10-256

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Nickel 63	13981-37-8	-0.931	1.7	2.89	30.0	U	NI_L

ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/07/10

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H4381

7896-009 B27M83

DATA SHEET

SDG	7896	Client/Case no	CHPRC	SDG_H4381
Contact	N. Joseph Verville	Contract	No. 33677	
Lab sample id	S009125-09	Client sample id	B27M83	
Dept sample id	7896-009	Location/Matrix	100-K-63 location 2 5ft	SOLID
Received	09/14/10	Collected/Weight	09/07/10 12:25	148 g
% solids	95.6	Custody/SAF No	F10-256-238	F10-256

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium	10028-17-8	0.409	4.4	7.64	400	U	H
Carbon 14	14762-75-5	-2.28	3.7	6.46	50.0	U	C
Nickel 63	13981-37-8	-1.77	1.7	2.93	30.0	U	NI_L
Thorium 228	14274-82-9	1.13	0.46	0.506	1.00		TH
Thorium 230	14269-63-7	0.563	0.45	0.664	1.00	U	TH
Thorium 232	TH-232	0.825	0.38	0.287	1.00		TH

ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/07/10

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H4381

7896-010 B27M84

DATA SHEET

SDG	7896	Client/Case no	CHPRC	SDG_H4381
Contact	N. Joseph Verville	Contract	No. 33677	
Lab sample id	S009125-10	Client sample id	B27M84	
Dept sample id	7896-010	Location/Matrix	100-K-63 location 3 5ft	SOLID
Received	09/14/10	Collected/Weight	09/08/10 08:30	188 g
% solids	96.7	Custody/SAF No	F10-256-239	F10-256

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium	10028-17-8	0.363	3.9	6.77	400	U	H
Carbon 14	14762-75-5	2.15	3.3	5.48	50.0	U	C
Nickel 63	13981-37-8	8.38	1.8	2.58	30.0		NI_L
Thorium 228	14274-82-9	0.759	0.38	0.364	1.00		TH
Thorium 230	14269-63-7	0.867	0.46	0.668	1.00		TH
Thorium 232	TH-232	0.943	0.38	0.288	1.00		TH

ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/07/10

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H4381

7896-011 B27M85

DATA SHEET

SDG	7896	Client/Case no	CHPRC	SDG_H4381
Contact	N. Joseph Verville	Contract	No. 33677	
Lab sample id	S009125-11	Client sample id	B27M85	
Dept sample id	7896-011	Location/Matrix	100-K-63 location 4 5ft	SOLID
Received	09/14/10	Collected/Weight	09/08/10 09:25	160 g
% solids	96.2	Custody/SAF No	F10-256-240	F10-256

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium	10028-17-8	1.03	4.2	7.20	400	U	H
Carbon 14	14762-75-5	0.748	3.5	5.87	50.0	U	C
Nickel 63	13981-37-8	-1.22	1.6	2.86	30.0	U	NI_L
Thorium 228	14274-82-9	0.796	0.45	0.489	1.00		TH
Thorium 230	14269-63-7	0.527	0.53	0.778	1.00	U	TH
Thorium 232	TH-232	0.483	0.27	0.336	1.00		TH

ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/07/10

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H4381

7896-012 B27M86

DATA SHEET

SDG	7896	Client/Case no	CHPRC	SDG_H4381
Contact	N. Joseph Verville	Contract	No. 33677	
Lab sample id	S009125-12	Client sample id	B27M86	
Dept sample id	7896-012	Location/Matrix	100-K-63 location 5 5ft	SOLID
Received	09/14/10	Collected/Weight	09/08/10 12:33	154 g
% solids	97.1	Custody/SAF No	F10-256-241	F10-256

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium	10028-17-8	2.93	4.3	7.13	400	U	H
Carbon 14	14762-75-5	-0.383	3.3	5.58	50.0	U	C
Nickel 63	13981-37-8	-0.555	1.6	2.81	30.0	U	NI_L
Thorium 228	14274-82-9	0.745	0.42	0.509	1.00		TH
Thorium 230	14269-63-7	0.288	0.41	0.728	1.00	U	TH
Thorium 232	TH-232	0.945	0.42	0.314	1.00		TH

ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/07/10

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H4381

7896-013 B27M87

DATA SHEET

SDG	7896	Client/Case no	CHPRC	SDG_H4381
Contact	N. Joseph Verville	Contract	No. 33677	
Lab sample id	S009125-13	Client sample id	B27M87	
Dept sample id	7896-013	Location/Matrix	100-K-63 location 6 5ft	SOLID
Received	09/14/10	Collected/Weight	09/09/10 07:38	137 g
% solids	95.5	Custody/SAF No	F10-256-242	F10-256

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium	10028-17-8	1.15	4.2	7.15	400	U	H
Carbon 14	14762-75-5	-0.402	3.4	5.86	50.0	U	C
Nickel 63	13981-37-8	-1.13	1.6	2.79	30.0	U	NI_L
Thorium 228	14274-82-9	1.16	0.49	0.384	1.00		TH
Thorium 230	14269-63-7	0.478	0.48	0.706	1.00	U	TH
Thorium 232	TH-232	0.877	0.41	0.305	1.00		TH

ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/07/10

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H4382

7897-001 B27M88

DATA SHEET

SDG	7897	Client/Case no	CHPRC	SDG_H4382
Contact	N. Joseph Verville	Contract	No. 33677	
Lab sample id	S009126-01	Client sample id	B27M88	
Dept sample id	7897-001	Location/Matrix	100-K-63 location 7 5ft	SOLID
Received	09/14/10	Collected/Weight	09/09/10 09:25	126.5 g
% solids	93.1	Custody/SAF No	F10-256-243	F10-256

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium	10028-17-8	2.93	4.7	7.83	400	U	H
Carbon 14	14762-75-5	-1.62	3.2	5.53	50.0	U	C
Nickel 63	13981-37-8	0.924	1.5	2.48	30.0	U	NI_L
Thorium 228	14274-82-9	0.634	0.32	0.354	1.00		TH
Thorium 230	14269-63-7	0.158	0.37	0.583	1.00	U	TH
Thorium 232	TH-232	0.605	0.27	0.201	1.00		TH

ARRA 100-K-63 KW Floodplain - In Process Sampling - Soil

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/07/10

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H4382

7897-002 B27MH3

DATA SHEET

SDG	7897	Client/Case no	CHPRC	SDG_H4382
Contact	N. Joseph Verville	Contract	No. 33677	
Lab sample id	S009126-02	Client sample id	B27MH3	
Dept sample id	7897-002	Location/Matrix	100-K-63 location 1 10ft	SOLID
Received	09/14/10	Collected/Weight	09/02/10 13:20	133.1 g
% solids	95.6	Custody/SAF No	F10-256-298	F10-256

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Nickel 63	13981-37-8	0.589	1.7	2.94	30.0	U	NI_L

ARRA 100-K-63 KW Floodplain - In Process Sampling - Soil

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/07/10

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H4382

7897-003 B27MH4

DATA SHEET

SDG	7897	Client/Case no	CHPRC SDG_H4382
Contact	N. Joseph Verville	Contract	No. 33677
Lab sample id	S009126-03	Client sample id	B27MH4
Dept sample id	7897-003	Location/Matrix	100-K-63 location 2 10ft SOLID
Received	09/14/10	Collected/Weight	09/07/10 12:35 133.2 g
% solids	91.4	Custody/SAF No	F10-256-299 F10-256

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium	10028-17-8	-1.94	5.0	8.79	400	U	H
Carbon 14	14762-75-5	1.09	2.9	4.94	50.0	U	C
Nickel 63	13981-37-8	-0.649	1.5	2.67	30.0	U	NI_L
Thorium 228	14274-82-9	1.15	0.40	0.345	1.00		TH
Thorium 230	14269-63-7	0.140	0.33	0.586	1.00	U	TH
Thorium 232	TH-232	0.446	0.23	0.213	1.00		TH

ARRA 100-K-63 KW Floodplain - In Process Sampling - Soil

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/07/10

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H4382

7897-004 B27MH5

DATA SHEET

SDG	7897	Client/Case no	CHPRC	SDG_H4382
Contact	N. Joseph Verville	Contract	No. 33677	
Lab sample id	S009126-04	Client sample id	B27MH5	
Dept sample id	7897-004	Location/Matrix	100-K-63 location 3 10ft	SOLID
Received	09/14/10	Collected/Weight	09/08/10 08:48	163.6 g
% solids	95.0	Custody/SAF No	F10-256-300	F10-256

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium	10028-17-8	1.65	4.8	8.10	400	U	H
Carbon 14	14762-75-5	0.420	2.9	4.91	50.0	U	C
Nickel 63	13981-37-8	-0.114	1.5	2.66	30.0	U	NI_L
Thorium 228	14274-82-9	0.860	0.34	0.341	1.00		TH
Thorium 230	14269-63-7	0.221	0.33	0.580	1.00	U	TH
Thorium 232	TH-232	0.580	0.28	0.211	1.00		TH

ARRA 100-K-63 KW Floodplain - In Process Sampling - Soil

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/07/10

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H4382

7897-005 B27MH6

DATA SHEET

SDG	7897	Client/Case no	CHPRC SDG_H4382
Contact	N. Joseph Verville	Contract	No. 33677
Lab sample id	S009126-05	Client sample id	B27MH6
Dept sample id	7897-005	Location/Matrix	100-K-63 location 4 10ft SOLID
Received	09/14/10	Collected/Weight	09/08/10 09:50 163.7 g
% solids	96.5	Custody/SAF No	F10-256-301 F10-256

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium	10028-17-8	3.10	4.8	7.92	400	U	H
Carbon 14	14762-75-5	1.84	3.1	5.20	50.0	U	C
Nickel 63	13981-37-8	-0.816	1.5	2.72	30.0	U	NI_L
Thorium 228	14274-82-9	0.783	0.37	0.404	1.00		TH
Thorium 230	14269-63-7	0.330	0.42	0.630	1.00	U	TH
Thorium 232	TH-232	0.510	0.24	0.229	1.00		TH

ARRA 100-K-63 KW Floodplain - In Process Sampling - Soil

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/07/10

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H4382

7897-006 B27MH7

DATA SHEET

SDG	7897	Client/Case no	CHPRC SDG_H4382
Contact	N. Joseph Verville	Contract	No. 33677
Lab sample id	S009126-06	Client sample id	B27MH7
Dept sample id	7897-006	Location/Matrix	100-K-63 location 5 10ft SOLID
Received	09/14/10	Collected/Weight	09/08/10 12:51 177.3 g
% solids	97.2	Custody/SAF No	F10-256-302 F10-256

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium	10028-17-8	1.98	4.6	7.78	400	U	H
Carbon 14	14762-75-5	1.36	2.9	4.83	50.0	U	C
Nickel 63	13981-37-8	-0.269	1.6	2.69	30.0	U	NI_L
Thorium 228	14274-82-9	0.741	0.35	0.315	1.00		TH
Thorium 230	14269-63-7	0.028	0.34	0.578	1.00	U	TH
Thorium 232	TH-232	0.539	0.23	0.217	1.00		TH

ARRA 100-K-63 KW Floodplain - In Process Sampling - Soil

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/07/10

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H4382

7897-007 B27MH8

DATA SHEET

SDG	7897	Client/Case no	CHPRC SDG_H4382
Contact	N. Joseph Verville	Contract	No. 33677
Lab sample id	S009126-07	Client sample id	B27MH8
Dept sample id	7897-007	Location/Matrix	100-K-63 location 6 10ft SOLID
Received	09/14/10	Collected/Weight	09/09/10 07:52 136.8 g
% solids	94.8	Custody/SAF No	F10-256-303 F10-256

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium	10028-17-8	2.92	5.7	9.55	400	U	H
Carbon 14	14762-75-5	0.446	3.6	6.09	50.0	U	C
Nickel 63	13981-37-8	-0.485	1.6	2.83	30.0	U	NI_L
Thorium 228	14274-82-9	0.782	0.40	0.374	1.00		TH
Thorium 230	14269-63-7	0.387	0.47	0.713	1.00	U	TH
Thorium 232	TH-232	0.851	0.39	0.296	1.00		TH

ARRA 100-K-63 KW Floodplain - In Process Sampling - Soil

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/07/10

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H4382

7897-008 B27MH9

DATA SHEET

SDG	7897	Client/Case no	CHPRC SDG_H4382
Contact	N. Joseph Verville	Contract	No. 33677
Lab sample id	S009126-08	Client sample id	B27MH9
Dept sample id	7897-008	Location/Matrix	100-K-63 location 7 10ft SOLID
Received	09/14/10	Collected/Weight	09/09/10 09:45 129.2 g
% solids	94.5	Custody/SAF No	F10-256-304 F10-256

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium	10028-17-8	-1.84	5.6	9.84	400	U	H
Carbon 14	14762-75-5	0.074	3.5	6.04	50.0	U	C
Nickel 63	13981-37-8	-0.942	1.7	2.99	30.0	U	NI_L
Thorium 228	14274-82-9	0.742	0.32	0.293	1.00		TH
Thorium 230	14269-63-7	0.501	0.42	0.554	1.00	U	TH
Thorium 232	TH-232	0.818	0.32	0.202	1.00		TH

ARRA 100-K-63 KW Floodplain - In Process Sampling - Soil

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/07/10

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H4382

7897-009 B27MM8

DATA SHEET

SDG	7897	Client/Case no	CHPRC SDG_H4382
Contact	N. Joseph Verville	Contract	No. 33677
Lab sample id	S009126-09	Client sample id	B27MM8
Dept sample id	7897-009	Location/Matrix	100-K-63 location 4 15ft SOLID
Received	09/14/10	Collected/Weight	09/08/10 12:00 110.7 g
% solids	95.4	Custody/SAF No	F10-256-341 F10-256

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium	10028-17-8	0.937	5.4	9.18	400	U	H
Carbon 14	14762-75-5	0.844	3.4	5.76	50.0	U	C
Nickel 63	13981-37-8	0.148	2.0	3.46	30.0	U	NI_L
Thorium 228	14274-82-9	0.716	0.36	0.400	1.00		TH
Thorium 230	14269-63-7	0.505	0.42	0.606	1.00	U	TH
Thorium 232	TH-232	0.891	0.30	0.227	1.00		TH

ARRA 100-K-63 KW Floodplain - In Process Sampling - Soil

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/07/10

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H4382

7897-010 B27MM9

DATA SHEET

SDG	7897	Client/Case no	CHPRC	SDG_H4382
Contact	N. Joseph Verville	Contract	No. 33677	
Lab sample id	S009126-10	Client sample id	B27MM9	
Dept sample id	7897-010	Location/Matrix	100K63 location4 15ftDup	SOLID
Received	09/14/10	Collected/Weight	09/08/10 12:00	111.7 g
% solids	95.4	Custody/SAF No	F10-256-342	F10-256

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium	10028-17-8	-0.578	4.9	8.50	400	U	H
Carbon 14	14762-75-5	0.483	3.3	5.65	50.0	U	C
Nickel 63	13981-37-8	-0.369	1.5	2.58	30.0	U	NI_L
Thorium 228	14274-82-9	0.918	0.38	0.389	1.00		TH
Thorium 230	14269-63-7	0.161	0.32	0.565	1.00	U	TH
Thorium 232	TH-232	0.618	0.27	0.206	1.00		TH

ARRA 100-K-63 KW Floodplain - In Process Sampling - Soil

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/07/10

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H4382

7897-011 B27MN0

DATA SHEET

SDG	7897	Client/Case no	CHPRC SDG_H4382
Contact	N. Joseph Verville	Contract	No. 33677
Lab sample id	S009126-11	Client sample id	B27MN0
Dept sample id	7897-011	Location/Matrix	100-K-63 location 5 15ft SOLID
Received	09/14/10	Collected/Weight	09/08/10 13:10 142.6 g
% solids	97.1	Custody/SAF No	F10-256-343 F10-256

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium	10028-17-8	1.69	4.9	8.29	400	U	H
Carbon 14	14762-75-5	0.965	3.1	5.27	50.0	U	C
Nickel 63	13981-37-8	-0.408	2.1	3.56	30.0	U	NI_L
Thorium 228	14274-82-9	1.32	0.40	0.235	1.00		TH
Thorium 230	14269-63-7	0.366	0.39	0.542	1.00	U	TH
Thorium 232	TH-232	0.611	0.25	0.187	1.00		TH

ARRA 100-K-63 KW Floodplain - In Process Sampling - Soil

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/07/10

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H4382

7897-012 B27MN1

DATA SHEET

SDG	7897	Client/Case no	CHPRC SDG_H4382
Contact	N. Joseph Verville	Contract	No. 33677
Lab sample id	S009126-12	Client sample id	B27MN1
Dept sample id	7897-012	Location/Matrix	100-K-63 location 6 15ft SOLID
Received	09/14/10	Collected/Weight	09/09/10 08:46 123.5 g
% solids	96.2	Custody/SAF No	F10-256-344 F10-256

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium	10028-17-8	4.42	5.2	8.65	400	U	H
Carbon 14	14762-75-5	-1.61	3.0	5.29	50.0	U	C
Nickel 63	13981-37-8	-1.40	1.5	2.71	30.0	U	NI_L
Thorium 228	14274-82-9	0.922	0.40	0.405	1.00		TH
Thorium 230	14269-63-7	0.622	0.46	0.647	1.00	U	TH
Thorium 232	TH-232	0.688	0.33	0.250	1.00		TH

ARRA 100-K-63 KW Floodplain - In Process Sampling - Soil

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/07/10

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H4382

7897-013 B27MN2

DATA SHEET

SDG	7897	Client/Case no	CHPRC SDG_H4382
Contact	N. Joseph Verville	Contract	No. 33677
Lab sample id	S009126-13	Client sample id	B27MN2
Dept sample id	7897-013	Location/Matrix	100-K-63 location 7 15ft SOLID
Received	09/14/10	Collected/Weight	09/09/10 10:06 113.1 g
% solids	95.5	Custody/SAF No	F10-256-345 F10-256

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium	10028-17-8	1.96	4.5	7.67	400	U	H
Carbon 14	14762-75-5	2.44	3.2	5.27	50.0	U	C
Nickel 63	13981-37-8	-0.777	1.5	2.72	30.0	U	NI_L
Thorium 228	14274-82-9	0.718	0.38	0.418	1.00		TH
Thorium 230	14269-63-7	0.639	0.45	0.692	1.00	U	TH
Thorium 232	TH-232	0.714	0.31	0.288	1.00		TH

ARRA 100-K-63 KW Floodplain - In Process Sampling - Soil

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/07/10

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H4383

7898-001 B27MR8

DATA SHEET

SDG	7898	Client/Case no	CHPRC	SDG_H4383
Contact	N. Joseph Verville	Contract	No. 33677	
Lab sample id	S009127-01	Client sample id	B27MR8	
Dept sample id	7898-001	Location/Matrix	100-K-63 In-Process EB	WATER
Received	09/14/10	Collected/Volume	09/02/10 12:18	2.0 L
		Custody/SAF No	F10-268-002	F10-268

ANALYTE	CAS NO	RESULT pCi/L	2σ ERR (COUNT)	MDA pCi/L	RDL pCi/L	QUALI-FIERS	TEST
Nickel 63	13981-37-8	-0.643	1.5	2.71	15.0	U	NI_L

ARRA 100-K-63 KW Floodplain In Process Sampling - QC Sampling

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/04/10

EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4393

7704-001 **B27M10**

DATA SHEET

SDG	7704	Client/Case no	CHPRC	SDG_H4393
Contact	N. Joseph Verville	Contract	No. 33677	
Lab sample id	S009151-01	Client sample id	B27M10	
Dept sample id	7704-001	Location/Matrix	100-K-63 location 8 Surf	SOLID
Received	09/18/10	Collected/Weight	09/13/10 07:40	157 g
% solids	93.8	Custody/SAF No	F10-256-175	F10-256

ANALYTE		CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium		10028-17-8	-0.244	4.0	6.98	400	U	H
Carbon 14	J	14762-75-5	116	4.4	4.01	50.0		C
Nickel 63		13981-37-8	0.787	1.8	3.05	30.0	U	NI_L
Thorium 228		14274-82-9	1.02	0.64	0.872	1.00		TH
Thorium 230		14269-63-7	0.629	0.63	1.13	1.00	U	TH
Thorium 232		TH-232	0.472	0.32	0.601	1.00	U	TH

ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/13/10

EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4393

7704-002 B27M12

DATA SHEET

SDG	7704	Client/Case no	CHPRC	SDG H4393
Contact	N. Joseph Verville	Contract	No. 33677	
Lab sample id	S009151-02	Client sample id	B27M12	
Dept sample id	7704-002	Location/Matrix	100-K-63 location 10 Sur	SOLID
Received	09/18/10	Collected/Weight	09/13/10 08:45	120 g
% solids	95.0	Custody/SAF No	F10-256-177	F10-256

ANALYTE		CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium		10028-17-8	-0.149	4.9	8.55	400	U	H
Carbon 14	UJ	14762-75-5	0.903	3.9	6.55	50.0	U	C
Nickel 63		13981-37-8	3.38	1.9	2.92	30.0		NI_L
Thorium 228		14274-82-9	1.36	0.80	1.08	1.00		TH
Thorium 230		14269-63-7	1.16	0.79	1.30	1.00	U	TH
Thorium 232		TH-232	1.16	0.60	0.742	1.00		TH

ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

EH
12/15/11

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/13/10

EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4393

7704-003 B27M13

DATA SHEET

SDG	7704	Client/Case no	CHPRC SDG_H4393
Contact	N. Joseph Verville	Contract	No. 33677
Lab sample id	S009151-03	Client sample id	B27M13
Dept sample id	7704-003	Location/Matrix	100-K-63 location 11 Sur SOLID
Received	09/18/10	Collected/Weight	09/13/10 10:00 142 g
% solids	95.4	Custody/SAF No	F10-256-178 F10-256

ANALYTE		CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium		10028-17-8	1.39	4.7	7.97	400	U	H
Carbon 14	UJ	14762-75-5	-0.296	3.5	6.01	50.0	U	C
Nickel 63		13981-37-8	0.702	1.6	2.72	30.0	U	NI_L
Thorium 228		14274-82-9	0.716	0.45	0.551	1.00		TH
Thorium 230		14269-63-7	0.268	0.45	0.822	1.00	U	TH
Thorium 232		TH-232	0.758	0.36	0.341	1.00		TH

ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

EH
12/15/11

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/13/10

EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4393

7704-004 **B27M14**

DATA SHEET

SDG	7704	Client/Case no	CHPRC SDG_H4393
Contact	N. Joseph Verville	Contract	No. 33677
Lab sample id	S009151-04	Client sample id	B27M14
Dept sample id	7704-004	Location/Matrix	100-K-63 location 12 Sur SOLID
Received	09/18/10	Collected/Weight	09/14/10 08:00 177 g
% solids	97.7	Custody/SAF No	F10-256-179 F10-256

ANALYTE		CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium		10028-17-8	2.71	4.4	7.39	400	U	H
Carbon 14	UJ	14762-75-5	-0.503	3.3	5.67	50.0	U	C
Nickel 63		13981-37-8	0.475	1.9	3.18	30.0	U	NI_L
Thorium 228		14274-82-9	1.06	0.58	0.674	1.00		TH
Thorium 230		14269-63-7	0.351	0.56	0.941	1.00	U	TH
Thorium 232		TH-232	1.19	0.58	0.537	1.00		TH

ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

EH
12/15/11

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/13/10

EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4393

7704-005 **B27M15**

DATA SHEET

SDG	7704	Client/Case no	CHPRC SDG_H4393
Contact	N. Joseph Verville	Contract	No. 33677
Lab sample id	S009151-05	Client sample id	B27M15
Dept sample id	7704-005	Location/Matrix	100-K-63 location 13 Sur SOLID
Received	09/18/10	Collected/Weight	09/14/10 08:45 170 g
% solids	96.4	Custody/SAF No	F10-256-180 F10-256

ANALYTE		CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium		10028-17-8	1.49	5.0	8.53	400	U	H
Carbon 14	UJ	14762-75-5	0.933	3.8	6.31	50.0	U	C
Nickel 63		13981-37-8	3.57	1.9	3.06	30.0		NI_L
Thorium 228		14274-82-9	0.378	0.61	0.931	1.00	U	TH
Thorium 230		14269-63-7	0.452	0.61	1.08	1.00	U	TH
Thorium 232		TH-232	0.377	0.45	0.577	1.00	U	TH

ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

EH
12/15/11

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/13/10

EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4393

7704-006 B27M17

DATA SHEET

SDG	7704	Client/Case no	CHPRC	SDG_H4393
Contact	N. Joseph Verville	Contract	No. 33677	
Lab sample id	S009151-06	Client sample id	B27M17	
Dept sample id	7704-006	Location/Matrix	100-K-63 location 15 Sur	SOLID
Received	09/18/10	Collected/Weight	09/14/10 09:25	158 g
% solids	96.0	Custody/SAF No	F10-256-182	F10-256

ANALYTE		CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium		10028-17-8	0.497	4.1	7.11	400	U	H
Carbon 14	UJ	14762-75-5	-0.679	3.4	5.74	50.0	U	C
Nickel 63		13981-37-8	0.082	1.8	3.04	30.0	U	NI_L
Thorium 228		14274-82-9	1.06	0.57	0.747	1.00		TH
Thorium 230		14269-63-7	0.556	0.56	0.850	1.00	U	TH
Thorium 232		TH-232	0.945	0.45	0.425	1.00		TH

ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

EH
12/15/11

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/13/10

EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4393

7704-007 **B27M89**

DATA SHEET

SDG	7704	Client/Case no	CHPRC	SDG H4393	
Contact	N. Joseph Verville	Contract	No. 33677		
Lab sample id	S009151-07	Client sample id	B27M89		
Dept sample id	7704-007	Location/Matrix	100-K-63 location 8 5ft	SOLID	
Received	09/18/10	Collected/Weight	09/13/10 08:00	165 g	
% solids	96.3	Custody/SAF No	F10-256-244	F10-256	

ANALYTE		CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium		10028-17-8	6.87	5.7	9.14	400	U	H
Carbon 14	UJ	14762-75-5	1.21	4.1	6.84	50.0	U	C
Nickel 63		13981-37-8	-0.114	1.6	2.81	30.0	U	NI_L
Thorium 228		14274-82-9	0.871	0.71	0.963	1.00	U	TH
Thorium 230		14269-63-7	0.608	0.53	1.07	1.00	U	TH
Thorium 232		TH-232	0.868	0.53	0.664	1.00		TH

ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

EH
12/15/11

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/13/10

EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4393

7704-008 **B27M91**

DATA SHEET

SDG	7704	Client/Case no	CHPRC	SDG_H4393
Contact	N. Joseph Verville	Contract	No. 33677	
Lab sample id	S009151-08	Client sample id	B27M91	
Dept sample id	7704-008	Location/Matrix	100-K-63 location 10 5ft	SOLID
Received	09/18/10	Collected/Weight	09/13/10 09:00	130 g
% solids	95.9	Custody/SAF No	F10-256-246	F10-256

ANALYTE		CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium		10028-17-8	4.60	4.6	7.53	400	U	H
Carbon 14	UJ	14762-75-5	1.86	3.5	5.90	50.0	U	C
Nickel 63		13981-37-8	-0.561	1.7	2.95	30.0	U	NI_L
Thorium 228		14274-82-9	1.54	0.88	1.05	1.00		TH
Thorium 230		14269-63-7	1.02	0.86	1.30	1.00	U	TH
Thorium 232		TH-232	0.933	0.52	0.649	1.00		TH

ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

EH
12/15/11

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/13/10

EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4393

7704-009 **B27M92**

DATA SHEET

SDG	7704	Client/Case no	CHPRC	SDG_H4393
Contact	N. Joseph Verville	Contract	No. 33677	
Lab sample id	S009151-09	Client sample id	B27M92	
Dept sample id	7704-009	Location/Matrix	100-K-63 location 11 5ft	SOLID
Received	09/18/10	Collected/Weight	09/13/10 10:15	144 g
% solids	96.2	Custody/SAF No	F10-256-247	F10-256

ANALYTE		CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium		10028-17-8	0.942	4.5	7.70	400	U	H
Carbon 14	UJ	14762-75-5	2.34	3.7	6.08	50.0	U	C
Nickel 63		13981-37-8	0.721	1.8	2.95	30.0	U	NI_L
Thorium 228		14274-82-9	1.10	0.54	0.541	1.00		TH
Thorium 230		14269-63-7	1.75	0.72	0.776	1.00		TH
Thorium 232		TH-232	0.964	0.45	0.335	1.00		TH

ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

EH
12/15/11

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/13/10

EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4393

7704-010 B27M93

DATA SHEET

SDG	7704	Client/Case no	CHPRC SDG_H4393
Contact	N. Joseph Verville	Contract	No. 33677
Lab sample id	S009151-10	Client sample id	B27M93
Dept sample id	7704-010	Location/Matrix	100-K-63 location 12 5ft SOLID
Received	09/18/10	Collected/Weight	09/14/10 08:20 150 g
% solids	97.4	Custody/SAF No	F10-256-248 F10-256

ANALYTE		CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium		10028-17-8	-0.704	4.6	8.05	400	U	H
Carbon 14	UJ	14762-75-5	2.44	3.9	6.52	50.0	U	C
Nickel 63		13981-37-8	0.489	1.8	3.00	30.0	U	NI_L
Thorium 228		14274-82-9	1.03	0.60	0.703	1.00		TH
Thorium 230		14269-63-7	0.073	0.44	0.981	1.00	U	TH
Thorium 232		TH-232	0.439	0.30	0.560	1.00	U	TH

ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

EH
12/15/11

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/13/10

EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4393

7704-011 **B27M94**

DATA SHEET

SDG	7704	Client/Case no	CHPRC SDG_H4393
Contact	N. Joseph Verville	Contract	No. 33677
Lab sample id	S009151-11	Client sample id	B27M94
Dept sample id	7704-011	Location/Matrix	100-K-63 location 13 5ft SOLID
Received	09/18/10	Collected/Weight	09/14/10 09:05 104 g
% solids	93.3	Custody/SAF No	F10-256-249 F10-256

ANALYTE		CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium		10028-17-8	3.04	4.4	7.24	400	U	H
Carbon 14	UJ	14762-75-5	2.60	3.5	5.75	50.0	U	C
Nickel 63		13981-37-8	1.61	1.8	2.97	30.0	U	NI_L
Thorium 228		14274-82-9	0.880	0.35	0.324	1.00		TH
Thorium 230		14269-63-7	0.405	0.41	0.644	1.00	U	TH
Thorium 232		TH-232	0.944	0.35	0.258	1.00		TH

ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

EH
12/15/11

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/13/10

EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4393

7704-012 **B27M96**

DATA SHEET

SDG	7704	Client/Case no	CHPRC	SDG_H4393	
Contact	N. Joseph Verville	Contract	No. 33677		
Lab sample id	S009151-12	Client sample id	B27M96		
Dept sample id	7704-012	Location/Matrix	100-K-63 location 15 5ft	SOLID	
Received	09/18/10	Collected/Weight	09/14/10 09:40	163 g	
% solids	94.6	Custody/SAF No	F10-256-251	F10-256	

ANALYTE		CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium		10028-17-8	2.81	4.2	6.99	400	U	H
Carbon 14	UJ	14762-75-5	1.96	3.3	5.52	50.0	U	C
Nickel 63		13981-37-8	1.27	1.8	3.02	30.0	U	NI_L
Thorium 228		14274-82-9	1.10	0.45	0.450	1.00		TH
Thorium 230		14269-63-7	0.691	0.44	0.695	1.00	U	TH
Thorium 232		TH-232	0.836	0.37	0.278	1.00		TH

ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

EH
12/15/11

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/13/10

EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4393

7704-013 B27MJ0

DATA SHEET

SDG	7704	Client/Case no	CHPRC SDG_H4393
Contact	N. Joseph Verville	Contract	No. 33677
Lab sample id	S009151-13	Client sample id	B27MJ0
Dept sample id	7704-013	Location/Matrix	100-K-63 location 8 10ft SOLID
Received	09/18/10	Collected/Weight	09/13/10 08:15 151 g
% solids	95.6	Custody/SAF No	F10-256-305 F10-256

ANALYTE		CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium		10028-17-8	2.11	4.2	7.10	400	U	H
Carbon 14	UJ	14762-75-5	-0.960	3.4	5.73	50.0	U	C
Nickel 63		13981-37-8	0.590	1.7	2.90	30.0	U	NI_L
Thorium 228		14274-82-9	1.02	0.45	0.489	1.00		TH
Thorium 230		14269-63-7	0.220	0.44	0.780	1.00	U	TH
Thorium 232		TH-232	0.882	0.36	0.337	1.00		TH

ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

EH
12/15/11

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/13/10

EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4393

7704-014 B27MJ2

DATA SHEET

SDG	7704	Client/Case no	CHPRC	SDG_H4393
Contact	N. Joseph Verville	Contract	No. 33677	
Lab sample id	S009151-14	Client sample id	B27MJ2	
Dept sample id	7704-014	Location/Matrix	100-K-63 location 10 10f	SOLID
Received	09/18/10	Collected/Weight	09/13/10 09:25	131 g
% solids	95.8	Custody/SAF No	F10-256-307	F10-256

ANALYTE		CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium		10028-17-8	0.752	5.0	8.61	400	U	H
Carbon 14	UJ	14762-75-5	3.10	4.1	6.85	50.0	U	C
Nickel 63		13981-37-8	0.296	1.8	3.11	30.0	U	NI_L
Thorium 228		14274-82-9	0.615	0.37	0.400	1.00		TH
Thorium 230		14269-63-7	0.108	0.36	0.689	1.00	U	TH
Thorium 232		TH-232	0.685	0.29	0.276	1.00		TH

ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

EH
12/15/11

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/13/10

EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4393

7704-015 **B27MJ3**

DATA SHEET

SDG	7704	Client/Case no	CHPRC SDG_H4393
Contact	N. Joseph Verville	Contract	No. 33677
Lab sample id	S009151-15	Client sample id	B27MJ3
Dept sample id	7704-015	Location/Matrix	100-K-63 location 11 10f SOLID
Received	09/18/10	Collected/Weight	09/13/10 10:40 153 g
% solids	94.5	Custody/SAF No	F10-256-308 F10-256

ANALYTE		CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium		10028-17-8	2.98	5.1	8.54	400	U	H
Carbon 14	UJ	14762-75-5	3.75	4.1	6.67	50.0	U	C
Nickel 63		13981-37-8	0.218	1.9	3.22	30.0	U	NI_L
Thorium 228		14274-82-9	1.13	0.43	0.436	1.00		TH
Thorium 230		14269-63-7	0.495	0.43	0.698	1.00	U	TH
Thorium 232		TH-232	0.671	0.36	0.270	1.00		TH

ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

EH
12/15/11

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/13/10

EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4393

7704-016 B27MJ4

DATA SHEET

SDG	7704	Client/Case no	CHPRC SDG_H4393
Contact	N. Joseph Verville	Contract	No. 33677
Lab sample id	S009151-16	Client sample id	B27MJ4
Dept sample id	7704-016	Location/Matrix	100-K-63 location 12 10f SOLID
Received	09/18/10	Collected/Weight	09/14/10 08:30 113 g
% solids	93.1	Custody/SAF No	F10-256-309 F10-256

ANALYTE		CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium		10028-17-8	2.33	4.7	7.83	400	U	H
Carbon 14	UJ	14762-75-5	0.301	3.6	6.12	50.0	U	C
Nickel 63		13981-37-8	0.728	1.7	2.82	30.0	U	NI_L
Thorium 228		14274-82-9	0.936	0.43	0.408	1.00		TH
Thorium 230		14269-63-7	0.170	0.42	0.719	1.00	U	TH
Thorium 232		TH-232	0.764	0.35	0.324	1.00		TH

ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

EH
12/15/11

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/13/10

EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4393

7704-017 **B27MJ7**

DATA SHEET

SDG	7704	Client/Case no	CHPRC SDG_H4393
Contact	N. Joseph Verville	Contract	No. 33677
Lab sample id	S009151-17	Client sample id	B27MJ7
Dept sample id	7704-017	Location/Matrix	100-K-63 location 15 10f SOLID
Received	09/18/10	Collected/Weight	09/14/10 09:50 166 g
% solids	94.8	Custody/SAF No	F10-256-312 F10-256

ANALYTE		CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium		10028-17-8	4.27	4.5	7.40	400	U	H
Carbon 14	UJ	14762-75-5	4.90	3.7	6.07	50.0	U	C
Nickel 63		13981-37-8	0.206	1.8	3.03	30.0	U	NI_L
Thorium 228		14274-82-9	0.831	0.33	0.306	1.00		TH
Thorium 230		14269-63-7	0.446	0.38	0.609	1.00	U	TH
Thorium 232		TH-232	0.828	0.32	0.244	1.00		TH

ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

EH
12/15/11

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/13/10

EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4393

7704-018 B27MN3

DATA SHEET

SDG	7704	Client/Case no	CHPRC SDG_H4393
Contact	N. Joseph Verville	Contract	No. 33677
Lab sample id	S009151-18	Client sample id	B27MN3
Dept sample id	7704-018	Location/Matrix	100-K-63 location 8 15ft SOLID
Received	09/18/10	Collected/Weight	09/13/10 08:31 126 g
% solids	97.6	Custody/SAF No	F10-256-346 F10-256

ANALYTE		CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium		10028-17-8	1.11	4.1	7.06	400	U	H
Carbon 14	UJ	14762-75-5	2.06	3.3	5.49	50.0	U	C
Nickel 63		13981-37-8	1.94	1.8	2.92	30.0	U	NI_L
Thorium 228		14274-82-9	1.24	0.51	0.554	1.00		TH
Thorium 230		14269-63-7	0.412	0.41	0.699	1.00	U	TH
Thorium 232		TH-232	0.949	0.42	0.316	1.00		TH

ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

EH
12/15/11

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/13/10

EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4393

7704-019 **B27MN5**

DATA SHEET

SDG	7704	Client/Case no	CHPRC	SDG_H4393
Contact	N. Joseph Verville	Contract	No. 33677	
Lab sample id	S009151-19	Client sample id	B27MN5	
Dept sample id	7704-019	Location/Matrix	100-K-63 location 10 15f	SOLID
Received	09/18/10	Collected/Weight	09/13/10 09:40	122 g
% solids	95.7	Custody/SAF No	F10-256-348	F10-256

ANALYTE		CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium		10028-17-8	1.56	4.4	7.45	400	U	H
Carbon 14	UJ	14762-75-5	2.86	3.6	5.92	50.0	U	C
Nickel 63		13981-37-8	1.04	2.0	3.34	30.0	U	NI_L
Thorium 228		14274-82-9	0.958	0.43	0.340	1.00		TH
Thorium 230		14269-63-7	0.177	0.35	0.652	1.00	U	TH
Thorium 232		TH-232	0.566	0.29	0.271	1.00		TH

ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

EH
12/15/11

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/13/10

EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4393

7704-020 **B27MN6**

DATA SHEET

SDG	7704	Client/Case no	CHPRC	SDG_H4393	
Contact	N. Joseph Verville	Contract	No. 33677		
Lab sample id	S009151-20	Client sample id	B27MN6		
Dept sample id	7704-020	Location/Matrix	100-K-63 location 11 15f	SOLID	
Received	09/18/10	Collected/Weight	09/13/10 12:20	126 g	
% solids	95.2	Custody/SAF No	F10-256-349	F10-256	

ANALYTE		CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium		10028-17-8	1.14	4.8	8.12	400	U	H
Carbon 14	UJ	14762-75-5	1.86	3.8	6.29	50.0	U	C
Nickel 63		13981-37-8	1.23	1.8	2.92	30.0	U	NI_L
Thorium 228		14274-82-9	1.03	0.46	0.497	1.00		TH
Thorium 230		14269-63-7	0.179	0.45	0.793	1.00	U	TH
Thorium 232		TH-232	0.896	0.37	0.343	1.00		TH

ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

EH
12/15/11

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/13/10

EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4393

7704-021 **B27MP0**

DATA SHEET

SDG	7704	Client/Case no	CHPRC	SDG_H4393	
Contact	N. Joseph Verville	Contract	No. 33677		
Lab sample id	S009151-21	Client sample id	B27MP0		
Dept sample id	7704-021	Location/Matrix	100-K-63 location 15 15f	SOLID	
Received	09/18/10	Collected/Weight	09/14/10 10:05	97 g	
% solids	93.1	Custody/SAF No	F10-256-353	F10-256	

ANALYTE		CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium		10028-17-8	0.407	4.5	7.76	400	U	H
Carbon 14	UJ	14762-75-5	3.30	4.0	6.57	50.0	U	C
Nickel 63		13981-37-8	0.421	1.7	2.82	30.0	U	NI_L
Thorium 228		14274-82-9	0.613	0.36	0.444	1.00		TH
Thorium 230		14269-63-7	0.395	0.43	0.687	1.00	U	TH
Thorium 232		TH-232	0.324	0.22	0.275	1.00		TH

ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

EH
12/15/11

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/13/10

EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4407

7706-001 **B27M18**

DATA SHEET

SDG	7706	Client/Case no	CHPRC	SDG_H4407
Contact	N. Joseph Verville	Contract	No. 33677	
Lab sample id	S009218-01	Client sample id	B27M18	
Dept sample id	7706-001	Location/Matrix	100-K-63 location 16 Sur	SOLID
Received	09/23/10	Collected/Weight	09/20/10 07:30	145 g
% solids	96.8	Custody/SAF No	F10-256-183	F10-256

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium	10028-17-8	4.66	4.7	7.70	400	U	H
Carbon 14	14762-75-5	-0.696	3.1	5.29	50.0	U	C
Nickel 63	13981-37-8	-0.083	2.0	3.49	30.0	U	NI_L
Thorium 228	14274-82-9	1.02	0.43	0.470	1.00		TH
Thorium 230	14269-63-7	0.424	0.43	0.751	1.00	U	TH
Thorium 232	TH-232	1.44	0.52	0.324	1.00		TH

ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/12/10

EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4407

7706-002 B27M19

DATA SHEET

SDG	7706	Client/Case no	CHPRC	SDG_H4407
Contact	N. Joseph Verville	Contract	No. 33677	
Lab sample id	S009218-02	Client sample id	B27M19	
Dept sample id	7706-002	Location/Matrix	100-K-63 location 17 Sur	SOLID
Received	09/23/10	Collected/Weight	09/20/10 08:15	155 g
% solids	98.2	Custody/SAF No	F10-256-184	F10-256

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium	10028-17-8	2.30	4.4	7.39	400	U	H
Carbon 14	14762-75-5	0.343	2.8	4.77	50.0	U	C
Nickel 63	13981-37-8	-0.803	1.7	2.92	30.0	U	NI_L
Thorium 228	14274-82-9	0.799	0.45	0.595	1.00		TH
Thorium 230	14269-63-7	0.443	0.44	0.784	1.00	U	TH
Thorium 232	TH-232	0.620	0.36	0.339	1.00		TH

ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
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EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4407

7706-003 B27M20

DATA SHEET

SDG	7706	Client/Case no	CHPRC	SDG H4407
Contact	N. Joseph Verville	Contract	No. 33677	
Lab sample id	S009218-03	Client sample id	B27M20	
Dept sample id	7706-003	Location/Matrix	100-K-63 location 18 Sur	SOLID
Received	09/23/10	Collected/Weight	09/20/10 08:45	119 g
% solids	96.2	Custody/SAF No	F10-256-185	F10-256

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium	10028-17-8	-1.66	4.5	7.99	400	U	H
Carbon 14	14762-75-5	0.329	3.2	5.50	50.0	U	C
Nickel 63	13981-37-8	-1.00	1.9	3.24	30.0	U	NI_L
Thorium 228	14274-82-9	1.07	0.57	0.692	1.00		TH
Thorium 230	14269-63-7	1.68	0.69	0.859	1.00		TH
Thorium 232	TH-232	0.898	0.46	0.429	1.00		TH

ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/12/10

EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4407

7706-004 B27M21

DATA SHEET

SDG	7706	Client/Case no	CHPRC SDG_H4407
Contact	N. Joseph Verville	Contract	No. 33677
Lab sample id	S009218-04	Client sample id	B27M21
Dept sample id	7706-004	Location/Matrix	100-K-63 location 19 Sur SOLID
Received	09/23/10	Collected/Weight	09/20/10 09:15 144 g
% solids	95.8	Custody/SAF No	F10-256-186 F10-256

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium	10028-17-8	2.40	5.2	8.69	400	U	H
Carbon 14	14762-75-5	0.985	3.5	5.88	50.0	U	C
Nickel 63	13981-37-8	-0.643	1.9	3.36	30.0	U	NI_L
Thorium 228	14274-82-9	1.19	0.56	0.612	1.00		TH
Thorium 230	14269-63-7	1.41	0.65	0.773	1.00		TH
Thorium 232	TH-232	0.730	0.37	0.349	1.00		TH

ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/12/10

EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4407

7706-005 B27M22

DATA SHEET

SDG	7706	Client/Case no	CHPRC SDG_H4407
Contact	N. Joseph Verville	Contract	No. 33677
Lab sample id	S009218-05	Client sample id	B27M22
Dept sample id	7706-005	Location/Matrix	100-K-63 location 20 Sur SOLID
Received	09/23/10	Collected/Weight	09/20/10 09:45 183 g
% solids	97.7	Custody/SAF No	F10-256-187 F10-256

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium	10028-17-8	0.249	4.2	7.21	400	U	H
Carbon 14	14762-75-5	0.181	3.0	5.03	50.0	U	C
Nickel 63	13981-37-8	-1.07	1.7	2.99	30.0	U	NI_L
Thorium 228	14274-82-9	1.12	0.49	0.444	1.00		TH
Thorium 230	14269-63-7	1.92	0.66	0.738	1.00		TH
Thorium 232	TH-232	1.28	0.49	0.306	1.00		TH

ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/12/10

EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4407

7706-006 B27M97

DATA SHEET

SDG	7706	Client/Case no	CHPRC SDG_H4407
Contact	N. Joseph Verville	Contract	No. 33677
Lab sample id	S009218-06	Client sample id	B27M97
Dept sample id	7706-006	Location/Matrix	100-K-63 location 16 5ft SOLID
Received	09/23/10	Collected/Weight	09/20/10 07:50 110 g
% solids	88.5	Custody/SAF No	F10-256-252 F10-256

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium	10028-17-8	0.790	4.4	7.62	400	U	H
Carbon 14	14762-75-5	-0.837	3.1	5.38	50.0	U	C
Nickel 63	13981-37-8	-2.12	1.9	3.41	30.0	U	NI_L
Thorium 228	14274-82-9	1.56	0.64	0.576	1.00		TH
Thorium 230	14269-63-7	0.728	0.52	0.839	1.00	U	TH
Thorium 232	TH-232	1.51	0.54	0.398	1.00		TH

ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/12/10

EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4407

7706-007 B27M98

DATA SHEET

SDG	7706	Client/Case no	CHPRC	SDG_H4407
Contact	N. Joseph Verville	Contract	No. 33677	
Lab sample id	S009218-07	Client sample id	B27M98	
Dept sample id	7706-007	Location/Matrix	100-K-63 location 17 5ft	SOLID
Received	09/23/10	Collected/Weight	09/20/10 08:30	112 g
% solids	95.0	Custody/SAF No	F10-256-253	F10-256

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium	10028-17-8	1.69	4.8	8.16	400	U	H
Carbon 14	14762-75-5	-1.81	3.2	5.59	50.0	U	C
Nickel 63	13981-37-8	-0.384	1.9	3.21	30.0	U	NI_L
Thorium 228	14274-82-9	0.538	0.42	0.596	1.00	U	TH
Thorium 230	14269-63-7	0.620	0.50	0.732	1.00	U	TH
Thorium 232	TH-232	0.868	0.42	0.316	1.00		TH

ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/12/10

EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4407

7706-008 B27M99

DATA SHEET

SDG	7706	Client/Case no	CHPRC	SDG_H4407
Contact	N. Joseph Verville	Contract	No. 33677	
Lab sample id	S009218-08	Client sample id	B27M99	
Dept sample id	7706-008	Location/Matrix	100-K-63 location 18 5ft	SOLID
Received	09/23/10	Collected/Weight	09/20/10 08:55	114 g
% solids	89.0	Custody/SAF No	F10-256-254	F10-256

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium	10028-17-8	0.256	4.3	7.39	400	U	H
Carbon 14	14762-75-5	0.185	3.0	5.16	50.0	U	C
Nickel 63	13981-37-8	-0.309	1.9	3.24	30.0	U	NI_L
Thorium 228	14274-82-9	1.29	0.66	0.864	1.00		TH
Thorium 230	14269-63-7	1.42	0.79	0.985	1.00		TH
Thorium 232	TH-232	1.29	0.53	0.492	1.00		TH

ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
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EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4407

7706-009

B27MB0

DATA SHEET

SDG	7706	Client/Case no	CHPRC SDG_H4407
Contact	N. Joseph Verville	Contract	No. 33677
Lab sample id	S009218-09	Client sample id	B27MB0
Dept sample id	7706-009	Location/Matrix	100-K-63 location 18 5ft SOLID
Received	09/23/10	Collected/Weight	09/20/10 08:55 117 g
% solids	89.0	Custody/SAF No	F10-256-255 F10-256

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium	10028-17-8	1.84	5.2	8.86	400	U	H
Carbon 14	14762-75-5	1.08	3.6	6.02	50.0	U	C
Nickel 63	13981-37-8	-1.15	2.1	3.69	30.0	U	NI_L
Thorium 228	14274-82-9	1.51	0.54	0.507	1.00		TH
Thorium 230	14269-63-7	1.13	0.54	0.722	1.00		TH
Thorium 232	TH-232	1.47	0.47	0.289	1.00		TH

ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
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EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4407

7706-010

B27MB1

DATA SHEET

SDG	7706	Client/Case no	CHPRC SDG_H4407
Contact	N. Joseph Verville	Contract	No. 33677
Lab sample id	S009218-10	Client sample id	B27MB1
Dept sample id	7706-010	Location/Matrix	100-K-63 location 19 5ft SOLID
Received	09/23/10	Collected/Weight	09/20/10 09:22 105 g
% solids	83.8	Custody/SAF No	F10-256-256 F10-256

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium	10028-17-8	2.28	4.9	8.22	400	U	H
Carbon 14	14762-75-5	0.492	3.5	5.88	50.0	U	C
Nickel 63	13981-37-8	-1.10	1.7	2.97	30.0	U	NI_L
Thorium 228	14274-82-9	1.04	0.60	0.715	1.00		TH
Thorium 230	14269-63-7	0.496	0.50	0.800	1.00	U	TH
Thorium 232	TH-232	0.842	0.40	0.379	1.00		TH

ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
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EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4407

7706-011 B27MB2

DATA SHEET

SDG	7706	Client/Case no	CHPRC SDG_H4407
Contact	N. Joseph Verville	Contract	No. 33677
Lab sample id	S009218-11	Client sample id	B27MB2
Dept sample id	7706-011	Location/Matrix	100-K-63 location 20 5ft SOLID
Received	09/23/10	Collected/Weight	09/20/10 09:55 107 g
% solids	90.8	Custody/SAF No	F10-256-257 F10-256

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium	10028-17-8	0.535	4.5	7.74	400	U	H
Carbon 14	14762-75-5	-1.12	3.2	5.49	50.0	U	C
Nickel 63	13981-37-8	0.850	1.9	3.23	30.0	U	NI_L
Thorium 228	14274-82-9	0.606	0.51	0.676	1.00	U	TH
Thorium 230	14269-63-7	0.503	0.51	0.853	1.00	U	TH
Thorium 232	TH-232	0.856	0.41	0.385	1.00		TH

ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/12/10

Appendix 4

Laboratory Narrative and Chain-of-Custody Documentation

Attachment 2
Narrative
WSCF102425

Introduction

One (1) S&GRP sample was received at the WSCF Laboratory on September 7, 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. Also is attached an Issue Resolution Form (IRF) pertaining to out of specification holding times for hexavalent chromium.

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

ICP-AES 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 159733 analyzed on sample# B27MR7 (102425001)

- All QC controls are within the established limits.

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

- Batch QC 163538 analyzed on sample# B275R1 (102400007)
  - Strontium – MS/MSD Relative Percent Difference(s) (RPD) did not meet the established laboratory limits. No flags issued on sample results. RPD failure was "X" flagged on the Quality Control Report.
  - Zinc - was detected in the Blank. Affected sample results in this batch were "C" Flagged.
  - All other QC controls are within the established limits.

Hexavalent Chromium – The hold time requirements for this analysis were not met (Refer to analytical note below). A Duplicate, Matrix Spike, Blank and Laboratory Control Sample were analyzed with this delivery group. Analytical Note(s):

- Batch QC 157641 analyzed on sample# B27749 (102431001)
  - An Issue Resolution Form (CHPRC Tracking Number: 10-217) was issued for sample B27MR7 (102425001) for exceedance of the 24 hour hold time for hexavalnet chromium.
  - All other QC controls are within the established limits.

Radiochemistry Comments

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

- 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 161435 analyzed on sample# B26F38 (102059001)
    - 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.

Attachment 2
Narrative
WSCF102425

- Strontium-89/90:
  - Batch QC 157347 analyzed on sample# B26TV9 (102123008)
    - Duplicate Relative Percent Difference(s) (RPD) did not meet the established laboratory limits. All other QC was acceptable so the batch was accepted. No flags issued on sample results. RPD failure was "X" flagged on the Quality Control Report.
    - All other QC controls are within the established limits.
- Isotopic Plutonium analysis:
  - Batch QC 157368 analyzed on sample# B27MR7 (102425001)
    - Plutonium-238 and 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 157368 analyzed on sample# B27MR7 (102425001)
    - All QC controls are within the established limits.

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

Attachment 2
Narrative
WSCF102425

ISSUE RESOLUTION FORM

CHPRC TRACKING NUMBER: 10-217

Date: **9/10/2010** SAF No. **F10-268**

SDG: **WSCF102425** LOGIN No.: TEST: HEXAVALENT CHROMIUM (CR+6)

Sample No.(s) B27MR7 **102425-001**

Submitted By: H Medley Submitted To: S Champoux

Phone No. 372-1488 Phone No. 373-5290

Fax No. 372-0456 Fax No

ISSUE	PROPOSED RESOLUTION
The 24hr regulatory hold time was missed for the Groundwater samples identified above. The sample was collected on September 2, 2010 and received at WSCF on September 7, 2010.	Accept analytical results (accept as-is) and note in narrative.

GRP COMMENTS

Accept proposed resolution.

J. G. Douglas 9/10/2010

Signature and Date

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CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-268-001	PAGE 1 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 7C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 In-Process EB	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - QC Sampling		SAF NO.: F10-268	AIR QUALITY: ☐	
ICE CHEST NO.: SML-107	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: N/A	COA: 301966ES10	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)

102425

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	HNO3 to pH <2	Cool-4C	HNO3 to pH <2	HNO3 to pH <2	HNO3 to pH <2	HNO3 to pH <2
HOLDING TIME	6 Months	24 Hours	6 Months	180 Days	6 Months	6 Months
TYPE OF CONTAINER	G/P	aG	G/P	P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1	1
VOLUME	500mL	500mL	500mL	1000mL	1000mL	1L
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS	SEE ITEM (4) IN SPECIAL INSTRUCTIONS	Strontium-89,90 Total Sr

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME						
B27MR7	WATER	SEP 02 2010	1218	✓	✓	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 02 2010 1440	RECEIVED BY/STORED IN: M01109 SSU #1	DATE/TIME: SEP 02 2010 1440
RELINQUISHED BY/REMOVED FROM: M01109 SSU #1	DATE/TIME: SEP 07 2010 0815	RECEIVED BY/STORED IN: FM Hall CHPRC	DATE/TIME: SEP 07 2010 0815
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 07 2010 0850	RECEIVED BY/STORED IN: VILTER	DATE/TIME: SEP 07 2010 0850
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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-268-001	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 7C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 In-Process EB	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - QC Sampling		SAF NO.: F10-268	AIR QUALITY: ☐	
ICE CHEST NO.: SML-107	FIELD LOGBOOK NO.: HNF-N-507-B	ACTUAL SAMPLE DEPTH: N/14	COA: 301966ES10	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 WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.The CACN for WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring S
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium};
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Isotopic Plutonium {Plutonium-238, Plutonium-239/240};
(4) Isotopic Uranium {Uranium-233/234, Uranium-235};

ORIGINAL

A-6003-618(01/06)

Attachment 2
Narrative Rev.2
WSCF102445

Revision 2 – Case Narrative Replaces The Prior Submittal in its Entirety

Introduction

Six (6) S&GRP samples were received at the WSCF Laboratory on September 7, 2010. The samples were analyzed for the analytes indicated on the attached copy of the chain of custody (COC) form in accordance with the *Statement of Work (SOW), Modification No. 2 to Agreement 36587, Release 3, "FH WSCF ANALYTICAL SERVICES FOR GROUNDWATER."*

The narrative (Attachment 2) will address sample characteristics, analyses requested and general information in performance of the analytical methods. Also attached is P&D SDG WSCF102445 which deals with incorrect sample collection dates. A Data Summary Report (Attachment 3) includes analytical results, a comment report detailing method abnormalities, tentatively identified peaks if applicable, method references, and Laboratory QC information as applicable. Copies of the chain of custody and sample receipt documentation are included as Attachment 4.

It should be noted that the attached chain of custody was not stamped "ICED" by the WSCF Laboratory Sample Custodian during sample receiving. However, based on procedure LO-090-403 form "NOTICE OF IMPROPER SAMPLE SUBMITTAL" was not submitted and was not stamped "NOT ICED". No anomaly was noted during sample receipt.

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

- **B** – Sample results with a concentration greater than the MDL but less than the PQL are B flagged (applies to inorganic and wet chemical analyses), as appropriate.
- **D** – Sample results are D flagged if dilution(s) were required, as appropriate.
- **J** – Sample results with a concentration greater than the MDL but less than the PQL are J flagged (applies to organic analyses), as appropriate.
- **U** – Analyzed for but not detected above limiting criteria. Relative Percent Difference (RPD) values associated with an analyte qualified with a "U" are not applicable.

Analytical Methodology for Requested Analyses

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

Inorganic Comments

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

- Batch QC 157734 analyzed on sample# B27MB6 (102445004)

Attachment 2
Narrative Rev.2
WSCF102445

All QC controls are within the established limits.

ICP-AES 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 157435 analyzed on sample# B27M35 (102445001)
    - Boron – Samples are "E" Flagged due to Iron interference.

All other 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 160834 analyzed on sample# B27M35 (102445001)

All QC controls are within the established limits.

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 164278 analyzed on sample# B27M35 (102445001)
    - Duplicate Relative Percent Difference(s) (RPD) did not meet the established laboratory limits. Duplicate Relative Percent Difference (RPD) does not apply to results near or below the minimum detectable level. No flags issued.

All other QC controls are within the established limits.

Radiochemistry Comments

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

- 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 162635 analyzed on sample# B26VN7 (102157001)
    - Radium-226 and Radium-228 were found in the blank. These are naturally occurring radioactive isotopes.

All other QC controls are within the established limits.

Attachment 2
Narrative Rev.2
WSCF102445

- Strontium-89/90:
  - Batch QC 157635 analyzed on sample# B27M35 (102445001)

  All QC controls are within the established limits.

- Americium-241:
  - Batch QC 157479 analyzed on sample# B27MB6 (102445004)
  - 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.
  - Americium-243 – The tracer is slightly high but the batch was accepted.

  All other QC controls are within the established limits.

- Isotopic Plutonium analysis:
  - Batch QC 157479 analyzed on sample# B27MB6 (102445004)

  All QC controls are within the established limits.

- Isotopic Uranium analysis:
  - Batch QC 157479 analyzed on sample# B27MB6 (102445004)
  - Uranium-235 - 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.
  - Uranium-234 - The Blank is less than two times the MDC. "B" Flag not required.

  All other QC controls are within the established limits.

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

Attachment 2
Narrative Rev.2
WSCF102445

10/11/2010

Problem and Discrepancy Report

WSCF

SDG WSCF102445

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1. The data package has the following issues:

a) SAF Number Cross Reference (page 3 of 76) and Acknowledgement of Sample Received (page 64 of 76) – Sample collection date is not correct for samples B27MB6 (102445 -004), B27M36 (102445 -005) and B27MJ9 (102445 -006). Sample collection date should be 9/7/2010. Refer to COCs (pages 71, 73 and 75 of 76) for sample collection date detail.

Resolution: *Provide corrections.*

Lab Response: **Collection dates are corrected.**

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

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CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-191 | PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K-63 location 1 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256
AIR QUALITY: ☐			
ICE CHEST NO.: SML - 107	FIELD LOGBOOK NO.: HNF-N-507-13.	ACTUAL SAMPLE DEPTH: 0 - 1 ft	COA: 301966ES10
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: 102445

PRESERVATION	Cool~4C	None	None
HOLDING TIME	6 Months	6 Months	6 Months
TYPE OF CONTAINER	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B27M35	SOIL	SEP 02 2010	1233	✓	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 02 2010 / 1400	M01109 SSU #1	SEP 02 2010 / 1400
M01109 SSU #1	9-7-10 / 1400	FM Hall	9-7-10 / 1400
FM Hall	9-7-10 / 1300	Vicky Bins	9-7-10 / 1300

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-6002-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-191	PAGE 2 OF 2
COLLECTOR: FM Hal CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 1 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SAXL-107	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 0-1'	COA: 301965ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr;

ORIGINAL

A-6003-618(01/06)

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-313 — PAGE 1 OF 2

COLLECTOR: FM Hall	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: GHPRC 100-K-63 location 1 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256
AIR QUALITY: ☐			
ICE CHEST NO.: SML-107	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 10'	COA: 301966ES10
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	None	None
HOLDING TIME	6 Months	6 Months	6 Months
TYPE OF CONTAINER	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B27MJ8 002	SOIL	SEP 02 2010	1320	✓	✓	✓

CHAIN OF POSSESSION — **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall	SEP 02 2010 1400	MO1109 SML #1	SEP 02 2010 1400
MO 1109 SML #1	9-7-10	FM Hall	9-7-10 1400
FM Hall	9-7-10	VWW	9-7-10

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-6003-518(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-313	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 1 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML- 107	FIELD LOGBOOK NO.: HNF -N-507- B	ACTUAL SAMPLE DEPTH: 10'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr;

ORIGINAL

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-260	PAGE 1 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 1 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML - 107	FIELD LOGBOOK NO.: HNF-N-507-13.	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10	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	None	None
HOLDING TIME	6 Months	6 Months	6 Months
TYPE OF CONTAINER	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B27MB5 003	SOIL	SEP 02 2010	1244	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 02 2010 /1440	RECEIVED BY/STORED IN: M01109 SSU #1	DATE/TIME: SEP 02 2010 /1440
RELINQUISHED BY/REMOVED FROM: M01109 SSU #1	DATE/TIME: 9-7-10	RECEIVED BY/STORED IN: FM Hall	DATE/TIME: 9-7-10 1400
RELINQUISHED BY/REMOVED FROM: FM Hall	DATE/TIME: 9-7-10 1430	RECEIVED BY/STORED IN: Rick Bivins Jr	DATE/TIME: 9-7-10 1430
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-5003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-260	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 1 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-107	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr;

OFFICIAL

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-261 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K-63 location 2 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256
AIR QUALITY:			
ICE CHEST NO.: SML-107	FIELD LOGBOOK NO.: HNF-N-807-13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966E51D
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MB6	604	SOIL	SEP 07 2010	1225	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 07 2010 1430	RECEIVED BY/STORED IN: [illegible]	DATE/TIME: SEP 07 2010 1430
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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-261	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 2 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML - 107	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-192	PAGE 1 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 2 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-107	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: ~~N/A~~ 1'	COA: 301966ES10	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	None	None
HOLDING TIME		6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER		G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)		1	1	1	1
VOLUME		250mL	60mL	500mL	120mL
SAMPLE ANALYSIS		SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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		
B27M36 005	SOIL	SEP 07 2010	1204	✓	✓ ✓ ✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 07 2010 1430	RECEIVED BY/STORED IN: VLDX	DATE/TIME: SEP 07 2010 1430	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	ORIGINAL
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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-192	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 2 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-107	FIELD LOGBOOK NO.: HNF-N-507-	ACTUAL SAMPLE DEPTH: 0-6"	COA: 301966ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-618(01/06)

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-314 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K-63 location 2 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256
AIR QUALITY:			
ICE CHEST NO.: SML-107	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 10'	COA: 301966ES10
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MJ9 006	SOIL	SEP 07 2010	1235	✓	✓	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 07 2010 1430	[illegible]	SEP 07 2010 1430

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(01/06)

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-314 — PAGE 2 OF 2

COLLECTOR: FM Hall CHPRC	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: 100-K-63 location 2 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	
ICE CHEST NO.: SAL - 107	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 10'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-018(01/06)

Attachment 2
Narrative, Rev.1
WSCF102464

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

Twelve (12) S&GRP samples were received at the WSCF Laboratory on September 8, 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. **Additionally, a copy of the completed P&D # WSCF102464 is included with this case narrative. Also is attached an Issue Resolution Form (IRF) pertaining to missing results for Hexavalent Chromium that were then scheduled to be analyzed outside the 30 day hold time.**

It should be noted that the attached chain of custody was not stamped "ICED" by the WSCF Laboratory Sample Custodian during sample receiving. However, based on procedure LO-090-403 form "NOTICE OF IMPROPER SAMPLE SUBMITTAL" was not submitted and was not stamped "NOT ICED". No anomaly was noted during sample receipt.

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

- **B** – Sample results with a concentration greater than the MDL but less than the PQL are B flagged (applies to inorganic and wet chemical analyses), as appropriate.
- **D** – Sample results are D flagged if dilution(s) were required, as appropriate.
- **J** – Sample results with a concentration greater than the MDL but less than the PQL are J flagged (applies to organic analyses), as appropriate.
- **U** – Analyzed for but not detected above limiting criteria. Relative Percent Difference (RPD) values associated with an analyte qualified with a "U" are not applicable.

Analytical Methodology for Requested Analyses

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

Inorganic Comments

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

- Batch QC 157734 analyzed on sample# B27MB6 (102445004)
  - All QC controls are within the established limits.
- Batch QC 158637 analyzed on sample# B27MP5 (102464012)
  - All QC controls are within the established limits.

Hexavalent Chromium – The hold time requirement for this analysis was not met. A Duplicate, Matrix Spike, Insoluble Matrix Spike, Blank and Laboratory Control Sample were analyzed with this delivery group. Analytical Note(s):

Batch QC 169038 analyzed on sample# B27M37 (102464001)

- Matrix Spike recovery was not within the established laboratory limits. Affected sample results in this batch were N flagged.
- An Issue Resolution Form regarding the analysis of the Hexavalent Chromium beyond the regulatory hold time is attached.

All other QC controls are within the established limits.

ICP-AES 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 158541 QC analyzed on sample# B27M37 (102464001)
  - Boron – Sample concentrations are estimated. "E"-Flagged are applied to samples. Samples are also "X" flagged to indicate iron interference.
  - All other 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 160834 analyzed on sample# B27M35 (102445001)
  - All QC controls are within the established limits.

Radiochemistry Comments

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

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

- Americium-241:
  - Batch QC 158433 analyzed on sample# B27M37 (102464001)
    - The Blank is less than two times the MDC. "B" Flag not required.
    - All other QC controls are within the established limits.
  - Batch QC 158434 analyzed on sample# B27MP4 (102464008)
    - All QC controls are within the established limits.
- Gamma Energy Analysis:
  - Batch QC 162635 analyzed on sample# B26VN7 (102157001)
    - Radium-226 and Radium-228 were detected in blank. These are Naturally Occurring Radioactive Materials (NORM). No flags assigned to sample results.
    - Cesium-137, cobalt-60, europium-152, europium-154, and europium-155 - 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.
  - Batch QC 162636 analyzed on sample# B27MK0 (102464003)
    - Radium-226 and Radium-228 were detected in blank. These are Naturally Occurring Radioactive Materials (NORM). No flags assigned to sample results.
    - Cesium-137, cobalt-60, europium-152, europium-154, radium-226 and radium-228- 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.
  - Batch QC 162637 analyzed on sample# B27MP5 (102464012)
    - Radium-226 and Radium-228 were detected in blank. These are Naturally Occurring Radioactive Materials (NORM). No flags assigned to sample results.

- Cesium-137, cobalt-60, europium-152, and europium-154 - 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 Plutonium analysis:
  - Batch QC 158433 analyzed on sample# B27M37 (102464001)
    - Plutonium-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.
    - All other QC controls are within the established limits.
  - Batch QC 158434 analyzed on sample# B27MP4 (102464008)
    - Plutonium 239/240—The Blank is less than two times the MDC. "B" Flag not required.
    - Plutonium-238—Duplicate RPD and Percent Recovery Limits are not shown due to the inability of the LIMS system to calculate a value when the results from the Sample and the Duplicate add up to zero.
    - All other QC controls are within the established limits.
- Isotopic Uranium analysis:
  - Batch QC 158433 analyzed on sample# B27M37 (102464001)
    - Uranium-235 - 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 other controls are within the established limits.
  - Batch QC 158434 analyzed on sample# B27MP4 (102464008)
    - The Blank is less than two times the MDC. "B" Flag not required.
    - Uranium-235 - 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.

- Strontium-89/90:
  - Batch QC 161633 analyzed on sample# B27M37 (102464001)
    - All QC controls are within the established limits.
  - Batch QC 161634 analyzed on sample# B27MP4 (102464008)
    - All QC controls are within the established limits.

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

Narrative

Attachment 2
Narrative, Rev.1
WSCF102464

10/11/2010

Problem and Discrepancy Report

WSCF

SDG WSCF102464

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1. The data package has the following issues:

a) Hexavalent chromium was not reported in hard copy or electronic files for all samples.

Resolution: *Provide missing results.*

Lab Response: **The Hexavalent chromium results are provided in the hard copy report and in the corresponding EDD.**

b) Quality Control Report, Duplicate, Plutonium-238, page 93 of 140 – Duplicate RPD and RPD limit for Plutonium-238 are missing/ not reported in the "hard copy" data package. Please evaluate problem and submit missing QC data.

Resolution: *Provide missing results.*

Lab Response: **Upon review of the analytical report, it was found that duplicate RPD and Percent Recovery Limits are not shown due to the inability of the LIMS system to calculate a value when the results from the Sample and the Duplicate add up to zero.**

Please correct the issues and resubmit the hard copy and electronic data packages.

6

Attachment 2
Narrative, Rev.1
WSCF102464

ISSUE RESOLUTION FORM

CHPRC TRACKING NUMBER: 10-260

Date: **10/21/2010** SAF No. **F10-256**

SDG: **WSCF102464** TEST: HEXAVALENT CHROMIUM (CR+6)

LOGIN No.: **102464-001, -002, -003, -004, -005, -006, -007, -008, -009, -010, -011, -012**

Sample No.(s) B27M37, B27MB9, B27MK0, B27M38, B27MB7, B27MB8, B27MK1, B27MP4, B27M39, B27MK2, B27MP3, B27MP5

Submitted By: H Medley Submitted To: S. Champoux

Phone No. 372-1488 Phone No. 373-5290

Fax No. 372-0456 Fax No

ISSUE	PROPOSED RESOLUTION
The 30 day regulatory hold time was missed for the 100K soil samples identified above. The samples were received on Wednesday September 8, 2010. The samples were not logged for Hex chromium.	Have the samples logged, analyzed, and reported for hex chromium outside the 30 day hold time but within 60 days.

GRP COMMENTS

Accept proposed resolution per D Widrig.

Sara Champoux 10/22/2010

Signature and Date

7

Sample Receipt

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-193 — PAGE 1 OF 2

COLLECTOR	FM Hall CHPRC
SAMPLING LOCATION	100-K-63 location 3 Surface
ICE CHEST NO.	SML-700
SHIPPED TO	Waste Sampling & Characterization
COMPANY CONTACT	WIDRIG, DL
TELEPHONE NO.	376-2858
PROJECT COORDINATOR	WIDRIG, DL
PRICE CODE	8C
DATA TURNAROUND	15 Days / 15 Days
PROJECT DESIGNATION	ARRA 100-K-63 KW Floodplain In Process Sampling - Soil
SAF NO.	F10-256
AIR QUALITY	☐
FIELD LOGBOOK NO.	HNF-N-507-13
ACTUAL SAMPLE DEPTH	0-1'
COA	301966ES10
METHOD OF SHIPMENT	GOVERNMENT VEHICLE
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)

102464

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool<4C	Cool<4C	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27M37	SOIL	SEP 08 2010	0815	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 08 2010 1530	TA Frazier	SEP 08 2010 1530
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-6033-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-193	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376 2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 3 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-700	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 0-1'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-618(01/06)

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ChemWare

Sample Receipt

Chain of Custody

CHZMHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-264 PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K-63 location 5 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	SAF NO.: F10-256	AIR QUALITY: ☐
ICE CHEST NO.: SAIL-700	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966E510
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27M89 2	SOIL	SEP 08 2010	1233	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 08 2010 1530	RECEIVED BY/STORED IN: TA Ensizm	DATE/TIME: SEP 08 2010 1530
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(01/06)

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Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-264	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 5 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-700	FIELD LOGBOOK NO.: ~~HNF-N-507-~~ 13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-518(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | F10-256-315 | PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: WIDRIG, DL

TELEPHONE NO.: 376-2858

PROJECT COORDINATOR: WIDRIG, DL

PRICE CODE: 8C

DATA TURNAROUND: 15 Days / 15 Days

SAMPLING LOCATION: 100-K-63 location 3 10ft

PROJECT DESIGNATION: ARRA 100-K 63 KW Floodplain In Process Sampling - Soil

SAF NO.: F10-256

AIR QUALITY: ☐

ICE CHEST NO.: SML-700

FIELD LOGBOOK NO.: HNF-N-607-13.

ACTUAL SAMPLE DEPTH: 10'

COA: 301966ES10

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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MK0	3	SOIL	SEP 08 2010	0848	✓	✓	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 08 2010 1530	TA Finazzi	SEP 09 2010 1530
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-6003-918(01/06)

ChemWare

Thursday, October 21, 2010 7:13:30 PM
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Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-315 — PAGE 2 OF 2

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** WIDRIG, DL	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8C	**DATA TURNAROUND** 15 Days / 15 Days
SAMPLING LOCATION 100-K-63 location 3 10ft	**PROJECT DESIGNATION** ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		**SAF NO.** F10-256	**AIR QUALITY** ☐	
ICE CHEST NO. SML-700	**FIELD LOGBOOK NO.** HNF-N-507-13	**ACTUAL SAMPLE DEPTH** 10'	**COA** 301966ES10	**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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 - Total Sr; Americium-241;

A-6003 618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | F10-256-194 | PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2853	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K-63 location 4 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	SAF NO.: F10-256	AIR QUALITY: ☐
ICE CHEST NO.: SML-700	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 0 - 1'	COA: 301966ES10
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250ml	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27M38	4 SOIL	SEP 08 2010	0905	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 08 2010 1530	RECEIVED BY/STORED IN: [illegible]	DATE/TIME: SEP 08 2010 1530
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

☐ [illegible]

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

A-6003-618(01/06)

Thursday, October 21, 2010 7:13:30 PM
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Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/ SAMPLE ANALYSIS REQUEST			F10-256-194	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K 63 location 4 Surface	PROJECT DESIGNATION: ARRA 100 K 63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY:	
ICE CHEST NO.: SML-700	FIELD LOGBOOK NO.: HNF-N-607-13	ACTUAL SAMPLE DEPTH: 0-1'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-610(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-262 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
SAMPLING LOCATION: 100-K-63 location 3 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256
ICE CHEST NO.: SAIL - 700	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 9-15 BGS	COA: 301966E510
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: 8C — AIR QUALITY: ☐ — DATA TURNAROUND: 15 Days / 15 Days — METHOD OF SHIPMENT: GOVERNMENT VEHICLE

MATRIX*: A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegetation, W=Water, WI=Wipe, X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS: Contains Radioactive Material at concentrations that may or may not be regulated for transportaton per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool<4C	Cool<4C	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Scuba Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250ml	60ml	500ml	120ml
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MB7	5	SOIL	SEP 08 2010	0830	✓	✓	✓	✓

CHAIN OF POSSESSION — **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 08 2010 1530	TA Brazier	SEP 08 2010 1530

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(01/06)

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ChemWare

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-262	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 3 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML - 700	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-256-263** | **PAGE 1 OF 2**

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** WIDRIG, DL	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DL
SAMPLING LOCATION 100-K-63 location 4 5ft	**PROJECT DESIGNATION** ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		**SAF NO.** F10-256
ICE CHEST NO. SAL-700	**FIELD LOGBOOK NO.** HNF-N-507-13	**ACTUAL SAMPLE DEPTH** 5'	**COA** 301966ES10
SHIPPED TO Waste Sampling & Characterization	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

PRICE CODE 8C **DATA TURNAROUND** 15 Days / 15 Days
AIR QUALITY ☐
METHOD OF SHIPMENT GOVERNMENT VEHICLE

MATRIX*: A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegetation, W=Water, WI=Wipe, X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS: Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool<4C	Cool<4C	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	50mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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**				
B27MB8	6 SOIL	SEP 08 2010	0925	✓	✓	✓	✓

CHAIN OF POSSESSION		**SIGN/ PRINT NAMES**	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 08 2010 / 1530	RECEIVED BY/STORED IN: TA Fragua	DATE/TIME: SEP 08 2010 / 1530
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 6002-618(01/06)

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Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-263 — PAGE 2 OF 2

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** WIDRIG, DL	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DL
SAMPLING LOCATION 100-K-63 location 4 5ft	**PROJECT DESIGNATION** ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		**SAF NO.** F10-256
ICE CHEST NO. SML-700	**FIELD LOGBOOK NO.** HNF-N-507-13	**ACTUAL SAMPLE DEPTH** 5'	**COA** 301966ES10
SHIPPED TO Waste Sampling & Characterization	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

PRICE CODE 8C — **AIR QUALITY** ☐ — **DATA TURNAROUND** 15 Days / 15 Days — **METHOD OF SHIPMENT** GOVERNMENT VEHICLE

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-316	PAGE 1 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: BC	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 4 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY:	
ICE CHEST NO.: SML-700	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 10'	COA: 301986ES10	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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MK1 7	SOIL	SEP 08 2010	0950	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 08 2010 1530	RECEIVED BY/STORED IN: TA Frazier	DATE/TIME: SEP 08 2010 1530
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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-316	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 4 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY:	
ICE CHEST NO.: SML-700	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 10'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-355 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K-63 location 4 15ft Dup	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256
AIR QUALITY: ☐	ICE CHEST NO.: SML-700	FIELD LOGBOOK NO.: HNF-N-507-13.	ACTUAL SAMPLE DEPTH: 12'
COA: 301966E510	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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MP4	8 SOIL	SEP 08 2010	1200	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 08 2010 / 1530	RECEIVED BY/STORED IN: TA Frazier	DATE/TIME: SEP 08 2010 / 1530
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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-355	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 4 15ft Dup	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-700	FIELD LOGBOOK NO.: HNF-N-607-13	ACTUAL SAMPLE DEPTH: 12'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-195	PAGE 1 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 5 Surface	PROJECT DESIGNATION: AREA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML - 700	FIELD LOGBOOK NO.: HNF-N-607-13	ACTUAL SAMPLE DEPTH: 0-1	COA: 301966ES10	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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250ml	60ml	500ml	120ml
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27M39	9 SOIL	SEP 08 2010	1220	✓	✓	✓	✓

CHAIN OF POSSESSION	DATE/TIME	SIGN/ PRINT NAMES	DATE/TIME
RELINQUISHED BY/REMOVED FROM: FM Hall	SEP 08 2010 1530	RECEIVED BY/STORED IN: TA Fleming	SEP 08 2010 1530
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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-195 — PAGE 2 OF 2

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** WIDRIG, DL	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DL
PRICE CODE BC	**DATA TURNAROUND** 15 Days / 15 Days		
SAMPLING LOCATION 100-K-63 location 5 Surface	**PROJECT DESIGNATION** ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	**SAF NO.** F10-256	**AIR QUALITY** ☐
ICE CHEST NO. SML-700	**FIELD LOGBOOK NO.** HNF-N-507-___-___	**ACTUAL SAMPLE DEPTH** 0 - 1	**COA** 301966ES10
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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-317

PAGE 1 OF 2

COLLECTOR: FM Hall	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
SAMPLING LOCATION: CHPRC 100-K-63 location S 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain To Process Sampling - Soil		SAF NO.: F10-256
ICE CHEST NO.: SML-700	FIELD LOGBOOK NO.: HNF-N-607-13	ACTUAL SAMPLE DEPTH: 10'	COA: 301966ES10
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: 8C

AIR QUALITY: ☐

DATA TURNAROUND: 15 Days / 15 Days

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

MATRIX*: A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegetation, W=Water, WI=Wipe, K=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS: Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool-4C	Cool-4C	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MK2	10 SOIL	SEP 08 2010	1231	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 08 2010 1530	RECEIVED BY/STORED IN: TA Fleming	DATE/TIME: SEP 08 2010 1530
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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-317

PAGE 2 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 5 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY:	
ICE CHEST NO.: SAML-700	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 10'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-354 PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DI	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K-63 location 4 15ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256
AIR QUALITY: ☐			
ICE CHEST NO.: SML-700	FIELD LOGBOOK NO.: HNF-N-607-13	ACTUAL SAMPLE DEPTH: 12'	COA: 301966ES10
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250ml	60ml	500ml	120ml
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MP3	SOIL	SEP 08 2010	1200	✓	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 08 2010 1530	TA Franklin	SEP 08 2010 1530

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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — **F10-256-354** — **PAGE 2 OF 2**

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** WIDRIG, DL	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8C	**DATA TURNAROUND** 15 Days / 15 Days
SAMPLING LOCATION 100-K-63 location 4 15ft	**PROJECT DESIGNATION** ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		**SAF NO.** F10-256	**AIR QUALITY**	
ICE CHEST NO. SML-700	**FIELD LOGBOOK NO.** HNF-N-507-13-	**ACTUAL SAMPLE DEPTH** 12'	**COA** 301966ES10	**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 WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6003-118(01/06)

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ChemWare

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-356

PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE:	BC	DATA TURNAROUND: 15 Days / 15 Days	
SAMPLING LOCATION: 100-K-63 location 5 15ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	SAF NO.: F10-256	AIR QUALITY: ☐
ICE CHEST NO.: SMAL-700	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 13'	COA: 301966ES10
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MP5	12 SOIL	SEP 08 2010	1310	✓	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 08 2010 1530	TA Frazier	SEP 08 2010 1530

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-6005-618(01/06)

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-356 — PAGE 2 OF 2

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** WIDRIG, DL	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DL
SAMPLING LOCATION 100-K-63 location 5 15ft	**PROJECT DESIGNATION** ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		**SAF NO.** F10-256
ICE CHEST NO. SML-700	**FIELD LOGBOOK NO.** HNF-N-507-13	**ACTUAL SAMPLE DEPTH** 13'	**COA** 301966ES10
SHIPPED TO Waste Sampling & Characterization	**~~HNF-N-507-OFFSITE PROPERTY NO.~~** N/A		**BILL OF LADING/AIR BILL NO.** N/A

PRICE CODE 8C — **AIR QUALITY** ☐ — **DATA TURNAROUND** 15 Days / 15 Days — **METHOD OF SHIPMENT** GOVERNMENT VEHICLE

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 – Total Sr; Americium-241;

A-6003-618(01/06)

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ChemWare

Attachment 2
Narrative
WSCF102473

Introduction

Eight (8) S&GRP samples were received at the WSCF Laboratory on September 9, 2010. The samples were analyzed for the analytes indicated on the attached copy of the chain of custody (COC) form in accordance with the *Statement of Work (SOW), Modification No. 2 to Agreement 36587, Release 3, "FH WSCF ANALYTICAL SERVICES FOR GROUNDWATER."*

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

It should be noted that the attached chain of custody was not stamped "ICED" by the WSCF Laboratory Sample Custodian during sample receiving. However, based on procedure LO-090-403 form "NOTICE OF IMPROPER SAMPLE SUBMITTAL" was not submitted and was not stamped "NOT ICED". No anomaly was noted during sample receipt.

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

- **B** – Sample results with a concentration greater than the MDL but less than the PQL are B flagged (applies to inorganic and wet chemical analyses), as appropriate.
- **D** – Sample results are D flagged if dilution(s) were required, as appropriate.
- **J** – Sample results with a concentration greater than the MDL but less than the PQL are J flagged (applies to organic analyses), as appropriate.
- **U** – Analyzed for but not detected above limiting criteria. Relative Percent Difference (RPD) values associated with an analyte qualified with a "U" are not applicable.

Analytical Methodology for Requested Analyses

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

Inorganic Comments

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

- Batch QC 161134 analyzed on sample# B27MP6 (102473005)

- Nitrate– Duplicate Relative Percent Difference(s) (RPD) did not meet the established laboratory limits. Duplicate Relative Percent Difference (RPD) does not apply to results near or below the minimum detectable level. No flags issued.
- All other QC controls are within the established limits.

ICP-AES 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 160033 analyzed on sample# B27MC0 (102473001)
  - Boron – Sample concentrations are estimated. "E"-Flagged are applied to samples. Samples are also "X" flagged to indicate iron interference.
  - All other 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 160834 analyzed on sample# B27M35 (102445001)
  - All QC controls are within the established limits.
- Batch QC 160836 analyzed on sample# B27M40 (102473003)
  - Manganese – Matrix Spike recovery exceeded established laboratory limits. Affected sample results in this batch were "N" flagged.
  - All other QC controls are within the established limits.

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 164278 analyzed on sample# B27M35 (102445001)
  - Duplicate Relative Percent Difference(s) (RPD) did not meet the established laboratory limits. Duplicate Relative Percent Difference (RPD) does not apply to results near or below the minimum detectable level. No flags issued.
  - All other QC controls are within the established limits.
- Batch QC 167140 analyzed on sample# B25H74 (102544001)

Attachment 2
Narrative
WSCF102473

- Duplicate Relative Percent Difference(s) (RPD) did not meet the established laboratory limits. Duplicate Relative Percent Difference (RPD) does not apply to results near or below the minimum detectable level. No flags issued.
- Matrix Spike and Insoluble Matrix Spike recoveries exceeded established laboratory limits. Affected sample results in this batch were "N" flagged.
- All other QC controls are within the established limits.

Radiochemistry Comments

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

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 162637 analyzed on sample# B27MP5 (102464012)
    - Radium-226 and Radium-228 - Duplicate Relative Percent Difference(s) (RPD) did not meet the established laboratory limits due to Naturally Occurring Radioactive Material. No flags issued on sample results.
    - Cesium-137, cobalt-60, europium-152 and europium-154 - 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.
- Strontium-89/90:
  - Batch QC 162438 analyzed on sample# B27MC0 (102473001)
    - 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.
- Americium-241:
  - Batch QC 160633 analyzed on sample# B27MC0 (102473001)

- The Blank is less than two times the MDC. "B" Flag not required.
- 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 Plutonium analysis:
  - Batch QC 160633 analyzed on sample# B27MC0 (102473001)
    - Plutonium-238 and 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 160633 analyzed on sample# B27MC0 (102473001)
    - All QC controls are within the established limits.

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

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-265 — PAGE 1 OF 2

COLLECTOR: J. Scales	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: 100-K-63 location 6 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	SAF NO.: F10-256	
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-13.	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10
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)

102473

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool<4C	Cool<4C	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS 2017 (ADD)	SEE ITEM (2) IN SPECIAL INSTRUCTIONS IC	SEE ITEM (3) IN SPECIAL INSTRUCTIONS GEA	SEE ITEM (4) IN SPECIAL INSTRUCTIONS PU U Am SE

SAMPLE NO.	MATRIX*		SAMPLE DATE	SAMPLE TIME				
B27MC0	1	SOIL	HNF-N-507-	0738	✓	✓	✓	✓

SEP 09 2010

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
J. Scales	SEP 09 2010 / 13:3	M. Wilson	SEP 09 2010 / 13:32
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(03/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-265	PAGE 2 OF 2
COLLECTOR: J. Scales	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 6 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SMK-007	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-618(01/06)

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-266	PAGE 1 OF 2
COLLECTOR: J. Scales	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 7 5ft.	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-13-	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10	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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MC1	2 SOIL	SEP 09 2010	0925	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
J. Scales	SEP 09 2010 1332	M Nelson	SEP 09 2010 1332	
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 (003-618(01/06))

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-266	PAGE 2 OF 2
COLLECTOR J. Scales	COMPANY CONTACT WIDRIG, DL	TELEPHONE NO. 376-2858	PROJECT COORDINATOR WIDRIG, DL	PRICE CODE 8C	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 100-K-63 location 7 5ft	PROJECT DESIGNATION ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO. F10-256	AIR QUALITY ☐	
ICE CHEST NO. SML-007	FIELD LOGBOOK NO. HNF-N-507-13	ACTUAL SAMPLE DEPTH 5'	COA 301966ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/ SAMPLE ANALYSIS REQUEST			F10-256-196	PAGE 1 OF 2
COLLECTOR: J. Scales	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 6 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-	ACTUAL SAMPLE DEPTH: 0-1'	COA: 301966ES10	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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27M40	3	SOIL	SEP 09 2010	0738	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: J. Scales	DATE/TIME: SEP 09 2010/ 13:32	RECEIVED BY/STORED IN: M. Nelson	DATE/TIME: SEP 09 2010 13:32	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	ORIGINAL
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(01/06)

ChemVare

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-196	PAGE 2 OF 2
COLLECTOR: J. Scales	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 6 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 0-1'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-518(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-197 — PAGE 1 OF 2

COLLECTOR: J. Scales	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K-63 location 7 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256
AIR QUALITY: ☐			
ICE CHEST NO.: SML - 007	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 0 - 1'	COA: 301966ES10
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27M41	4	SOIL	SEP 09 2010	0908	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: J. Scales	DATE/TIME: SEP 09 2010 1332	RECEIVED BY/STORED IN: M. Nelson M. Nelson	DATE/TIME: SEP 09 2010 13:32
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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-197	PAGE 2 OF 2
COLLECTOR: J. Scales	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 7 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SAAL - 007	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 0-1'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-357 — PAGE 1 OF 2

COLLECTOR: J. Scales	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K-63 location 6 15ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	SAF NO.: F10-256	AIR QUALITY: ☐
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 15'	COA: 301966ES10
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27VP6 5	SOIL	SEP 09 2010	0846	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
J. Scales	SEP 09 2010 13:32	M. Nelson M. Nelson	SEP 09 2010 13:32
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

COPY

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

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-357	PAGE 2 OF 2
COLLECTOR: J. Scales	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 6 15ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-607-13	ACTUAL SAMPLE DEPTH: 15'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-358 — PAGE 1 OF 2

COLLECTOR: J. Scales	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
SAMPLING LOCATION: 100-K-63 location 7 15ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 15'	COA: 301966ES10
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: 8C — AIR QUALITY: ☐ — DATA TURNAROUND: 15 Days / 15 Days — METHOD OF SHIPMENT: GOVERNMENT VEHICLE

MATRIX*: A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegetation, W=Water, WI=Wipe, X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS: Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool-4C	Cool-4C	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MP7	6	SOIL	SEP 09 2010	1006	✓	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
J. Scales	SEP 09 2010 13:32	M. Nelson M. Nelson	SEP 09 2010 13:32

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(01/05)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-358	PAGE 2 OF 2
COLLECTOR: J. Scales	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 7 15ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-15	ACTUAL SAMPLE DEPTH: 15'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-618(01/06)

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-318 — PAGE 1 OF 2

COLLECTOR: J. Scales	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days	AIR QUALITY: ☐	
SAMPLING LOCATION: 100-K-53 location 6 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	SAF NO.: F10-256	
ICE CHEST NO.: SML - 007	FIELD LOGBOOK NO.: HNF-N-507-13.	ACTUAL SAMPLE DEPTH: 10'	COA: 301966ES10
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MK3	7	SOIL	SEP 09 2010	0752	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
J. Scales	SEP 09 2010 13:32	M. Weisman	SEP 09 2010 13:32
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-5003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-318	PAGE 2 OF 2
COLLECTOR: J. Scales	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 6 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 10'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-618(01/06)

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-319 — PAGE 1 OF 2

COLLECTOR: J. Scales	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K-63 location 7 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	SAF NO.: F10-256	AIR QUALITY: ☐
ICE CHEST NO.: SAL-007	FIELD LOGBOOK NO.: HNF-N-607-13.	ACTUAL SAMPLE DEPTH: 10'	COA: 301966ES10
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
827MK4	8	SOIL	SEP 09 2010	0945	✓	✓	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
J. Scales	SEP 09 2010 13:32	M. Nelson	SEP 09 2010 13:32

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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-319	PAGE 2 OF 2
COLLECTOR: J. Scales	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 7 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SAML-007	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 10'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-618(01/06)

Attachment 2
Narrative
WSCF102515

Introduction

Twelve (12) S&GRP sample was received at the WSCF Laboratory on September 13, 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

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

- Batch QC 162938 analyzed on sample# B27MR0 (102515004)
- Batch QC 162939 analyzed on sample# B27MP8 (102515007)

- Chloride - Duplicate Relative Percent Difference (RPD) did not meet the established laboratory limits. The RPD criterion does not apply to results near or below the minimum detection limit.

All QC controls are within the established limits.

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

- Batch QC 167375 analyzed on sample# B27MK8 (102515001)
  - Matrix Spike and/or Matrix Spike (along with post spike) Duplicate recoveries exceeded established laboratory limits. Affected sample results in this batch were "N" flagged.

All QC controls are within the established limits.

ICP-AES 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 162852 QC analyzed on sample# B27MK8 (102515001)
  - Estimated Boron results due to Iron interference. Sample results are "E" flagged.

All other 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 162434 QC analyzed on sample# B27MK8 (102515001)
  - Molybdenum - was detected in the Blank and was evaluated. Affected sample results in this batch were "C" Flagged.

All other QC controls are within the established limits.

Radiochemistry Comments

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

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

Attachment 2
Narrative
WSCF102515

- Americium-241:
  - Batch QC 162840 analyzed on sample# B27MK8 (102515001)
    - The blank is less than 2 times the MDC and is acceptable. "B" flag not required.
  - Batch QC 162841 analyzed on sample# B27MP8 (102515007)
    - The blank is less than 2 times the MDC and is acceptable. "B" flag not required.
    - 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 QC controls are within the established limits.

- Gamma Energy Analysis:
  - Batch QC 163840 analyzed on sample# B27MK8 (102515001)
    - Radium-226 and 228 contaminations were detected in the Blank and was evaluated. These isotopes are Naturally Occurring Radioactive Material (NORM) and no flags were assigned.
  - Batch QC 163934 analyzed on sample# B27MC2 (102515010)

All QC controls are within the established limits.

- Isotopic Plutonium analysis:
  - Batch QC 162840 analyzed on sample# B27MK8 (102515001)
  - Batch QC 162841 analyzed on sample# B27MP8 (102515007)
    - Plutonium-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.

All QC controls are within the established limits.

- Isotopic Uranium analysis:
  - Batch QC 162840 analyzed on sample# B27MK8 (102515001)
    - 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 162841 analyzed on sample# B27MP8 (102515007)

All QC controls are within the established limits.

- Strontium-89/90:
  - Batch QC 165533 analyzed on sample# B27MK8 (102515001)
  - Batch QC 165534 analyzed on sample# B27MP8 (102515007)

All QC controls are within the established limits.

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

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-323

PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: WIDRIG, DL

TELEPHONE NO.: 376-2858

PROJECT COORDINATOR: WIDRIG, DL

PRICE CODE: 8C

DATA TURNAROUND: 15 Days / 15 Days

SAMPLING LOCATION: 100-K-63 location 11 10ft

PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

SAF NO.: F10-256

AIR QUALITY: ☐

ICE CHEST NO.: SML-007

FIELD LOGBOOK NO.: HNF-N-507-13

ACTUAL SAMPLE DEPTH: 10'

COA: 301966E510

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
WT=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)

102515

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool~4C	Cool~4C	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60ml	500ml	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MK8	SOIL	SEP 13 2010	1040	✓	✓	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 13 2010 1430	Markson Rivers	SEP 13 2010 1430
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-6003-518(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-323 — PAGE 2 OF 2

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** WIDRIG, DL	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DL
PRICE CODE 8C	**DATA TURNAROUND** 15 Days / 15 Days		
SAMPLING LOCATION 100-K-63 location 11 10ft	**PROJECT DESIGNATION** ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		**SAF NO.** F10-256
AIR QUALITY ☐			
ICE CHEST NO. SML-007	**FIELD LOGBOOK NO.** HNF-N-507-13	**ACTUAL SAMPLE DEPTH** 10'	**COA** 301966ES10
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 WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6003-618(01/06)

ChemVare

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST**

F10-256-270 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: WIDRIG, DL

TELEPHONE NO.: 376-2858

PROJECT COORDINATOR: WIDRIG, DL

PRICE CODE: 8C

DATA TURNAROUND: 15 Days / 15 Days

SAMPLING LOCATION: 100-K-63 location 11.5ft

PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

SAF NO.: F10-256

AIR QUALITY: ☐

ICE CHEST NO.: SML-007

FIELD LOGBOOK NO.: HNF-N-507-13

ACTUAL SAMPLE DEPTH: 5'

COA: 301966ES10

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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MC5	2 SOIL	SEP 13 2010	1015	✓	✓	✓	✓

CHAIN OF POSSESSION — **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 13 2010 1430	Mannison Manoja	SEP 13 2010 1430

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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-270	PAGE 2 OF 2
COLLECTOR: FM Hal CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 11 50	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6003-618(01/06)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-201 PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

SAMPLING LOCATION: 100-K-63 location 11 Surface

ICE CHEST NO.: SML-007

SHIPPED TO: Waste Sampling & Characterization

COMPANY CONTACT: WIDRIG, DL

TELEPHONE NO.: 376-2658

PROJECT COORDINATOR: WIDRIG, DL

PRICE CODE: 8C

DATA TURNAROUND: 15 Days / 15 Days

AIR QUALITY: ☐

PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

SAF NO.: F10-256

FIELD LOGBOOK NO.: HNF-N-507-13

ACTUAL SAMPLE DEPTH: 0-1'

COA: 301966ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250ml	60mL	500ml	120ml
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27M45	3 SOIL	SEP 13 2010	1000	✓	✓	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 13 2010 1430	MANRISON	SEP 13 2010 1430

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-6005-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-201 PAGE 2 OF 2

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** WIDRIG, DL	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DL
SAMPLING LOCATION 100-K-63 location 11 Surface	**PROJECT DESIGNATION** ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		**SAF NO.** F10-256
TCF CHEST NO. SML-007	**FIELD LOGBOOK NO.** HNF-N-507-13	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 301966ES10
SHIPPED TO Waste Sampling & Characterization	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

PRICE CODE 8C

AIR QUALITY ☐

DATA TURNAROUND 15 Days / 15 Days

METHOD OF SHIPMENT GOVERNMENT VEHICLE

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium 239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6003-618(01/06)

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST**

F10-256-361 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K-63 location 10 15ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256
AIR QUALITY:			
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-13.	ACTUAL SAMPLE DEPTH: 13'	COA: 301966ES10
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
E27MR0	4	SOIL	SEP 13 2010	0940	✓	✓	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 13 2010 1430	MARKSON Minock	SEP 13 2010 1430

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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — **F10-256-361** — **PAGE 2 OF 2**

COLLECTOR FM Hall	**COMPANY CONTACT** WIDRIG, DI	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DI
SAMPLING LOCATION CHPRC 100-K-63 location 10 15ft	**PROJECT DESIGNATION** ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		**SAF NO.** F10-256
ICE CHEST NO. SML-007	**FIELD LOGBOOK NO.** HNF-N-507-13	**ACTUAL SAMPLE DEPTH** 13'	**COA** 301966ES10
SHIPPED TO Waste Sampling & Characterization	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

PRICE CODE 8C — **AIR QUALITY** ☐ — **DATA TURNAROUND** 15 Days / 15 Days — **METHOD OF SHIPMENT** GOVERNMENT VEHICLE

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-322 PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: WIDRIG, DL

TELEPHONE NO.: 376-2858

PROJECT COORDINATOR: WIDRIG, DL

PRICE CODE: 8C

DATA TURNAROUND: 15 Days / 15 Days

SAMPLING LOCATION: 100-K-63 location 10 10ft

PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

SAF NO.: F10-256

AIR QUALITY: ☐

ICE CHEST NO.: SML-007

FIELD LOGBOOK NO.: HNF-N-507-13

ACTUAL SAMPLE DEPTH: 10'

COA: 301966ES10

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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MK7	5	SOIL	SEP 13 2010	0925	✓	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 13 2010 1430	M Nelson	SEP 13 2010 1430

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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F10-256-322	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C
SAMPLING LOCATION: 100-K-63 location 10 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY:
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 10'	COA: 301966ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A	

DATA TURNAROUND: 15 Days / 15 Days

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6003-618(01/06)

ChemWare

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-269 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K 63 location 10 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	SAF NO.: F10-256	AIR QUALITY: ☐
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MC4	6 SOIL	SEP 13 2010	0900	✓	✓	✓	✓

CHAIN OF POSSESSION: RELINQUISHED BY/REMOVED FROM	DATE/TIME	SIGN/ PRINT NAMES: RECEIVED BY/STORED IN	DATE/TIME
FM Hall	SEP 13 2010 1430	Marlon Mends	SEP 13 2010 1430
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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-269 — PAGE 2 OF 2

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** WIDRIG, DL	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DL
SAMPLING LOCATION 100-K-63 location 10 5ft	**PROJECT DESIGNATION** ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		**SAF NO.** F10-256
ICE CHEST NO. SML-007	**FIELD LOGBOOK NO.** HNF-N-807-13	**ACTUAL SAMPLE DEPTH** 5	**COA** 301966ES10
SHIPPED TO Waste Sampling & Characterization	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

PRICE CODE 8C — **AIR QUALITY** ☐ — **DATA TURNAROUND** 15 Days / 15 Days — **METHOD OF SHIPMENT** GOVERNMENT VEHICLE

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GK1 applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

☐ ORIGINAL

A-6003-618(01/06)

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-359

PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
SAMPLING LOCATION: 100-K-63 location 8 15ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-13.	ACTUAL SAMPLE DEPTH: 13'	COA: 301966ES10
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: BC

AIR QUALITY: ☐

DATA TURNAROUND: 15 Days / 15 Days

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

MATRIX*: A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegetation, W=Water, WI=Wipe, X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS: Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool~4C	Cool~4C	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27VP8 7	SOIL	SEP 13 2010	0831	✓	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 13 2010 1430	Marelson Morales	SEP 13 2010 1430

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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-359	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 8 15ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 13'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6003-018(01/06)

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-200 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
SAMPLING LOCATION: 100-K-63 location 10 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain Ir Process Sampling - Soil		SAF NO.: F10-256
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 0-1'	COA: 301966ES10
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

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

MATRIX*: A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegetation, W=Water, WT=Wipe, X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS: Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool~4C	Cool~4C	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27M44	8	SOIL	SEP 13 2010	0845	✓	✓	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 13 2010 1430	Maneia MANASM	SEP 13 2010 1430

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(01/05)

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-200 — PAGE 2 OF 2

COLLECTOR	**COMPANY CONTACT** WIDRIG, DI	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DI
SAMPLING LOCATION FM Hall CHPRC 100-K-63 location 10 Surface	**PROJECT DESIGNATION** ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		**SAF NO.** F10-256
ICE CHEST NO. SAL-007	**FIELD LOGBOOK NO.** HNF-N-507-13	**ACTUAL SAMPLE DEPTH** 0-1	**COA** 301966ES10
SHIPPED TO Waste Sampling & Characterization	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

PRICE CODE 8C

AIR QUALITY ☐

DATA TURNAROUND 15 Days / 15 Days

METHOD OF SHIPMENT GOVERNMENT VEHICLE

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-320

PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K-63 location 8 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	SAF NO.: F10-256	AIR QUALITY: ☐
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-13.	ACTUAL SAMPLE DEPTH: 10'	COA: 301966ES10
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MK5	9 SOIL	SEP 13 2010	0815	✓	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 13 2010 1430	Mandson Manes	SEP 13 2010 1430

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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-320	PAGE 2 OF 2
COLLECTOR: FM Hal CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 8 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 10'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-618(01/06)

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-267 PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: WIDRIG, DL

TELEPHONE NO.: 376-2858

PROJECT COORDINATOR: WIDRIG, DL

PRICE CODE: 8C

DATA TURNAROUND: 15 Days / 15 Days

SAMPLING LOCATION: 100-K-63 location 8 5ft

PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

SAF NO.: F10-256

AIR QUALITY: ☐

ICE CHEST NO.: SAIL-007

FIELD LOGBOOK NO.: HNF-N-507-13

ACTUAL SAMPLE DEPTH: 0-5'

COA: 301966ES10

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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MC2	10	SOIL	SEP 13 2010	0800	✓	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 13 2010 1430	Marlon Marlon	SEP 13 2010 1430

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

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-267	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 8 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: [ ]	
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-607-13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6023-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-362 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 375-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days	AIR QUALITY: ☐	
SAMPLING LOCATION: 100-K-63 location 11 15ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	SAF NO.: F10-256	
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-13.	ACTUAL SAMPLE DEPTH: 141	COA: 301966ES10
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MR1 / SOIL / SEP 13 2010 1220	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 13 2010 1430	RECEIVED BY/STORED IN: Marvin Marvin	DATE/TIME: SEP 13 2010 1430
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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-362

PAGE 2 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K-63 location 11 15ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256
AIR QUALITY: ☐			
ICE CHEST NO.: SMC-007	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 141	COA: 301966ES10
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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-198 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
SAMPLING LOCATION: 100-K-63 location 8 Surface	PROJECT DESIGNATION: ARRA 100-K 63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256
ICE CHEST NO.: SML-007	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 0 - 1	COA: 301966ES10
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: 8C — AIR QUALITY: ☐ — DATA TURNAROUND: 15 Days / 15 Days — METHOD OF SHIPMENT: GOVERNMENT VEHICLE

MATRIX*: A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegetation, W=Water, WI=Wipe, X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS: Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool~4C	Cool~4C	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27M42	12 SOIL	SEP 13 2010	0740	✓	✓	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 13 2010 1430	MAWilson	SEP 13 2010 1430

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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-198 PAGE 2 OF 2

COLLECTOR
FM Hall
CHPRC

COMPANY CONTACT
WIDRIG, DL

TELEPHONE NO.
376-2858

PROJECT COORDINATOR
WIDRIG, DL

PRICE CODE 8C

DATA TURNAROUND
15 Days / 15 Days

AIR QUALITY ☐

SAMPLING LOCATION
100-K-63 location 8 Surface

PROJECT DESIGNATION
ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

SAF NO.
F10-256

ICE CHEST NO.
SML-007

FIELD LOGBOOK NO.
HNF-N-507-13

ACTUAL SAMPLE DEPTH
0-1

COA
301966ES10

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 WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-618(01/06)

Attachment 2
Narrative
WSCF102537

Introduction

Nine (9) S&GRP samples were received at the WSCF Laboratory on September 14, 2010. The samples were analyzed for the analytes indicated on the attached copy of the chain of custody (COC) form in accordance with the *Statement of Work (SOW), Modification No. 2 to Agreement 36587, Release 3, "FH WSCF ANALYTICAL SERVICES FOR GROUNDWATER."*

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

It should be noted that the attached chain of custody was not stamped "ICED" by the WSCF Laboratory Sample Custodian during sample receiving. However, based on procedure LO-090-403 form "NOTICE OF IMPROPER SAMPLE SUBMITTAL" was not submitted and was not stamped "NOT ICED". No anomaly was noted during sample receipt.

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

- **B** – Sample results with a concentration greater than the MDL but less than the PQL are B flagged (applies to inorganic and wet chemical analyses), as appropriate.
- **D** – Sample results are D flagged if dilution(s) were required, as appropriate.
- **J** – Sample results with a concentration greater than the MDL but less than the PQL are J flagged (applies to organic analyses), as appropriate.
- **U** – Analyzed for but not detected above limiting criteria. Relative Percent Difference (RPD) values associated with an analyte qualified with a "U" are not applicable.

Analytical Methodology for Requested Analyses

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

Inorganic Comments

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

- Batch QC 163549 analyzed on sample# B27M46 (102537001)

All QC controls are within the established limits.

Attachment 2
Narrative
WSCF102537

ICP-AES 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 162853 analyzed on sample# B27M46 (102537001)

All QC controls are within the established limits.

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

- Batch QC 163533 analyzed on sample# B27M46 (102537001)
  - Manganese – Matrix Spike recovery was not within the established laboratory limits. Affected sample results in this batch were N flagged.
  - Selenium - was detected in the Blank. Affected sample results in this batch were "C" Flagged.

All other QC controls are within the established limits.

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 167140 analyzed on sample# B25H74 (102544001)
  - Matrix Spike and Insoluble Matrix Spike recoveries exceeded established laboratory limits. Affected sample results in this batch were N flagged.
  - Duplicate Relative Percent Difference(s) (RPD) did not meet the established laboratory limits. Duplicate Relative Percent Difference (RPD) does not apply to results near or below the minimum detectable level. No flags issued.
- Batch QC 167375 analyzed on sample# B27MK8 (102515001)
  - Matrix Spike, Matrix Spike Duplicate and Post Spike recoveries exceeded established laboratory limits. Affected sample results in this batch were N flagged.

All other QC controls are within the established limits.

Attachment 2
Narrative
WSCF102537

Radiochemistry Comments

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

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 163934 analyzed on sample# B27MC2 (102515010)
    - Radium-226—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 163942 analyzed on sample# B26FB7 (102197001)
    - Radium-226 and Radium-228 – The Blank was above established laboratory limits due to Naturally Occurring Radioactive Material.
    - Radium-226 - Duplicate Relative Percent Difference(s) (RPD) did not meet the established laboratory limits due to Naturally Occurring Radioactive Material.

All other QC controls are within the established limits.

- Strontium-89/90:
  - Batch QC 165535 analyzed on sample# B27M46 (102537001)

All QC controls are within the established limits.

- Americium-241:
  - Batch QC 163237 analyzed on sample# B27M46 (102537001)
    - The Blank is less than two times the MDC. "B" Flag not required.
    - 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 163238 analyzed on sample# B27MC9 (102537006)
    - The Blank is less than two times the MDC. "B" Flag not required.

All other QC controls are within the established limits.

Attachment 2
Narrative
WSCF102537

- Isotopic Plutonium analysis:
  - Batch QC 163237 analyzed on sample# B27M46 (102537001)
    - Plutonium-238 and 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.
  - Batch QC 163238 analyzed on sample# B27MC9 (102537006)
    - Plutonium-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.

  All other QC controls are within the established limits.

- Isotopic Uranium analysis:
  - Batch QC 163237 analyzed on sample# B27M46 (102537001)
  - Batch QC 163238 analyzed on sample# B27MC9 (102537006)

  All QC controls are within the established limits.

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

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-202 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K-63 location L2 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256
AIR QUALITY: ☐			
ICE CHEST NO.: SAXL-777	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 0-1	COA: 301966ES10
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: 102537

PRESERVATION	Cool-4C	Cool-4C	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27M46	SOIL	SEP 14 2010	0800	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 14 2010 1400	RECEIVED BY/STORED IN: Marvelson Mendoza	DATE/TIME: SEP 14 2010 1400
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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-202	PAGE 2 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: BC	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 12 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-777	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 0-1	COA: 301966ES10	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 WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6003-618(01/06)

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-203 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K-63 location 13 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256
AIR QUALITY: [ ]			
ICE CHEST NO.: SML-777	FIELD LOGBOOK NO.: HNF-N-507-13-	ACTUAL SAMPLE DEPTH: 0 - 1	COA: 301966ES10
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27M47	S SOIL	SEP 14 2010	0845	✓	✓	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 14 2010 1400	Marvelson Manoch	SEP 14 2010 1400
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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-203	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 13 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-777	FIELD LOGBOOK NO.: HNF-N-807-13	ACTUAL SAMPLE DEPTH: 0 - 1	COA: 301966ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6003-618(01/06)

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-205 PAGE 1 OF 2

COLLECTOR	FM Hall CHPRC
SAMPLING LOCATION	100-K-63 location 15 Surface
ICE CHEST NO.	SML-777
SHIPPED TO	Waste Sampling & Characterization
COMPANY CONTACT	WIDRIG, DL
TELEPHONE NO.	376-2858
PROJECT COORDINATOR	WIDRIG, DL
PRICE CODE	8C
DATA TURNAROUND	15 Days / 15 Days
PROJECT DESIGNATION	ARRA 100-K-63 KW Floodplain In Process Sampling - Soil
SAF NO.	F10-256
AIR QUALITY	
FIELD LOGBOOK NO.	HNF-N-607-13
ACTUAL SAMPLE DEPTH	0-1
COA	301966ES10
METHOD OF SHIPMENT	GOVERNMENT VEHICLE
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27M49	3	SOIL	SEP 14 2010	09:25	✓	✓	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 14 2010 1400	MANXIson	SEP 14 2010 1400

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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-205	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 15 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: [ ]	
ICE CHEST NO.: SML-777	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 0-1'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-5003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-271 — PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days	AIR QUALITY: ☐	
SAMPLING LOCATION: 100-K-63 location 12.5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	SAF NO.: F10-256	
ICE CHEST NO.: SML-777	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27M06	4 SOIL	SEP 14 2010	0820	✓	✓	✓	✓

CHAIN OF POSSESSION: RELINQUISHED BY/REMOVED FROM	DATE/TIME	SIGN/ PRINT NAMES: RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 14 2010 1400	MANSON Manson	SEP 14 2010 1400

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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-271	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 12 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY:	
ICE CHEST NO.: SMIL-777	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-272 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K-63 location 13 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	SAF NO.: F10-256	AIR QUALITY:
ICE CHEST NO.: SML-777	FIELD LOGBOOK NO.: HNF-N-507-13.	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10
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=Wipe, X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS: Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool~4C	Cool~4C	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MC7	5	SOIL	SEP 14 2010	~~SEP 14 2010~~ 0905	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 14 2010 1400	MAJackson	SEP 14 2010 1400
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-6003-018(01/06)

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-272 — PAGE 2 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
SAMPLING LOCATION: 100-K-63 location 13 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256
ICE CHEST NO.: SXL-777	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: 8C — AIR QUALITY: ☐ — DATA TURNAROUND: 15 Days / 15 Days — METHOD OF SHIPMENT: GOVERNMENT VEHICLE

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F10-256-274 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K-63 location 15 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	SAF NO.: F10-256	AIR QUALITY: ☐
ICE CHEST NO.: SMC-777	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MC9	6	SOIL	SEP 14 2010	0940	✓	✓	✓	✓

CHAIN OF POSSESSION — **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 14 2010 1400	MANelson	SEP 14 2010 1400

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(01/06)

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-274	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 15 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-777	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966E510	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 WSCF Analytical is 402111ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-324	PAGE 1 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 12 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY:	
ICE CHEST NO.: SML-777	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 7'	COA: 301966ES10	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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MK9 7	SOIL	SEP 14 2010	0830	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 14 2010 1400	RECEIVED BY/STORED IN: Manuel Manuel	DATE/TIME: SEP 14 2010 1400
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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-324

PAGE 2 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K-63 location 12 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	SAF NO.: F10-256	AIR QUALITY: ☐
ICE CHEST NO.: SML-777	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 7'	COA: 301966ES10
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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6003-618(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	F10-256-327	PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 100-K-63 location 15 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	SAF NO.: F10-256	AIR QUALITY: ☐
ICE CHEST NO.: SAAL-777	FIELD LOGBOOK NO.: HNF-N-607-13	ACTUAL SAMPLE DEPTH: 10'	COA: 301966ES10
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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27ML2	8	SOIL	SEP 14 2010	0950	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 14 2010/400	RECEIVED BY/STORED IN: Marie Gon	DATE/TIME: SEP 14 2010/400
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(01/06)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-327	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 15 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SML-777	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 10'	COA: 301966ES10	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 WSCF Analytical is 402111ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

ORIGINAL

A-6003-618(01/06)

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-356 PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: WIDRIG, DL

TELEPHONE NO.: 376-2858

PROJECT COORDINATOR: WIDRIG, DL

PRICE CODE: 8C

DATA TURNAROUND: 15 Days / 15 Days

SAMPLING LOCATION: 100-K-63 location 15 15ft

PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

SAF NO.: F10-256

AIR QUALITY: ☐

ICE CHEST NO.: SMC-777

FIELD LOGBOOK NO.: HNF-N-507-13

ACTUAL SAMPLE DEPTH: 141

COA: 301966ES10

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	None	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	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				
B27MR5	9	SOIL	SEP 14 2010	1005	✓	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 14 2010 1400	[illegible]	SEP 14 2010 1400

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(01/06)

Wednesday, September 15, 2010 7:19:12 PM

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Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-366	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 15 15ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodpain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: SAM-777	FIELD LOGBOOK NO.: HNF-N-607-13	ACTUAL SAMPLE DEPTH: 14'	COA: 301966ES10	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 WSCF Analytical is 402111ES20. ** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; ICP Metals - 6010 (Add-On) {Boron, Lithium}; Chromium Hex - 7196;
(2) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Radium-226, Radium-228};
(4) Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235}; Strontium-89,90 -- Total Sr; Americium-241;

A-6003-618(01/06)

1.0 GENERAL

CH2M Hill Plateau Remediation Company (CHPRC) Sample Delivery Group H4381 was composed of thirteen solid (soil) samples designated under SAF No. F10-256: ARRA 100-K-63 KW Floodplain in Process Sampling - Soil.

The samples were received as stated on the chain-of-custody documents. Any discrepancies are noted on the Eberline Analytical Sample Receipt Checklist.

2.0 ANALYSIS NOTES

2.1 Tritium Analysis

The results for both the original and duplicate analyses were less than their respective MDA's, therefore no RPD, or statistical control limit is calculated. No problems were encountered during the course of the analyses.

2.2 Carbon-14 Analysis

The results for both the original and duplicate analyses were less than their respective MDA's, therefore no RPD, or statistical control limit is calculated. No problems were encountered during the course of the analyses.

2.3 Nickel-63 Analysis

The results for both the original and duplicate analyses were less than their respective MDA's, therefore no RPD, or statistical control limit is calculated. No problems were encountered during the course of the analyses.

2.4 Isotopic Thorium Analysis

Thorium-230 results for both the original and duplicate analyses were less than their respective MDA's, therefore no RPD, or statistical control limit is calculated. No problems were encountered during the course of the analyses.

3.0 Case Narrative Certification Statement

"I 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 obtained in this hard copy data package has been authorized by the Laboratory Manager or a designee, as verified by the following signature."

N. Verville

N. Joseph Verville
Client Services Manager

10/7/10

Date

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-168	PAGE 1 OF 1
COLLECTOR FM Hall CHPRC	COMPANY CONTACT WIDRIG, DL H4381	TELEPHONE NO. 376-2858 7896	PROJECT COORDINATOR WIDRIG, DL	PRICE CODE 8C AIR QUALITY ☐	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 100-K-63 location 1 Surface LW. 9/13/10	PROJECT DESIGNATION ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO. F10-256		
ICE CHEST NO. GWS-184 ~~SAMC-107~~	FIELD LOGBOOK NO. HNF-~~N-507~~-13	ACTUAL SAMPLE DEPTH N/A	COA 301966ES10	METHOD OF SHIPMENT FEDERAL EXPRESS	
SHIPPED TO Eberline Services	OFFSITE PROPERTY NO. SEE PTR 01984		BILL OF LADING/AIR BILL NO. SEE PTR 7962 3788 8755		

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
RADIOACTIVE TIE TO: B27LX0

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	120mL
SAMPLE ANALYSIS	Nickel-63;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27M03	SOIL	SEP 02 2010	1233	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM FM Hall CHPRC	DATE/TIME SEP 02 2010 1440	RECEIVED BY/STORED IN MO1109 SSU#1	DATE/TIME SEP 02 2010 1440
RELINQUISHED BY/REMOVED FROM MO1109 SSU #1	DATE/TIME 9/9/10 1230	RECEIVED BY/STORED IN J Scales	DATE/TIME 9/9/10 1230
RELINQUISHED BY/REMOVED FROM J. Scales	DATE/TIME 9/9/10 1400	RECEIVED BY/STORED IN SSU #1	DATE/TIME 9/9/10 1400
RELINQUISHED BY/REMOVED FROM SSU-1	DATE/TIME SEP 13 2010 0800	RECEIVED BY/STORED IN L.D. Wall CHPRC	DATE/TIME SEP 13 2010 0800
RELINQUISHED BY/REMOVED FROM L.D. Wall	DATE/TIME SEP 13 2010 1400	RECEIVED BY/STORED IN FEDEX	DATE/TIME
RELINQUISHED BY/REMOVED FROM CHPRC FED EX	DATE/TIME	RECEIVED BY/STORED IN M. Martinson	DATE/TIME 09/14/10 0915
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	F10-256-169	PAGE 1 OF 1

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** WIDRIG, DL H4381	**TELEPHONE NO.** 376-2858 7896	**PROJECT COORDINATOR** WIDRIG, DL
PRICE CODE 8C	**DATA TURNAROUND** 15 Days / 15 Days	**AIR QUALITY** ☐	
SAMPLING LOCATION 100-K-63 location 2 Surface LW. 9/13/10	**PROJECT DESIGNATION** ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	**SAF NO.** F10-256	
ICE CHEST NO. 6WS-184 ~~SAAL-107~~ 9/13/10	**FIELD LOGBOOK NO.** HNF -~~N-507~~-13	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 301966ES10
METHOD OF SHIPMENT FEDERAL EXPRESS			
SHIPPED TO Eberline Services	**OFFSITE PROPERTY NO.** SEE PTR 01984	**BILL OF LADING/AIR BILL NO.** SEE PTR 7962 3788 8755	

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
RADIOACTIVE TIE TO: B27LX1

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27M04	SOIL	SEP 07 2010	1204	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 07 2010 1400	MO 1109 SSU #1	SEP 07 2010 1400
MO 1109 SSU 7	9/9/10 1230	J Scales	9/9/10 1230
J Scales	9/9/10 1400	SSU #7	9/9/10 1400
SSU-1	SEP 13 2010 0800	L.D. Wall CHPRC	SEP 13 2010 0800
L.D. Wall CHPRC	SEP 13 2010 1400	FEDEX	
	FED EX		09/14/10 0815
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-170	PAGE 1 OF 1
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL H4381	TELEPHONE NO.: 376-2858 7896	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND
SAMPLING LOCATION: 100-K-63 location 3 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO.: GWS-184	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 0 - 1'	COA: 301966ES10	METHOD OF SHIPMENT: FEDERAL EXPRESS	
SHIPPED TO: Eberline Services	OFFSITE PROPERTY NO.: SEE PTR 01984		BILL OF LADING/AIR BILL NO.: SEE PTR 7962 3788 8755		

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
RADIOACTIVE TIE TO: B27LX2

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27M05	SOIL	SEP 08 2010	0815	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 08 2010 / 1400	RECEIVED BY/STORED IN: M01109 SSU #1	DATE/TIME: SEP 08 2010 / 1400
RELINQUISHED BY/REMOVED FROM: M01109 SSU 7	DATE/TIME: 9/9/10 1230	RECEIVED BY/STORED IN: J Scales	DATE/TIME: 9/9/10 1230
RELINQUISHED BY/REMOVED FROM: J Scales	DATE/TIME: 9/9/10 1400	RECEIVED BY/STORED IN: SSU #7	DATE/TIME: 9/9/10 1400
RELINQUISHED BY/REMOVED FROM: SSU-1	DATE/TIME: SEP 13 2010 0800	RECEIVED BY/STORED IN: L.D. Wall CHPRC	DATE/TIME: SEP 13 2010 0800
RELINQUISHED BY/REMOVED FROM: L.D. Wall CHPRC	DATE/TIME: SEP 13 2010 1400	RECEIVED BY/STORED IN: FEDEX	DATE/TIME:
RELINQUISHED BY/REMOVED FROM: FED EX	DATE/TIME:	RECEIVED BY/STORED IN: RF-MATAGUAMAN	DATE/TIME: 09/14/10 0815
RELINQUISHED BY/REMOVED FROM:	DATE/TIME:	RECEIVED BY/STORED IN:	DATE/TIME:

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-171	PAGE 1 OF 1
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL H4381	TELEPHONE NO.: 376-2858 7896	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND
SAMPLING LOCATION: 100-K-63 location 4 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	15 Days / 15 Days
ICE CHEST NO.: GWS-184	FIELD LOGBOOK NO.: HNF-N-507-13-	ACTUAL SAMPLE DEPTH: 0-1'	COA: 301966ES10	METHOD OF SHIPMENT: FEDERAL EXPRESS	
SHIPPED TO: Eberline Services	OFFSITE PROPERTY NO.: SEE PTR 01984		BILL OF LADING/AIR BILL NO.: SEE PTR 7962 3788 8755		

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
RADIOACTIVE TIE TO: B27LX3

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27M06	SOIL	SEP 08 2010	0905	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 08 2010 1410	RECEIVED BY/STORED IN: M01109 SSU #1	DATE/TIME: SEP 08 2010 1410
RELINQUISHED BY/REMOVED FROM: M01109 SSU 7	DATE/TIME: 9/9/10 1230	RECEIVED BY/STORED IN: J Scales	DATE/TIME: 9/9/10 1230
RELINQUISHED BY/REMOVED FROM: J Scales	DATE/TIME: 9/9/10 1400	RECEIVED BY/STORED IN: SSU #7	DATE/TIME: 9/9/10 1400
RELINQUISHED BY/REMOVED FROM: SSU-1	DATE/TIME: SEP 13 2010 0800	RECEIVED BY/STORED IN: L.D. Wall CHPRC	DATE/TIME: SEP 13 2010 0800
RELINQUISHED BY/REMOVED FROM: L.D. Wall CHPRC	DATE/TIME: SEP 13 2010 1400	RECEIVED BY/STORED IN: FEDEX	DATE/TIME:
RELINQUISHED BY/REMOVED FROM: FED EX	DATE/TIME:	RECEIVED BY/STORED IN: F. MATHWIAN	DATE/TIME: 09/14/10 0915
RELINQUISHED BY/REMOVED FROM:	DATE/TIME:	RECEIVED BY/STORED IN:	DATE/TIME:

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	F10-256-172	PAGE 1 OF 1

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** WIDRIG, DL H4381	**TELEPHONE NO.** 376-2858 7896	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8C **DATA TURNAROUND**
SAMPLING LOCATION 100-K-63 location 5 Surface	**PROJECT DESIGNATION** ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		**SAF NO.** F10-256	**AIR QUALITY** ☐ 15 Days / 15 Days
ICE CHEST NO. GWS-184	**FIELD LOGBOOK NO.** HNF-N-507-13	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 301966ES10	**METHOD OF SHIPMENT** FEDERAL EXPRESS
SHIPPED TO Eberline Services	**OFFSITE PROPERTY NO.** SEE PTR 01984		**BILL OF LADING/AIR BILL NO.** SEE PTR 7962 3788 8755	

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
RADIOACTIVE TIE TO: B27LX4

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27M07	SOIL	SEP 08 2010	1220	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 08 2010 1410	M01109 SSU#1	SEP 08 2010 1410
M01109 SSU 1	9/9/10 1230	J Scales	9/9/10 1230
J Scales	9/9/10 1400	SSU #1	9/9/10 1400
SSU-1	SEP 13 2010 0800	L.D. Wall CHPRC	SEP 13 2010 0800
L.D. Wall CHPRC	SEP 13 2010 1400	FEDEX	
		M. MATSUMOTO	09/14/10 0815
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-173	PAGE 1 OF 1
COLLECTOR J. Scales	COMPANY CONTACT WIDRIG, DL H4381	TELEPHONE NO. 376-2858 7896	PROJECT COORDINATOR WIDRIG, DL	PRICE CODE 8C AIR QUALITY ☐	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 100-K-63 location 6 Surface	PROJECT DESIGNATION ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO. F10-256		
ICE CHEST NO. GWS-184 ~~SMC-007~~ KW. 9/13/10	FIELD LOGBOOK NO. HNF ~~N-507~~-13	ACTUAL SAMPLE DEPTH 0-1'	COA 301966ES10	METHOD OF SHIPMENT FEDERAL EXPRESS	
SHIPPED TO Eberline Services	OFFSITE PROPERTY NO. SEE PTR 01984		BILL OF LADING/AIR BILL NO. SEE PTR 7962 3788 8755		

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
RADIOACTIVE TIE TO: B27LX5

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27M08	SOIL	SEP 09 2010	0738	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM J. Scales	DATE/TIME SEP 09 2010 1400	RECEIVED BY/STORED IN SSU-1	DATE/TIME SEP 09 2010 1400
RELINQUISHED BY/REMOVED FROM SSU-1	DATE/TIME SEP 13 2010 0800	RECEIVED BY/STORED IN L.D. Wall	DATE/TIME SEP 13 2010 0800
RELINQUISHED BY/REMOVED FROM L.D. Wall CHPRC	DATE/TIME SEP 13 2010 1400	RECEIVED BY/STORED IN FEDEX	DATE/TIME
RELINQUISHED BY/REMOVED FROM FED EX	DATE/TIME	RECEIVED BY/STORED IN TF. MATHASTON	DATE/TIME 09/14/10 0915
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	F10-256-174	PAGE 1 OF 1

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 8C	DATA TURNAROUND
J. Scales	WIDRIG, DL H4381	376-2858 7896	WIDRIG, DL	AIR QUALITY ☐	15 Days / 15 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**		
100-K-63 location 7 Surface	ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		F10-256		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
GWS-184	HNF-N-507-13	0-1'	301966ES10	FEDERAL EXPRESS	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
Eberline Services	SEE PTR 01984		SEE PTR 7962 3788 8755		

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
RADIOACTIVE TIE TO: B27LX6

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27M09	SOIL	SEP 09 2010	0908	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
J. Scales	SEP 09 2010 1400	SSU- 1	SEP 09 2010 1400
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
SSU- 1	SEP 13 2010 0800	L.D. Wall CHPRC	SEP 13 2010 0800
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
L.D. Wall CHPRC	SEP 13 2010 1400	FEDEX	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FED EX		FF/MATHWATTON	09/14/10 0915
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F10-256-237	PAGE 1 OF 1
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL H4381	TELEPHONE NO.: 376-2858 7896	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C; DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 1 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐
ICE CHEST NO.: GWS-184 ~~SAAL-107~~ LW. 9/13/10	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10	METHOD OF SHIPMENT: FEDERAL EXPRESS
SHIPPED TO: Eberline Services	OFFSITE PROPERTY NO.: SEE PTR 01984		BILL OF LADING/AIR BILL NO.: SEE PTR 7962 3788 8755	

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
RADIOACTIVE TIE TO: B27M59

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	120mL
SAMPLE ANALYSIS	Nickel-63;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27M82	SOIL	SEP 02 2010	1244	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 02 2010 1440	M01109 SSU #1	SEP 02 2010 1440
M01109 SSU #1	9/9/10 1230	J Scales	9/9/10 1230
J Scales	9/9/10 1400	SSU #1	9/9/10 1400
SSU-1	SEP 13 2010 0800	L.D. Wall CHPRC	SEP 13 2010 0800
L.D. Wall CHPRC	SEP 13 2010 1400	FEDEX	
FEDEX		PF. NATASWATSON	09/14/10 0915

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	F10-256-238	PAGE 1 OF 1

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL H4381	TELEPHONE NO.: 376-2858 7896	PROJECT COORDINATOR: WIDRIG, DL
SAMPLING LOCATION: 100-K-63 location 2 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256
ICE CHEST NO.: GWS-184 ~~SAL 107~~ LW. 9/13/10	FIELD LOGBOOK NO.: HNF -N-607- 13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10
SHIPPED TO: Eberline Services	OFFSITE PROPERTY NO.: SEE PTR 01984		BILL OF LADING/AIR BILL NO.: SEE PTR 7962 3788 8755

PRICE CODE: 8C
AIR QUALITY: ☐
DATA TURNAROUND: 15 Days / 15 Days
METHOD OF SHIPMENT: FEDERAL EXPRESS

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
RADIOACTIVE TIE TO: B27M60

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27M83	SOIL	SEP 07 2010	1225	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 07 2010 1400	RECEIVED BY/STORED IN: MO 1109 SSU #1	DATE/TIME: SEP 07 2010 1400
RELINQUISHED BY/REMOVED FROM: MO 1109 SSU 7	DATE/TIME: 9/9/10 1230	RECEIVED BY/STORED IN: J Scales	DATE/TIME: 9/9/10 1230
RELINQUISHED BY/REMOVED FROM: J Scales	DATE/TIME: 9/9/10 1400	RECEIVED BY/STORED IN: SSU #2	DATE/TIME: 9/9/10 1400
RELINQUISHED BY/REMOVED FROM: SSU- 1	DATE/TIME: SEP 13 2010 0800	RECEIVED BY/STORED IN: L.D. Wall CHPRC	DATE/TIME: SEP 13 2010 0800
RELINQUISHED BY/REMOVED FROM: L.D. Wall CHPRC	DATE/TIME: SEP 13 2010 1400	RECEIVED BY/STORED IN: FEDEX	DATE/TIME:
RELINQUISHED BY/REMOVED FROM: FEDEX	DATE/TIME:	RECEIVED BY/STORED IN: E MATHEWSON	DATE/TIME: 09/14/10 0915
RELINQUISHED BY/REMOVED FROM:	DATE/TIME:	RECEIVED BY/STORED IN:	DATE/TIME:

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	F10-256-239	PAGE 1 OF 1

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** WIDRIG, DL H4381	**TELEPHONE NO.** 376-2858 7896	**PROJECT COORDINATOR** WIDRIG, DL
PRICE CODE 8C	**DATA TURNAROUND** 15 Days / 15 Days	**AIR QUALITY** ☐	
SAMPLING LOCATION 100-K-63 location 3 5ft LW. 9/13/10	**PROJECT DESIGNATION** ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	**SAF NO.** F10-256	
ICE CHEST NO. ~~SAAL-700~~ GWS-184	**FIELD LOGBOOK NO.** HNF-N-507-13.	**ACTUAL SAMPLE DEPTH** 5'	**COA** 301966ES10
METHOD OF SHIPMENT FEDERAL EXPRESS			
SHIPPED TO Eberline Services	**OFFSITE PROPERTY NO.** SEE PTR 01984	**BILL OF LADING/AIR BILL NO.** SEE PTR 7962 3788 8755	

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
RADIOACTIVE TIE TO: B27M61

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27M84	SOIL	SEP 08 2010	0830	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM FM Hall CHPRC	DATE/TIME SEP 08 2010 1400	RECEIVED BY/STORED IN M01109 SSU #1	DATE/TIME SEP 08 2010 1400
RELINQUISHED BY/REMOVED FROM M01109 SSU 1	DATE/TIME 9/9/10 1230	RECEIVED BY/STORED IN J Scales	DATE/TIME 9/9/10 1230
RELINQUISHED BY/REMOVED FROM J Scales	DATE/TIME 9/9/10 1400	RECEIVED BY/STORED IN SSU #7	DATE/TIME 9/9/10 1400
RELINQUISHED BY/REMOVED FROM SSU-1	DATE/TIME SEP 13 2010 0800	RECEIVED BY/STORED IN L.D. Wall CHPRC	DATE/TIME SEP 13 2010 0800
RELINQUISHED BY/REMOVED FROM L.D. Wall CHPRC	DATE/TIME SEP 13 2010 1400	RECEIVED BY/STORED IN FEDEX	DATE/TIME
RELINQUISHED BY/REMOVED FROM FED EX	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME 09/14/10 0915
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	F10-256-240	PAGE 1 OF 1

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 8C	DATA TURNAROUND
FM Hall CHPRC	WIDRIG, DL H4381	376-2858 7896	WIDRIG, DL	AIR QUALITY ☐	15 Days / 15 Days

SAMPLING LOCATION	PROJECT DESIGNATION	SAF NO.
100-K-63 location 4 5ft	ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	F10-256

ICE CHEST NO.	FIELD LOGBOOK NO.	ACTUAL SAMPLE DEPTH	COA	METHOD OF SHIPMENT
GWS-184	HNF ~~N-507~~- 13	5'	301966ES10	FEDERAL EXPRESS

SHIPPED TO	OFFSITE PROPERTY NO.	BILL OF LADING/AIR BILL NO.
Eberline Services	SEE PTR 01984	SEE PTR 7962 3788 8755

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
RADIOACTIVE TIE TO: B27M62

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27M85	SOIL	SEP 08 2010	0925	✓

CHAIN OF POSSESSION — **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 08 2010 1410	MO1109SSU#1	SEP 08 2010 1410
MO1109 SSU 1	9/9/10 1230	J Scales	9/9/10 1230
J Scales	9/9/10 1400	SSU #7	9/9/10 1400
SSU-1	SEP 13 2010 0800	L.D. Wall CHPRC	SEP 13 2010 0800
L.D. Wall CHPRC	SEP 13 2010 1400	FEDEX	
FED EX		F. MATHWATHAN	09/14/10 0315

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	F10-256-241	PAGE 1 OF 1

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** WIDRIG, DL H4381	**TELEPHONE NO.** 376-2858 7896	**PROJECT COORDINATOR** WIDRIG, DL
PRICE CODE 8C	**DATA TURNAROUND** 15 Days / 15 Days	**AIR QUALITY** ☐	
SAMPLING LOCATION 100-K-63 location 5 5ft	**PROJECT DESIGNATION** ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	**SAF NO.** F10-256	
ICE CHEST NO. GWS-184 ~~SAM-700~~ RW. 9/13/10	**FIELD LOGBOOK NO.** HNF ~~N-507~~- 13.	**ACTUAL SAMPLE DEPTH** 5'	**COA** 301966ES10
METHOD OF SHIPMENT FEDERAL EXPRESS	**SHIPPED TO** Eberline Services	**OFFSITE PROPERTY NO.** SEE PTR 01984	**BILL OF LADING/AIR BILL NO.** SEE PTR 7962 3788 8755

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
RADIOACTIVE TIE TO: B27M63

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27M86	SOIL	SEP 0 8 2010	1233	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM FM Hall CHPRC	DATE/TIME SEP 0 8 2010 1410	RECEIVED BY/STORED IN M01109SSU #1	DATE/TIME SEP 0 8 2010 1410
RELINQUISHED BY/REMOVED FROM M01109 SSU 7	DATE/TIME 9/9/10 1230	RECEIVED BY/STORED IN J Scales	DATE/TIME 9/9/10 1230
RELINQUISHED BY/REMOVED FROM J Scales	DATE/TIME 9/9/10 1400	RECEIVED BY/STORED IN SSU #7	DATE/TIME 9/9/10 1400
RELINQUISHED BY/REMOVED FROM SSU- 1	DATE/TIME SEP 1 3 2010 0800	RECEIVED BY/STORED IN L.D. Wall CHPRC	DATE/TIME SEP 1 3 2010 0800
RELINQUISHED BY/REMOVED FROM L.D. Wall CHPRC	DATE/TIME SEP 1 3 2010 1400	RECEIVED BY/STORED IN FEDEX	DATE/TIME
RELINQUISHED BY/REMOVED FROM FEDEX	DATE/TIME	RECEIVED BY/STORED IN M. MATHUSTAN	DATE/TIME 09/14/10 0915
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	F10-256-242	PAGE 1 OF 1

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 8C	DATA TURNAROUND
J. Scales	WIDRIG, DL HA381	376-2858 7896	WIDRIG, DL	AIR QUALITY ☐	15 Days / 15 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**		
100-K-63 location 6 5ft	ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		F10-256		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
GWS-184 ~~SAL-007~~ 9/13/10	HNF ~~N-507~~- 13.	5'	301966ES10	FEDERAL EXPRESS	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
Eberline Services	SEE PTR 01984		SEE PTR 7962 3788 8755		

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
RADIOACTIVE TIE TO: B27M64

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	[redacted]
B27M87	SOIL	SEP 09 2010	0738	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
J. Scales	SEP 09 2010 1400	SSU- 1	SEP 09 2010 1400
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
SSU- 1	SEP 13 2010 0800	L.D. Wall CHPRC	SEP 13 2010 0800
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
L.D. Wall CHPRC	SEP 13 2010 1400	FEDEX	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
		F. NATARAJAN	09/14/10 0915
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;

ORIGINAL

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

A-6003-618(01/06)

1.0 GENERAL

CH2M Hill Plateau Remediation Company (CHPRC) Sample Delivery Group H4382 was composed of thirteen solid (soil) samples designated under SAF No. F10-256: ARRA 100-K-63 KW Floodplain in Process Sampling - Soil.

The samples were received as stated on the chain-of-custody documents. Any discrepancies are noted on the Eberline Analytical Sample Receipt Checklist.

2.0 ANALYSIS NOTES

2.1 Tritium Analysis

The results for both the original and duplicate analyses were less than their respective MDA's, therefore no RPD, or statistical control limit is calculated. No problems were encountered during the course of the analyses.

2.2 Carbon-14 Analysis

The results for both the original and duplicate analyses were less than their respective MDA's, therefore no RPD, or statistical control limit is calculated. No problems were encountered during the course of the analyses.

2.3 Nickel-63 Analysis

The results for both the original and duplicate analyses were less than their respective MDA's, therefore no RPD, or statistical control limit is calculated. No problems were encountered during the course of the analyses.

2.4 Isotopic Thorium Analysis

Thorium-230 results for both the original and duplicate analyses were less than their respective MDA's, therefore no RPD, or statistical control limit is calculated. No problems were encountered during the course of the analyses.

3.0 Case Narrative Certification Statement

"I 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 obtained in this hard copy data package has been authorized by the Laboratory Manager or a designee, as verified by the following signature."

N. Joseph Verville
Client Services Manager

10/7/10
Date

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-243	PAGE 1 OF 1
COLLECTOR J. Scales	COMPANY CONTACT WIDRIG, DL H4382	TELEPHONE NO. 376-2858 7897	PROJECT COORDINATOR WIDRIG, DL	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 100-K-63 location 7 5ft	PROJECT DESIGNATION ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO. F10-256	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO. GWS-184	FIELD LOGBOOK NO. HNF-N-507-13	ACTUAL SAMPLE DEPTH 5'	COA 301966ES10	METHOD OF SHIPMENT FEDERAL EXPRESS	
SHIPPED TO Eberline Services	OFFSITE PROPERTY NO. SEE PTR 01984		BILL OF LADING/AIR BILL NO. SEE PTR 7962 3788 8755		

MATRIX*	POSSIBLE SAMPLE HAZARDS/ REMARKS		
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	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	None
		HOLDING TIME	6 Months
		TYPE OF CONTAINER	G/P
		NO. OF CONTAINER(S)	1
		VOLUME	120mL
	SPECIAL HANDLING AND/OR STORAGE RADIOACTIVE TIE TO: B27M65	SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27M88	SOIL	SEP 09 2010	0925	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM J. Scales	DATE/TIME SEP 09 2010 1400	RECEIVED BY/STORED IN SSU-1	DATE/TIME SEP 09 2010 1400
RELINQUISHED BY/REMOVED FROM SSU-1	DATE/TIME SEP 13 2010 0800	RECEIVED BY/STORED IN L.D. Wall	DATE/TIME SEP 13 2010 0800
RELINQUISHED BY/REMOVED FROM L.D. Wall	DATE/TIME SEP 13 2010 1400	RECEIVED BY/STORED IN CHPRC FEDEX	DATE/TIME
RELINQUISHED BY/REMOVED FROM CHPRC FED EX	DATE/TIME	RECEIVED BY/STORED IN HF. MATAUTAN	DATE/TIME 09/14/10 0915
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

(1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-298	PAGE 1 OF 1
COLLECTOR FM Hall CHPRC	COMPANY CONTACT WIDRIG, DL H 4382	TELEPHONE NO. 376-2858 7897	PROJECT COORDINATOR WIDRIG, DL	PRICE CODE 8C AIR QUALITY ☐	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 100-K-63 location 1 10ft	PROJECT DESIGNATION ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO. F10-256		
ICE CHEST NO. GWS-184 ~~SAAL 107~~ LW. 9/13/10	FIELD LOGBOOK NO. HNF-~~N-507~~-13	ACTUAL SAMPLE DEPTH 10'	COA 301966ES10	METHOD OF SHIPMENT FEDERAL EXPRESS	
SHIPPED TO Eberline Services	OFFSITE PROPERTY NO. SEE PTR 01984		BILL OF LADING/AIR BILL NO. SEE PTR 7962 3788 8755		

MATRIX*	POSSIBLE SAMPLE HAZARDS/ REMARKS		
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	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	None
		HOLDING TIME	6 Months
		TYPE OF CONTAINER	G/P
		NO. OF CONTAINER(S)	1
		VOLUME	120mL
	SPECIAL HANDLING AND/OR STORAGE RADIOACTIVE TIE TO: B27MD8	SAMPLE ANALYSIS	Nickel-63;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27MH3	SOIL	SEP 02 2010	1320	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM FM Hall ~~CHPRC~~	DATE/TIME SEP 02 2010 1440	RECEIVED BY/STORED IN MO1109 SSU#1	DATE/TIME SEP 02 2010 1440	** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
RELINQUISHED BY/REMOVED FROM MO1109 SSU#1 9/9/10	DATE/TIME 1230	RECEIVED BY/STORED IN T Scales 9/9/10	DATE/TIME 1230	
RELINQUISHED BY/REMOVED FROM T Scales 9/9/10	DATE/TIME 1400	RECEIVED BY/STORED IN SSU #7 9/9/10	DATE/TIME 1400	
RELINQUISHED BY/REMOVED FROM SSU-1	DATE/TIME SEP 13 2010 0800	RECEIVED BY/STORED IN L.D. Wall L.D. Wall	DATE/TIME SEP 13 2010 0800	
RELINQUISHED BY/REMOVED FROM L.D. Wall L.D. Wall ~~CHPRC~~	DATE/TIME SEP 13 2010 1400	RECEIVED BY/STORED IN FEDEX	DATE/TIME	
RELINQUISHED BY/REMOVED FROM FED EX	DATE/TIME	RECEIVED BY/STORED IN PF. PLATEAU	DATE/TIME 05/14/10 0815	
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(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-299	PAGE 1 OF 1
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL H4382	TELEPHONE NO.: 376-2858 7897	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND
SAMPLING LOCATION: 100-K-63 location 2 10ft RW. 9/13/10	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO.: GWS-184 ~~SAF-107~~	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 10'	COA: 301966ES10	METHOD OF SHIPMENT: FEDERAL EXPRESS	
SHIPPED TO: Eberline Services	OFFSITE PROPERTY NO.: SEE PTR 01984		BILL OF LADING/AIR BILL NO.: SEE PTR 7962 3788 8755		

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
RADIOACTIVE TIE TO: B27MD9

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27MH4	SOIL	SEP 07 2010	1235	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 07 2010 1400	MO 1109 SSU #1	SEP 07 2010 1400
MO 1109 SSU 7	9/9/10 1230	J Scales	9/9/10 1230
J Scales	9/9/10 1400	SSU #7	9/9/10 1400
SSU- 1	SEP 13 2010 0800	L.D. Wall CHPRC	SEP 13 2010 0800
L.D. Wall CHPRC	SEP 13 2010 1400	FEDEX	
FED EX		F. Mathews	09/14/10 0915

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-300	PAGE 1 OF 1
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL H4382	TELEPHONE NO.: 376-2858 7897	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND
SAMPLING LOCATION: 100-K-63 location 3 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO.: GUS-184	FIELD LOGBOOK NO.: HNF-N-607-13	ACTUAL SAMPLE DEPTH: 10'	COA: 301966ES10	METHOD OF SHIPMENT: FEDERAL EXPRESS	
SHIPPED TO: Eberline Services	OFFSITE PROPERTY NO.: SEE PTR 01984		BILL OF LADING/AIR BILL NO.: SEE PTR 7962 3788 8755		

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
RADIOACTIVE TIE TO: B27MF0

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27MH5	SOIL	SEP 08 2010	0848	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 08 2010 1400	MO1109 SSU #1	SEP 08 2010 1400
MO1109 SSU 7 9/9/10	1230	J Scales 9/9/10	1230
J Scales 9/9/10	1400	SSU #7 9/9/10	1400
SSU- 1	SEP 13 2010 0800	L.D. Wall CHPRC	SEP 13 2010 0800
L.D. Wall CHPRC	SEP 13 2010 1400	FEDEX	
FED EX			09/14/10 0915
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	F10-256-301	PAGE 1 OF 1

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 8C	DATA TURNAROUND
FM Hall CHPRC	WIDRIG, DL H4382	376-2858 7897	WIDRIG, DL	AIR QUALITY ☐	15 Days / 15 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**		
100-K-63 location 4 10ft	ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		F10-256		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
GWS-184	HNF-N-507-13	10'	301966ES10	FEDERAL EXPRESS	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
Eberline Services	SEE PTR 01984		SEE PTR 7962 3788 8755		

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
RADIOACTIVE TIE TO: B27MF1

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27MH6	SOIL	SEP 08 2010	0950	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 08 2010 1400	MO1109 SSU #1	SEP 08 2010 1400
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
MO1109 SSU 1	9/9/10 1230	J Scales	9/9/10 1230
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
J Scales	9/9/10 1400	SSU #1	9/9/10 1400
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
SSU-1	SEP 13 2010 0800	L.D. Wall CHPRC	SEP 13 2010 0800
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
L.D. Wall CHPRC	SEP 13 2010 1400	FEDEX	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FEDEX		M. MATTAU	09/14/10 0900
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-302	PAGE 1 OF 1
COLLECTOR: FM Hall	COMPANY CONTACT: WIDRIG, DL H4382	TELEPHONE NO.: 376-2858 7897	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: CHPRC 100-K-63 location 5 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY ☐	
ICE CHEST NO.: GWS-184	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 10'	COA: 301966ES10	METHOD OF SHIPMENT: FEDERAL EXPRESS	
SHIPPED TO: Eberline Services	OFFSITE PROPERTY NO.: SEE PTR 01984		BILL OF LADING/AIR BILL NO.: SEE PTR 7962 3788 8755		

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
RADIOACTIVE TIE TO: B27MF2

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27MH7	SOIL	SEP 08 2010	1251	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 08 2010 1410	MO1109 SSU# 1	SEP 08 2010 1410
MO 1109 SSU 1	9/9/10 1230	T Scales	9/9/10 1230
T Scales	9/9/10 1400	SSU #1	9/9/10 1400
SSU-1	SEP 13 2010 0800	L.D. Wall CHPRC	SEP 13 2010 0800
L.D. Wall CHPRC	SEP 13 2010 1400	FEDEX	
FEDEX			09/14/10 0815

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-303	PAGE 1 OF 1
COLLECTOR J. Scales	COMPANY CONTACT WIDRIG, DL H4382	TELEPHONE NO. 376-2858 7897	PROJECT COORDINATOR WIDRIG, DL	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 100-K-63 location 6 10ft	PROJECT DESIGNATION ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO. F10-256	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO. GWS-184	FIELD LOGBOOK NO. HNF-~~N-507~~-13-	ACTUAL SAMPLE DEPTH 10'	COA 301966ES10	METHOD OF SHIPMENT FEDERAL EXPRESS	
SHIPPED TO Eberline Services	OFFSITE PROPERTY NO. SEE PTR 01984		BILL OF LADING/AIR BILL NO. SEE PTR 7962 3788 8755		

MATRIX*	POSSIBLE SAMPLE HAZARDS/ REMARKS		
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	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	None
		HOLDING TIME	6 Months
		TYPE OF CONTAINER	G/P
		NO. OF CONTAINER(S)	1
		VOLUME	120mL
	SPECIAL HANDLING AND/OR STORAGE RADIOACTIVE TIE TO: B27MF3	SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27MH8	SOIL	SEP 09 2010	0752	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM J. Scales	DATE/TIME SEP 09 2010 1400	RECEIVED BY/STORED IN SSU-1	DATE/TIME SEP 09 2010 1400
RELINQUISHED BY/REMOVED FROM SSU-1	DATE/TIME SEP 13 2010 0800	RECEIVED BY/STORED IN L.D. Wall CHPRC	DATE/TIME SEP 13 2010 ~~0800~~ 0800
RELINQUISHED BY/REMOVED FROM L.D. Wall CHPRC	DATE/TIME SEP 13 2010 1400	RECEIVED BY/STORED IN FEDEX	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN FEDEX NATHAN	DATE/TIME 09/14/10 0915
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

(1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3; 9/13/10

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-304	PAGE 1 OF 1
COLLECTOR J. Scales	COMPANY CONTACT WIDRIG, DL H4382	TELEPHONE NO. 376-2858 7897	PROJECT COORDINATOR WIDRIG, DL	PRICE CODE 8C AIR QUALITY ☐	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 100-K-63 location 7 10ft	PROJECT DESIGNATION ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO. F10-256		
ICE CHEST NO. GWS-184	FIELD LOGBOOK NO. HNF-N-507-13	ACTUAL SAMPLE DEPTH 10'	COA 301966ES10	METHOD OF SHIPMENT FEDERAL EXPRESS	
SHIPPED TO Eberline Services	OFFSITE PROPERTY NO. SEE PTR 01984		BILL OF LADING/AIR BILL NO. SEE PTR 7962 3788 8755		

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
RADIOACTIVE TIE TO: B27MF4

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27MH9	SOIL	SEP 09 2010	0945	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM J. Scales	DATE/TIME SEP 09 2010 1400	RECEIVED BY/STORED IN SSU-1	DATE/TIME SEP 09 2010 1400	The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. (1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;
RELINQUISHED BY/REMOVED FROM SSU-1	DATE/TIME SEP 13 2010 0800	RECEIVED BY/STORED IN L.D. Wall CHPRC	DATE/TIME SEP 13 2010 0800	
RELINQUISHED BY/REMOVED FROM L.D. Wall CHPRC	DATE/TIME SEP 13 2010 1400	RECEIVED BY/STORED IN FEDEX	DATE/TIME	
RELINQUISHED BY/REMOVED FROM FED EX	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME 09/14/10 0915	
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(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-341	PAGE 1 OF 1
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL 14382	TELEPHONE NO.: 376-2858 7897	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 4 15ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-184	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 12	COA: 301966ES10	METHOD OF SHIPMENT: FEDERAL EXPRESS	
SHIPPED TO: Eberline Services	OFFSITE PROPERTY NO.: SEE PTR 01984		BILL OF LADING/AIR BILL NO.: SEE PTR 7962 3788 8755		

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
RADIOACTIVE TIE TO: B27ML5

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27MM8	SOIL	SEP 08 2010	1200	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 08 2010 1410	RECEIVED BY/STORED IN: MO1109 SSU #1	DATE/TIME: SEP 08 2010 1410
RELINQUISHED BY/REMOVED FROM: MO 1109 SSU 7	DATE/TIME: 9/9/10 1230	RECEIVED BY/STORED IN: J Sales	DATE/TIME: 9/9/10 1230
RELINQUISHED BY/REMOVED FROM: J Sales	DATE/TIME: 9/9/10 1400	RECEIVED BY/STORED IN: SSU #7	DATE/TIME: 9/9/10 1400
RELINQUISHED BY/REMOVED FROM: SSU- 1	DATE/TIME: SEP 13 2010 0800	RECEIVED BY/STORED IN: L.D. Wall CHPRC	DATE/TIME: SEP 13 2010 0800
RELINQUISHED BY/REMOVED FROM: L.D. Wall CHPRC	DATE/TIME: SEP 13 2010 1400	RECEIVED BY/STORED IN: FEDEX	DATE/TIME:
RELINQUISHED BY/REMOVED FROM: FED EX	DATE/TIME:	RECEIVED BY/STORED IN: NEWATAWAN	DATE/TIME: 09/14/10 0915
RELINQUISHED BY/REMOVED FROM:	DATE/TIME:	RECEIVED BY/STORED IN:	DATE/TIME:

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-342	PAGE 1 OF 1
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL H4 382	TELEPHONE NO.: 376-2858 7897	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND
SAMPLING LOCATION: 100-K-63 location 4 15ft Dup	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO.: GWS-184	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 12'	COA: 301966ES10	METHOD OF SHIPMENT: FEDERAL EXPRESS	
SHIPPED TO: Eberline Services	OFFSITE PROPERTY NO.: SEE PTR 01984		BILL OF LADING/AIR BILL NO.: SEE PTR 7962 3788 8755		

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
RADIOACTIVE TIE TO: B27ML6

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27MM9	SOIL	SEP 08 2010	1200	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall	SEP 08 2010 1410	M01109 SSU	SEP 08 2010 1410
M01109 SSU 7	9/9/10 1230	J Scales	9/9/10 1230
J Scales	9/9/10 1400	SSU #7	9/9/10 1400
SSU- 1	SEP 13 2010 0800	L.D. Wall	SEP 13 2010 0800
L.D. Wall	SEP 13 2010 1400	FEDEX	
		F. MATSUMAN	09/14/10 0815

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-343	PAGE 1 OF 1
COLLECTOR FM Hall CHPRC	COMPANY CONTACT WIDRIG, DL H4382	TELEPHONE NO. 376-2858 7897	PROJECT COORDINATOR WIDRIG, DL	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 100-K-63 location 5 15ft	PROJECT DESIGNATION ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO. F10-256	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO. GW5-184	FIELD LOGBOOK NO. HNF-N-507-13.	ACTUAL SAMPLE DEPTH 13'	COA 301966ES10	METHOD OF SHIPMENT FEDERAL EXPRESS	
SHIPPED TO Eberline Services	OFFSITE PROPERTY NO. SEE PTR 01984		BILL OF LADING/AIR BILL NO. SEE PTR 7962 3788 8755		

MATRIX*	POSSIBLE SAMPLE HAZARDS/ REMARKS	PRESERVATION	None
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	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)	HOLDING TIME	6 Months
		TYPE OF CONTAINER	G/P
		NO. OF CONTAINER(S)	1
		VOLUME	120mL
	SPECIAL HANDLING AND/OR STORAGE RADIOACTIVE TIE TO: B27ML7	SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27MN0	SOIL	SEP 08 2010	1310	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM FM Hall CHPRC	DATE/TIME SEP 08 2010 1410	RECEIVED BY/STORED IN MO1109 SSU #1	DATE/TIME SEP 08 2010 1410	** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. (1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;
RELINQUISHED BY/REMOVED FROM MO 1109 SSU 7 9/9/10	DATE/TIME 1230	RECEIVED BY/STORED IN J Scales 9/9/10	DATE/TIME 1230	
RELINQUISHED BY/REMOVED FROM J Scales 9/9/10	DATE/TIME 1400	RECEIVED BY/STORED IN SSU #7 9/9/10	DATE/TIME 1400	
RELINQUISHED BY/REMOVED FROM SSU- 1	DATE/TIME SEP 13 2010 0800	RECEIVED BY/STORED IN L.D. Wall CHPRC	DATE/TIME SEP 13 2010 0800	
RELINQUISHED BY/REMOVED FROM L.D. Wall CHPRC	DATE/TIME SEP 13 2010 1400	RECEIVED BY/STORED IN FEDEX	DATE/TIME	
RELINQUISHED BY/REMOVED FROM FED EX	DATE/TIME	RECEIVED BY/STORED IN M NATHAN	DATE/TIME 09/14/10 0915	
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(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-344	PAGE 1 OF 1
COLLECTOR J. Scales	COMPANY CONTACT WIDRIG, DL H4382	TELEPHONE NO. 376-2858 7897	PROJECT COORDINATOR WIDRIG, DL	PRICE CODE 8C AIR QUALITY ☐	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 100-K-63 location 6 15ft	PROJECT DESIGNATION ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO. F10-256		
ICE CHEST NO. GWS-184	FIELD LOGBOOK NO. HNF -~~N-507~~-13.	ACTUAL SAMPLE DEPTH 15'	COA 301966ES10	METHOD OF SHIPMENT FEDERAL EXPRESS	
SHIPPED TO Eberline Services	OFFSITE PROPERTY NO. SEE PTR 01984		BILL OF LADING/AIR BILL NO. SEE PTR 7962 3788 8755		

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
RADIOACTIVE TIE TO: B27ML8

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27MN1	SOIL	SEP 09 2010	0846	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM J. Scales	DATE/TIME SEP 09 2010 1400	RECEIVED BY/STORED IN SSU- 1	DATE/TIME SEP 09 2010 1400
RELINQUISHED BY/REMOVED FROM SSU- 1	DATE/TIME SEP 13 2010 0800	RECEIVED BY/STORED IN L.D. Wall CHPRC	DATE/TIME SEP 13 2010 0800
RELINQUISHED BY/REMOVED FROM L.D. Wall CHPRC	DATE/TIME SEP 13 2010 1400	RECEIVED BY/STORED IN FEDEX	DATE/TIME
RELINQUISHED BY/REMOVED FROM FED EX	DATE/TIME	RECEIVED BY/STORED IN M-NATARAJAN	DATE/TIME 09/14/10 0915
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-345	PAGE 1 OF 1
COLLECTOR J. Scales	COMPANY CONTACT WIDRIG, DL H4382	TELEPHONE NO. 376-2858 7897	PROJECT COORDINATOR WIDRIG, DL	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 100-K-63 location 7 15ft	PROJECT DESIGNATION ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO. F10-256	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO. GWS-184	FIELD LOGBOOK NO. HNF-N-507-13	ACTUAL SAMPLE DEPTH 15'	COA 301966ES10	METHOD OF SHIPMENT FEDERAL EXPRESS	
SHIPPED TO Eberline Services	OFFSITE PROPERTY NO. SEE PTR 01984		BILL OF LADING/AIR BILL NO. SEE PTR 7962 3788 8755		

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
RADIOACTIVE TIE TO: B27ML9

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	[redacted]
B27MN2	SOIL	SEP 09 2010	1006	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM J. Scales	DATE/TIME SEP 09 2010 1400	RECEIVED BY/STORED IN SSU-1	DATE/TIME SEP 09 2010 1400
RELINQUISHED BY/REMOVED FROM SSU-1	DATE/TIME SEP 13 2010 0800	RECEIVED BY/STORED IN L.D. Wall CHPRC	DATE/TIME SEP 13 2010 0800
RELINQUISHED BY/REMOVED FROM L.D. Wall CHPRC	DATE/TIME SEP 13 2010 1400	RECEIVED BY/STORED IN FEDEX	DATE/TIME
RELINQUISHED BY/REMOVED FROM FEDEX	DATE/TIME	RECEIVED BY/STORED IN M. NATARAJAN	DATE/TIME 09/14/10 0815
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;

ORIGINAL

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

A-6003-618(01/06)

1.0 GENERAL

CH2M Hill Plateau Remediation Company (CHPRC) Sample Delivery Group H4383 was composed of one water sample designated under SAF No. F10-268 with a Project Designation of: ARRA 216-K-63 KW Floodplain In-Process Sampling – QC Sampling.

The sample was received as stated on the chain-of-custody document. Any discrepancies are noted on the Eberline Analytical Sample Receipt Checklist.

2.0 ANALYSIS NOTES

2.1 Nickel-63 Analysis

No problems were encountered during the course of the analyses. The results for both the original and duplicate analyses were less than their respective MDA's, therefore no RPD, or statistical control limit is calculated.

3.0 Case Narrative Certification Statement

"I 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 obtained in this hard copy data package has been authorized by the Laboratory Manager or a designee, as verified by the following signature."

for MWTchem 10/4/10

N. Joseph Verville
Client Services Manager

Date

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-268-002	PAGE 1 OF 1
COLLECTOR PM Hall CHPRC	COMPANY CONTACT WIDRIG, DL H4383	TELEPHONE NO. 376-2858 7898	PROJECT COORDINATOR WIDRIG, DL	PRICE CODE 7C	DATA TURNAROUND
SAMPLING LOCATION 100-K-63 In-Process EB	PROJECT DESIGNATION ARRA 100-K-63 KW Floodplain In Process Sampling - QC Sampling		SAF NO. F10-268	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO. GWS-184	FIELD LOGBOOK NO. HNF-N-507-13	ACTUAL SAMPLE DEPTH N/A	COA 301966ES10	METHOD OF SHIPMENT FEDERAL EXPRESS	
SHIPPED TO Eberline Services	OFFSITE PROPERTY NO. SEE PTR 01984		BILL OF LADING/AIR BILL NO. SEE PTR 7962 3788 8755		

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	HNO3 to pH <2
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	2
VOLUME	1000mL
SAMPLE ANALYSIS	Nickel-63;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27MR8	WATER	SEP 02 2010	1218	✓

0

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM PM Hall CHPRC	DATE/TIME SEP 02 2010 1400	RECEIVED BY/STORED IN MO1109 SSU #	DATE/TIME SEP 02 2010 1400
RELINQUISHED BY/REMOVED FROM MO1109 SSU #7	DATE/TIME 9/9/10 1230	RECEIVED BY/STORED IN J Scales	DATE/TIME 9/9/10 1230
RELINQUISHED BY/REMOVED FROM J Scales	DATE/TIME 9/9/10 1400	RECEIVED BY/STORED IN SSU #7	DATE/TIME 9/9/10 1400
RELINQUISHED BY/REMOVED FROM SSU- 1	DATE/TIME SEP 13 2010 0800	RECEIVED BY/STORED IN L.D. Wall CHPRC	DATE/TIME SEP 13 2010 0800
RELINQUISHED BY/REMOVED FROM L.D. Wall CHPRC	DATE/TIME SEP 13 2010 1400	RECEIVED BY/STORED IN FEDEX	DATE/TIME
RELINQUISHED BY/REMOVED FROM FED EX	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME 08/14/10 0915
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

☐ ORIGINAL

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

A-6003-618(01/06)

1.0 GENERAL

CH2M Hill Plateau Remediation Company (CHPRC) Sample Delivery Group H4393 was composed of twenty-one solid (soil) samples designated under SAF No. F10-256: ARRA 100-K-63 KW Floodplain in Process Sampling - Soil.

The samples were received as stated on the chain-of-custody documents. Any discrepancies are noted on the Eberline Analytical Sample Receipt Checklist.

2.0 ANALYSIS NOTES

2.1 Tritium Analysis

The results for both the original and duplicate analyses were less than their respective MDA's, therefore no RPD, or statistical control limit is calculated. No problems were encountered during the course of the analyses.

2.2 Carbon-14 Analysis

The calculated result for sample B27M10 was 116 $\pm$4.4 pCi/g (MDA=4.01 pCi/g); two duplicate analyses of this sample were performed and the results for both of which were less than their respective MDA's (MDA's=3.86 pCi/g and 4.76 pCi/g). The difference in the results may be due to non-homogeneous C-14 activity in the soil matrix. See attached Issue Resolution Form. No other problems were encountered during the course of the analyses.

2.3 Nickel-63 Analysis

The results for both the original and duplicate analyses were less than their respective MDA's, therefore no RPD, or statistical control limit is calculated. No problems were encountered during the course of the analyses.

2.4 Isotopic Thorium Analysis

Thorium-230 results for both the original and duplicate analyses were less than their respective MDA's, therefore no RPD, or statistical control limit is calculated. The relative percent difference (RPD) in the original and duplicate results for Th-228 was 34%, greater than the control limit of 25%, however per DOE QSAS, Rev. 2.5, "When either the DER or the RPD pass, then the duplicate is acceptable." In this case, the DER was 0.6, less than the control limit of 3.0. The relative percent difference (RPD) in the original and duplicate results for Th-232 was 64%, greater than the control limit of 25%, however per DOE QSAS, Rev. 2.5, "When either the DER or the RPD pass, then the duplicate is acceptable." In this case, the DER was 1.3, less than the control limit of 3.0. No other problems were encountered during the course of the analyses.

3.0 Case Narrative Certification Statement

"I 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 obtained in this hard copy data package has been authorized by the Laboratory Manager or a designee, as verified by the following signature."

N. Joseph Verville
Client Services Manager

10/13/10
Date

ISSUE RESOLUTION FORM

CHPRC TRACKING NUMBER: 10-248

Date : October 12, 2010 SAF No. **F10-256**

SDG: **H4393** LOGIN No.: TEST:

Sample No.(s) **B27M10, B27M12, B27M13, B27M14, B27M15, B27M17, B27M89, B27M91, B27M92, B27M93, B27M94, B27M96, B27MJ0, B27MJ2, B27MJ3, B27MJ4, B27MJ7, B27MN3, B27MN5, B27MN6, B27MP0**

Submitted By: J. Verville, EAC
Phone No. 510-235-2633 x264
Fax No. 510-235-0438

Submitted To: Sara Champoux
Phone No. 509-373-5290
Fax No.

ISSUE	PROPOSED RESOLUTION
Calculated result for sample B27M10 is 116 ± 4.4, MDA=4.01 pCi/g. Two duplicates were also prepared, results for those duplicates are: Dup 1 non-detect, MDA=3.86 pCi/g Dup 2 non-detect, MDA=4.76 pCi/g The RDL for the analysis is 50 pCi/g.	The positive result is considered anomalous representing C-14 activity not sufficiently flushed from the oxidizer machine prior to analyzing the batch of samples that B27M10 was a part. The counting blanks associated with the analytical run were non-positive, and the reported QC blank sample was also non-positive. Eberline would prefer to report the results "as are", however reanalysis is available at the direction of CHPRC.

CHPRC/BHI/WMH/PNNL COMMENTS

Please report results "as are" and note in the narrative.

Sara Champoux 10/13/2010
Signature and Date

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-175	PAGE 1 OF 1
COLLECTOR FM Hall CHPRC	COMPANY CONTACT WIDRIG, DL H4393	TELEPHONE NO. 376-2858 7704	PROJECT COORDINATOR WIDRIG, DL	PRICE CODE 8C AIR QUALITY ☐	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 100-K-63 location 8 Surface	PROJECT DESIGNATION ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO. F10-256		
ICE CHEST NO. GWS-116	FIELD LOGBOOK NO. ~~HNF-N-507-~~ 13-	ACTUAL SAMPLE DEPTH 0 - 1	COA 301966ES10	METHOD OF SHIPMENT FEDERAL EXPRESS	
SHIPPED TO Eberline Services	OFFSITE PROPERTY NO. ~~SEE PTR~~ 02034 RW 9/16/10		BILL OF LADING/AIR BILL NO. ~~SEE PTR~~ 793920 861165 RW 9/16/10		

MATRIX*	POSSIBLE SAMPLE HAZARDS/ REMARKS		
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	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	None
		HOLDING TIME	6 Months
		TYPE OF CONTAINER	G/P
		NO. OF CONTAINER(S)	1
		VOLUME	120mL
	SPECIAL HANDLING AND/OR STORAGE RADIOACTIVE TIE TO: B27LX7	SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27M10	SOIL	SEP 13 2010	0740	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM FM Hall CHPRC	DATE/TIME SEP 13 2010 / 1500	RECEIVED BY/STORED IN M01109 SSU#1	DATE/TIME SEP 13 2010 / 1500
RELINQUISHED BY/REMOVED FROM M01109 SSU#1	DATE/TIME 9-14-10 1300	RECEIVED BY/STORED IN FM Hall	DATE/TIME 9-14-10 1300
RELINQUISHED BY/REMOVED FROM FM Hall	DATE/TIME 9-14-10 1500	RECEIVED BY/STORED IN SSU #1	DATE/TIME 9-14-10 1500
RELINQUISHED BY/REMOVED FROM SSU-1	DATE/TIME SEP 16 2010 0800	RECEIVED BY/STORED IN L.D. Wall CHPRC	DATE/TIME SEP 16 2010 0800
RELINQUISHED BY/REMOVED FROM L.D. Wall CHPRC	DATE/TIME SEP 16 2010 1400	RECEIVED BY/STORED IN FEDEX	DATE/TIME
RELINQUISHED BY/REMOVED FROM FED EX	DATE/TIME	RECEIVED BY/STORED IN R.E. NATARAJAN	DATE/TIME 09/28/10 0920
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

(1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-177	PAGE 1 OF 1
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: WIDRIG, DL H4393	TELEPHONE NO.: 376-2858 7704	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C AIR QUALITY: ☐	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 10 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256		
ICE CHEST NO.: GWS-116	FIELD LOGBOOK NO.: HNF-N-507-13.	ACTUAL SAMPLE DEPTH: 0-1'	COA: 301966ES10	METHOD OF SHIPMENT: FEDERAL EXPRESS	
SHIPPED TO: Eberline Services	OFFSITE PROPERTY NO.: ~~SEE PTR~~ AW 9/16/10 02034		BILL OF LADING/AIR BILL NO.: ~~SEE PTR~~ AW 9/16/10 793920 861165		

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
RADIOACTIVE TIE TO: B27LX9

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27M12	SOIL	SEP 13 2010	0845	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall	DATE/TIME: SEP 13 2010 1500	RECEIVED BY/STORED IN: M01109 SSU #1	DATE/TIME: SEP 13 2010 1500
RELINQUISHED BY/REMOVED FROM: M01109 SSU #1	DATE/TIME: 9-14-10 1300	RECEIVED BY/STORED IN: FM Hall	DATE/TIME: 9-14-10 1300
RELINQUISHED BY/REMOVED FROM: FM Hall	DATE/TIME: 9-14-10 1500	RECEIVED BY/STORED IN: SSU #1	DATE/TIME: 9-14-10 1500
RELINQUISHED BY/REMOVED FROM: SSU-1	DATE/TIME: SEP 16 2010 0800	RECEIVED BY/STORED IN: L.D. Wall	DATE/TIME: SEP 16 2010 0800
RELINQUISHED BY/REMOVED FROM: L.D. Wall CHPRC	DATE/TIME: SEP 16 2010 1400	RECEIVED BY/STORED IN: FEDEX	DATE/TIME:
RELINQUISHED BY/REMOVED FROM: FED EX	DATE/TIME:	RECEIVED BY/STORED IN:	DATE/TIME: 09/18/10 0930
RELINQUISHED BY/REMOVED FROM:	DATE/TIME:	RECEIVED BY/STORED IN:	DATE/TIME:

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-178	PAGE 1 OF 1
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL H4393	TELEPHONE NO.: 376-2858 7704	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND
SAMPLING LOCATION: 100-K-63 location 11 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO.: 6WS-116	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 0-11	COA: 301966ES10	METHOD OF SHIPMENT: FEDERAL EXPRESS	
SHIPPED TO: Eberline Services	OFFSITE PROPERTY NO.: ~~SEE PTR~~ 02034 RW 9/16/10		BILL OF LADING/AIR BILL NO.: ~~SEE PTR~~ 793920 861165 RW 9/16/10		

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
RADIOACTIVE TIE TO: B27LY0

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27M13	SOIL	SEP 13 2010	1000	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 13 2010/1500	MO1109 SSU#1	SEP 13 2010 1500
MO 1109 SSU#1	9-14-10 1300	FM Hall	9-14-10 1300
FM Hall	9-14-10 1500	SSU#1	9-14-10 1500
SSU-1	SEP 16 2010 0800	L.D. Wall CHPRC	SEP 16 2010 0800
L.D. Wall CHPRC	SEP 16 2010 1400	FEDEX	
FED EX			09/18/10 0930

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-179	PAGE 1 OF 1
COLLECTOR FM Hall CHPRC	COMPANY CONTACT WIDRIG, DL H4393	TELEPHONE NO. 376-2858 7704	PROJECT COORDINATOR WIDRIG, DL	PRICE CODE 8C AIR QUALITY ☐	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 100-K-63 location 12 Surface	PROJECT DESIGNATION ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO. F10-256		
ICE CHEST NO. GWS-116	FIELD LOGBOOK NO. HNF ~~N-507~~-13	ACTUAL SAMPLE DEPTH 0 - 1	COA 301966ES10	METHOD OF SHIPMENT FEDERAL EXPRESS	
SHIPPED TO Eberline Services	OFFSITE PROPERTY NO. ~~SEE PTR~~ 02034 RW. 9/16/10		BILL OF LADING/AIR BILL NO. ~~SEE PTR~~ 793920 861165 RW. 9/16/10		

MATRIX*	POSSIBLE SAMPLE HAZARDS/ REMARKS		
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	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	None
		HOLDING TIME	6 Months
		TYPE OF CONTAINER	G/P
		NO. OF CONTAINER(S)	1
		VOLUME	120mL
	SPECIAL HANDLING AND/OR STORAGE RADIOACTIVE TIE TO: B27LY1	SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27M14	SOIL	SEP 14 2010	0800	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM FM Hall CHPRC	DATE/TIME SEP 14 2010/1500	RECEIVED BY/STORED IN SSU #1	DATE/TIME SEP 14 2010/1500
RELINQUISHED BY/REMOVED FROM SSU-1	DATE/TIME SEP 16 2010 1000	RECEIVED BY/STORED IN L.D. Wall CHPRC L.D. Wall	DATE/TIME SEP 16 2010 1000
RELINQUISHED BY/REMOVED FROM L.D. Wall CHPRC L.D. Wall	DATE/TIME SEP 16 2010 1400	RECEIVED BY/STORED IN FEDEX	DATE/TIME
RELINQUISHED BY/REMOVED FROM FED EX	DATE/TIME	RECEIVED BY/STORED IN F. MATAWATAN	DATE/TIME 09/15/10 0930
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

(1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-180	PAGE 1 OF 1
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL H4393	TELEPHONE NO.: 376-2858 7704	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 13 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-116	FIELD LOGBOOK NO.: HNF ~~N-507~~-13	ACTUAL SAMPLE DEPTH: 0 - 1	COA: 301966ES10	METHOD OF SHIPMENT: FEDERAL EXPRESS	
SHIPPED TO: Eberline Services	OFFSITE PROPERTY NO.: ~~SEE PTR~~ 02034 LW. 9/16/10		BILL OF LADING/AIR BILL NO.: ~~SEE PTR~~ LW. 9/16/10	793920 861165	

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
RADIOACTIVE TIE TO: B27LY2

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27M15	SOIL	SEP 14 2010	0845	✓

CHAIN OF POSSESSION	DATE/TIME	SIGN/ PRINT NAMES: RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM: FM Hall	SEP 14 2010 1500	SSU #1	SEP 14 2010 1500
RELINQUISHED BY/REMOVED FROM: CHPRC SSU-1	SEP 16 2010 1000	RECEIVED BY/STORED IN: L.D. Wall CHPRC	SEP 16 2010 1000
RELINQUISHED BY/REMOVED FROM: L.D. Wall CHPRC	SEP 16 2010 1400	RECEIVED BY/STORED IN: FEDEX	
RELINQUISHED BY/REMOVED FROM: FED EX		RECEIVED BY/STORED IN: JF. Natarajan	09/18/10 0930
RELINQUISHED BY/REMOVED FROM		RECEIVED BY/STORED IN	
RELINQUISHED BY/REMOVED FROM		RECEIVED BY/STORED IN	
RELINQUISHED BY/REMOVED FROM		RECEIVED BY/STORED IN	

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-182	PAGE 1 OF 1
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL H4393	TELEPHONE NO.: 376-2858 7704	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 15 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-116	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 0-1	COA: 301966ES10	METHOD OF SHIPMENT: FEDERAL EXPRESS	
SHIPPED TO: Eberline Services	OFFSITE PROPERTY NO.: ~~SEE PTR~~ 02034 LLO. 9/16/10		BILL OF LADING/AIR BILL NO.: ~~SEE PTR~~ 793920 861165 LLO. 9/16/10		

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
RADIOACTIVE TIE TO: B27LY4

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27M17	SOIL	SEP 14 2010	0925	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 14 2010 1500	RECEIVED BY/STORED IN: SSU #1	DATE/TIME: SEP 14 2010 1500
RELINQUISHED BY/REMOVED FROM: SSU #1	DATE/TIME: SEP 16 2010 1000	RECEIVED BY/STORED IN: L.D. Wall LD. Wall CHPRC	DATE/TIME: SEP 16 2010 1000
RELINQUISHED BY/REMOVED FROM: L.D. Wall CHPRC LD. Wall	DATE/TIME: SEP 16 2010 1400	RECEIVED BY/STORED IN: FEDEX	DATE/TIME:
RELINQUISHED BY/REMOVED FROM: FED EX	DATE/TIME:	RECEIVED BY/STORED IN: [illegible]	DATE/TIME: 09/18/10 0930
RELINQUISHED BY/REMOVED FROM	DATE/TIME:	RECEIVED BY/STORED IN	DATE/TIME:
RELINQUISHED BY/REMOVED FROM	DATE/TIME:	RECEIVED BY/STORED IN	DATE/TIME:
RELINQUISHED BY/REMOVED FROM	DATE/TIME:	RECEIVED BY/STORED IN	DATE/TIME:

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-244	PAGE 1 OF 1
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL H4393	TELEPHONE NO.: 376-2858 7704	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 8 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-116	FIELD LOGBOOK NO.: ~~HNF-N-807~~ 13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10	METHOD OF SHIPMENT: FEDERAL EXPRESS	
SHIPPED TO: Eberline Services	OFFSITE PROPERTY NO.: ~~SEE PTR~~ 02034		BILL OF LADING/AIR BILL NO.: ~~SEE PTR~~ 793920 861165		

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
RADIOACTIVE TIE TO: B27M66

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27M89	SOIL	SEP 13 2010	0800	✓

CHAIN OF POSSESSION	DATE/TIME	SIGN/ PRINT NAMES: RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	SEP 13 2010 1500	RECEIVED BY/STORED IN: M01109 SSU#1	SEP 13 2010 1500
RELINQUISHED BY/REMOVED FROM: M01109 SSU #1	9-14-10 1300	RECEIVED BY/STORED IN: FM Hall	9-14-10 1300
RELINQUISHED BY/REMOVED FROM: FM Hall	9-14-10 1500	RECEIVED BY/STORED IN: SSU- 1	9-14-10 1500
RELINQUISHED BY/REMOVED FROM: SSU- 1	SEP 16 2010 0800	RECEIVED BY/STORED IN: L.D. Wall CHPRC	SEP 16 2010 0800
RELINQUISHED BY/REMOVED FROM: L.D. Wall CHPRC	SEP 16 2010 1400	RECEIVED BY/STORED IN: FEDEX	
RELINQUISHED BY/REMOVED FROM: FED EX		RECEIVED BY/STORED IN: M. NATARAJAN	09/18/10 0970
RELINQUISHED BY/REMOVED FROM:		RECEIVED BY/STORED IN:	

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-246	PAGE 1 OF 1
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL H4393	TELEPHONE NO.: 376-2858 7704	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 10 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: 6WS-116	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10	METHOD OF SHIPMENT: FEDERAL EXPRESS	
SHIPPED TO: Eberline Services	OFFSITE PROPERTY NO.: ~~SEE PTR~~ LW. 9/16/10 02034		BILL OF LADING/AIR BILL NO.: ~~SEE PTR~~ LW. 9/16/10 793920 861165		

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
RADIOACTIVE TIE TO: B27M68

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27M91	SOIL	SEP 13 2010	0900	✓

CHAIN OF POSSESSION — **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 13 2010 1500	MO1109SSU#1	SEP 13 2010 1500
MO1109 SSU#1	9-14-10	FM Hall	9-14-10
FM Hall	9-14-10	SSU#1	9-14-10
SSU-1	SEP 16 2010 0800	L.D. Wall	SEP 16 2010 0800
L.D. Wall CHPRC	SEP 16 2010 1400	FEDEX	
FED EX		F. Matthewson	09/18/10 09:30

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-247	PAGE 1 OF 1
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL HH393	TELEPHONE NO.: 376-2858 7704	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 11 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-116	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10	METHOD OF SHIPMENT: FEDERAL EXPRESS	
SHIPPED TO: Eberline Services	OFFSITE PROPERTY NO.: ~~SEE PTR~~ LW. 9/10/10 02034		BILL OF LADING/AIR BILL NO.: ~~SEE PTR~~ LW. 9/10/10 793920861165		

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
RADIOACTIVE TIE TO: B27M69

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27M92	SOIL	SEP 13 2010	1015	✓

CHAIN OF POSSESSION	DATE/TIME	SIGN/ PRINT NAMES: RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	SEP 13 2010 1500	M01109SSU #1	SEP 13 2010 1500
RELINQUISHED BY/REMOVED FROM: M01109 SSU #1	9-14-10 1300	RECEIVED BY/STORED IN: FM Hall	9-14-10 1300
RELINQUISHED BY/REMOVED FROM: FM Hall	9-14-10 1500	RECEIVED BY/STORED IN: SSU #1	9-14-10 1500
RELINQUISHED BY/REMOVED FROM: SSU-1	SEP 16 2010 0800	RECEIVED BY/STORED IN: L.D. Wall CHPRC	SEP 16 2010 0800
RELINQUISHED BY/REMOVED FROM: L.D. Wall CHPRC	SEP 16 2010 1400	RECEIVED BY/STORED IN: FEDEX	
RELINQUISHED BY/REMOVED FROM: Fed Ex		RECEIVED BY/STORED IN: M. Hatchman	09/18/10 0930
RELINQUISHED BY/REMOVED FROM		RECEIVED BY/STORED IN	

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-248	PAGE 1 OF 1
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL #4393	TELEPHONE NO.: 376-2858 7704	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 12 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-116	FIELD LOGBOOK NO.: ~~HNF-N-507-~~ 13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10	METHOD OF SHIPMENT: FEDERAL EXPRESS	
SHIPPED TO: Eberline Services	OFFSITE PROPERTY NO.: ~~SEE PTR~~ 02034 AW. 9/16/10		BILL OF LADING/AIR BILL NO.: ~~SEE PTR~~ 793920 861165 AW. 9/16/10		

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
RADIOACTIVE TIE TO: B27M70

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27M93	SOIL	SEP 14 2010	0820	✓

CHAIN OF POSSESSION	DATE/TIME	SIGN/ PRINT NAMES	DATE/TIME
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	SEP 14 2010 1500	RECEIVED BY/STORED IN: SSU #1	SEP 14 2010 1500
RELINQUISHED BY/REMOVED FROM: SSU-1	SEP 16 2010 1000	RECEIVED BY/STORED IN: L.D. Wall CHPRC	SEP 16 2010 1000
RELINQUISHED BY/REMOVED FROM: L.D. Wall CHPRC	SEP 16 2010 1400	RECEIVED BY/STORED IN: FEDEX	
RELINQUISHED BY/REMOVED FROM: FED EX		RECEIVED BY/STORED IN: M. MATBUKHAN	08/18/10 0920
RELINQUISHED BY/REMOVED FROM		RECEIVED BY/STORED IN	
RELINQUISHED BY/REMOVED FROM		RECEIVED BY/STORED IN	
RELINQUISHED BY/REMOVED FROM		RECEIVED BY/STORED IN	

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;

☐ ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-256-249

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL H4393	TELEPHONE NO.: 376-2858 7704	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	AIR QUALITY: ☐	DATA TURNAROUND: 15 Days / 15 Days	
SAMPLING LOCATION: 100-K-63 location 13 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil	SAF NO.: F10-256	
ICE CHEST NO.: GWS-116 ~~SAL-777~~ RW. 9/16/10	FIELD LOGBOOK NO.: HNF -~~N-507~~-13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10
METHOD OF SHIPMENT: FEDERAL EXPRESS	SHIPPED TO: Eberline Services	OFFSITE PROPERTY NO.: ~~SEE PTR~~ RW. 9/16/10 02034	BILL OF LADING/AIR BILL NO.: ~~SEE PTR~~ RW. 9/16/10 793920 861165

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
RADIOACTIVE TIE TO: B27M71

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27M94	SOIL	SEP 14 2010	0905	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 14 2010 1500	SSU #1	SEP 14 2010 1500
SSU-1	SEP 16 2010 1000	L.D. Wall CHPRC	SEP 16 2010 1000
L.D. Wall CHPRC	SEP 16 2010 1400	FEDEX	
FED EX		[illegible]	09/28/10 09:220

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-251	PAGE 1 OF 1
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL H4393	TELEPHONE NO.: 376-2858 7704	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 15 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-116	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10	METHOD OF SHIPMENT: FEDERAL EXPRESS	
SHIPPED TO: Eberline Services	OFFSITE PROPERTY NO.: ~~SEE PTR~~ 02034 KW 9/16/10		BILL OF LADING/AIR BILL NO.: ~~SEE PTR~~ KW 9/16/10	793920 861165	

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
RADIOACTIVE TIE TO: B27M73

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27M96	SOIL	SEP 14 2010	0940	✓

CHAIN OF POSSESSION	DATE/TIME	SIGN/ PRINT NAMES	DATE/TIME
RELINQUISHED BY/REMOVED FROM: FM Hall	SEP 14 2010 1500	RECEIVED BY/STORED IN: SSU #1	SEP 14 2010 1500
RELINQUISHED BY/REMOVED FROM: SSU-1	SEP 16 2010 1000	RECEIVED BY/STORED IN: L.D. Wall	SEP 16 2010 1000
RELINQUISHED BY/REMOVED FROM: L.D. Wall	SEP 16 2010 1400	RECEIVED BY/STORED IN: FEDEX	
RELINQUISHED BY/REMOVED FROM: FED EX		RECEIVED BY/STORED IN: [illegible]	09/18/10 0930
RELINQUISHED BY/REMOVED FROM		RECEIVED BY/STORED IN	
RELINQUISHED BY/REMOVED FROM		RECEIVED BY/STORED IN	
RELINQUISHED BY/REMOVED FROM		RECEIVED BY/STORED IN	

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-305	PAGE 1 OF 1
COLLECTOR: FM Hall ~~CHPRC~~	COMPANY CONTACT: WIDRIG, DL H4393	TELEPHONE NO.: 376-2858 7704	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 8 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-116	FIELD LOGBOOK NO.: ~~HNF-N-507-~~ 13	ACTUAL SAMPLE DEPTH: 10'	COA: 301966ES10	METHOD OF SHIPMENT: FEDERAL EXPRESS	
SHIPPED TO: Eberline Services	OFFSITE PROPERTY NO.: ~~SEE PTR~~ 02034 KW. 9/16/10		BILL OF LADING/AIR BILL NO.: ~~SEE PTR~~ 793920 861165 KW. 9/16/10		

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
RADIOACTIVE TIE TO: B27MF5

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27MJ0	SOIL	SEP 13 2010	0815	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall	SEP 13 2010 1500	M01109 / SSU #1	SEP 13 2010 1500
~~CHPRC~~ M01109 SSU #1	9-14-10 1300	FM Hall	9-14-10 1300
FM Hall	9-14-10 1500	SSU #1	9-14-10 1500
SSU-1	SEP 16 2010 0800	L.D. Wall	SEP 16 2010 0800
L.D. Wall ~~CHPRC~~	SEP 16 2010 1400	FEDEX	
FED EX		M. Hathaway	09/18/10 0930

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-307	PAGE 1 OF 1
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL H4393	TELEPHONE NO.: 376-2858 7704	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 10 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: LW. 9/16/10 ~~SAF~~ - GWS-116	FIELD LOGBOOK NO.: HNF -N-507- 13	ACTUAL SAMPLE DEPTH: 10'	COA: 301966ES10	METHOD OF SHIPMENT: FEDERAL EXPRESS	
SHIPPED TO: Eberline Services	OFFSITE PROPERTY NO.: ~~SEE PTR~~ LW. 9/16/10 02034		BILL OF LADING/AIR BILL NO.: ~~SEE PTR~~ LW. 9/16/10 793920 861165		

MATRIX*	POSSIBLE SAMPLE HAZARDS/ REMARKS		
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	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	None
		HOLDING TIME	6 Months
		TYPE OF CONTAINER	G/P
		NO. OF CONTAINER(S)	1
		VOLUME	120mL
	SPECIAL HANDLING AND/OR STORAGE RADIOACTIVE TIE TO: B27MF7	SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27MJ2	SOIL	SEP 13 2010	0925	✓

CHAIN OF POSSESSION	SIGN/ PRINT NAMES		
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 13 2010 1500	RECEIVED BY/STORED IN: MO1109 SSU #1	DATE/TIME: SEP 13 2010 1500
RELINQUISHED BY/REMOVED FROM: MO1109 SSU #1	DATE/TIME: 9-14-10 1300	RECEIVED BY/STORED IN: FM Hall	DATE/TIME: 9-14-10 1300
RELINQUISHED BY/REMOVED FROM: FM Hall	DATE/TIME: 9-14-10 1500	RECEIVED BY/STORED IN: SSU #1	DATE/TIME: 9-14-10 1500
RELINQUISHED BY/REMOVED FROM: SSU- 1	DATE/TIME: SEP 16 2010 0800	RECEIVED BY/STORED IN: L.D. Wall CHPRC	DATE/TIME: SEP 16 2010 0800
RELINQUISHED BY/REMOVED FROM: L.D. Wall CHPRC	DATE/TIME: SEP 16 2010 1400	RECEIVED BY/STORED IN: FEDEX	DATE/TIME:
RELINQUISHED BY/REMOVED FROM: FED EX	DATE/TIME:	RECEIVED BY/STORED IN: FEMATAWANN	DATE/TIME: 09/18/10 0320
RELINQUISHED BY/REMOVED FROM:	DATE/TIME:	RECEIVED BY/STORED IN:	DATE/TIME:

SPECIAL INSTRUCTIONS

** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

(1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-308	PAGE 1 OF 1
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: WIDRIG, DL H4393	TELEPHONE NO.: 376-2858 7704	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 11 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-116	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 10'	COA: 301966ES10	METHOD OF SHIPMENT: FEDERAL EXPRESS	
SHIPPED TO: Eberline Services	OFFSITE PROPERTY NO.: ~~SEE PTR~~ 02034 LW. 9/16/10		BILL OF LADING/AIR BILL NO.: ~~SEE PTR~~ 793920 861165 LW. 9/16/10		

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
RADIOACTIVE TIE TO: B27MF8

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27MJ3	SOIL	SEP 13 2010	1040	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall, CHPRC	SEP 13 2010 1500	M01109SSU #1	SEP 13 2010 1500
M01109 SSU #1	9-14-10 1300	FM Hall	9-14-10 1300
FM Hall	9-14-10 1500	SSU #1	9-14-10 1500
SSU-1	SEP 16 2010 0800	L.D. Wall, CHPRC	SEP 16 2010 0800
L.D. Wall, CHPRC	SEP 16 2010 1400	FEDEX	
FED EX		FEDEX	09/18/10 0970

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-309	PAGE 1 OF 1
COLLECTOR FM Hall CHPRC	COMPANY CONTACT WIDRIG, DL H4393	TELEPHONE NO. 376-2858 7704	PROJECT COORDINATOR WIDRIG, DL	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 100-K-63 location 12 10ft	PROJECT DESIGNATION ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO. F10-256	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO. GWS-116	FIELD LOGBOOK NO. HNF -N-507-13	ACTUAL SAMPLE DEPTH 7'	COA 301966ES10	METHOD OF SHIPMENT FEDERAL EXPRESS	
SHIPPED TO Eberline Services	OFFSITE PROPERTY NO. ~~SEE PTR~~ LW. 9/16/10 02034		BILL OF LADING/AIR BILL NO. ~~SEE PTR~~ LW. 9/16/10 7939 2086 1165		

MATRIX*	POSSIBLE SAMPLE HAZARDS/ REMARKS
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	Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)
	SPECIAL HANDLING AND/OR STORAGE RADIOACTIVE TIE TO: B27MF9

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27MJ4	SOIL	SEP 14 2010	0830	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM FM Hall CHPRC	DATE/TIME SEP 14 2010 1500	RECEIVED BY/STORED IN SSU #1	DATE/TIME SEP 14 2010 1500
RELINQUISHED BY/REMOVED FROM SSU #1	DATE/TIME SEP 16 2010 1000	RECEIVED BY/STORED IN L.D. Wall CHPRC	DATE/TIME SEP 16 2010 1000
RELINQUISHED BY/REMOVED FROM L.D. Wall CHPRC	DATE/TIME SEP 16 2010 1400	RECEIVED BY/STORED IN FEDEX	DATE/TIME
RELINQUISHED BY/REMOVED FROM FED EX	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME 09/18/10 8920
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

(1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-312	PAGE 1 OF 1
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL H4393	TELEPHONE NO.: 376-2858 T704	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 15 10ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-116	FIELD LOGBOOK NO.: HNF-N-607-13-	ACTUAL SAMPLE DEPTH: 10'	COA: 301966ES10	METHOD OF SHIPMENT: FEDERAL EXPRESS	
SHIPPED TO: Eberline Services	OFFSITE PROPERTY NO.: ~~SEE PTR~~ 02034 AW. 9/16/10		BILL OF LADING/AIR BILL NO.: ~~SEE PTR~~ 793920 861165 AW 9/16/10		

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
RADIOACTIVE TIE TO: B27MH2

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27MJ7	SOIL	SEP 14 2010	0950	✓

CHAIN OF POSSESSION	SIGN/ PRINT NAMES		
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 14 2010 1500	RECEIVED BY/STORED IN: SSU #1	DATE/TIME: SEP 14 2010 1500
RELINQUISHED BY/REMOVED FROM: SSU-1	DATE/TIME: SEP 16 2010 1000	RECEIVED BY/STORED IN: L.D. Wall L.D. Wall	DATE/TIME: SEP 16 2010 1000
RELINQUISHED BY/REMOVED FROM: L.D. Wall L.D. Wall CHPRC	DATE/TIME: SEP 16 2010 1400	RECEIVED BY/STORED IN: FEDEX	DATE/TIME:
RELINQUISHED BY/REMOVED FROM: FED EX	DATE/TIME:	RECEIVED BY/STORED IN: TF-NASRUWAN	DATE/TIME: 09/18/10 0920
RELINQUISHED BY/REMOVED FROM	DATE/TIME:	RECEIVED BY/STORED IN	DATE/TIME:
RELINQUISHED BY/REMOVED FROM	DATE/TIME:	RECEIVED BY/STORED IN	DATE/TIME:
RELINQUISHED BY/REMOVED FROM	DATE/TIME:	RECEIVED BY/STORED IN	DATE/TIME:

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-346	PAGE 1 OF 1
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL 44393	TELEPHONE NO.: 376-2858 7704	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 8 15ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-116	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 13'	COA: 301966ES10	METHOD OF SHIPMENT: FEDERAL EXPRESS	
SHIPPED TO: Eberline Services	OFFSITE PROPERTY NO.: ~~SEE PTR~~ 02034 LW.9/16/10		BILL OF LADING/AIR BILL NO.: ~~SEE PTR~~ 793920 861165 LW.9/16/10		

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
RADIOACTIVE TIE TO: B27MM0

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27MN3	SOIL	SEP 13 2010	0831	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 13 2010/1500	RECEIVED BY/STORED IN: MO1109SSU #1	DATE/TIME: SEP 13 2010/1500
RELINQUISHED BY/REMOVED FROM: MO1109 SSU #1	DATE/TIME: 9-14-10 1300	RECEIVED BY/STORED IN: FM Hall	DATE/TIME: 9-14-10 1300
RELINQUISHED BY/REMOVED FROM: FM Hall	DATE/TIME: 9-14-10 1500	RECEIVED BY/STORED IN: SSU #1	DATE/TIME: 9-14-10 1500
RELINQUISHED BY/REMOVED FROM: SSU-1 L.D. Wall CHPRC	DATE/TIME: SEP 16 2010 0800	RECEIVED BY/STORED IN: L.D. Wall	DATE/TIME: SEP 16 2010 0800
RELINQUISHED BY/REMOVED FROM: L.D. Wall CHPRC	DATE/TIME: SEP 16 2010 1400	RECEIVED BY/STORED IN: FEDEX	DATE/TIME:
RELINQUISHED BY/REMOVED FROM: FEDEX	DATE/TIME:	RECEIVED BY/STORED IN: [illegible]	DATE/TIME: 09/16/10 0930
RELINQUISHED BY/REMOVED FROM:	DATE/TIME:	RECEIVED BY/STORED IN:	DATE/TIME:

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-348	PAGE 1 OF 1
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL H4393	TELEPHONE NO.: 376-2858 7704	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 10 15ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-116	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 13'	COA: 301966ES10	METHOD OF SHIPMENT: FEDERAL EXPRESS	
SHIPPED TO: Eberline Services	OFFSITE PROPERTY NO.: ~~SEE PTR~~ 02034 AW 9/16/10		BILL OF LADING/AIR BILL NO.: ~~SEE PTR~~ 793920 861165 AW 9/16/10		

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
RADIOACTIVE TIE TO: B27MM2

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27MN5	SOIL	SEP 13 2010	0940	✓

CHAIN OF POSSESSION	DATE/TIME	SIGN/ PRINT NAMES: RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	SEP 13 2010 1500	MO1109SSU#1	SEP 13 2010 1500
RELINQUISHED BY/REMOVED FROM: MO1109 SSU#1	9-14-10 1300	RECEIVED BY/STORED IN: FM Hall	9-14-10 1300
RELINQUISHED BY/REMOVED FROM: FM Hall	9-14-10 1500	RECEIVED BY/STORED IN: SSU#1	9-14-10 1500
RELINQUISHED BY/REMOVED FROM: SSU-1	SEP 16 2010 0800	RECEIVED BY/STORED IN: L.D. Wall CHPRC	SEP 16 2010 0800
RELINQUISHED BY/REMOVED FROM: L.D. Wall CHPRC	SEP 16 2010 1400	RECEIVED BY/STORED IN: FEDEX	
RELINQUISHED BY/REMOVED FROM: FED EX		RECEIVED BY/STORED IN: M. Mathewman	09/16/10 0830
RELINQUISHED BY/REMOVED FROM		RECEIVED BY/STORED IN	

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-349	PAGE 1 OF 1
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL H4393	TELEPHONE NO.: 376-2858 7704	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 11 15ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-116	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 14'	COA: 301966ES10	METHOD OF SHIPMENT: FEDERAL EXPRESS	
SHIPPED TO: Eberline Services	OFFSITE PROPERTY NO.: ~~SEE PTR~~ 02034 LW 9/16/10		BILL OF LADING/AIR BILL NO.: ~~SEE PTR~~ 793920 861165 LW 9/16/10		

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
RADIOACTIVE TIE TO: B27MM3

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27MN6	SOIL	SEP 13 2010	1220	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 13 2010 1500	RECEIVED BY/STORED IN: MO1109 SSU #1	DATE/TIME: SEP 13 2010 1500
RELINQUISHED BY/REMOVED FROM: MO 1109 SSU #1	DATE/TIME: 9-14-10 1300	RECEIVED BY/STORED IN: FM Hall	DATE/TIME: 9-14-10 1300
RELINQUISHED BY/REMOVED FROM: FM Hall	DATE/TIME: 9-14-10 1500	RECEIVED BY/STORED IN: SSU #1	DATE/TIME: 9-14-10 1500
RELINQUISHED BY/REMOVED FROM: SSU-1	DATE/TIME: SEP 16 2010 0800	RECEIVED BY/STORED IN: L.D. Wall CHPRC	DATE/TIME: SEP 16 2010 0800
RELINQUISHED BY/REMOVED FROM: L.D. Wall CHPRC	DATE/TIME: SEP 16 2010 1400	RECEIVED BY/STORED IN: FEDEX	DATE/TIME:
RELINQUISHED BY/REMOVED FROM: FED EX	DATE/TIME:	RECEIVED BY/STORED IN: M. Heatwatson	DATE/TIME: 09/18/10 0930
RELINQUISHED BY/REMOVED FROM:	DATE/TIME:	RECEIVED BY/STORED IN:	DATE/TIME:

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-353	PAGE 1 OF 1
COLLECTOR: ~~FM Hall~~ CHPRC	COMPANY CONTACT: WIDRIG, DL H4393	TELEPHONE NO.: 376-2858 7704	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 15 15ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-116	FIELD LOGBOOK NO.: ~~HNF-N-507-~~ 13	ACTUAL SAMPLE DEPTH: 14'	COA: 301966ES10	METHOD OF SHIPMENT: FEDERAL EXPRESS	
SHIPPED TO: Eberline Services	OFFSITE PROPERTY NO.: ~~SEE PTR~~ 02034 KW 9/16/10		BILL OF LADING/AIR BILL NO.: ~~SEE PTR~~ 793920 861165 KW 9/16/10		

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
RADIOACTIVE TIE TO: B27MM7

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27MP0	SOIL	SEP 14 2010	1005	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: ~~FM Hall~~ CHPRC	DATE/TIME: SEP 14 2010 1500	RECEIVED BY/STORED IN: SSU #1	DATE/TIME: SEP 14 2010 1500
RELINQUISHED BY/REMOVED FROM: SSU-1	DATE/TIME: SEP 16 2010 0800	RECEIVED BY/STORED IN: L.D. Wall	DATE/TIME: SEP 16 2010 0800
RELINQUISHED BY/REMOVED FROM: L.D. Wall	DATE/TIME: SEP 16 2010 1400	RECEIVED BY/STORED IN: FEDEX	DATE/TIME:
RELINQUISHED BY/REMOVED FROM: FED EX	DATE/TIME:	RECEIVED BY/STORED IN:	DATE/TIME: 09/18/10 0930
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;

ORIGINAL

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

A-6003-618(01/06)

1.0 GENERAL

CH2M Hill Plateau Remediation Company (CHPRC) Sample Delivery Group H4407 was composed of eleven solid (soil) samples designated under SAF No. F10-256: ARRA 100-K-63 KW Floodplain in Process Sampling - Soil.

The samples were received as stated on the chain-of-custody documents. Any discrepancies are noted on the Eberline Analytical Sample Receipt Checklist.

2.0 ANALYSIS NOTES

2.1 Tritium Analysis

The results for both the original and duplicate analyses were less than their respective MDA's, therefore no RPD, or statistical control limit is calculated. No problems were encountered during the course of the analyses.

2.2 Carbon-14 Analysis

The results for both the original and duplicate analyses were less than their respective MDA's, therefore no RPD, or statistical control limit is calculated. No problems were encountered during the course of the analyses.

2.3 Nickel-63 Analysis

The results for both the original and duplicate analyses were less than their respective MDA's, therefore no RPD, or statistical control limit is calculated. No problems were encountered during the course of the analyses.

2.4 Isotopic Thorium Analysis

Thorium-230 results for both the original and duplicate analyses were less than their respective MDA's, therefore no RPD, or statistical control limit is calculated. No problems were encountered during the course of the analyses.

3.0 Case Narrative Certification Statement

"I 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 obtained in this hard copy data package has been authorized by the Laboratory Manager or a designee, as verified by the following signature."

N. Joseph Verville
Client Services Manager

10/12/10
Date

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-183	PAGE 1 OF 1
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL H4407	TELEPHONE NO.: 376-2858 (7706)	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND
SAMPLING LOCATION: 100-K-63 location 16 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO.: GWS-236 ~~SAL-717~~ bb 9.22.10	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 0-1'	COA: 301966ES10	METHOD OF SHIPMENT: FEDERAL EXPRESS	
SHIPPED TO: Eberline Services	OFFSITE PROPERTY NO.: ~~SEE PTR~~ bb 9.22.10 02072		BILL OF LADING/AIR BILL NO.: ~~SEE PTR~~ bb 9/22/10 7939 3787 6314		

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
RADIOACTIVE TIE TO: B27LY5

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27M18	SOIL	SEP 20 2010	0730	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 20 2010 1300	RECEIVED BY/STORED IN: SSU #1	DATE/TIME: SEP 20 2010 1300
RELINQUISHED BY/REMOVED FROM: SSU-1	DATE/TIME: SEP 22 2010 1000	RECEIVED BY/STORED IN: B.E. Briggs CHPRC	DATE/TIME: SEP 22 2010 1000
RELINQUISHED BY/REMOVED FROM: B.E. Briggs CHPRC	DATE/TIME: SEP 22 2010 1400	RECEIVED BY/STORED IN: FEDEX	DATE/TIME:
RELINQUISHED BY/REMOVED FROM: FEDEX	DATE/TIME:	RECEIVED BY/STORED IN: F MATAUSAMAN	DATE/TIME: 09/23/10 0915
RELINQUISHED BY/REMOVED FROM	DATE/TIME:	RECEIVED BY/STORED IN	DATE/TIME:
RELINQUISHED BY/REMOVED FROM	DATE/TIME:	RECEIVED BY/STORED IN	DATE/TIME:
RELINQUISHED BY/REMOVED FROM	DATE/TIME:	RECEIVED BY/STORED IN	DATE/TIME:

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-184	PAGE 1 OF 1
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: WIDRIG, DL H4407	TELEPHONE NO.: 376-2858 (7706)	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 100-K-63 location 17 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-236 ~~SAAL-717~~ bb 9.22.10	FIELD LOGBOOK NO.: HNF-N-507-13-	ACTUAL SAMPLE DEPTH: 0-1'	COA: 301966ES10	METHOD OF SHIPMENT: FEDERAL EXPRESS	
SHIPPED TO: Eberline Services	OFFSITE PROPERTY NO.: ~~SEE PTR~~ bb 9.22.10 02072		BILL OF LADING/AIR BILL NO.: ~~SEE PTR~~ bb 9.22.10 7939 3787 6314		

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
RADIOACTIVE TIE TO: B27LY6

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27M19	SOIL	SEP 20 2010	0815	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall, CHPRC	DATE/TIME: SEP 20 2010 1300	RECEIVED BY/STORED IN: SSU#1	DATE/TIME: SEP 20 2010 1300
RELINQUISHED BY/REMOVED FROM: SSU-1	DATE/TIME: SEP 22 2010 1400	RECEIVED BY/STORED IN: B.E. Briggs CHPRC	DATE/TIME: SEP 22 2010 1400
RELINQUISHED BY/REMOVED FROM: B.E. Briggs CHPRC	DATE/TIME: SEP 22 2010 1400	RECEIVED BY/STORED IN: FEDEX	DATE/TIME:
RELINQUISHED BY/REMOVED FROM: FED EX	DATE/TIME:	RECEIVED BY/STORED IN: F. MATAWAMAN	DATE/TIME: 09/23/10 0915
RELINQUISHED BY/REMOVED FROM	DATE/TIME:	RECEIVED BY/STORED IN	DATE/TIME:
RELINQUISHED BY/REMOVED FROM	DATE/TIME:	RECEIVED BY/STORED IN	DATE/TIME:
RELINQUISHED BY/REMOVED FROM	DATE/TIME:	RECEIVED BY/STORED IN	DATE/TIME:

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-185	PAGE 1 OF 1
COLLECTOR FM Hall CHPRC	COMPANY CONTACT WIDRIG, DL H4407	TELEPHONE NO. 376-2858 (7706)	PROJECT COORDINATOR WIDRIG, DL	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 100-K-63 location 18 Surface	PROJECT DESIGNATION ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO. F10-256	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO. GWS-236 ~~SWL-242~~ bb 9.22.10	FIELD LOGBOOK NO. HNF-N-507-13	ACTUAL SAMPLE DEPTH 0-1'	COA 301966ES10	METHOD OF SHIPMENT FEDERAL EXPRESS	
SHIPPED TO Eberline Services	OFFSITE PROPERTY NO. ~~SEE PTR~~ bb 9.22.10 02072		BILL OF LADING/AIR BILL NO. ~~SEE PTR~~ bb 9.22.10 7939 3787 6314		

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
RADIOACTIVE TIE TO: B27LY7

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27M20	SOIL	SEP 20 2010	0845	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM FM Hall CHPRC	DATE/TIME SEP 20 2010 1300	RECEIVED BY/STORED IN SSU #1	DATE/TIME SEP 20 2010 1300
RELINQUISHED BY/REMOVED FROM SSU-1	DATE/TIME SEP 22 2010 1000	RECEIVED BY/STORED IN B.E. Briggs CHPRC	DATE/TIME SEP 22 2010 1000
RELINQUISHED BY/REMOVED FROM B.E. Briggs CHPRC	DATE/TIME SEP 22 2010 1400	RECEIVED BY/STORED IN FEDEX	DATE/TIME
RELINQUISHED BY/REMOVED FROM FEDEX	DATE/TIME	RECEIVED BY/STORED IN F. NATAWARAN	DATE/TIME 09/23/10 0915
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-186	PAGE 1 OF 1
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL H4407	TELEPHONE NO.: 376-2858 (7706)	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND
SAMPLING LOCATION: 100-K-63 location 19 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO.: GLOS-236 ~~[illegible]~~ bb 9.22.10	FIELD LOGBOOK NO.: HNF-N-507-13.	ACTUAL SAMPLE DEPTH: 0 - 1'	COA: 301966ES10	METHOD OF SHIPMENT: FEDERAL EXPRESS	
SHIPPED TO: Eberline Services ~~[illegible]~~ bb 9/22/10	OFFSITE PROPERTY NO.: ~~SEE PTR~~ bb 9.22.10 02072		BILL OF LADING/AIR BILL NO.: ~~SEE PTR~~ bb 9.22.10 7939 3787 6314		

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
RADIOACTIVE TIE TO: B27LY8

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27M21	SOIL	SEP 20 2010	0915	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC ~~[illegible]~~	SEP 20 2010 1300	SSU #1	SEP 20 2010 1300
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
SSU-1	SEP 22 2010 1000	B.E. Briggs CHPRC B.E. Briggs	SEP 22 2010 1000
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
B.E. Briggs CHPRC B.E. Briggs	SEP 22 2010 1400	FEDEX	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FED EX		M.F. MATHEW	09/23/10 0915
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-187	PAGE 1 OF 1
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL H4407	TELEPHONE NO.: 376-2858 (7706)	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND
SAMPLING LOCATION: 100-K-63 location 20 Surface	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO.: GWS-2316 ~~Same~~ bb 9.22.10	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 0-1'	COA: 301966ES10	METHOD OF SHIPMENT: FEDERAL EXPRESS	
SHIPPED TO: Eberline Services	OFFSITE PROPERTY NO.: ~~SEE PTR~~ bb 9.22.10 02072		BILL OF LADING/AIR BILL NO.: ~~SEE PTR~~ bb 9.22.10 7939 3787 6314		

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
RADIOACTIVE TIE TO: B27LY9

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27M22	SOIL	SEP 20 2010	0945	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 20 2010 1300	RECEIVED BY/STORED IN: SSU #1	DATE/TIME: SEP 20 2010 1300
RELINQUISHED BY/REMOVED FROM: SSU-1	DATE/TIME: SEP 22 2010 1000	RECEIVED BY/STORED IN: B.E. Briggs CHPRC	DATE/TIME: SEP 22 2010 1000
RELINQUISHED BY/REMOVED FROM: B.E. Briggs CHPRC	DATE/TIME: SEP 22 2010 1400	RECEIVED BY/STORED IN: FEDEX	DATE/TIME:
RELINQUISHED BY/REMOVED FROM: FED EX	DATE/TIME:	RECEIVED BY/STORED IN: [illegible]	DATE/TIME: 09/23/10 0915
RELINQUISHED BY/REMOVED FROM	DATE/TIME:	RECEIVED BY/STORED IN	DATE/TIME:
RELINQUISHED BY/REMOVED FROM	DATE/TIME:	RECEIVED BY/STORED IN	DATE/TIME:
RELINQUISHED BY/REMOVED FROM	DATE/TIME:	RECEIVED BY/STORED IN	DATE/TIME:

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-252	PAGE 1 OF 1
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: WIDRIG, DL H4407	TELEPHONE NO.: 376-2858 (7706)	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND
SAMPLING LOCATION: 100-K-63 location 16 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO.: GWS-236 ~~SAAL-717~~ bb 9.22.10	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10	METHOD OF SHIPMENT: FEDERAL EXPRESS	
SHIPPED TO: Eberline Services	OFFSITE PROPERTY NO.: ~~SEE PTR~~ bb 9.22.10 02072		BILL OF LADING/AIR BILL NO.: ~~SEE PTR~~ bb 9.22.10 7939 3787 6314		

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
RADIOACTIVE TIE TO: B27M74

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27M97	SOIL	SEP 20 2010	0750	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 20 2010 1300	RECEIVED BY/STORED IN: SSU #1	DATE/TIME: SEP 20 2010 1300
RELINQUISHED BY/REMOVED FROM: SSU-1	DATE/TIME: SEP 22 2010 1000	RECEIVED BY/STORED IN: B.E. Briggs CHPRC	DATE/TIME: SEP 22 2010 1000
RELINQUISHED BY/REMOVED FROM: B.E. Briggs CHPRC	DATE/TIME: SEP 22 2010 1400	RECEIVED BY/STORED IN: FEDEX	DATE/TIME:
RELINQUISHED BY/REMOVED FROM: FED EX	DATE/TIME:	RECEIVED BY/STORED IN: M. HATA WATSON	DATE/TIME: 09/23/10 0915
RELINQUISHED BY/REMOVED FROM	DATE/TIME:	RECEIVED BY/STORED IN	DATE/TIME:
RELINQUISHED BY/REMOVED FROM	DATE/TIME:	RECEIVED BY/STORED IN	DATE/TIME:
RELINQUISHED BY/REMOVED FROM	DATE/TIME:	RECEIVED BY/STORED IN	DATE/TIME:

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-253	PAGE 1 OF 1
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL H4407	TELEPHONE NO.: 376-2858 (7706)	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND
SAMPLING LOCATION: 100-K-63 location 17 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO.: GWS-236 ~~SWL-719~~ bb 9.22.10	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10	METHOD OF SHIPMENT: FEDERAL EXPRESS	
SHIPPED TO: Eberline Services	OFFSITE PROPERTY NO.: ~~SEE PTR~~ bb 9.22.10 02072		BILL OF LADING/AIR BILL NO.: ~~SEE PTR~~ bb 9.22.10 7939 3787 6314		

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
RADIOACTIVE TIE TO: B27M75

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27M98	SOIL	SEP 20 2010	0830	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 20 2010 1300	RECEIVED BY/STORED IN: SSU #1	DATE/TIME: SEP 20 2010 1300
RELINQUISHED BY/REMOVED FROM: SSU-1	DATE/TIME: SEP 22 2010 1000	RECEIVED BY/STORED IN: B.E. Briggs CHPRC	DATE/TIME: SEP 22 2010 1000
RELINQUISHED BY/REMOVED FROM: B.E. Briggs CHPRC	DATE/TIME: SEP 22 2010 1400	RECEIVED BY/STORED IN: FEDEX	DATE/TIME:
RELINQUISHED BY/REMOVED FROM: FED EX	DATE/TIME:	RECEIVED BY/STORED IN:	DATE/TIME: 09/23/10 0915
RELINQUISHED BY/REMOVED FROM	DATE/TIME:	RECEIVED BY/STORED IN	DATE/TIME:
RELINQUISHED BY/REMOVED FROM	DATE/TIME:	RECEIVED BY/STORED IN	DATE/TIME:
RELINQUISHED BY/REMOVED FROM	DATE/TIME:	RECEIVED BY/STORED IN	DATE/TIME:

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-254	PAGE 1 OF 1
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: WIDRIG, DL H4407	TELEPHONE NO.: 376-2858 (7706)	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND
SAMPLING LOCATION: 100-K-63 location 18 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO.: GWS-236 ~~SWL~~ 717 bb 9.22.10	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10	METHOD OF SHIPMENT: FEDERAL EXPRESS	
SHIPPED TO: Eberline Services	OFFSITE PROPERTY NO.: ~~SEE PTR~~ bb 9.22.10 02072		BILL OF LADING/AIR BILL NO.: ~~SEE PTR~~ bb 9.22.10 7939 3787 6314		

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
RADIOACTIVE TIE TO: B27M76

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27M99	SOIL	SEP 20 2010	0855	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 20 2010 1300	RECEIVED BY/STORED IN: SSU#1	DATE/TIME: SEP 20 2010 1300
RELINQUISHED BY/REMOVED FROM: SSU-1	DATE/TIME: SEP 22 2010 1000	RECEIVED BY/STORED IN: B.E. Briggs CHPRC	DATE/TIME: SEP 22 2010 1000
RELINQUISHED BY/REMOVED FROM: B.E. Briggs CHPRC	DATE/TIME: SEP 22 2010 1400	RECEIVED BY/STORED IN: FEDEX	DATE/TIME:
RELINQUISHED BY/REMOVED FROM: FED EX	DATE/TIME:	RECEIVED BY/STORED IN:	DATE/TIME: 09/23/10 0915
RELINQUISHED BY/REMOVED FROM	DATE/TIME:	RECEIVED BY/STORED IN	DATE/TIME:
RELINQUISHED BY/REMOVED FROM	DATE/TIME:	RECEIVED BY/STORED IN	DATE/TIME:
RELINQUISHED BY/REMOVED FROM	DATE/TIME:	RECEIVED BY/STORED IN	DATE/TIME:

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-255	PAGE 1 OF 1
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL H4407	TELEPHONE NO.: 376-2858 (7706)	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND
SAMPLING LOCATION: 100-K-63 location 18 5ft Dup	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO.: GWS-236 ~~Sing~~ bb 9.22.10	FIELD LOGBOOK NO.: HNF-N-507-13.	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10	METHOD OF SHIPMENT: FEDERAL EXPRESS	
SHIPPED TO: Eberline Services	OFFSITE PROPERTY NO.: ~~SEE PTR~~ bb 9.22.10 02072		BILL OF LADING/AIR BILL NO.: ~~SEE PTR~~ bb 9.22.10 7939 3787 6314		

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
RADIOACTIVE TIE TO: B27M77

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27MB0	SOIL	SEP 20 2010	0855	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 20 2010 1300	RECEIVED BY/STORED IN: SSU #1	DATE/TIME: SEP 20 2010 1300
RELINQUISHED BY/REMOVED FROM: SSU-1	DATE/TIME: SEP 22 2010 1000	RECEIVED BY/STORED IN: B.E. Briggs CHPRC	DATE/TIME: SEP 22 2010 1000
RELINQUISHED BY/REMOVED FROM: B.E. Briggs CHPRC	DATE/TIME: SEP 22 2010 1400	RECEIVED BY/STORED IN: FEDEX	DATE/TIME:
RELINQUISHED BY/REMOVED FROM: FED EX	DATE/TIME:	RECEIVED BY/STORED IN: JF-NATHANAAN	DATE/TIME: 09/27/10 0915
RELINQUISHED BY/REMOVED FROM	DATE/TIME:	RECEIVED BY/STORED IN	DATE/TIME:
RELINQUISHED BY/REMOVED FROM	DATE/TIME:	RECEIVED BY/STORED IN	DATE/TIME:
RELINQUISHED BY/REMOVED FROM	DATE/TIME:	RECEIVED BY/STORED IN	DATE/TIME:

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-256	PAGE 1 OF 1
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: WIDRIG, DL H4407	TELEPHONE NO.: 376-2858 (7706)	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND
SAMPLING LOCATION: 100-K-63 location 19 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO.: GWS-236 ~~SWC 717~~ bb 9.22.10	FIELD LOGBOOK NO.: HNF ~~-N-~~507- 13 -	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10	METHOD OF SHIPMENT: FEDERAL EXPRESS	
SHIPPED TO: Eberline Services	OFFSITE PROPERTY NO.: ~~SEE PTR~~ bb 9.22.10 02072		BILL OF LADING/AIR BILL NO.: ~~SEE PTR~~ bb 9.22.10 7939 3787 6314		

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
RADIOACTIVE TIE TO: B27M78

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27MB1	SOIL	SEP 20 2010	0922	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 20 2010 1300	RECEIVED BY/STORED IN: SSU#1	DATE/TIME: SEP 20 2010 1300
RELINQUISHED BY/REMOVED FROM: SSU-1	DATE/TIME: SEP 22 2010 1000	RECEIVED BY/STORED IN: B.E. Briggs CHPRC	DATE/TIME: SEP 22 2010 1000
RELINQUISHED BY/REMOVED FROM: B.E. Briggs CHPRC	DATE/TIME: SEP 22 2010 1400	RECEIVED BY/STORED IN: FEDEX	DATE/TIME:
RELINQUISHED BY/REMOVED FROM: FED EX	DATE/TIME:	RECEIVED BY/STORED IN: F. MATAWARAN	DATE/TIME: 09/23/10 0915
RELINQUISHED BY/REMOVED FROM	DATE/TIME:	RECEIVED BY/STORED IN	DATE/TIME:
RELINQUISHED BY/REMOVED FROM	DATE/TIME:	RECEIVED BY/STORED IN	DATE/TIME:
RELINQUISHED BY/REMOVED FROM	DATE/TIME:	RECEIVED BY/STORED IN	DATE/TIME:

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-256-257	PAGE 1 OF 1
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: WIDRIG, DL H4407	TELEPHONE NO.: 376-2858 (7706)	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND
SAMPLING LOCATION: 100-K-63 location 20 5ft	PROJECT DESIGNATION: ARRA 100-K-63 KW Floodplain In Process Sampling - Soil		SAF NO.: F10-256	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO.: GWS-236 ~~SMC-7177~~ bb 9.22.10	FIELD LOGBOOK NO.: HNF-N-507-13	ACTUAL SAMPLE DEPTH: 5'	COA: 301966ES10	METHOD OF SHIPMENT: FEDERAL EXPRESS	
SHIPPED TO: Eberline Services	OFFSITE PROPERTY NO.: ~~SEE PTR~~ bb 9.22.10 02072		BILL OF LADING/AIR BILL NO.: ~~SEE PTR~~ bb 9.22.10 7939 3787 6314		

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
RADIOACTIVE TIE TO: B27M79

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27MB2	SOIL	SEP 20 2010	0955	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall, CHPRC	DATE/TIME: SEP 20 2010 1300	RECEIVED BY/STORED IN: SSU #1	DATE/TIME: SEP 20 2010 1300
RELINQUISHED BY/REMOVED FROM: SSU-1	DATE/TIME: SEP 22 2010 1000	RECEIVED BY/STORED IN: B.E. Briggs, CHPRC	DATE/TIME: SEP 22 2010 1000
RELINQUISHED BY/REMOVED FROM: B.E. Briggs, CHPRC	DATE/TIME: SEP 22 2010 1400	RECEIVED BY/STORED IN: FEDEX	DATE/TIME:
RELINQUISHED BY/REMOVED FROM:	DATE/TIME:	RECEIVED BY/STORED IN:	DATE/TIME: 09/23/10 0915
RELINQUISHED BY/REMOVED FROM:	DATE/TIME:	RECEIVED BY/STORED IN:	DATE/TIME:
RELINQUISHED BY/REMOVED FROM:	DATE/TIME:	RECEIVED BY/STORED IN:	DATE/TIME:
RELINQUISHED BY/REMOVED FROM:	DATE/TIME:	RECEIVED BY/STORED IN:	DATE/TIME:

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) Nickel-63; Carbon-14; Isotopic Thorium {Thorium-228}; Tritium - H3;

ORIGINAL

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

A-6003-618(01/06)

Appendix 5

Data Validation Supporting Documentation

Appendix B - Radiochemical Data Validation Checklist

RADIOCHEMICAL DATA VALIDATION CHECKLIST

VALIDATION LEVEL:	A	B	(C)	D	E
PROJECT: 100-K-63 Pothole Samples			DATA PACKAGE: VSR12-005		
VALIDATOR: Eyda Hergenreder		LAB: WSCF, Eberline		DATE: 12-15-2011	
SDG: H4381, H4382, H4383, H4393, H4407			SDG: WSCF102425, WSCF102445, WSCF102464, WSCF102473, WSCF102515, WSCF102537,		
ANALYSES PERFORMED					
Gross Alpha/Beta	Strontium-90 X	Technetium-99	Alpha Spectroscopy X	Gamma Spectroscopy X	Ni-63 X
Total Uranium	Radium-22	Tritium X	C-14 X	I-129	

SAMPLES/MATRIX Soil & Water samples

SDG WSCF102425: B27MR7
SDG WSCF102445: B27M35, B27MJ8, B27MB5, B27MB6, B27M36, B27MJ9
SDG WSCF102464: B27M37, B27MB9, B27MK0, B27M38, B27MB7, B27MB8, B27MK1, B27MP4, B27M39 B27MK2, B27MP3, B27MP5
SDG WSCF102473: B27MC0, B27MC1, B27M40, B27M41, B27MP6, B27MP7, B27MK3, B27MK4,
SDG WSCF102515: B27MK8, B27MC5, B27M45, B27MR0, B27MK7, B27MC4, B27MP8, B27M44, B27MK5, B27MC2, B27MR1, B27M42,
SDG WSCF102537: B27M46, B27M47, B27M49, B27MC6, B27MC7, B27MC9, B27MK9, B27ML2, B27MR5

(continue on last page)

1. Completeness ..... ☐ N/A

Technical verification forms present? ..... (Yes) No N/A

Comments: None

2. Initial Calibration (Levels D, E) ..... ☒ N/A

Instruments/detectors calibrated? ..... Yes No N/A

Initial calibration acceptable? ..... Yes No N/A

Standards NIST traceable? ..... Yes No N/A

Standards Expired? ..... Yes No N/A

Calculation check acceptable? ..... Yes No N/A

Comments:

3. Continuing Calibration (Levels D, E)..... ☒ N/A

Calibration checked within required frequency? ..... Yes No N/A

Calibration check acceptable? ..... Yes No N/A

Calibration check standards traceable? ..... Yes No N/A

Calibration check standards expired? ..... Yes No N/A

Calculation check acceptable?..... Yes No N/A

Comments:

4. Background Counts (Levels D, E) ..... ☒ N/A

Background Counts checked within required frequency? ..... Yes No N/A

Background Counts acceptable? ..... Yes No N/A

Calculation check acceptable?..... Yes No N/A

Comments:

5. Blanks (Levels B, C, D, E) ☐ N/A

Method blank analyzed within required frequency? Yes No N/A

Method blank results acceptable? Yes No N/A

Analytes detected in method blank? Yes No N/A

Field blank(s) analyzed? Yes No N/A

Field blank results acceptable? Yes No N/A

Analytes detected in field blank(s)? Yes No N/A

Transcription/Calculation Errors? (Levels D, E) Yes No N/A

Comments:
SDG WSCF102445: MB U-234: 0.014 pCi/g
SDG WSCF102464: MB (batch 158433) Am-241: 0.023 pCi/g; (batch 158434) Pu-239/240: 0.030 pCi/g; U-238: 0.0053 pCi/g
SDG WSCF102473: MB Am-241: 0.045 pCi/g
SDG WSCF102515: MB (batch 162840) Am-241: 0.017 pCi/g; (batch 162841) Am-241: 0.012 pCi/g; (batch 163840) Ra-228: 0.091 pCi/g
SDG WSCF105237: MB (batch 163237) Am-241: 0.019 pCi/g; (batch 163238)Am-241: 0.020 pCi/g (batch 163942) Ra-228: 0.070 pCi/g

(continue on last page)

6. Laboratory Control Samples or Blank Spike Samples (Levels C, D, E) ☐ N/A

LCS /BSS analyzed within required frequency? Yes No N/A

LCS/BSS recoveries acceptable? Yes No N/A

LCS/BSS traceable? (Levels D,E) Yes No N/A

LCS/BSS expired? (Levels D,E) Yes No N/A

LCS/BSS levels correct? (Levels D,E) Yes No N/A

Transcription/Calculation Errors? (Levels D, E) Yes No N/A

Comments: None

7. Chemical Carrier Recovery (Levels C, D, E) ..... ☐ N/A

Chemical carrier added? ..... (Yes) No N/A

Chemical recovery acceptable? ..... (Yes) No N/A

Chemical carrier traceable? (Levels D, E) ..... Yes No (N/A)

Chemical carrier expired? (Levels D, E) ..... Yes No (N/A)

Transcription/Calculation errors? (Levels D, E) ..... Yes No (N/A)

Comments: None

8. Tracer Recovery (Levels C, D, E) ..... ☐ N/A

Tracer added? ..... (Yes) No N/A

Tracer recovery acceptable? ..... (Yes) No N/A

Tracer traceable? (Levels D, E) ..... Yes No (N/A)

Tracer expired? (Levels D, E) ..... Yes No (N/A)

Transcription/Calculation errors? (Levels D, E) ..... Yes No (N/A)

Comments: None

9. Matrix Spikes (Levels C, D, E)..... ☐ N/A

Matrix spike analyzed?..... Yes No (N/A)

Spike recoveries acceptable? ..... Yes No (N/A)

Spike source traceable? (Levels D, E) ..... Yes No (N/A)

Spike source expired? Levels D, E) ..... Yes No (N/A)

Transcription/Calculation Errors? (Levels D, E)..... Yes No (N/A)

Comments: None

10. Duplicates (Levels C, D, E) ..... ☐ N/A

Duplicates Analyzed at required frequency? ..... (Yes) No N/A

RPD Values Acceptable?..... Yes (No) N/A

Transcription/Calculation Errors? (Levels D, E)..... Yes No (N/A)

Comments:

SDG WSCF102464: (batch 162636) Ra-228 RPD 56%

SDG H4393: C14 difference >2X the MDC

11. Field QC Samples (Levels C, D E) ..... ☐ N/A

Field duplicate sample(s) analyzed? ..... (Yes) No N/A

Field duplicate RPD values acceptable? ..... (Yes) No N/A

Field split sample(s) analyzed? ..... Yes No (N/A)

Field split RPD values acceptable? ..... Yes No (N/A)

Performance audit sample(s) analyzed? ..... Yes No (N/A)

Performance audit sample results acceptable? ..... Yes No (N/A)

Comments: None

12. Holding Times (All levels)

Are sample holding times acceptable? ..... (Yes) No N/A

Comments: None

13. Results and Detection Limits (All Levels) ..... ☐ N/A

Results reported for all required sample analyses? ..... (Yes) No N/A

Results supported in raw data?(Levels D, E) ..... Yes No (N/A)

Results Acceptable? (Levels D, E) ..... Yes No (N/A)

Transcription/Calculation errors? (Levels D, E) ..... Yes No (N/A)

MDA's meet required detection limits? ..... (Yes) No N/A

Transcription/calculation errors? (Levels D, E) ..... Yes No (N/A)

Comments:

MDCs > CRDLs for associated non-detect sample results

WSCF102445: Eu-154, Eu-155: CRDL 0.1pCi/g, 0.1 pCi/g:
B27M35: Eu-154 0.15 pCi/g, Eu-155 0.18 pCi/g; B27MJ8: Eu-155 0.21 pCi/g, B27M36 Eu-155 0.19 pCi/g;
B27MJ9: Eu-154 0.15 pCi/g, Eu-155 0.20 pCi/g
WSCF102464: B27MB9: Eu-155 0.18 pCi/g; B27MK0: Eu-155 0.15 pCi/g; B27MB7: Eu-155 0.15 pCi/g; B27MB8: Eu-155 0.15 pCi/g; B27M39: Eu-155 0.16 pCi/g; B27MP3: Eu-154 0.15 pCi/g, Eu-155 0.25 pCi/g; B27MP5: Eu-154 0.15 pCi/g, Eu-155 0.19 pCi/g

(continue on next page)

SAMPLES/MATRIX Soil and Water samples (con't)
SDG H4381: B27M03, B27M04, B27M05, B27M06, B24M07, B27M08, B27M09, B27M82, B27M83, B27M84, B27M85, B27M86, B27M87
SDG H4382: B27M88, B27MH3, B27MH4, B27MH5, B27MH6, B27MH7, B27MH8, B27MH9, B27MM8, B27MM9, B27MN0, B27MN1, B27MN2
SDG H4383: B27MR8
SDG H4393: B27M10, B27M12, B27M13, B27M14, B27M15, B27M17, B27M89, B27M91, B27M92, B27M93, B27M94, B27M96, B27MJ0, B27MJ2, B27MJ3, B27MJ4, B27MJ7, B27MN3, B27MN5, B27MN6, B27MP0
SDG H4407: B27M18, B27M19, B27M20, B27M21, B27M22, B27M97, B27M98, B27M99, B27MB0, B27MB1, B27MB2

Field Blank:
WSCF102425: Eq Blk B27MR7: U-234 0.11 pCi/L

MDCs > CRDLs for associated non-detect sample results (con't)
WSCF102473: B27MC0: Eu-155 0.17 pCi/g; B27MC1: Eu-155 0.21 pCi/g; B27M41: Eu-154 0.20 pCi/g, Eu-155 0.26 pCi/g,
B27MP7: Eu-152 0.15 pCi/g, Eu-154 0.15 pCi/g, Eu-155 0.17 pCi/g; B27MK3: Eu-155 0.20 pCi/g; B27MK4: Eu-155 0.19 pCi/g,
WSCF102515: B27M45: Eu-155 0.17 pCi/g; B27MR0: Eu-155 0.19 pCi/g; B27MR1: Eu-155 0.23 pCi/g
WSCF102537: B27M47: Eu-155 0.16 pCi/g; B27MC6: Eu-155 0.16 pCi/g; B27MC7: Eu-155 0.22 pCi/g; B27MK9: Eu-155 0.18 pCi/g
H4393: Th-230 CRDL 1.0 pCi/g: B27M12: 1.30 pCi/g; B27M91: Th-230 1.30 pCi/g
C14 CRDL 1 pCi/g: all associated samples >1 pCi/g

Appendix 6

Additional Documentation Requested By Client

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102425

QC Batch 157347
Associated Samples 102425001

Test Strontium 89/90 (GPC/GEA)

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
BLANK			**QC Sample #37597**								
Strontium-89/90	SR-RAD		-22	pCi/L						U	09/20/10
LCS			**QC Sample #37598**								
Strontium-89/90	SR-RAD		520	pCi/L	91.8	80 - 120					09/20/10
DUP			**QC Sample #37599**								
			Original 102123008								
Strontium-89/90	SR-RAD		560	pCi/L			21.80	-20 - 20	*	X	09/20/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102425

QC Batch 157368
Associated Samples 102425001

Test Plutonium (AEA)

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
BLANK			**QC Sample #37679**								
Plutonium-238	13981-16-3		-0.15	pCi/L						U	09/10/10
Uranium-234	U-233/234		0.045	pCi/L						U	09/10/10
Plutonium-239/240	PU-239/240		9.7E-3	pCi/L						U	09/10/10
Uranium-235	15117-96-1		0.059	pCi/L						U	09/10/10
LCS			**QC Sample #37680**								
Plutonium-239/240	PU-239/240		5.7	pCi/sample	98.8	80 - 120					09/10/10
DUP			**QC Sample #37681**								
			Original 102425001								
Plutonium-238	13981-16-3	-0.23	0.12	pCi/L			-636.40	-20 - 20	*	U	09/10/10
Uranium-234	U-233/234	0.11	0.11	pCi/L			0.00	-20 - 20			09/10/10
Plutonium-239/240	PU-239/240	9.6E-3	0.050	pCi/L			135.60	-20 - 20	*	U	09/10/10
Uranium-235	15117-96-1	0.066	0.067	pCi/L			1.50	-20 - 20		U	09/10/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102425

QC Batch 161435
Associated Samples 102425001

Test Gamma Energy Analysis-general

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
IBLANK			**QC Sample #38360**								
Cesium-137	10045-97-3		-5.1	pCi/L						U	09/15/10
Cobalt-60	10198-40-0		-4.1	pCi/L						U	09/15/10
Europium-152	14683-23-9		-3.7	pCi/L						U	09/15/10
Europium-154	15585-10-1		-5.8	pCi/L						U	09/15/10
Europium-155	14391-16-3		-4.4	pCi/L						U	09/15/10
LCS			**QC Sample #38361**								
Cesium-137	10045-97-3		6200	pCi/sample	103.2	80 - 120					09/16/10
Cobalt-60	10198-40-0		11000	pCi/sample	106	80 - 120					09/16/10
DUP			**QC Sample #38362**								
			Original 102059001								
Cesium-137	10045-97-3		-5.3	pCi/L			-423.50	-20 - 20	*	U	09/15/10
Cobalt-60	10198-40-0		-3.3	pCi/L			-680.00	-20 - 20	*	U	09/15/10
Europium-152	14683-23-9		0.49	pCi/L			170.70	-20 - 20	*	U	09/15/10
Europium-154	15585-10-1		5.5	pCi/L			-847.10	-20 - 20	*	U	09/15/10
Europium-155	14391-16-3		-1.2	pCi/L			-62.90	-20 - 20	*	U	09/15/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102425

QC Batch 157347
Associated Samples 102425001

Test Strontium 89/90 (GPC/GEA)

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE			**Sample #102425001**							
Strontium-85	13967-73-2				76.9	25 - 105				09/20/10
BLANK			**QC Sample #37597**							
Strontium-85	13967-73-2				82.6	25 - 105				09/20/10
LCS			**QC Sample #37598**							
Strontium-85	13967-73-2				90	25 - 105				09/20/10
DUP			**QC Sample #37599**							
			Original 102123008							
Strontium-85	13967-73-2				85.4	25 - 105	8.70			09/20/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102425

QC Batch 157368
Associated Samples 102425001

Test Uranium (AEA)

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE			**Sample #102425001**							
Uranium-232 Tracer	14158-29-3				98.3	25 - 105				09/10/10
Plutonium-242 Tracer	13982-10-0				89	25 - 105				09/10/10
BLANK			**QC Sample #37679**							
Uranium-232 Tracer	14158-29-3				97.4	25 - 105				09/10/10
Plutonium-242 Tracer	13982-10-0				84.1	25 - 105				09/10/10
LCS			**QC Sample #37680**							
Uranium-232 Tracer	14158-29-3				71.7	25 - 105				09/10/10
Plutonium-242 Tracer	13982-10-0				89.2	25 - 105				09/10/10
DUP			**QC Sample #37681**							
			Original 102425001							
Uranium-232 Tracer	14158-29-3				94.5	25 - 105	0.00			09/10/10
Plutonium-242 Tracer	13982-10-0				82.7	25 - 105	0.00			09/10/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102445

QC Batch 157479 **Test** Plutonium (AEA)
Associated Samples 102445001, 102445002, 102445003, 102445004, 102445005, 102445006

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
BLANK			**QC Sample #37918**								
Plutonium-238	13981-16-3		1.2E-6	pCi/g						U	09/14/10
Uranium-234	U-233/234		0.014	pCi/g						X	09/14/10
Plutonium-239/240	PU-239/240		0.012	pCi/g						U	09/14/10
Uranium-235	15117-96-1		2.5E-3	pCi/g						U	09/14/10
LCS			**QC Sample #37919**								
Uranium-234	U-233/234		8.5	pCi/sample	104.2	80 - 120					09/14/10
Plutonium-239/240	PU-239/240		5.6	pCi/sample	97.3	80 - 120					09/14/10
DUP			**QC Sample #37920**								
			Original 102445004								
Plutonium-238	13981-16-3	0.011	0.017	pCi/g			42.90	30	*	U	09/14/10
Uranium-234	U-233/234	0.13	0.14	pCi/g			7.40	30			09/14/10
Plutonium-239/240	PU-239/240	3.8E-3	1.9E-3	pCi/g			64.30	30	*	U	09/14/10
Uranium-235	15117-96-1	0.011	0.020	pCi/g			58.10	30	*	X	09/14/10

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Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102445

QC Batch 157635 **Test** Strontium 89/90 (GPC/GEA)
Associated Samples 102445001, 102445002, 102445003, 102445004, 102445005, 102445006

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
BLANK			**QC Sample #37950**								
Strontium-89/90	SR-RAD		-0.52	pCi/g						U	09/14/10
LCS			**QC Sample #37951**								
Strontium-89/90	SR-RAD		27	pCi/g	96.2	80 - 120					09/14/10
DUP			**QC Sample #37952**								
			Original 102445001								
Strontium-89/90	SR-RAD	-1.1	-2.2	pCi/g			-66.70	30	*	U	09/14/10

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Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102445

QC Batch 162635 **Test** Gamma Energy Analysis-general
Associated Samples 102445001, 102445002, 102445003, 102445004, 102445005, 102445006

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
IBLANK			**QC Sample #38507**								
Cesium-137	10045-97-3		-3.5E-3	pCi/g						U	09/21/10
Cobalt-60	10198-40-0		-2.8E-3	pCi/g						U	09/21/10
Europium-152	14683-23-9		8.4E-3	pCi/g						U	09/21/10
Europium-154	15585-10-1		2.2E-3	pCi/g						U	09/21/10
Europium-155	14391-16-3		-0.031	pCi/g						U	09/21/10
Radium-226	13982-63-3		0.053	pCi/g						X	09/21/10
Radium-228	15262-20-1		0.050	pCi/g						X	09/21/10
LCS			**QC Sample #38508**								
Cesium-137	10045-97-3		6200	pCi/sample	102.3	80 - 120					09/21/10
Cobalt-60	10198-40-0		10000	pCi/sample	104.6	80 - 120					09/21/10
DUP			**QC Sample #38509**								
			Original 102157001								
Cesium-137	10045-97-3		7.5E-3	pCi/g			-642.10	30	*	U	09/21/10
Cobalt-60	10198-40-0		-0.010	pCi/g			-92.40	30	*	U	09/21/10
Europium-152	14683-23-9		-0.046	pCi/g			-151.00	30	*	U	09/21/10
Europium-154	15585-10-1		-6.1E-3	pCi/g			-73.30	30	*	U	09/21/10
Europium-155	14391-16-3		0.096	pCi/g			169.90	30	*	U	09/21/10
Radium-226	13982-63-3		0.54	pCi/g			14.30	30			09/21/10

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Attention Michael Neely
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Group # WSCF102445

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Radium-228	15262-20-1		0.87	pCi/g			5.30	30		09/21/10

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Attention Michael Neely
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Group # WSCF102445

QC Batch 157479 **Test** Uranium (AEA)
Associated Samples 102445001, 102445002, 102445003, 102445004, 102445005, 102445006

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE			**Sample #102445001**							
Uranium-232 Tracer	14158-29-3				91.2	25 - 105				09/14/10
Plutonium-242 Tracer	13982-10-0				82.9	25 - 105				09/14/10
SAMPLE			**Sample #102445002**							
Uranium-232 Tracer	14158-29-3				85.2	25 - 105				09/14/10
Plutonium-242 Tracer	13982-10-0				85.2	25 - 105				09/14/10
SAMPLE			**Sample #102445003**							
Uranium-232 Tracer	14158-29-3				79.8	25 - 105				09/14/10
Plutonium-242 Tracer	13982-10-0				84.9	25 - 105				09/14/10
SAMPLE			**Sample #102445004**							
Americium-243 Tracer	14993-75-0				100.4	25 - 105				09/14/10
Uranium-232 Tracer	14158-29-3				84.2	25 - 105				09/14/10
Plutonium-242 Tracer	13982-10-0				84.6	25 - 105				09/14/10
SAMPLE			**Sample #102445005**							
Americium-243 Tracer	14993-75-0				104.4	25 - 105				09/14/10
Uranium-232 Tracer	14158-29-3				90.1	25 - 105				09/14/10
Plutonium-242 Tracer	13982-10-0				85.6	25 - 105				09/14/10

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Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102445

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE			**Sample #102445006**							
Americium-243 Tracer	14993-75-0				103.9	25 - 105				09/14/10
Uranium-232 Tracer	14158-29-3				82.2	25 - 105				09/14/10
Plutonium-242 Tracer	13982-10-0				83.7	25 - 105				09/14/10
BLANK			**QC Sample #37918**							
Uranium-232 Tracer	14158-29-3				70.5	25 - 105				09/14/10
Plutonium-242 Tracer	13982-10-0				86	25 - 105				09/14/10
LCS			**QC Sample #37919**							
Uranium-232 Tracer	14158-29-3				62	25 - 105				09/14/10
Plutonium-242 Tracer	13982-10-0				87	25 - 105				09/14/10
DUP			**QC Sample #37920**							
			Original 102445004							
Uranium-232 Tracer	14158-29-3				87.8	25 - 105	0.00			09/14/10
Plutonium-242 Tracer	13982-10-0				82	25 - 105	0.00			09/14/10

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Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102445

QC Batch 157635 **Test** Strontium 89/90 (GPC/GEA)
Associated Samples 102445001, 102445002, 102445003, 102445004, 102445005, 102445006

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE			**Sample #102445001**							
Strontium-85	13967-73-2				85.3	25 - 105				09/14/10
SAMPLE			**Sample #102445002**							
Strontium-85	13967-73-2				82.5	25 - 105				09/14/10
SAMPLE			**Sample #102445003**							
Strontium-85	13967-73-2				79	25 - 105				09/14/10
SAMPLE			**Sample #102445004**							
Strontium-85	13967-73-2				94.9	25 - 105				09/14/10
SAMPLE			**Sample #102445005**							
Strontium-85	13967-73-2				77	25 - 105				09/14/10
SAMPLE			**Sample #102445006**							
Strontium-85	13967-73-2				84.8	25 - 105				09/14/10
BLANK			**QC Sample #37950**							
Strontium-85	13967-73-2				77.6	25 - 105				09/14/10

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Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102445

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
LCS			**QC Sample #37951**							
Strontium-85	13967-73-2				82.5	25 - 105				09/14/10
DUP			**QC Sample #37952**							
			Original 102445001							
Strontium-85	13967-73-2				93	25 - 105	8.30			09/14/10

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Quality Control Report

Attention Michael Neely
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Group # WSCF102464

QC Batch 158433 **Test** Plutonium (AEA)
Associated Samples 102464001, 102464002, 102464003, 102464004, 102464005, 102464006, 102464007

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
BLANK			**QC Sample #38095**								
Plutonium-238	13981-16-3		7.5E-3	pCi/g						U	09/15/10
Americium-241	14596-10-2		0.023	pCi/g						X	09/15/10
Uranium-234	U-233/234		0.013	pCi/g						U	09/15/10
Plutonium-239/240	PU-239/240		3.8E-3	pCi/g						U	09/15/10
Uranium-235	15117-96-1		8.1E-3	pCi/g						U	09/15/10
Uranium-238	U-238		3.7E-3	pCi/g						U	09/15/10
LCS			**QC Sample #38096**								
Americium-241	14596-10-2		6.2	pCi/sample	111.3	80 - 120					09/15/10
Plutonium-239/240	PU-239/240		5.6	pCi/sample	96.8	80 - 120					09/15/10
Uranium-234	U-233/234		8.3	pCi/sample	100.9	80 - 120					09/15/10
DUP			**QC Sample #38097**								
			Original 102464001								
Plutonium-238	13981-16-3	9.8E-3	5.8E-3	pCi/g			48.40	-30 - 30	*	U	09/15/10
Americium-241	14596-10-2	0.014	0.017	pCi/g			19.40	-30 - 30			09/21/10
Plutonium-239/240	PU-239/240	4.9E-3	5.8E-3	pCi/g			18.90	-30 - 30		U	09/15/10
Uranium-234	U-233/234	0.12	0.11	pCi/g			0.00	-30 - 30			09/15/10
Uranium-235	15117-96-1	8.4E-3	4.5E-3	pCi/g			58.30	-30 - 30	*	U	09/15/10
Uranium-238	U-238	0.11	0.14	pCi/g			24.00	-30 - 30			09/15/10

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Quality Control Report

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Group # WSCF102464

QC Batch 158434 **Test** Americium/Curium (AEA)
Associated Samples 102464008, 102464009, 102464010, 102464011, 102464012

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
BLANK			**QC Sample #38098**								
Americium-241	14596-10-2		0.017	pCi/g						U	09/20/10
Plutonium-238	13981-16-3		-0.016	pCi/g						U	09/20/10
Uranium-234	U-233/234		7.1E-3	pCi/g						U	09/16/10
Plutonium-239/240	PU-239/240		0.030	pCi/g						X	09/20/10
Uranium-235	15117-96-1		1.9E-3	pCi/g						U	09/16/10
Uranium-238	U-238		5.3E-3	pCi/g						X	09/16/10
LCS			**QC Sample #38099**								
Americium-241	14596-10-2		6.3	pCi/sample	114	80 - 120					09/20/10
Plutonium-239/240	PU-239/240		5.8	pCi/sample	101.2	80 - 120					09/20/10
Uranium-234	U-233/234		8.6	pCi/sample	105	80 - 120					09/16/10
DUP			**QC Sample #38100**								
			Original 102464008								
Plutonium-238	13981-16-3	8.2E-3	-7.9E-3	pCi/g						U	09/20/10
Americium-241	14596-10-2	0.031	0.036	pCi/g			18.20	-30 - 30			09/20/10
Plutonium-239/240	PU-239/240	0.018	0.016	pCi/g			11.80	-30 - 30			09/20/10
Uranium-234	U-233/234	0.27	0.24	pCi/g			8.00	-30 - 30			09/16/10
Uranium-235	15117-96-1	0.017	0.011	pCi/g			37.00	-30 - 30	*	U	09/16/10
Uranium-238	U-238	0.23	0.19	pCi/g			14.60	-30 - 30			09/16/10

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Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102464

QC Batch 161633 **Test** Strontium 89/90 (GPC/GEA)
Associated Samples 102464001, 102464002, 102464003, 102464004, 102464005, 102464006, 102464007

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #38369**							
Strontium-89/90	SR-RAD		-0.93	pCi/g					U	09/23/10
LCS			**QC Sample #38370**							
Strontium-89/90	SR-RAD		27	pCi/g	94.6	80 - 120				09/23/10
DUP			**QC Sample #38371**							
			Original 102464001							
Strontium-89/90	SR-RAD	-0.93	-0.74	pCi/g			-22.20	-30 - 30	U	09/23/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102464

QC Batch 161634
Associated Samples 102464008, 102464009, 102464010, 102464011, 102464012

Test Strontium 89/90 (GPC/GEA)

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #38372**							
Strontium-89/90	SR-RAD		-1.4	pCi/g					U	09/23/10
LCS			**QC Sample #38373**							
Strontium-89/90	SR-RAD		26	pCi/g	93.7	80 - 120				09/23/10
DUP			**QC Sample #38374**							
			Original 102464008							
Strontium-89/90	SR-RAD	-0.95	-1.2	pCi/g			-26.40	-30 - 30	U	09/23/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102464

QC Batch 162635
Associated Samples 102464001, 102464002

Test Gamma Energy Analysis-general

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
IBLANK			**QC Sample #38507**								
Cesium-137	10045-97-3		-3.5E-3	pCi/g						U	09/21/10
Cobalt-60	10198-40-0		-2.8E-3	pCi/g						U	09/21/10
Europium-152	14683-23-9		8.4E-3	pCi/g						U	09/21/10
Europium-154	15585-10-1		2.2E-3	pCi/g						U	09/21/10
Europium-155	14391-16-3		-0.031	pCi/g						U	09/21/10
Radium-226	13982-63-3		0.053	pCi/g						X	09/21/10
Radium-228	15262-20-1		0.050	pCi/g						X	09/21/10
LCS			**QC Sample #38508**								
Cesium-137	10045-97-3		6200	pCi/sample	102.3	80 - 120					09/21/10
Cobalt-60	10198-40-0		10000	pCi/sample	104.6	80 - 120					09/21/10
DUP			**QC Sample #38509**								
			Original 102157001								
Cesium-137	10045-97-3		7.5E-3	pCi/g			-642.10	-30 - 30	*	U	09/21/10
Cobalt-60	10198-40-0		-0.010	pCi/g			-92.40	-30 - 30	*	U	09/21/10
Europium-152	14683-23-9		-0.046	pCi/g			-151.00	-30 - 30	*	U	09/21/10
Europium-154	15585-10-1		-6.1E-3	pCi/g			-73.30	-30 - 30	*	U	09/21/10
Europium-155	14391-16-3		0.096	pCi/g			169.90	-30 - 30	*	U	09/21/10
Radium-226	13982-63-3		0.54	pCi/g			14.30	-30 - 30			09/21/10

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Quality Control Report

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Group # WSCF102464

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Radium-228	15262-20-1		0.87	pCi/g			5.30	-30 - 30		09/21/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102464

QC Batch 162636 **Test** Gamma Energy Analysis-general
Associated Samples 102464003, 102464004, 102464005, 102464006, 102464007, 102464008, 102464009, 102464010, 102464011

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
IBLANK			**QC Sample #38510**								
Cesium-137	10045-97-3		-3.6E-3	pCi/g						U	09/16/10
Cobalt-60	10198-40-0		-1.5E-3	pCi/g						U	09/16/10
Europium-152	14683-23-9		-2.4E-3	pCi/g						U	09/16/10
Europium-154	15585-10-1		-0.0070	pCi/g						U	09/16/10
Europium-155	14391-16-3		0.015	pCi/g						U	09/16/10
Radium-226	13982-63-3		0.030	pCi/g						X	09/16/10
Radium-228	15262-20-1		0.061	pCi/g						X	09/16/10
LCS			**QC Sample #38511**								
Cesium-137	10045-97-3		6400	pCi/sample	106.7	80 - 120					09/16/10
Cobalt-60	10198-40-0		11000	pCi/sample	106.8	80 - 120					09/16/10
DUP			**QC Sample #38512**								
			Original 102464003								
Cesium-137	10045-97-3	-8.6E-3	-4.9E-3	pCi/g			-55.40	-30 - 30	*	U	09/20/10
Cobalt-60	10198-40-0	9.6E-3	3.6E-3	pCi/g			90.60	-30 - 30	*	U	09/20/10
Europium-152	14683-23-9	-0.0010	0.035	pCi/g			212.50	-30 - 30	*	U	09/20/10
Europium-154	15585-10-1	0.017	-0.036	pCi/g			-555.60	-30 - 30	*	U	09/20/10
Europium-155	14391-16-3	0.037	0.028	pCi/g			28.60	-30 - 30		U	09/20/10
Radium-226	13982-63-3	0.46	0.92	pCi/g			64.70	-30 - 30	*	X	09/20/10

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Group # WSCF102464

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
Radium-228	15262-20-1	0.76	1.3	pCi/g			56.20	-30 - 30	*	X	09/20/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102464

QC Batch 162637
Associated Samples 102464012

Test Gamma Energy Analysis-general

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
IBLANK			**QC Sample #38513**								
Cesium-137	10045-97-3		-3.2E-3	pCi/g						U	09/16/10
Cobalt-60	10198-40-0		1.7E-4	pCi/g						U	09/16/10
Europium-152	14683-23-9		-6.7E-3	pCi/g						U	09/16/10
Europium-154	15585-10-1		6.9E-4	pCi/g						U	09/16/10
Europium-155	14391-16-3		5.4E-3	pCi/g						U	09/16/10
Radium-226	13982-63-3		0.042	pCi/g						X	09/16/10
Radium-228	15262-20-1		0.070	pCi/g						X	09/16/10
LCS			**QC Sample #38514**								
Cesium-137	10045-97-3		6300	pCi/sample	104.3	80 - 120					09/16/10
Cobalt-60	10198-40-0		11000	pCi/sample	105.7	80 - 120					09/16/10
DUP			**QC Sample #38515**								
			Original 102464012								
Cesium-137	10045-97-3	-7.1E-3	0.013	pCi/g			652.50	-30 - 30	*	U	09/20/10
Cobalt-60	10198-40-0	4.8E-3	3.2E-3	pCi/g			38.00	-30 - 30	*	U	09/20/10
Europium-152	14683-23-9	-0.11	-3.3E-3	pCi/g			-188.70	-30 - 30	*	U	09/20/10
Europium-154	15585-10-1	-0.017	0.013	pCi/g			-1160.00	-30 - 30	*	U	09/20/10
Europium-155	14391-16-3	0.031	0.035	pCi/g			12.50	-30 - 30		U	09/20/10
Radium-226	13982-63-3	0.80	0.78	pCi/g			2.60	-30 - 30			09/20/10

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Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Radium-228	15262-20-1	1.0	1.2	pCi/g			20.20	-30 - 30		09/20/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102464

QC Batch 158433 **Test** Americium/Curium (AEA)
Associated Samples 102464001, 102464002, 102464003, 102464004, 102464005, 102464006, 102464007

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE			**Sample #102464001**							
Americium-243 Tracer	14993-75-0				89	25 - 105				09/15/10
Uranium-232 Tracer	14158-29-3				82	25 - 105				09/15/10
Plutonium-242 Tracer	13982-10-0				97.4	25 - 105				09/15/10
SAMPLE			**Sample #102464002**							
Americium-243 Tracer	14993-75-0				89.6	25 - 105				09/15/10
Uranium-232 Tracer	14158-29-3				83.1	25 - 105				09/15/10
Plutonium-242 Tracer	13982-10-0				88.3	25 - 105				09/15/10
SAMPLE			**Sample #102464003**							
Americium-243 Tracer	14993-75-0				93.7	25 - 105				09/15/10
Uranium-232 Tracer	14158-29-3				79.7	25 - 105				09/15/10
Plutonium-242 Tracer	13982-10-0				93	25 - 105				09/15/10
SAMPLE			**Sample #102464004**							
Americium-243 Tracer	14993-75-0				92.7	25 - 105				09/21/10
Uranium-232 Tracer	14158-29-3				81.4	25 - 105				09/15/10
Plutonium-242 Tracer	13982-10-0				87.8	25 - 105				09/15/10
SAMPLE			**Sample #102464005**							

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102464

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Americium-243 Tracer	14993-75-0				95.5	25 - 105				09/21/10
Uranium-232 Tracer	14158-29-3				83.7	25 - 105				09/15/10
Plutonium-242 Tracer	13982-10-0				80.9	25 - 105				09/15/10
SAMPLE			**Sample #102464006**							
Americium-243 Tracer	14993-75-0				91.2	25 - 105				09/21/10
Uranium-232 Tracer	14158-29-3				83.7	25 - 105				09/15/10
Plutonium-242 Tracer	13982-10-0				92.8	25 - 105				09/15/10
SAMPLE			**Sample #102464007**							
Americium-243 Tracer	14993-75-0				99	25 - 105				09/21/10
Uranium-232 Tracer	14158-29-3				80.3	25 - 105				09/15/10
Plutonium-242 Tracer	13982-10-0				85.7	25 - 105				09/15/10
BLANK			**QC Sample #38095**							
Americium-243 Tracer	14993-75-0				89.5	25 - 105				09/15/10
Uranium-232 Tracer	14158-29-3				87.6	25 - 105				09/15/10
Plutonium-242 Tracer	13982-10-0				87.7	25 - 105				09/15/10
LCS			**QC Sample #38096**							
Americium-243 Tracer	14993-75-0				95.7	25 - 105				09/15/10
Uranium-232 Tracer	14158-29-3				72.8	25 - 105				09/15/10
Plutonium-242 Tracer	13982-10-0				92.3	25 - 105				09/15/10
DUP			**QC Sample #38097**							
			Original 102464001							
Americium-243 Tracer	14993-75-0				97.3	25 - 105	5.10			09/21/10

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Quality Control Report

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Department Radiochemistry

Group # WSCF102464

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Uranium-232 Tracer	14158-29-3				77.7	25 - 105	8.00			09/15/10
Plutonium-242 Tracer	13982-10-0				84.8	25 - 105	5.10			09/15/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102464

QC Batch 158434 **Test** Uranium (AEA)
Associated Samples 102464008, 102464009, 102464010, 102464011, 102464012

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE			**Sample #102464008**							
Uranium-232 Tracer	14158-29-3				102.4	25 - 105				09/16/10
Americium-243 Tracer	14993-75-0				93.8	25 - 105				09/20/10
Plutonium-242 Tracer	13982-10-0				82.2	25 - 105				09/20/10
SAMPLE			**Sample #102464009**							
Uranium-232 Tracer	14158-29-3				96.3	25 - 105				09/16/10
Americium-243 Tracer	14993-75-0				78	25 - 105				09/20/10
Plutonium-242 Tracer	13982-10-0				70.3	25 - 105				09/20/10
SAMPLE			**Sample #102464010**							
Americium-243 Tracer	14993-75-0				92.4	25 - 105				09/20/10
Uranium-232 Tracer	14158-29-3				86.5	25 - 105				09/16/10
Plutonium-242 Tracer	13982-10-0				72.6	25 - 105				09/20/10
SAMPLE			**Sample #102464011**							
Americium-243 Tracer	14993-75-0				100.3	25 - 105				09/20/10
Uranium-232 Tracer	14158-29-3				75.4	25 - 105				09/16/10
Plutonium-242 Tracer	13982-10-0				95.8	25 - 105				09/20/10
SAMPLE			**Sample #102464012**							

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Group # WSCF102464

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Americium-243 Tracer	14993-75-0				64.5	25 - 105				09/20/10
Uranium-232 Tracer	14158-29-3				91.5	25 - 105				09/16/10
Plutonium-242 Tracer	13982-10-0				79.2	25 - 105				09/20/10
BLANK			**QC Sample #38098**							
Uranium-232 Tracer	14158-29-3				91	25 - 105				09/16/10
Americium-243 Tracer	14993-75-0				77.5	25 - 105				09/20/10
Plutonium-242 Tracer	13982-10-0				82	25 - 105				09/20/10
LCS			**QC Sample #38099**							
Uranium-232 Tracer	14158-29-3				62.1	25 - 105				09/16/10
Americium-243 Tracer	14993-75-0				84.9	25 - 105				09/20/10
Plutonium-242 Tracer	13982-10-0				78.2	25 - 105				09/20/10
DUP			**QC Sample #38100**							
			Original	**102464008**						
Uranium-232 Tracer	14158-29-3				92.6	25 - 105	2.60			09/16/10
Americium-243 Tracer	14993-75-0				96.4	25 - 105	0.00			09/20/10
Plutonium-242 Tracer	13982-10-0				75.9	25 - 105	0.00			09/20/10

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Quality Control Report

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Department Radiochemistry

Group # WSCF102464

QC Batch 161633 **Test** Strontium 89/90 (GPC/GEA)
Associated Samples 102464001, 102464002, 102464003, 102464004, 102464005, 102464006, 102464007

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE			**Sample #102464001**							
Strontium-85	13967-73-2				81.5	25 - 105				09/23/10
SAMPLE			**Sample #102464002**							
Strontium-85	13967-73-2				83.5	25 - 105				09/23/10
SAMPLE			**Sample #102464003**							
Strontium-85	13967-73-2				85.5	25 - 105				09/23/10
SAMPLE			**Sample #102464004**							
Strontium-85	13967-73-2				78.6	25 - 105				09/23/10
SAMPLE			**Sample #102464005**							
Strontium-85	13967-73-2				79.6	25 - 105				09/23/10
SAMPLE			**Sample #102464006**							
Strontium-85	13967-73-2				71.4	25 - 105				09/23/10
SAMPLE			**Sample #102464007**							
Strontium-85	13967-73-2				83.6	25 - 105				09/23/10

Quality Control Report

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Department Radiochemistry

Group # WSCF102464

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #38369**							
Strontium-85	13967-73-2				85.5	25 - 105				09/23/10
LCS			**QC Sample #38370**							
Strontium-85	13967-73-2				90.3	25 - 105				09/23/10
DUP			**QC Sample #38371**							
			Original 102464001							
Strontium-85	13967-73-2				82.8	25 - 105	4.90			09/23/10

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Attention Michael Neely
Department Radiochemistry

Group # WSCF102464

QC Batch 161634
Associated Samples 102464008, 102464009, 102464010, 102464011, 102464012

Test Strontium 89/90 (GPC/GEA)

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE			**Sample #102464008**							
Strontium-85	13967-73-2				79.6	25 - 105				09/23/10
SAMPLE			**Sample #102464009**							
Strontium-85	13967-73-2				83.4	25 - 105				09/23/10
SAMPLE			**Sample #102464010**							
Strontium-85	13967-73-2				85.1	25 - 105				09/23/10
SAMPLE			**Sample #102464011**							
Strontium-85	13967-73-2				79.3	25 - 105				09/23/10
SAMPLE			**Sample #102464012**							
Strontium-85	13967-73-2				83.4	25 - 105				09/23/10
BLANK			**QC Sample #38372**							
Strontium-85	13967-73-2				88.8	25 - 105				09/23/10
LCS			**QC Sample #38373**							
Strontium-85	13967-73-2				81	25 - 105				09/23/10

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Group # WSCF102464

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
DUP			**QC Sample #38374**							
			Original 102464008							
Strontium-85	13967-73-2				87.3	25 - 105	9.50			09/23/10

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Quality Control Report

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Group # WSCF102473

QC Batch 160633 **Test** Plutonium (AEA)
Associated Samples 102473001, 102473002, 102473003, 102473004, 102473005, 102473006, 102473007, 102473008

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
BLANK			**QC Sample #38207**								
Plutonium-238	13981-16-3		-0.013	pCi/g						U	09/20/10
Americium-241	14596-10-2		0.045	pCi/g						X	09/20/10
Uranium-234	U-233/234		3.6E-3	pCi/g						U	09/21/10
Plutonium-239/240	PU-239/240		0.011	pCi/g						U	09/20/10
Uranium-235	15117-96-1		-0.0020	pCi/g						U	09/21/10
LCS			**QC Sample #38208**								
Americium-241	14596-10-2		5.9	pCi/sample	106.4	80 - 120					09/20/10
Uranium-234	U-233/234		8.5	pCi/sample	103.3	80 - 120					09/21/10
Plutonium-239/240	PU-239/240		5.6	pCi/sample	97	80 - 120					09/20/10
DUP			**QC Sample #38209**								
			Original 102473001								
Americium-241	14596-10-2	0.027	0.018	pCi/g			36.40	-30 - 30	*	U	09/20/10
Plutonium-238	13981-16-3	9.9E-3	-8.5E-3	pCi/g			3600.00	-30 - 30	*	U	09/20/10
Uranium-234	U-233/234	0.16	0.17	pCi/g			12.50	-30 - 30			09/21/10
Plutonium-239/240	PU-239/240	0.020	0.011	pCi/g			53.30	-30 - 30	*	U	09/20/10
Uranium-235	15117-96-1	0.016	0.014	pCi/g			6.90	-30 - 30		U	09/21/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102473

QC Batch 162438 **Test** Strontium 89/90 (GPC/GEA)
Associated Samples 102473001, 102473002, 102473003, 102473004, 102473005, 102473006, 102473007, 102473008

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
BLANK			**QC Sample #38482**								
Strontium-89/90	SR-RAD		-0.74	pCi/g						U	09/23/10
LCS			**QC Sample #38483**								
Strontium-89/90	SR-RAD		32	pCi/g	111.8	80 - 120					09/23/10
DUP			**QC Sample #38484**								
			Original 102473001								
Strontium-89/90	SR-RAD	-0.34	-0.84	pCi/g			-84.20	-30 - 30	*	U	09/23/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102473

QC Batch 162637 **Test** Gamma Energy Analysis-general
Associated Samples 102473001, 102473002, 102473003, 102473004, 102473005, 102473006, 102473007, 102473008

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
IBLANK			**QC Sample #38513**								
Cesium-137	10045-97-3		-3.2E-3	pCi/g						U	09/16/10
Cobalt-60	10198-40-0		1.7E-4	pCi/g						U	09/16/10
Europium-152	14683-23-9		-6.7E-3	pCi/g						U	09/16/10
Europium-154	15585-10-1		6.9E-4	pCi/g						U	09/16/10
Europium-155	14391-16-3		5.4E-3	pCi/g						U	09/16/10
Radium-226	13982-63-3		0.042	pCi/g						X	09/16/10
Radium-228	15262-20-1		0.070	pCi/g						X	09/16/10
LCS			**QC Sample #38514**								
Cesium-137	10045-97-3		6300	pCi/sample	104.3	80 - 120					09/16/10
Cobalt-60	10198-40-0		11000	pCi/sample	105.7	80 - 120					09/16/10
DUP			**QC Sample #38515**								
			Original 102464012								
Cesium-137	10045-97-3		0.013	pCi/g			652.50	-30 - 30	*	U	09/20/10
Cobalt-60	10198-40-0		3.2E-3	pCi/g			38.00	-30 - 30	*	U	09/20/10
Europium-152	14683-23-9		-3.3E-3	pCi/g			-188.70	-30 - 30	*	U	09/20/10
Europium-154	15585-10-1		0.013	pCi/g			-1160.00	-30 - 30	*	U	09/20/10
Europium-155	14391-16-3		0.035	pCi/g			12.50	-30 - 30		U	09/20/10
Radium-226	13982-63-3		0.78	pCi/g			2.60	-30 - 30			09/20/10

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Attention Michael Neely
Department Radiochemistry

Group # WSCF102473

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Radium-228	15262-20-1		1.2	pCi/g			20.20	-30 - 30		09/20/10

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Attention Michael Neely
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Group # WSCF102473

QC Batch 160633 **Test** Americium/Curium (AEA)
Associated Samples 102473001, 102473002, 102473003, 102473004, 102473005, 102473006, 102473007, 102473008

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE			**Sample #102473001**							
Americium-243 Tracer	14993-75-0				51.2	25 - 105				09/20/10
Uranium-232 Tracer	14158-29-3				93.6	25 - 105				09/21/10
Plutonium-242 Tracer	13982-10-0				69.1	25 - 105				09/20/10
SAMPLE			**Sample #102473002**							
Americium-243 Tracer	14993-75-0				71.9	25 - 105				09/20/10
Uranium-232 Tracer	14158-29-3				96.8	25 - 105				09/21/10
Plutonium-242 Tracer	13982-10-0				86.9	25 - 105				09/20/10
SAMPLE			**Sample #102473003**							
Americium-243 Tracer	14993-75-0				85.9	25 - 105				09/20/10
Uranium-232 Tracer	14158-29-3				87.6	25 - 105				09/21/10
Plutonium-242 Tracer	13982-10-0				84	25 - 105				09/20/10
SAMPLE			**Sample #102473004**							
Americium-243 Tracer	14993-75-0				58	25 - 105				09/20/10
Uranium-232 Tracer	14158-29-3				89.9	25 - 105				09/21/10
Plutonium-242 Tracer	13982-10-0				77.3	25 - 105				09/20/10
SAMPLE			**Sample #102473005**							

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Group # WSCF102473

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Americium-243 Tracer	14993-75-0				102.4	25 - 105				09/20/10
Uranium-232 Tracer	14158-29-3				86.4	25 - 105				09/21/10
Plutonium-242 Tracer	13982-10-0				77.4	25 - 105				09/20/10
SAMPLE			**Sample #102473006**							
Americium-243 Tracer	14993-75-0				60.9	25 - 105				09/20/10
Uranium-232 Tracer	14158-29-3				84.7	25 - 105				09/21/10
Plutonium-242 Tracer	13982-10-0				70.2	25 - 105				09/20/10
SAMPLE			**Sample #102473007**							
Plutonium-242 Tracer	13982-10-0				72.2	25 - 105				09/21/10
Americium-243 Tracer	14993-75-0				57.1	25 - 105				09/20/10
Uranium-232 Tracer	14158-29-3				82.4	25 - 105				09/21/10
SAMPLE			**Sample #102473008**							
Americium-243 Tracer	14993-75-0				68.8	25 - 105				09/20/10
Uranium-232 Tracer	14158-29-3				87.7	25 - 105				09/21/10
Plutonium-242 Tracer	13982-10-0				69.7	25 - 105				09/20/10
BLANK			**QC Sample #38207**							
Americium-243 Tracer	14993-75-0				49.1	25 - 105				09/20/10
Uranium-232 Tracer	14158-29-3				90.5	25 - 105				09/21/10
Plutonium-242 Tracer	13982-10-0				73.7	25 - 105				09/20/10
LCS			**QC Sample #38208**							
Americium-243 Tracer	14993-75-0				93.2	25 - 105				09/20/10

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Group # WSCF102473

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Uranium-232 Tracer	14158-29-3				68.5	25 - 105				09/21/10
Plutonium-242 Tracer	13982-10-0				91.7	25 - 105				09/20/10
DUP			**QC Sample #38209**							
			Original	**102473001**						
Americium-243 Tracer	14993-75-0				66.7	25 - 105	2.40			09/20/10
Uranium-232 Tracer	14158-29-3				90.8	25 - 105	2.50			09/21/10
Plutonium-242 Tracer	13982-10-0				77.8	25 - 105	3.20			09/20/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102473

QC Batch 162438 **Test** Strontium 89/90 (GPC/GEA)
Associated Samples 102473001, 102473002, 102473003, 102473004, 102473005, 102473006, 102473007, 102473008

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE			**Sample #102473001**							
Strontium-85	13967-73-2				91.1	25 - 105				09/23/10
SAMPLE			**Sample #102473002**							
Strontium-85	13967-73-2				79	25 - 105				09/23/10
SAMPLE			**Sample #102473003**							
Strontium-85	13967-73-2				89.6	25 - 105				09/23/10
SAMPLE			**Sample #102473004**							
Strontium-85	13967-73-2				79.9	25 - 105				09/23/10
SAMPLE			**Sample #102473005**							
Strontium-85	13967-73-2				89.1	25 - 105				09/23/10
SAMPLE			**Sample #102473006**							
Strontium-85	13967-73-2				86.6	25 - 105				09/23/10
SAMPLE			**Sample #102473007**							
Strontium-85	13967-73-2				80.9	25 - 105				09/23/10

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Group # WSCF102473

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE			**Sample #102473008**							
Strontium-85	13967-73-2				82.1	25 - 105				09/23/10
BLANK			**QC Sample #38482**							
Strontium-85	13967-73-2				79.9	25 - 105				09/23/10
LCS			**QC Sample #38483**							
Strontium-85	13967-73-2				77.6	25 - 105				09/23/10
DUP			**QC Sample #38484**							
			Original 102473001							
Strontium-85	13967-73-2				85.7	25 - 105	9.10			09/23/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102515

QC Batch 162840 **Test** Americium/Curium (AEA)
Associated Samples 102515001, 102515002, 102515003, 102515004, 102515005, 102515006

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
BLANK			**QC Sample #38532**								
Americium-241	14596-10-2		0.017	pCi/g						X	09/27/10
Plutonium-238	13981-16-3		0.019	pCi/g						U	09/27/10
Uranium-234	U-233/234		3.8E-3	pCi/g						U	09/27/10
Plutonium-239/240	PU-239/240		-0.032	pCi/g						U	09/27/10
Uranium-235	15117-96-1		4.2E-3	pCi/g						U	09/27/10
Uranium-238	U-238		3.8E-3	pCi/g						U	09/27/10
LCS			**QC Sample #38533**								
Americium-241	14596-10-2		6.1	pCi/sample	110.7	80 - 120					09/27/10
Uranium-234	U-233/234		8.1	pCi/sample	98.6	80 - 120					09/27/10
Plutonium-239/240	PU-239/240		5.5	pCi/sample	94.8	80 - 120					09/27/10
DUP			**QC Sample #38534**								
			Original 102515001								
Plutonium-238	13981-16-3	-5.1E-3	0.022	pCi/g			311.60	-30 - 30	*	U	09/27/10
Americium-241	14596-10-2	0.024	0.018	pCi/g			24.40	-30 - 30			09/27/10
Plutonium-239/240	PU-239/240	0.013	-0.0060	pCi/g			542.90	-30 - 30	*	U	09/27/10
Uranium-234	U-233/234	0.15	0.10	pCi/g			33.30	-30 - 30	*	X	09/27/10
Uranium-235	15117-96-1	0.013	0.021	pCi/g			47.10	-30 - 30	*	X	09/27/10
Uranium-238	U-238	0.17	0.15	pCi/g			6.50	-30 - 30			09/27/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102515

QC Batch 162841 **Test** Plutonium (AEA)
Associated Samples 102515007, 102515008, 102515009, 102515010, 102515011, 102515012

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
BLANK			**QC Sample #38535**								
Plutonium-238	13981-16-3		-0.020	pCi/g						U	09/28/10
Americium-241	14596-10-2		0.012	pCi/g						X	09/27/10
Plutonium-239/240	PU-239/240		1.8E-3	pCi/g						U	09/28/10
Uranium-234	U-233/234		0.0020	pCi/g						U	09/27/10
Uranium-235	15117-96-1		2.1E-3	pCi/g						U	09/27/10
Uranium-238	U-238		0.0020	pCi/g						U	09/27/10
LCS			**QC Sample #38536**								
Americium-241	14596-10-2		5.9	pCi/sample	105.9	80 - 120					09/27/10
Plutonium-239/240	PU-239/240		5.8	pCi/sample	100.1	80 - 120					09/28/10
Uranium-234	U-233/234		8.5	pCi/sample	104.2	80 - 120					09/27/10
DUP			**QC Sample #38537**								
			Original 102515007								
Plutonium-238	13981-16-3	0.024	0.050	pCi/g			70.30	-30 - 30	*		09/28/10
Americium-241	14596-10-2	0.016	0.026	pCi/g			47.60	-30 - 30	*		09/27/10
Uranium-234	U-233/234	0.22	0.27	pCi/g			25.00	-30 - 30			09/27/10
Plutonium-239/240	PU-239/240	6.9E-3	-0.035	pCi/g			-294.70	-30 - 30	*	U	09/28/10
Uranium-235	15117-96-1	0.016	0.017	pCi/g			6.10	-30 - 30			09/27/10
Uranium-238	U-238	0.22	0.22	pCi/g			4.70	-30 - 30			09/27/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102515

QC Batch 163840 **Test** Gamma Energy Analysis-general
Associated Samples 102515001, 102515002, 102515003, 102515004, 102515005, 102515006, 102515007, 102515008, 102515009

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
IBLANK			**QC Sample #38803**								
Cesium-137	10045-97-3		3.4E-3	pCi/g						U	09/21/10
Cobalt-60	10198-40-0		-3.8E-3	pCi/g						U	09/21/10
Europium-152	14683-23-9		-0.020	pCi/g						U	09/21/10
Europium-154	15585-10-1		-0.014	pCi/g						U	09/21/10
Europium-155	14391-16-3		-4.4E-3	pCi/g						U	09/21/10
Radium-226	13982-63-3		0.093	pCi/g						X	09/21/10
Radium-228	15262-20-1		0.091	pCi/g						X	09/21/10
LCS			**QC Sample #38804**								
Cesium-137	10045-97-3		6400	pCi/sample	106.3	80 - 120					09/23/10
Cobalt-60	10198-40-0		11000	pCi/sample	107	80 - 120					09/23/10
DUP			**QC Sample #38805**								
			Original 102515001								
Cesium-137	10045-97-3	-1.1E-3	0.023	pCi/g			219.00	-30 - 30	*	U	09/27/10
Cobalt-60	10198-40-0	-8.9E-3	-2.2E-3	pCi/g			-120.00	-30 - 30	*	U	09/27/10
Europium-152	14683-23-9	0.013	-0.019	pCi/g			-1000.00	-30 - 30	*	U	09/27/10
Europium-154	15585-10-1	0.020	-0.019	pCi/g			7400.00	-30 - 30	*	U	09/27/10
Europium-155	14391-16-3	-1.8E-3	0.040	pCi/g			218.70	-30 - 30	*	U	09/27/10
Radium-226	13982-63-3	0.51	0.48	pCi/g			6.50	-30 - 30			09/27/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102515

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Radium-228	15262-20-1	0.72	0.70	pCi/g			4.40	-30 - 30		09/27/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102515

QC Batch 163934
Associated Samples 102515010, 102515011, 102515012

Test Gamma Energy Analysis-general

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
IBLANK			**QC Sample #38825**								
Cesium-137	10045-97-3		-2.5E-3	pCi/g						U	09/20/10
Cobalt-60	10198-40-0		-7.3E-3	pCi/g						U	09/20/10
Europium-152	14683-23-9		-0.026	pCi/g						U	09/20/10
Europium-154	15585-10-1		9.5E-3	pCi/g						U	09/20/10
Europium-155	14391-16-3		0.13	pCi/g						U	09/20/10
Radium-226	13982-63-3		0.032	pCi/g						U	09/20/10
Radium-228	15262-20-1		0.080	pCi/g						U	09/20/10
LCS			**QC Sample #38826**								
Cesium-137	10045-97-3		6500	pCi/sample	107.5	80 - 120					09/20/10
Cobalt-60	10198-40-0		10000	pCi/sample	103.7	80 - 120					09/20/10
DUP			**QC Sample #38827**								
			Original 102515010								
Cesium-137	10045-97-3	-4.9E-3	-4.8E-3	pCi/g			-2.10	-30 - 30		U	09/21/10
Cobalt-60	10198-40-0	-8.3E-3	-1.7E-3	pCi/g			-130.60	-30 - 30	*	U	09/21/10
Europium-152	14683-23-9	-9.1E-3	9.5E-3	pCi/g			9100.00	-30 - 30	*	U	09/21/10
Europium-154	15585-10-1	-2.7E-3	-0.011	pCi/g			-117.50	-30 - 30	*	U	09/21/10
Europium-155	14391-16-3	0.049	0.0050	pCi/g			162.90	-30 - 30	*	U	09/21/10
Radium-226	13982-63-3	0.43	0.71	pCi/g			48.60	-30 - 30	*		09/21/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102515

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Radium-228	15262-20-1	0.75	0.68	pCi/g			8.60	-30 - 30		09/21/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102515

QC Batch 165533 **Test** Strontium 89/90 (GPC/GEA)
Associated Samples 102515001, 102515002, 102515003, 102515004, 102515005, 102515006

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #39279**							
Strontium-89/90	SR-RAD		-0.86	pCi/g					U	09/29/10
LCS			**QC Sample #39280**							
Strontium-89/90	SR-RAD		28	pCi/g	97.8	80 - 120				09/29/10
DUP			**QC Sample #39281**							
			Original 102515001							
Strontium-89/90	SR-RAD	-1.2	-1.1	pCi/g			-9.50	-30 - 30	U	09/29/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102515

QC Batch 165534 **Test** Strontium 89/90 (GPC/GEA)
Associated Samples 102515007, 102515008, 102515009, 102515010, 102515011, 102515012

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #39282**							
Strontium-89/90	SR-RAD		-0.50	pCi/g					U	09/29/10
LCS			**QC Sample #39283**							
Strontium-89/90	SR-RAD		25	pCi/g	89	80 - 120				09/29/10
DUP			**QC Sample #39284**							
			Original 102515007							
Strontium-89/90	SR-RAD	-0.93	-1.1	pCi/g			-18.90	-30 - 30	U	09/29/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102515

QC Batch 162840 **Test** Americium/Curium (AEA)
Associated Samples 102515001, 102515002, 102515003, 102515004, 102515005, 102515006

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE			**Sample #102515001**							
Americium-243 Tracer	14993-75-0				81.8	25 - 105				09/27/10
Uranium-232 Tracer	14158-29-3				83.9	25 - 105				09/27/10
Plutonium-242 Tracer	13982-10-0				90.1	25 - 105				09/27/10
SAMPLE			**Sample #102515002**							
Americium-243 Tracer	14993-75-0				90.2	25 - 105				09/27/10
Uranium-232 Tracer	14158-29-3				90.5	25 - 105				09/27/10
Plutonium-242 Tracer	13982-10-0				82.3	25 - 105				09/27/10
SAMPLE			**Sample #102515003**							
Americium-243 Tracer	14993-75-0				96.8	25 - 105				09/27/10
Uranium-232 Tracer	14158-29-3				82.6	25 - 105				09/27/10
Plutonium-242 Tracer	13982-10-0				85.9	25 - 105				09/27/10
SAMPLE			**Sample #102515004**							
Americium-243 Tracer	14993-75-0				89.4	25 - 105				09/27/10
Uranium-232 Tracer	14158-29-3				86	25 - 105				09/27/10
Plutonium-242 Tracer	13982-10-0				95.9	25 - 105				09/27/10
SAMPLE			**Sample #102515005**							

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102515

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Americium-243 Tracer	14993-75-0				90.6	25 - 105				09/27/10
Uranium-232 Tracer	14158-29-3				95.1	25 - 105				09/27/10
Plutonium-242 Tracer	13982-10-0				85.9	25 - 105				09/27/10
SAMPLE			**Sample #102515006**							
Uranium-232 Tracer	14158-29-3				95.9	25 - 105				09/27/10
Americium-243 Tracer	14993-75-0				100.5	25 - 105				09/27/10
Plutonium-242 Tracer	13982-10-0				94	25 - 105				09/27/10
BLANK			**QC Sample #38532**							
Americium-243 Tracer	14993-75-0				85.8	25 - 105				09/27/10
Uranium-232 Tracer	14158-29-3				88	25 - 105				09/27/10
Plutonium-242 Tracer	13982-10-0				100	25 - 105				09/27/10
LCS			**QC Sample #38533**							
Americium-243 Tracer	14993-75-0				89.4	25 - 105				09/27/10
Uranium-232 Tracer	14158-29-3				66.3	25 - 105				09/27/10
Plutonium-242 Tracer	13982-10-0				95.5	25 - 105				09/27/10
DUP			**QC Sample #38534**							
			Original 102515001							
Americium-243 Tracer	14993-75-0				88.7	25 - 105	15.40			09/27/10
Uranium-232 Tracer	14158-29-3				81.6	25 - 105	13.30			09/27/10
Plutonium-242 Tracer	13982-10-0				87.5	25 - 105	13.60			09/27/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102515

QC Batch 162841 **Test** Americium/Curium (AEA)
Associated Samples 102515007, 102515008, 102515009, 102515010, 102515011, 102515012

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE			**Sample #102515007**							
Americium-243 Tracer	14993-75-0				88.4	25 - 105				09/27/10
Uranium-232 Tracer	14158-29-3				91.7	25 - 105				09/27/10
Plutonium-242 Tracer	13982-10-0				100	25 - 105				09/28/10
SAMPLE			**Sample #102515008**							
Americium-243 Tracer	14993-75-0				86.1	25 - 105				09/27/10
Uranium-232 Tracer	14158-29-3				92.1	25 - 105				09/27/10
Plutonium-242 Tracer	13982-10-0				84.9	25 - 105				09/28/10
SAMPLE			**Sample #102515009**							
Americium-243 Tracer	14993-75-0				88.2	25 - 105				09/27/10
Uranium-232 Tracer	14158-29-3				80.7	25 - 105				09/27/10
Plutonium-242 Tracer	13982-10-0				87.6	25 - 105				09/28/10
SAMPLE			**Sample #102515010**							
Americium-243 Tracer	14993-75-0				96.6	25 - 105				09/28/10
Uranium-232 Tracer	14158-29-3				87.7	25 - 105				09/27/10
Plutonium-242 Tracer	13982-10-0				82	25 - 105				09/28/10
SAMPLE			**Sample #102515011**							

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102515

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Americium-243 Tracer	14993-75-0				94.5	25 - 105				09/28/10
Uranium-232 Tracer	14158-29-3				84.6	25 - 105				09/27/10
Plutonium-242 Tracer	13982-10-0				89.9	25 - 105				09/28/10
SAMPLE			**Sample #102515012**							
Americium-243 Tracer	14993-75-0				98.4	25 - 105				09/28/10
Uranium-232 Tracer	14158-29-3				92.4	25 - 105				09/27/10
Plutonium-242 Tracer	13982-10-0				92.5	25 - 105				09/28/10
BLANK			**QC Sample #38535**							
Americium-243 Tracer	14993-75-0				84.1	25 - 105				09/27/10
Uranium-232 Tracer	14158-29-3				79.5	25 - 105				09/27/10
Plutonium-242 Tracer	13982-10-0				93.9	25 - 105				09/28/10
LCS			**QC Sample #38536**							
Americium-243 Tracer	14993-75-0				82.1	25 - 105				09/27/10
Uranium-232 Tracer	14158-29-3				61.8	25 - 105				09/27/10
Plutonium-242 Tracer	13982-10-0				92.9	25 - 105				09/28/10
DUP			**QC Sample #38537**							
			Original	**102515007**						
Americium-243 Tracer	14993-75-0				99.2	25 - 105	0.00			09/27/10
Uranium-232 Tracer	14158-29-3				94.6	25 - 105	0.00			09/27/10
Plutonium-242 Tracer	13982-10-0				93.4	25 - 105	0.00			09/28/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102515

QC Batch 165533 **Test** Strontium 89/90 (GPC/GEA)
Associated Samples 102515001, 102515002, 102515003, 102515004, 102515005, 102515006

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE			**Sample #102515001**							
Strontium-85	13967-73-2				80.6	25 - 105				09/29/10
SAMPLE			**Sample #102515002**							
Strontium-85	13967-73-2				87	25 - 105				09/29/10
SAMPLE			**Sample #102515003**							
Strontium-85	13967-73-2				96	25 - 105				09/29/10
SAMPLE			**Sample #102515004**							
Strontium-85	13967-73-2				94.7	25 - 105				09/29/10
SAMPLE			**Sample #102515005**							
Strontium-85	13967-73-2				91.8	25 - 105				09/29/10
SAMPLE			**Sample #102515006**							
Strontium-85	13967-73-2				89.4	25 - 105				09/29/10
BLANK			**QC Sample #39279**							
Strontium-85	13967-73-2				83.3	25 - 105				09/29/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102515

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
LCS			**QC Sample #39280**							
Strontium-85	13967-73-2				76.3	25 - 105				09/29/10
DUP			**QC Sample #39281**							
			Original	**102515001**						
Strontium-85	13967-73-2				91.3	25 - 105	11.30			09/29/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102515

QC Batch 165534 **Test** Strontium 89/90 (GPC/GEA)
Associated Samples 102515007, 102515008, 102515009, 102515010, 102515011, 102515012

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE			**Sample #102515007**							
Strontium-85	13967-73-2				82.2	25 - 105				09/29/10
SAMPLE			**Sample #102515008**							
Strontium-85	13967-73-2				86.9	25 - 105				09/29/10
SAMPLE			**Sample #102515009**							
Strontium-85	13967-73-2				86.8	25 - 105				09/29/10
SAMPLE			**Sample #102515010**							
Strontium-85	13967-73-2				82.8	25 - 105				09/29/10
SAMPLE			**Sample #102515011**							
Strontium-85	13967-73-2				84.3	25 - 105				09/29/10
SAMPLE			**Sample #102515012**							
Strontium-85	13967-73-2				90.2	25 - 105				09/29/10
BLANK			**QC Sample #39282**							
Strontium-85	13967-73-2				73.9	25 - 105				09/29/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102515

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
LCS			**QC Sample #39283**							
Strontium-85	13967-73-2				81.4	25 - 105				09/29/10
DUP			**QC Sample #39284**							
			Original 102515007							
Strontium-85	13967-73-2				79.8	25 - 105	4.10			09/29/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102537

QC Batch 163237 **Test** Plutonium (AEA)
Associated Samples 102537001, 102537002, 102537003, 102537004, 102537005

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
BLANK			**QC Sample #38657**								
Plutonium-238	13981-16-3		3.1E-3	pCi/g						U	09/28/10
Americium-241	14596-10-2		0.019	pCi/g						X	09/28/10
Uranium-234	U-233/234		9.2E-3	pCi/g						U	09/28/10
Plutonium-239/240	PU-239/240		0.011	pCi/g						U	09/28/10
Uranium-235	15117-96-1		0.013	pCi/g						U	09/28/10
Uranium-238	U-238		-2.3E-3	pCi/g						U	09/28/10
LCS			**QC Sample #38658**								
Americium-241	14596-10-2		5.9	pCi/sample	106.4	80 - 120					09/28/10
Plutonium-239/240	PU-239/240		5.9	pCi/sample	101.8	80 - 120					09/28/10
Uranium-234	U-233/234		8.2	pCi/sample	100.2	80 - 120					09/28/10
DUP			**QC Sample #38659**								
			Original 102537001								
Plutonium-238	13981-16-3	-1.6E-3	1.5E-3	pCi/g			-6200.00	-30 - 30	*	U	09/28/10
Americium-241	14596-10-2	0.033	0.018	pCi/g			58.80	-30 - 30	*	U	09/28/10
Uranium-234	U-233/234	0.11	0.12	pCi/g			8.70	-30 - 30			09/28/10
Plutonium-239/240	PU-239/240	0.011	0.0060	pCi/g			58.80	-30 - 30	*	U	09/28/10
Uranium-235	15117-96-1	9.4E-3	0.010	pCi/g			8.30	-30 - 30		U	09/28/10
Uranium-238	U-238	0.12	0.12	pCi/g			0.00	-30 - 30			09/28/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102537

QC Batch 163238
Associated Samples 102537006, 102537007, 102537008, 102537009

Test Plutonium (AEA)

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
BLANK			**QC Sample #38660**								
Plutonium-238	13981-16-3		-0.021	pCi/g						U	09/29/10
Americium-241	14596-10-2		0.020	pCi/g						X	09/23/10
Plutonium-239/240	PU-239/240		1.9E-3	pCi/g						U	09/29/10
Uranium-234	U-233/234		0.011	pCi/g						U	09/28/10
Uranium-235	15117-96-1		-2.1E-3	pCi/g						U	09/28/10
Uranium-238	U-238		7.5E-3	pCi/g						U	09/28/10
LCS			**QC Sample #38661**								
Americium-241	14596-10-2		6.0	pCi/sample	108.7	80 - 120					09/23/10
Plutonium-239/240	PU-239/240		6.2	pCi/sample	107.9	80 - 120					09/23/10
Uranium-234	U-233/234		8.8	pCi/sample	106.8	80 - 120					09/28/10
DUP			**QC Sample #38662**								
			Original 102537006								
Plutonium-238	13981-16-3	4.2E-3	-3.1E-3	pCi/g			1577.80	-30 - 30	*	U	09/23/10
Americium-241	14596-10-2	0.019	0.019	pCi/g			5.40	-30 - 30			09/23/10
Plutonium-239/240	PU-239/240	8.4E-3	9.2E-3	pCi/g			12.70	-30 - 30		U	09/23/10
Uranium-234	U-233/234	0.12	0.11	pCi/g			8.70	-30 - 30			09/28/10
Uranium-235	15117-96-1	0.018	0.019	pCi/g			11.10	-30 - 30			09/28/10
Uranium-238	U-238	0.15	0.15	pCi/g			0.00	-30 - 30			09/28/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102537

QC Batch 163934 **Test** Gamma Energy Analysis-general
Associated Samples 102537001, 102537002, 102537003, 102537004, 102537005, 102537006

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
IBLANK			**QC Sample #38825**								
Cesium-137	10045-97-3		-2.5E-3	pCi/g						U	09/20/10
Cobalt-60	10198-40-0		-7.3E-3	pCi/g						U	09/20/10
Europium-152	14683-23-9		-0.026	pCi/g						U	09/20/10
Europium-154	15585-10-1		9.5E-3	pCi/g						U	09/20/10
Europium-155	14391-16-3		0.13	pCi/g						U	09/20/10
Radium-226	13982-63-3		0.032	pCi/g						U	09/20/10
Radium-228	15262-20-1		0.080	pCi/g						U	09/20/10
LCS			**QC Sample #38826**								
Cesium-137	10045-97-3		6500	pCi/sample	107.5	80 - 120					09/20/10
Cobalt-60	10198-40-0		10000	pCi/sample	103.7	80 - 120					09/20/10
DUP			**QC Sample #38827**								
			Original 102515010								
Cesium-137	10045-97-3		-4.8E-3	pCi/g			-2.10	-30 - 30		U	09/21/10
Cobalt-60	10198-40-0		-1.7E-3	pCi/g			-130.60	-30 - 30	*	U	09/21/10
Europium-152	14683-23-9		9.5E-3	pCi/g			9100.00	-30 - 30	*	U	09/21/10
Europium-154	15585-10-1		-0.011	pCi/g			-117.50	-30 - 30	*	U	09/21/10
Europium-155	14391-16-3		0.0050	pCi/g			162.90	-30 - 30	*	U	09/21/10
Radium-226	13982-63-3		0.71	pCi/g			48.60	-30 - 30	*		09/21/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102537

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Radium-228	15262-20-1		0.68	pCi/g			8.60	-30 - 30		09/21/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102537

QC Batch 163942
Associated Samples 102537007, 102537008, 102537009

Test Gamma Energy Analysis-general

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
IBLANK			**QC Sample #38831**								
Cesium-137	10045-97-3		-4.9E-3	pCi/g						U	09/20/10
Cobalt-60	10198-40-0		1.7E-3	pCi/g						U	09/20/10
Europium-152	14683-23-9		-0.023	pCi/g						U	09/20/10
Europium-154	15585-10-1		0.019	pCi/g						U	09/20/10
Europium-155	14391-16-3		9.3E-3	pCi/g						U	09/20/10
Radium-226	13982-63-3		0.087	pCi/g						X	09/20/10
Radium-228	15262-20-1		0.070	pCi/g						X	09/20/10
LCS			**QC Sample #38832**								
Cesium-137	10045-97-3		6300	pCi/sample	104.1	80 - 120					09/20/10
Cobalt-60	10198-40-0		11000	pCi/sample	108	80 - 120					09/20/10
DUP			**QC Sample #38833**								
			Original 102197001								
Cesium-137	10045-97-3		-3.6E-3	pCi/g			357.00	-30 - 30	*	U	09/21/10
Cobalt-60	10198-40-0		1.4E-3	pCi/g			160.70	-30 - 30	*	U	09/21/10
Europium-152	14683-23-9		-0.022	pCi/g			-48.00	-30 - 30	*	U	09/21/10
Europium-154	15585-10-1		-0.044	pCi/g			1150.00	-30 - 30	*	U	09/21/10
Europium-155	14391-16-3		0.097	pCi/g			389.50	-30 - 30	*	U	09/21/10
Radium-226	13982-63-3		1.1	pCi/g			57.90	-30 - 30	*	X	09/21/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102537

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Radium-228	15262-20-1		1.1	pCi/g			4.20	-30 - 30		09/21/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102537

QC Batch 165535 **Test** Strontium 89/90 (GPC/GEA)
Associated Samples 102537001, 102537002, 102537003, 102537004, 102537005, 102537006, 102537007, 102537008, 102537009

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #39285**							
Strontium-89/90	SR-RAD		-0.30	pCi/g					U	09/30/10
LCS			**QC Sample #39286**							
Strontium-89/90	SR-RAD		27	pCi/g	95.3	80 - 120				09/30/10
DUP			**QC Sample #39287**							
			Original 102537001							
Strontium-89/90	SR-RAD	-1.8	-2.1	pCi/g			-15.40	-30 - 30	U	09/30/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102537

QC Batch 163237 **Test** Americium/Curium (AEA)
Associated Samples 102537001, 102537002, 102537003, 102537004, 102537005

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE			**Sample #102537001**							
Americium-243 Tracer	14993-75-0				95.6	25 - 105				09/28/10
Uranium-232 Tracer	14158-29-3				77.9	25 - 105				09/28/10
Plutonium-242 Tracer	13982-10-0				91	25 - 105				09/28/10
SAMPLE			**Sample #102537002**							
Americium-243 Tracer	14993-75-0				96.3	25 - 105				09/28/10
Uranium-232 Tracer	14158-29-3				67.6	25 - 105				09/28/10
Plutonium-242 Tracer	13982-10-0				81.4	25 - 105				09/28/10
SAMPLE			**Sample #102537003**							
Americium-243 Tracer	14993-75-0				98.2	25 - 105				09/28/10
Uranium-232 Tracer	14158-29-3				79.7	25 - 105				09/28/10
Plutonium-242 Tracer	13982-10-0				83.3	25 - 105				09/28/10
SAMPLE			**Sample #102537004**							
Americium-243 Tracer	14993-75-0				90.1	25 - 105				09/28/10
Uranium-232 Tracer	14158-29-3				81.3	25 - 105				09/28/10
Plutonium-242 Tracer	13982-10-0				96.7	25 - 105				09/28/10
SAMPLE			**Sample #102537005**							

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102537

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Americium-243 Tracer	14993-75-0				92.6	25 - 105				09/28/10
Uranium-232 Tracer	14158-29-3				68.6	25 - 105				09/28/10
Plutonium-242 Tracer	13982-10-0				83.6	25 - 105				09/28/10
BLANK			**QC Sample #38657**							
Americium-243 Tracer	14993-75-0				85.2	25 - 105				09/28/10
Uranium-232 Tracer	14158-29-3				70.6	25 - 105				09/28/10
Plutonium-242 Tracer	13982-10-0				89.8	25 - 105				09/28/10
LCS			**QC Sample #38658**							
Americium-243 Tracer	14993-75-0				80.1	25 - 105				09/28/10
Uranium-232 Tracer	14158-29-3				65.5	25 - 105				09/28/10
Plutonium-242 Tracer	13982-10-0				92	25 - 105				09/28/10
DUP			**QC Sample #38659**							
			Original	**102537001**						
Americium-243 Tracer	14993-75-0				82.6	25 - 105	5.00			09/28/10
Uranium-232 Tracer	14158-29-3				81.3	25 - 105	2.60			09/28/10
Plutonium-242 Tracer	13982-10-0				84.2	25 - 105	3.30			09/28/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102537

QC Batch 163238
Associated Samples 102537006, 102537007, 102537008, 102537009

Test Americium/Curium (AEA)

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE			**Sample #102537006**							
Americium-243 Tracer	14993-75-0				83.5	25 - 105				09/23/10
Uranium-232 Tracer	14158-29-3				70.3	25 - 105				09/28/10
Plutonium-242 Tracer	13982-10-0				93.8	25 - 105				09/23/10
SAMPLE			**Sample #102537007**							
Americium-243 Tracer	14993-75-0				88.8	25 - 105				09/23/10
Uranium-232 Tracer	14158-29-3				76.7	25 - 105				09/28/10
Plutonium-242 Tracer	13982-10-0				92.6	25 - 105				09/23/10
SAMPLE			**Sample #102537008**							
Americium-243 Tracer	14993-75-0				91	25 - 105				09/23/10
Uranium-232 Tracer	14158-29-3				75.3	25 - 105				09/28/10
Plutonium-242 Tracer	13982-10-0				89.6	25 - 105				09/23/10
SAMPLE			**Sample #102537009**							
Americium-243 Tracer	14993-75-0				102.6	25 - 105				09/29/10
Uranium-232 Tracer	14158-29-3				75.9	25 - 105				09/28/10
Plutonium-242 Tracer	13982-10-0				86.2	25 - 105				09/23/10
BLANK			**QC Sample #38660**							

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102537

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Americium-243 Tracer	14993-75-0				86	25 - 105				09/23/10
Uranium-232 Tracer	14158-29-3				86.4	25 - 105				09/28/10
Plutonium-242 Tracer	13982-10-0				89.2	25 - 105				09/29/10
LCS			**QC Sample #38661**							
Americium-243 Tracer	14993-75-0				94.5	25 - 105				09/23/10
Uranium-232 Tracer	14158-29-3				59.2	25 - 105				09/28/10
Plutonium-242 Tracer	13982-10-0				85.6	25 - 105				09/23/10
DUP			**QC Sample #38662**							
			Original	**102537006**						
Americium-243 Tracer	14993-75-0				95.6	25 - 105	0.00			09/23/10
Uranium-232 Tracer	14158-29-3				69	25 - 105	0.00			09/28/10
Plutonium-242 Tracer	13982-10-0				79.3	25 - 105	0.00			09/23/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102537

QC Batch 165535 **Test** Strontium 89/90 (GPC/GEA)
Associated Samples 102537001, 102537002, 102537003, 102537004, 102537005, 102537006, 102537007, 102537008, 102537009

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE			**Sample #102537001**							
Strontium-85	13967-73-2				84.8	25 - 105				09/30/10
SAMPLE			**Sample #102537002**							
Strontium-85	13967-73-2				89.6	25 - 105				09/30/10
SAMPLE			**Sample #102537003**							
Strontium-85	13967-73-2				83.8	25 - 105				09/30/10
SAMPLE			**Sample #102537004**							
Strontium-85	13967-73-2				80.1	25 - 105				09/30/10
SAMPLE			**Sample #102537005**							
Strontium-85	13967-73-2				78.6	25 - 105				09/30/10
SAMPLE			**Sample #102537006**							
Strontium-85	13967-73-2				85.4	25 - 105				09/30/10
SAMPLE			**Sample #102537007**							
Strontium-85	13967-73-2				82.4	25 - 105				09/30/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102537

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE			**Sample #102537008**							
Strontium-85	13967-73-2				79.5	25 - 105				09/30/10
SAMPLE			**Sample #102537009**							
Strontium-85	13967-73-2				86.8	25 - 105				09/30/10
BLANK			**QC Sample #39285**							
Strontium-85	13967-73-2				78.2	25 - 105				09/30/10
LCS			**QC Sample #39286**							
Strontium-85	13967-73-2				82	25 - 105				09/30/10
DUP			**QC Sample #39287**							
			Original 102537001							
Strontium-85	13967-73-2				89.6	25 - 105	3.80			09/30/10

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H4381

7896-015 Method Blank

METHOD BLANK

SDG 7896 Client/Case no CHPRC SDG H4381
Contact N. Joseph Verville Contract No. 33677

Lab sample id S009125-15 Client sample id Method Blank
Dept sample id 7896-015 Material/Matrix SOLID
SAF No F10-256

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium	10028-17-8	3.12	5.2	8.74	400	U	H
Carbon 14	14762-75-5	2.73	4.3	7.15	50.0	U	C
Nickel 63	13981-37-8	-0.991	1.4	2.51	30.0	U	NI_L
Thorium 228	14274-82-9	0.036	0.22	0.443	1.00	U	TH
Thorium 230	14269-63-7	-0.179	0.29	0.682	1.00	U	TH
Thorium 232	TH-232	0	0.071	0.273	1.00	U	TH

QC-BLANK #74992

Lab id EBRLNE
Protocol CHPRC
Version Ver 1.0
Form DVD-DS
Version 3.06
Report date 10/07/10

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H4381

7896-014

Lab Control Sample

LAB CONTROL SAMPLE

SDG 7896
Contact N. Joseph Verville

Client/Case no CHPRC SDG H4381
Contract No. 33677

Lab sample id S009125-14
Dept sample id 7896-014

Client sample id Lab Control Sample
Material/Matrix SOLID
SAF No F10-256

ANALYTE	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST	ADDED pCi/g	2σ ERR pCi/g	REC %	3σ LMTS (TOTAL)	PROTOCOL LIMITS
Tritium	1100	27	9.38	400		H	1080	43	102	83-117	80-120
Carbon 14	3010	29	6.82	50.0		C	3190	130	94	85-115	80-120
Nickel 63	180	4.6	2.48	30.0		NI_L	218	8.7	83	85-115	80-120
Thorium 230	20.6	2.3	0.668	1.00		TH	18.9	0.76	109	77-123	80-120

QC-LCS #74991

Lab id EBRLNE
Protocol CHPRC
Version Ver 1.0
Form DVD-LCS
Version 3.06
Report date 10/07/10

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H4381

7896-016 B27M04

DUPLICATE

SDG	7896			Client/Case no	CHPRC SDG H4381
Contact	N. Joseph Verville			Contract	No. 33677
	DUPLICATE		ORIGINAL		
Lab sample id	S009125-16	Lab sample id	S009125-02	Client sample id	B27M04
Dept sample id	7896-016	Dept sample id	7896-002	Location/Matrix	100-K-63 location 2 Surf SOLID
		Received	09/14/10	Collected/Weight	09/07/10 12:04 144 g
% solids	96.0	% solids	96.0	Custody/SAF No	F10-256-169 F10-256

ANALYTE	DUPLICATE pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST	ORIGINAL pCi/g	2σ ERR (COUNT)	MDA pCi/g	QUALI-FIERS	RPD %	3σ TOT	DER σ
Tritium	0.269	4.4	7.53	400	U	H	-1.65	4.0	7.10	U	-		0.6
Carbon 14	-0.400	3.4	5.83	50.0	U	C	2.12	3.5	5.86	U	-		1.0
Nickel 63	1.18	1.8	2.98	30.0	U	NI_L	-0.345	1.8	3.01	U	-		1.2
Thorium 228	0.694	0.37	0.450	1.00		TH	0.813	0.41	0.449		16	111	0.4
Thorium 230	0.361	0.43	0.690	1.00	U	TH	0.686	0.49	0.714	U	-		1.0
Thorium 232	0.831	0.37	0.276	1.00		TH	0.767	0.33	0.309		8	95	0.3

QC-DUP#2 74993

ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DUP
Version	3.06
Report date	10/07/10

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H4381

Test TH Matrix SOLID
SDG 7896
Contact N. Joseph Verville

LAB METHOD SUMMARY

THORIUM, ISOTOPIC IN SOLIDS

ALPHA SPECTROSCOPY

Client CHPRC
Contract No. 33677
Contract SDG H4381

RESULTS

LAB SAMPLE ID	RAW TEST	SUF-FIX	PLANCHET	CLIENT SAMPLE ID	Thorium 228	Thorium 230	Thorium 232
Preparation batch 7270-032							
S009125-02			7896-002	B27M04	0.813	U	0.767
S009125-03			7896-003	B27M05	0.801	0.756	0.716
S009125-04			7896-004	B27M06	0.866	U	0.942
S009125-05			7896-005	B27M07	0.549	U	0.923
S009125-06			7896-006	B27M08	1.10	U	0.881
S009125-07			7896-007	B27M09	1.24	U	U
S009125-09			7896-009	B27M83	1.13	U	0.825
S009125-10			7896-010	B27M84	0.759	0.867	0.943
S009125-11			7896-011	B27M85	0.796	U	0.483
S009125-12			7896-012	B27M86	0.745	U	0.945
S009125-13			7896-013	B27M87	1.16	U	0.877
S009125-14			7896-014	Lab Control Sample		ok	
S009125-15			7896-015	Method Blank	U	U	U
S009125-16			7896-016	Duplicate (S009125-02)	ok	- U	ok
Nominal values and limits from method				RDLs (pCi/g)	1.00	1.00	1.00

Lab id EBRLNE
Protocol CHPRC
Version Ver 1.0
Form DVD-LMS
Version 3.06
Report date 10/07/10

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H4381

Test TH Matrix SOLID
SDG 7896
Contact N. Joseph Verville

LAB METHOD SUMMARY

THORIUM, ISOTOPIC IN SOLIDS

ALPHA SPECTROSCOPY

Client CHPRC
Contract No. 33677
Contract SDG H4381

METHOD PERFORMANCE

LAB SAMPLE ID	RAW TEST	SUF-FIX	CLIENT SAMPLE ID	MAX MDA pCi/g	ALIQ g	PREP FAC	DILU-TION	YIELD %	EFF %	COUNT min	FWHM keV	DRIFT KeV	DAYS HELD	PREPARED	ANAL-YZED	DETECTOR
Preparation batch 7270-032			2σ prep error 8.0 %		Reference Lab Notebook No. 7270 pg.032											
S009125-02			B27M04	0.714	0.250			84		165			23	09/25/10	09/30	SS-032
S009125-03			B27M05	0.733	0.250			88		154			22	09/25/10	09/30	SS-030
S009125-04			B27M06	0.725	0.250			92		154			22	09/25/10	09/30	SS-031
S009125-05			B27M07	0.742	0.250			87		154			22	09/25/10	09/30	SS-032
S009125-06			B27M08	0.773	0.250			91		155			21	09/25/10	09/30	SS-033
S009125-07			B27M09	0.744	0.250			86		155			21	09/25/10	09/30	SS-034
S009125-09			B27M83	0.664	0.250			92		155			23	09/25/10	09/30	SS-035
S009125-10			B27M84	0.668	0.250			88		155			22	09/25/10	09/30	SS-036
S009125-11			B27M85	0.778	0.250			88		156			22	09/25/10	09/30	SS-037
S009125-12			B27M86	0.728	0.250			86		156			22	09/25/10	09/30	SS-038
S009125-13			B27M87	0.706	0.250			84		157			21	09/25/10	09/30	SS-040
S009125-14			Lab Control Sample	0.668	0.250			87		191				09/25/10	10/01	SS-030
S009125-15			Method Blank	0.682	0.250			85		191				09/25/10	10/01	SS-031
S009125-16			Duplicate (S009125-02)	0.690	0.250			91		163			28	09/25/10	10/05	SS-038
Nominal values and limits from method				1.00	0.250			30-110		150			180			

PROCEDURES	REFERENCE	THISO_IE_PLATE_AEA
	SPP-070	Soil Dissolution, < 1.0g Aliquot, rev 1
	CP-900	Thorium in Water and Dissolved Solid Samples by Extraction Chromatography, rev 5
	CP-008	Heavy Element Electroplating, rev 13

AVERAGES ± 2 SD FOR 14 SAMPLES				
	MDA	0.715	±	0.075
	YIELD	88	±	6

Lab id EBRLNE
Protocol CHPRC
Version Ver 1.0
Form DVD-LMS
Version 3.06
Report date 10/07/10

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H4381

Test C Matrix SOLID
SDG 7896
Contact N. Joseph Verville

LAB METHOD SUMMARY

CARBON 14 IN SOLIDS

LIQUID SCINTILLATION COUNTING

Client CHPRC
Contract No. 33677
Contract SDG H4381

RESULTS

LAB SAMPLE ID	RAW TEST	SUF-FIX	PLANCHET	CLIENT SAMPLE ID	Carbon 14	
Preparation batch 7270-032						
S009125-02			7896-002	B27M04	U	
S009125-03			7896-003	B27M05	U	
S009125-04			7896-004	B27M06	U	
S009125-05			7896-005	B27M07	U	
S009125-06			7896-006	B27M08	U	
S009125-07			7896-007	B27M09	U	
S009125-09			7896-009	B27M83	U	
S009125-10			7896-010	B27M84	U	
S009125-11			7896-011	B27M85	U	
S009125-12			7896-012	B27M86	U	
S009125-13			7896-013	B27M87	U	
S009125-14			7896-014	Lab Control Sample	ok	
S009125-15			7896-015	Method Blank	U	
S009125-16			7896-016	Duplicate (S009125-02)	-	U

Nominal values and limits from method RDLs (pCi/g) 50.0

Lab id EBRLNE
Protocol CHPRC
Version Ver 1.0
Form DVD-LMS
Version 3.06
Report date 10/07/10

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H4381

Test C Matrix SOLID
SDG 7896
Contact N. Joseph Verville

LAB METHOD SUMMARY

CARBON 14 IN SOLIDS

LIQUID SCINTILLATION COUNTING

Client CHPRC
Contract No. 33677
Contract SDG H4381

METHOD PERFORMANCE

LAB SAMPLE ID	RAW TEST	SUF-FIX	CLIENT SAMPLE ID	MDA pCi/g	ALIQ g	PREP FAC	DILU-TION	YIELD %	EFF %	COUNT min	FWHM keV	DRIFT KeV	DAYS HELD	PREPARED	ANAL-YZED	DETECTOR
Preparation batch 7270-032			2σ prep error 10.0 % Reference Lab Notebook No. 7270 pg.032													
S009125-02			B27M04	5.86	0.235			100		50			18	09/23/10	09/25	LSC-004
S009125-03			B27M05	5.55	0.243			100		50			17	09/23/10	09/25	LSC-004
S009125-04			B27M06	5.59	0.240			100		50			17	09/23/10	09/25	LSC-004
S009125-05			B27M07	5.70	0.253			100		50			17	09/23/10	09/25	LSC-004
S009125-06			B27M08	5.78	0.236			100		50			16	09/23/10	09/25	LSC-004
S009125-07			B27M09	5.74	0.238			100		50			16	09/23/10	09/25	LSC-004
S009125-09			B27M83	6.46	0.231			100		50			18	09/23/10	09/25	LSC-004
S009125-10			B27M84	5.48	0.256			100		50			17	09/23/10	09/25	LSC-004
S009125-11			B27M85	5.87	0.229			100		50			17	09/23/10	09/25	LSC-004
S009125-12			B27M86	5.58	0.243			100		50			17	09/23/10	09/25	LSC-004
S009125-13			B27M87	5.86	0.240			100		50			16	09/23/10	09/25	LSC-004
S009125-14			Lab Control Sample	6.82	0.200			100		50				09/23/10	09/25	LSC-004
S009125-15			Method Blank	7.15	0.200			100		50				09/23/10	09/25	LSC-004
S009125-16			Duplicate (S009125-02)	5.83	0.234			100		50			18	09/23/10	09/25	LSC-004
Nominal values and limits from method				50.0	0.200					10			180			

PROCEDURES REFERENCE C14_COX_LSC
CP-251 Tritium/Carbon-14 Oxidation, rev 11

AVERAGES ± 2 SD MDA 5.95 ± 1.00
FOR 14 SAMPLES YIELD 100 ± 0

Lab id EBRLNE
Protocol CHPRC
Version Ver 1.0
Form DVD-LMS
Version 3.06
Report date 10/07/10

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H4381

Test H Matrix SOLID
SDG 7896
Contact N. Joseph Verville

LAB METHOD SUMMARY

TRITIUM IN SOLIDS

LIQUID SCINTILLATION COUNTING

Client CHPRC
Contract No. 33677
Contract SDG H4381

RESULTS

LAB SAMPLE ID	RAW TEST	SUF-FIX	PLANCHET	CLIENT SAMPLE ID	Tritium	
Preparation batch 7270-032						
S009125-02			7896-002	B27M04	U	
S009125-03			7896-003	B27M05	U	
S009125-04			7896-004	B27M06	U	
S009125-05			7896-005	B27M07	U	
S009125-06			7896-006	B27M08	U	
S009125-07			7896-007	B27M09	U	
S009125-09			7896-009	B27M83	U	
S009125-10			7896-010	B27M84	U	
S009125-11			7896-011	B27M85	U	
S009125-12			7896-012	B27M86	U	
S009125-13			7896-013	B27M87	U	
S009125-14			7896-014	Lab Control Sample	ok	
S009125-15			7896-015	Method Blank	U	
S009125-16			7896-016	Duplicate (S009125-02)	-	U

Nominal values and limits from method RDLs (pCi/g) 400

Lab id EBRLNE
Protocol CHPRC
Version Ver 1.0
Form DVD-LMS
Version 3.06
Report date 10/07/10

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H4381

Test H Matrix SOLID
SDG 7896
Contact N. Joseph Verville

LAB METHOD SUMMARY

TRITIUM IN SOLIDS

LIQUID SCINTILLATION COUNTING

Client CHPRC
Contract No. 33677
Contract SDG H4381

METHOD PERFORMANCE

LAB SAMPLE ID	RAW TEST	SUF-FIX	CLIENT SAMPLE ID	MDA pCi/g	ALIQ g	PREP FAC	DILU-TION	YIELD %	EFF %	COUNT min	FWHM keV	DRIFT KeV	DAYS HELD	PREPARED	ANAL-YZED	DETECTOR
Preparation batch 7270-032			2σ prep error 10.0 % Reference Lab Notebook No. 7270 pg.032													
S009125-02			B27M04	7.10	0.235			100		50			19	09/23/10	09/26	LSC-005
S009125-03			B27M05	7.19	0.243			100		50			18	09/23/10	09/26	LSC-005
S009125-04			B27M06	7.04	0.240			100		50			18	09/23/10	09/26	LSC-005
S009125-05			B27M07	6.58	0.253			100		50			18	09/23/10	09/26	LSC-005
S009125-06			B27M08	7.36	0.236			100		50			17	09/23/10	09/26	LSC-005
S009125-07			B27M09	7.28	0.238			100		50			17	09/23/10	09/26	LSC-005
S009125-09			B27M83	7.64	0.231			100		50			19	09/23/10	09/26	LSC-005
S009125-10			B27M84	6.77	0.256			100		50			18	09/23/10	09/26	LSC-005
S009125-11			B27M85	7.20	0.229			100		50			18	09/23/10	09/26	LSC-005
S009125-12			B27M86	7.13	0.243			100		50			18	09/23/10	09/26	LSC-005
S009125-13			B27M87	7.15	0.240			100		50			17	09/23/10	09/26	LSC-005
S009125-14			Lab Control Sample	9.38	0.200			100		50				09/23/10	09/27	LSC-005
S009125-15			Method Blank	8.74	0.200			100		50				09/23/10	09/26	LSC-005
S009125-16			Duplicate (S009125-02)	7.53	0.234			100		50			19	09/23/10	09/26	LSC-005
Nominal values and limits from method				400	0.200					25			180			

PROCEDURES REFERENCE TRITIUM_COX_LSC
CP-251 Tritium/Carbon-14 Oxidation, rev 11

AVERAGES ± 2 SD FOR 14 SAMPLES
MDA 7.44 ± 1.50
YIELD 100 ± 0

Lab id EBRLNE
Protocol CHPRC
Version Ver 1.0
Form DVD-LMS
Version 3.06
Report date 10/07/10

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H4381

Test NI L Matrix SOLID
SDG 7896
Contact N. Joseph Verville

LAB METHOD SUMMARY

NICKEL 63 IN SOLIDS

LIQUID SCINTILLATION COUNTING

Client CHPRC
Contract No. 33677
Contract SDG H4381

RESULTS

LAB SAMPLE ID	RAW TEST	SUF-FIX	PLANCHET	CLIENT SAMPLE ID	Nickel 63
Preparation batch 7270-032					
S009125-01			7896-001	B27M03	U
S009125-02			7896-002	B27M04	U
S009125-03			7896-003	B27M05	U
S009125-04			7896-004	B27M06	U
S009125-05			7896-005	B27M07	U
S009125-06			7896-006	B27M08	U
S009125-07			7896-007	B27M09	U
S009125-08			7896-008	B27M82	U
S009125-09			7896-009	B27M83	U
S009125-10			7896-010	B27M84	8.38
S009125-11			7896-011	B27M85	U
S009125-12			7896-012	B27M86	U
S009125-13			7896-013	B27M87	U
S009125-14			7896-014	Lab Control Sample	LOW
S009125-15			7896-015	Method Blank	U
S009125-16			7896-016	Duplicate (S009125-02)	- U

Nominal values and limits from method RDLs (pCi/g) 30.0

Lab id EBRLNE
Protocol CHPRC
Version Ver 1.0
Form DVD-LMS
Version 3.06
Report date 10/07/10

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H4381

Test NI L Matrix SOLID
SDG 7896
Contact N. Joseph Verville

LAB METHOD SUMMARY

NICKEL 63 IN SOLIDS

LIQUID SCINTILLATION COUNTING

Client CHPRC
Contract No. 33677
Contract SDG H4381

METHOD PERFORMANCE

LAB SAMPLE ID	RAW TEST	SUF-FIX	CLIENT SAMPLE ID	MDA pCi/g	ALIQ g	PREP FAC	DILU-TION	YIELD %	EFF %	COUNT min	FWHM keV	DRIFT KeV	DAYS HELD	PREPARED	ANAL-YZED	DETECTOR
Preparation batch 7270-032			2σ prep error 11.2 % Reference Lab Notebook No. 7270 pg.032													
S009125-01			B27M03	3.07	0.500			89		50			23	09/23/10	09/25	LSC-004
S009125-02			B27M04	3.01	0.500			89		50			18	09/23/10	09/25	LSC-004
S009125-03			B27M05	2.98	0.500			91		50			17	09/23/10	09/25	LSC-004
S009125-04			B27M06	2.89	0.500			91		50			17	09/23/10	09/25	LSC-004
S009125-05			B27M07	2.88	0.500			94		50			17	09/23/10	09/25	LSC-004
S009125-06			B27M08	2.66	0.500			101		50			16	09/23/10	09/25	LSC-004
S009125-07			B27M09	2.92	0.500			89		50			16	09/23/10	09/25	LSC-004
S009125-08			B27M82	2.89	0.500			93		50			23	09/23/10	09/25	LSC-004
S009125-09			B27M83	2.93	0.500			92		50			18	09/23/10	09/25	LSC-004
S009125-10			B27M84	2.58	0.500			102		50			17	09/23/10	09/25	LSC-004
S009125-11			B27M85	2.86	0.500			94		50			17	09/23/10	09/25	LSC-004
S009125-12			B27M86	2.81	0.500			96		50			17	09/23/10	09/25	LSC-004
S009125-13			B27M87	2.79	0.500			95		50			16	09/23/10	09/25	LSC-004
S009125-14			Lab Control Sample	2.48	0.500			108		50				09/23/10	09/25	LSC-004
S009125-15			Method Blank	2.51	0.500			107		50				09/23/10	09/25	LSC-004
S009125-16			Duplicate (S009125-02)	2.98	0.500			90		50			18	09/23/10	09/25	LSC-004
Nominal values and limits from method				30.0	0.500			40-110		25			180			

PROCEDURES	REFERENCE	NI63_LSC
	SPP-070	Soil Dissolution, < 1.0g Aliquot, rev 1
	CP-281	Nickel-63 Purification By Extraction Chromatography, rev 5

AVERAGES ± 2 SD FOR 16 SAMPLES
MDA 2.83 ± 0.358
YIELD 95 ± 12

Lab id EBRLNE
Protocol CHPRC
Version Ver 1.0
Form DVD-LMS
Version 3.06
Report date 10/07/10

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H4382

7897-015 Method Blank

METHOD BLANK

SDG	7897	Client/Case no	CHPRC	SDG_H4382
Contact	N. Joseph Verville	Contract	No. 33677	
Lab sample id	S009126-15	Client sample id	Method Blank	
Dept sample id	7897-015	Material/Matrix		SOLID
		SAF No	F10-256	

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium	10028-17-8	-0.162	5.5	9.52	400	U	H
Carbon 14	14762-75-5	-0.658	3.5	6.00	50.0	U	C
Nickel 63	13981-37-8	-0.701	1.4	2.45	30.0	U	NI_L
Thorium 228	14274-82-9	0.036	0.22	0.446	1.00	U	TH
Thorium 230	14269-63-7	0.143	0.36	0.660	1.00	U	TH
Thorium 232	TH-232	0.072	0.072	0.274	1.00	U	TH

QC-BLANK #74995

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/07/10

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H4382

7897-014

Lab Control Sample

LAB CONTROL SAMPLE

SDG 7897
Contact N. Joseph Verville

Client/Case no CHPRC SDG H4382
Contract No. 33677

Lab sample id S009126-14
Dept sample id 7897-014

Client sample id Lab Control Sample
Material/Matrix SOLID
SAF No F10-256

ANALYTE	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST	ADDED pCi/g	2σ ERR pCi/g	REC %	3σ LMTS (TOTAL)	PROTOCOL LIMITS
Tritium	1080	27	9.74	400		H	1080	43	100	83-117	80-120
Carbon 14	3030	91	18.2	50.0		C	3190	130	95	84-116	80-120
Nickel 63	194	5.5	2.52	30.0		NI_L	218	8.7	89	83-117	80-120
Thorium 230	17.9	2.3	0.736	1.00		TH	18.9	0.76	95	78-122	80-120

QC-LCS #74994

Lab id EBRLNE
Protocol CHPRC
Version Ver 1.0
Form DVD-LCS
Version 3.06
Report date 10/07/10

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H4382

7897-016 B27M88

DUPLICATE

SDG	7897			Client/Case no	CHPRC SDG H4382
Contact	N. Joseph Verville			Contract	No. 33677
	DUPLICATE		ORIGINAL		
Lab sample id	S009126-16	Lab sample id	S009126-01	Client sample id	B27M88
Dept sample id	7897-016	Dept sample id	7897-001	Location/Matrix	100-K-63 location 7 5ft SOLID
		Received	09/14/10	Collected/Weight	09/09/10 09:25 126.5 g
% solids	93.1	% solids	93.1	Custody/SAF No	F10-256-243 F10-256

ANALYTE	DUPLICATE pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST	ORIGINAL pCi/g	2σ ERR (COUNT)	MDA pCi/g	QUALI-FIERS	RPD %	3σ TOT	DER σ
Tritium	1.07	4.6	7.84	400	U	H	2.93	4.7	7.83	U	-		0.6
Carbon 14	-0.478	2.8	4.89	50.0	U	C	-1.62	3.2	5.53	U	-		0.5
Nickel 63	-0.150	1.5	2.62	30.0	U	NI_L	0.924	1.5	2.48	U	-		1.0
Thorium 228	0.552	0.30	0.352	1.00		TH	0.634	0.32	0.354		14	112	0.4
Thorium 230	0.293	0.37	0.648	1.00	U	TH	0.158	0.37	0.583	U	-		0.5
Thorium 232	0.622	0.30	0.280	1.00		TH	0.605	0.27	0.201		3	100	0.1

QC-DUP#1 74996

ARRA 100-K-63 KW Floodplain - In Process Sampling - Soil

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DUP
Version	3.06
Report date	10/07/10

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H4382

Test TH Matrix SOLID
SDG 7897
Contact N. Joseph Verville

LAB METHOD SUMMARY

THORIUM, ISOTOPIC IN SOLIDS

ALPHA SPECTROSCOPY

Client CHPRC
Contract No. 33677
Contract SDG H4382

RESULTS

LAB SAMPLE ID	RAW TEST	SUF-FIX	PLANCHET	CLIENT SAMPLE ID	Thorium 228	Thorium 230	Thorium 232
Preparation batch 7265-033							
S009126-01			7897-001	B27M88	0.634	U	0.605
S009126-03			7897-003	B27MH4	1.15	U	0.446
S009126-04			7897-004	B27MH5	0.860	U	0.580
S009126-05			7897-005	B27MH6	0.783	U	0.510
S009126-06			7897-006	B27MH7	0.741	U	0.539
S009126-07			7897-007	B27MH8	0.782	U	0.851
S009126-08			7897-008	B27MH9	0.742	U	0.818
S009126-09			7897-009	B27MM8	0.716	U	0.891
S009126-10			7897-010	B27MM9	0.918	U	0.618
S009126-11			7897-011	B27MN0	1.32	U	0.611
S009126-12			7897-012	B27MN1	0.922	U	0.688
S009126-13			7897-013	B27MN2	0.718	U	0.714
S009126-14			7897-014	Lab Control Sample		ok	
S009126-15			7897-015	Method Blank	U	U	U
S009126-16			7897-016	Duplicate (S009126-01)	ok	- U	ok
Nominal values and limits from method				RDLs (pCi/g)	1.00	1.00	1.00

Lab id EBRLNE
Protocol CHPRC
Version Ver 1.0
Form DVD-LMS
Version 3.06
Report date 10/07/10

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H4382

Test TH Matrix SOLID
SDG 7897
Contact N. Joseph Verville

LAB METHOD SUMMARY

THORIUM, ISOTOPIC IN SOLIDS

ALPHA SPECTROSCOPY

Client CHPRC
Contract No. 33677
Contract SDG H4382

METHOD PERFORMANCE

LAB SAMPLE ID	RAW TEST	SUF-FIX	CLIENT SAMPLE ID	MAX MDA pCi/g	ALIQ g	PREP FAC	DILU-TION	YIELD %	EFF %	COUNT min	FWHM keV	DRIFT KeV	DAYS HELD	PREPARED	ANAL-YZED	DETECTOR
Preparation batch 7265-033			2σ prep error 8.0 %		Reference Lab Notebook No. 7265 pg.033											
S009126-01			B27M88	0.583	0.250			95		216			20	09/28/10	09/29	SS-030
S009126-03			B27MH4	0.586	0.250			96		217			22	09/28/10	09/29	SS-031
S009126-04			B27MH5	0.580	0.250			94		217			21	09/28/10	09/29	SS-032
S009126-05			B27MH6	0.630	0.250			92		217			21	09/28/10	09/29	SS-033
S009126-06			B27MH7	0.578	0.250			95		217			21	09/28/10	09/29	SS-034
S009126-07			B27MH8	0.713	0.250			83		173			26	09/28/10	10/05	SS-031
S009126-08			B27MH9	0.554	0.250			91		215			20	09/28/10	09/29	SS-036
S009126-09			B27MM8	0.606	0.250			95		215			21	09/28/10	09/29	SS-037
S009126-10			B27MM9	0.565	0.250			95		215			21	09/28/10	09/29	SS-038
S009126-11			B27MN0	0.542	0.250			99		216			21	09/28/10	09/29	SS-040
S009126-12			B27MN1	0.647	0.250			100		165			21	09/28/10	09/30	SS-030
S009126-13			B27MN2	0.692	0.250			93		165			21	09/28/10	09/30	SS-031
S009126-14			Lab Control Sample	0.736	0.250			93		165				09/28/10	09/30	SS-033
S009126-15			Method Blank	0.660	0.250			89		173				09/28/10	10/05	SS-032
S009126-16			Duplicate (S009126-01)	0.648	0.250			92		155			21	09/28/10	09/30	SS-040
Nominal values and limits from method				1.00	0.250			30-110		150			180			

PROCEDURES	REFERENCE	THISO_IE_PLATE_AEA
	SPP-070	Soil Dissolution, < 1.0g Aliquot, rev 1
	CP-900	Thorium in Water and Dissolved Solid Samples by Extraction Chromatography, rev 5
	CP-008	Heavy Element Electroplating, rev 13

AVERAGES ± 2 SD FOR 15 SAMPLES				
	MDA	0.621	±	0.120
	YIELD	93	±	8

Lab id EBRLNE
Protocol CHPRC
Version Ver 1.0
Form DVD-LMS
Version 3.06
Report date 10/07/10

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H4382

Test C Matrix SOLID
SDG 7897
Contact N. Joseph Verville

LAB METHOD SUMMARY

CARBON 14 IN SOLIDS

LIQUID SCINTILLATION COUNTING

Client CHPRC
Contract No. 33677
Contract SDG H4382

RESULTS

LAB SAMPLE ID	RAW TEST	SUF-FIX	PLANCHET	CLIENT SAMPLE ID	Carbon 14	
Preparation batch 7265-033						
S009126-01			7897-001	B27M88	U	
S009126-03			7897-003	B27MH4	U	
S009126-04			7897-004	B27MH5	U	
S009126-05			7897-005	B27MH6	U	
S009126-06			7897-006	B27MH7	U	
S009126-07			7897-007	B27MH8	U	
S009126-08			7897-008	B27MH9	U	
S009126-09			7897-009	B27MM8	U	
S009126-10			7897-010	B27MM9	U	
S009126-11			7897-011	B27MN0	U	
S009126-12			7897-012	B27MN1	U	
S009126-13			7897-013	B27MN2	U	
S009126-14			7897-014	Lab Control Sample	ok	
S009126-15			7897-015	Method Blank	U	
S009126-16			7897-016	Duplicate (S009126-01)	-	U

Nominal values and limits from method RDLs (pCi/g) 50.0

Lab id EBRLNE
Protocol CHPRC
Version Ver 1.0
Form DVD-LMS
Version 3.06
Report date 10/07/10

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H4382

Test C Matrix SOLID
SDG 7897
Contact N. Joseph Verville

LAB METHOD SUMMARY

CARBON 14 IN SOLIDS

LIQUID SCINTILLATION COUNTING

Client CHPRC
Contract No. 33677
Contract SDG H4382

METHOD PERFORMANCE

LAB SAMPLE ID	RAW TEST	SUF-FIX	CLIENT SAMPLE ID	MDA pCi/g	ALIQ g	PREP FAC	DILU-TION	YIELD %	EFF %	COUNT min	FWHM keV	DRIFT KeV	DAYS HELD	PREPARED	ANAL-YZED	DETECTOR
Preparation batch 7265-033			2σ prep error 10.0 %	Reference Lab Notebook No. 7265 pg.033												
S009126-01			B27M88	5.53	0.247			100		50			15	09/23/10	09/24	LSC-005
S009126-03			B27MH4	4.94	0.237			100		50			17	09/23/10	09/24	LSC-005
S009126-04			B27MH5	4.91	0.243			100		50			16	09/23/10	09/24	LSC-005
S009126-05			B27MH6	5.20	0.241			100		50			16	09/23/10	09/24	LSC-005
S009126-06			B27MH7	4.83	0.245			100		50			16	09/23/10	09/24	LSC-005
S009126-07			B27MH8	6.09	0.201			100		50			15	09/23/10	09/24	LSC-005
S009126-08			B27MH9	6.04	0.201			100		50			15	09/23/10	09/24	LSC-005
S009126-09			B27MM8	5.76	0.210			100		50			16	09/23/10	09/24	LSC-005
S009126-10			B27MM9	5.65	0.220			100		50			16	09/23/10	09/24	LSC-005
S009126-11			B27MN0	5.27	0.231			100		50			16	09/23/10	09/24	LSC-005
S009126-12			B27MN1	5.29	0.225			100		50			15	09/23/10	09/24	LSC-005
S009126-13			B27MN2	5.27	0.244			100		50			15	09/23/10	09/24	LSC-005
S009126-14			Lab Control Sample	18.2	0.200			100		5				09/23/10	09/25	LSC-005
S009126-15			Method Blank	6.00	0.200			100		50				09/23/10	09/24	LSC-005
S009126-16			Duplicate (S009126-01)	4.89	0.242			100		50			15	09/23/10	09/24	LSC-005
Nominal values and limits from method				50.0	0.200					10			180			

PROCEDURES REFERENCE C14_COX_LSC
CP-251 Tritium/Carbon-14 Oxidation, rev 11

AVERAGES ± 2 SD FOR 15 SAMPLES
MDA 6.26 ± 6.66
YIELD 100 ± 0

Lab id EBRLNE
Protocol CHPRC
Version Ver 1.0
Form DVD-LMS
Version 3.06
Report date 10/07/10

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H4382

Test H Matrix SOLID
SDG 7897
Contact N. Joseph Verville

LAB METHOD SUMMARY

TRITIUM IN SOLIDS

LIQUID SCINTILLATION COUNTING

Client CHPRC
Contract No. 33677
Contract SDG H4382

RESULTS

LAB SAMPLE ID	RAW TEST	SUF-FIX	PLANCHET	CLIENT SAMPLE ID	Tritium	
Preparation batch 7265-033						
S009126-01			7897-001	B27M88	U	
S009126-03			7897-003	B27MH4	U	
S009126-04			7897-004	B27MH5	U	
S009126-05			7897-005	B27MH6	U	
S009126-06			7897-006	B27MH7	U	
S009126-07			7897-007	B27MH8	U	
S009126-08			7897-008	B27MH9	U	
S009126-09			7897-009	B27MM8	U	
S009126-10			7897-010	B27MM9	U	
S009126-11			7897-011	B27MN0	U	
S009126-12			7897-012	B27MN1	U	
S009126-13			7897-013	B27MN2	U	
S009126-14			7897-014	Lab Control Sample	ok	
S009126-15			7897-015	Method Blank	U	
S009126-16			7897-016	Duplicate (S009126-01)	-	U

Nominal values and limits from method RDLs (pCi/g) 400

Lab id EBRLNE
Protocol CHPRC
Version Ver 1.0
Form DVD-LMS
Version 3.06
Report date 10/07/10

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H4382

Test H Matrix SOLID
SDG 7897
Contact N. Joseph Verville

LAB METHOD SUMMARY

TRITIUM IN SOLIDS

LIQUID SCINTILLATION COUNTING

Client CHPRC
Contract No. 33677
Contract SDG H4382

METHOD PERFORMANCE

LAB SAMPLE ID	RAW TEST	SUF-FIX	CLIENT SAMPLE ID	MDA pCi/g	ALIQ g	PREP FAC	DILU-TION	YIELD %	EFF %	COUNT min	FWHM keV	DRIFT KeV	DAYS HELD	PREPARED	ANAL-YZED	DETECTOR
Preparation batch 7265-033			2σ prep error 10.0 %	Reference Lab Notebook No. 7265 pg.033												
S009126-01			B27M88	7.83	0.247			100		50			16	09/23/10	09/25	LSC-006
S009126-03			B27MH4	8.79	0.237			100		50			18	09/23/10	09/25	LSC-006
S009126-04			B27MH5	8.10	0.243			100		50			17	09/23/10	09/25	LSC-006
S009126-05			B27MH6	7.92	0.241			100		50			17	09/23/10	09/25	LSC-006
S009126-06			B27MH7	7.78	0.245			100		50			17	09/23/10	09/25	LSC-006
S009126-07			B27MH8	9.55	0.201			100		50			16	09/23/10	09/25	LSC-006
S009126-08			B27MH9	9.84	0.201			100		50			16	09/23/10	09/25	LSC-006
S009126-09			B27MM8	9.18	0.210			100		50			17	09/23/10	09/25	LSC-006
S009126-10			B27MM9	8.50	0.220			100		50			17	09/23/10	09/25	LSC-006
S009126-11			B27MN0	8.29	0.231			100		50			17	09/23/10	09/25	LSC-006
S009126-12			B27MN1	8.65	0.225			100		50			16	09/23/10	09/25	LSC-006
S009126-13			B27MN2	7.67	0.244			100		50			16	09/23/10	09/25	LSC-006
S009126-14			Lab Control Sample	9.74	0.200			100		50				09/23/10	09/25	LSC-006
S009126-15			Method Blank	9.52	0.200			100		50				09/23/10	09/25	LSC-006
S009126-16			Duplicate (S009126-01)	7.84	0.242			100		50			16	09/23/10	09/25	LSC-006
Nominal values and limits from method				400	0.200					25			180			

PROCEDURES REFERENCE TRITIUM_COX_LSC
CP-251 Tritium/Carbon-14 Oxidation, rev 11

AVERAGES ± 2 SD FOR 15 SAMPLES
MDA 8.61 ± 1.56
YIELD 100 ± 0

Lab id EBRLNE
Protocol CHPRC
Version Ver 1.0
Form DVD-LMS
Version 3.06
Report date 10/07/10

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H4382

Test NI L Matrix SOLID
SDG 7897
Contact N. Joseph Verville

LAB METHOD SUMMARY

NICKEL 63 IN SOLIDS

LIQUID SCINTILLATION COUNTING

Client CHPRC
Contract No. 33677
Contract SDG H4382

RESULTS

LAB SAMPLE ID	RAW TEST	SUF-FIX	PLANCHET	CLIENT SAMPLE ID	Nickel 63	
Preparation batch 7265-033						
S009126-01			7897-001	B27M88	U	
S009126-02			7897-002	B27MH3	U	
S009126-03			7897-003	B27MH4	U	
S009126-04			7897-004	B27MH5	U	
S009126-05			7897-005	B27MH6	U	
S009126-06			7897-006	B27MH7	U	
S009126-07			7897-007	B27MH8	U	
S009126-08			7897-008	B27MH9	U	
S009126-09			7897-009	B27MM8	U	
S009126-10			7897-010	B27MM9	U	
S009126-11			7897-011	B27MN0	U	
S009126-12			7897-012	B27MN1	U	
S009126-13			7897-013	B27MN2	U	
S009126-14			7897-014	Lab Control Sample	ok	
S009126-15			7897-015	Method Blank	U	
S009126-16			7897-016	Duplicate (S009126-01)	-	U

Nominal values and limits from method RDLs (pCi/g) 30.0

Lab id EBRLNE
Protocol CHPRC
Version Ver 1.0
Form DVD-LMS
Version 3.06
Report date 10/07/10

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H4382

Test NI L Matrix SOLID
SDG 7897
Contact N. Joseph Verville

LAB METHOD SUMMARY

NICKEL 63 IN SOLIDS

LIQUID SCINTILLATION COUNTING

Client CHPRC
Contract No. 33677
Contract SDG H4382

METHOD PERFORMANCE

LAB SAMPLE ID	RAW TEST	SUF-FIX	CLIENT SAMPLE ID	MDA pCi/g	ALIQ g	PREP FAC	DILU-TION	YIELD %	EFF %	COUNT min	FWHM keV	DRIFT KeV	DAYS HELD	PREPARED	ANAL-YZED	DETECTOR
Preparation batch 7265-033			2σ prep error 11.2 %		Reference Lab Notebook No. 7265 pg.033											
S009126-01			B27M88	2.48	0.500			100		50			18	09/27/10	09/27	LSC-005
S009126-02			B27MH3	2.94	0.500			85		50			25	09/27/10	09/27	LSC-005
S009126-03			B27MH4	2.67	0.500			92		50			20	09/27/10	09/27	LSC 005
S009126-04			B27MH5	2.66	0.500			92		50			19	09/27/10	09/27	LSC-005
S009126-05			B27MH6	2.72	0.500			89		50			19	09/27/10	09/27	LSC-005
S009126-06			B27MH7	2.69	0.500			92		50			19	09/27/10	09/27	LSC-005
S009126-07			B27MH8	2.83	0.500			86		50			18	09/27/10	09/27	LSC-005
S009126-08			B27MH9	2.99	0.500			83		50			18	09/27/10	09/27	LSC-005
S009126-09			B27MM8	3.46	0.500			72		50			19	09/27/10	09/27	LSC-005
S009126-10			B27MM9	2.58	0.500			95		50			19	09/27/10	09/27	LSC-005
S009126-11			B27MN0	3.56	0.500			71		50			19	09/27/10	09/27	LSC-005
S009126-12			B27MN1	2.71	0.500			92		50			18	09/27/10	09/27	LSC-005
S009126-13			B27MN2	2.72	0.500			90		50			18	09/27/10	09/27	LSC-005
S009126-14			Lab Control Sample	2.52	0.500			100		50				09/27/10	09/27	LSC-005
S009126-15			Method Blank	2.45	0.500			101		50				09/27/10	09/27	LSC-005
S009126-16			Duplicate (S009126-01)	2.62	0.500			95		50			18	09/27/10	09/27	LSC-005
Nominal values and limits from method				30.0	0.500			40-110		25			180			

PROCEDURES	REFERENCE	NI63_LSC
	SPP-070	Soil Dissolution, < 1.0g Aliquot, rev 1
	CP-281	Nickel-63 Purification By Extraction Chromatography, rev 5

AVERAGES ± 2 SD FOR 16 SAMPLES	MDA	2.79	±	0.637
	YIELD	90	±	18

Lab id EBRLNE
Protocol CHPRC
Version Ver 1.0
Form DVD-LMS
Version 3.06
Report date 10/07/10

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H4383

7898-003 **Method Blank**

METHOD BLANK

SDG	7898	Client/Case no	CHPRC	SDG_H4383
Contact	N. Joseph Verville	Contract	No. 33677	
Lab sample id	S009127-03	Client sample id	Method Blank	
Dept sample id	7898-003	Material/Matrix		WATER
		SAF No	F10-268	

ANALYTE	CAS NO	RESULT pCi/L	2σ ERR (COUNT)	MDA pCi/L	RDL pCi/L	QUALI-FIERS	TEST
Nickel 63	13981-37-8	0	1.6	2.66	15.0	U	NI_L

QC-BLANK #74998

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/04/10

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H4383

7898-002

Lab Control Sample

LAB CONTROL SAMPLE

SDG 7898
Contact N. Joseph Verville

Client/Case no CHPRC SDG H4383
Contract No. 33677

Lab sample id S009127-02
Dept sample id 7898-002

Client sample id Lab Control Sample
Material/Matrix WATER
SAF No F10-268

ANALYTE	RESULT pCi/L	2σ ERR (COUNT)	MDA pCi/L	RDL pCi/L	QUALI-FIERS	TEST	ADDED pCi/L	2σ ERR pCi/L	REC %	3σ LMTS (TOTAL)	PROTOCOL LIMITS
Nickel 63	239	6.1	2.57	15.0		NI_L	260	10	92	83-117	80-120

QC-LCS #74997

Lab id EBRLNE
Protocol CHPRC
Version Ver 1.0
Form DVD-LCS
Version 3.06
Report date 10/04/10

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H4383

7898-004 B27MR8

DUPLICATE

SDG 7898
Contact N. Joseph Verville

Client/Case no CHPRC SDG H4383
Contract No. 33677

DUPLICATE
Lab sample id S009127-04
Dept sample id 7898-004

ORIGINAL
Lab sample id S009127-01
Dept sample id 7898-001
Received 09/14/10

Client sample id B27MR8
Location/Matrix 100-K-63 In-Process EB WATER
Collected/Volume 09/02/10 12:18 2.0 L
Custody/SAF No F10-268-002 F10-268

ANALYTE	DUPLICATE pCi/L	2σ ERR (COUNT)	MDA pCi/L	RDL pCi/L	QUALI-FIERS	TEST	ORIGINAL pCi/L	2σ ERR (COUNT)	MDA pCi/L	QUALI-FIERS	RPD %	3σ TOT	DER σ
Nickel 63	-0.738	1.5	2.64	15.0	U	NI_L	-0.643	1.5	2.71	U	-		0.1

QC-DUP#1 74999

ARRA 100-K-63 KW Floodplain In Process Sampling - QC Sampling

Lab id EBRLNE
Protocol CHPRC
Version Ver 1.0
Form DVD-DUP
Version 3.06
Report date 10/04/10

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H4383

Test NI L Matrix WATER
SDG 7898
Contact N. Joseph Verville

LAB METHOD SUMMARY

NICKEL-63 IN LIQUID

LIQUID SCINTILLATION COUNTING

Client CHPRC
Contract No. 33677
Contract SDG H4383

RESULTS

LAB SAMPLE ID	RAW TEST	SUF-FIX	PLANCHET	CLIENT SAMPLE ID	Nickel 63	
Preparation batch 7265-038						
S009127-01			7898-001	B27MR8	U	
S009127-02			7898-002	Lab Control Sample	ok	
S009127-03			7898-003	Method Blank	U	
S009127-04			7898-004	Duplicate (S009127-01)	-	U
Nominal values and limits from method				RDLs (pCi/L)	15.0	

METHOD PERFORMANCE

LAB SAMPLE ID	RAW TEST	SUF-FIX	CLIENT SAMPLE ID	MDA pCi/L	ALIQ L	PREP FAC	DILU-TION	YIELD %	EFF %	COUNT min	FWHM keV	DRIFT KeV	DAYS HELD	PREPARED	ANAL-YZED	DETECTOR
Preparation batch 7265-038			2σ prep error 11.2 % Reference Lab Notebook No. 7265 pg.038													
S009127-01			B27MR8	2.71	0.500			95		50			23	09/23/10	09/25	LSC-005
S009127-02			Lab Control Sample	2.57	0.500			99		50				09/23/10	09/25	LSC-005
S009127-03			Method Blank	2.66	0.500			97		50				09/23/10	09/25	LSC-005
S009127-04			Duplicate (S009127-01)	2.64	0.500			96		50			23	09/23/10	09/25	LSC-005
Nominal values and limits from method				15.0	0.500			40-110		50			180			

PROCEDURES	REFERENCE	NI63_LSC
	SPP-040	Environmental Water Dissolution, rev 2
	CP-280	Nickel-63 Purification, rev 5

AVERAGES ± 2 SD FOR 4 SAMPLES
MDA 2.64 ± 0.116
YIELD 97 ± 3

Lab id EBRLNE
Protocol CHPRC
Version Ver 1.0
Form DVD-LMS
Version 3.06
Report date 10/04/10

EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4393

7704-023 **Method Blank**

METHOD BLANK

SDG	7704	Client/Case no	CHPRC	SDG_H4393
Contact	N. Joseph Verville	Contract	No. 33677	
Lab sample id	S009151-23	Client sample id	Method Blank	
Dept sample id	7704-023	Material/Matrix		SOLID
		SAF No	F10-256	

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium	10028-17-8	3.62	5.4	9.01	400	U	H
Carbon 14	14762-75-5	-1.99	3.9	6.74	50.0	U	C
Nickel 63	13981-37-8	0.369	1.6	2.72	30.0	U	NI_L
Thorium 228	14274-82-9	0.167	0.34	0.561	1.00	U	TH
Thorium 230	14269-63-7	0.167	0.42	0.768	1.00	U	TH
Thorium 232	TH-232	0.042	0.17	0.319	1.00	U	TH

QC-BLANK #75061

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/13/10

EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4393

7704-022

Lab Control Sample

LAB CONTROL SAMPLE

SDG 7704
Contact N. Joseph Verville

Client/Case no CHPRC SDG H4393
Contract No. 33677

Lab sample id S009151-22
Dept sample id 7704-022

Client sample id Lab Control Sample
Material/Matrix SOLID
SAF No F10-256

ANALYTE	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST	ADDED pCi/g	2σ ERR pCi/g	REC %	3σ LMTS (TOTAL)	PROTOCOL LIMITS
Tritium	1060	26	8.31	400		H	1080	43	98	84-116	80-120
Carbon 14	2880	28	6.52	50.0		C	3190	130	90	85-115	80-120
Nickel 63	243	6.3	2.78	30.0		NI_L	260	10	93	83-117	80-120
Thorium 230	18.2	2.4	0.722	1.00		TH	18.9	0.76	96	77-123	80-120

QC-LCS #75060

Lab id EBRLNE
Protocol CHPRC
Version Ver 1.0
Form DVD-LCS
Version 3.06
Report date 10/13/10

EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4393

7704-024 B27M10

DUPLICATE

SDG	7704			Client/Case no	CHPRC SDG H4393
Contact	N. Joseph Verville			Contract	No. 33677
	DUPLICATE		ORIGINAL		
Lab sample id	S009151-24	Lab sample id	S009151-01	Client sample id	B27M10
Dept sample id	7704-024	Dept sample id	7704-001	Location/Matrix	100-K-63 location 8 Surf SOLID
		Received	09/18/10	Collected/Weight	09/13/10 07:40 157 g
% solids	93.8	% solids	93.8	Custody/SAF No	F10-256-175 F10-256

ANALYTE	DUPLICATE pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST	ORIGINAL pCi/g	2σ ERR (COUNT)	MDA pCi/g	QUALI-FIERS	RPD %	3σ TOT	DER σ
Tritium	3.40	4.4	7.20	400	U	H	-0.244	4.0	6.98	U	-		1.2
Carbon 14	0.569	2.7	3.86	50.0	U	C	116	4.4	4.01		198	33	18
Nickel 63	-0.285	1.7	3.00	30.0	U	NI_L	0.787	1.8	3.05	U	-		0.9
Thorium 228	0.722	0.83	1.27	1.00	U	TH	1.02	0.64	0.872		34	181	0.6
Thorium 230	0.307	0.62	1.37	1.00	U	TH	0.629	0.63	1.13	U	-		0.7
Thorium 232	0.920	0.63	0.782	1.00		TH	0.472	0.32	0.601	U	64	153	1.3

QC-DUP#1 75062

ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DUP
Version	3.06
Report date	10/13/10

EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4393

7704-025 B27M10

DUPLICATE

SDG	7704			Client/Case no	CHPRC SDG H4393
Contact	N. Joseph Verville			Contract	No. 33677
	DUPLICATE		ORIGINAL		
Lab sample id	S009151-25	Lab sample id	S009151-01	Client sample id	B27M10
Dept sample id	7704-025	Dept sample id	7704-001	Location/Matrix	100-K-63 location 8 Surf SOLID
		Received	09/18/10	Collected/Weight	09/13/10 07:40 157 g
% solids	93.8	% solids	93.8	Custody/SAF No	F10-256-175 F10-256

ANALYTE	DUPLICATE pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST	ORIGINAL pCi/g	2σ ERR (COUNT)	MDA pCi/g	QUALI-FIERS	RPD %	3σ TOT	DER σ
Carbon 14	-0.634	2.8	4.76	50.0	U	C	116	4.4	4.01		200	33	18

QC-DUP#1 75362

ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DUP
Version	3.06
Report date	10/13/10

EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4393

Test TH Matrix SOLID
SDG 7704
Contact N. Joseph Verville

LAB METHOD SUMMARY

THORIUM, ISOTOPIC IN SOLIDS

ALPHA SPECTROSCOPY

Client CHPRC
Contract No. 33677
Contract SDG H4393

RESULTS

LAB SAMPLE ID	RAW TEST	SUF-FIX	PLANCHET	CLIENT SAMPLE ID	Thorium 228	Thorium 230	Thorium 232
Preparation batch 7270-054							
S009151-01			7704-001	B27M10	1.02	U	U
S009151-02			7704-002	B27M12	1.36	1.16 U	1.16
S009151-03			7704-003	B27M13	0.716	U	0.758
S009151-04			7704-004	B27M14	1.06	U	1.19
S009151-05			7704-005	B27M15	U	U	U
S009151-06			7704-006	B27M17	1.06	U	0.945
S009151-07			7704-007	B27M89	U	U	0.868
S009151-08			7704-008	B27M91	1.54	1.02 U	0.933
S009151-09			7704-009	B27M92	1.10	1.75	0.964
S009151-10			7704-010	B27M93	1.03	U	U
S009151-11			7704-011	B27M94	0.880	U	0.944
S009151-12			7704-012	B27M96	1.10	U	0.836
S009151-13			7704-013	B27MJ0	1.02	U	0.882
S009151-14			7704-014	B27MJ2	0.615	U	0.685
S009151-15			7704-015	B27MJ3	1.13	U	0.671
S009151-16			7704-016	B27MJ4	0.936	U	0.764
S009151-17			7704-017	B27MJ7	0.831	U	0.828
S009151-18			7704-018	B27MN3	1.24	U	0.949
S009151-19			7704-019	B27MN5	0.958	U	0.566
S009151-20			7704-020	B27MN6	1.03	U	0.896
S009151-21			7704-021	B27MP0	0.613	U	0.324
S009151-22			7704-022	Lab Control Sample		ok	
S009151-23			7704-023	Method Blank	U	U	U
S009151-24			7704-024	Duplicate (S009151-01)	ok U	- U	ok
Nominal values and limits from method				RDLs (pCi/g)	1.00	1.00	1.00

Lab id EBRLNE
Protocol CHPRC
Version Ver 1.0
Form DVD-LMS
Version 3.06
Report date 10/13/10

EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4393

Test TH Matrix SOLID
SDG 7704
Contact N. Joseph Verville

LAB METHOD SUMMARY

THORIUM, ISOTOPIC IN SOLIDS

ALPHA SPECTROSCOPY

Client CHPRC
Contract No. 33677
Contract SDG H4393

METHOD PERFORMANCE

LAB SAMPLE ID	RAW TEST	SUF-FIX	CLIENT SAMPLE ID	MAX MDA pCi/g	ALIQ g	PREP FAC	DILU-TION	YIELD %	EFF %	COUNT min	FWHM keV	DRIFT KeV	DAYS HELD	PREPARED	ANAL-YZED	DETECTOR
Preparation batch 7270-054			2σ prep error 8.0 %	Reference Lab Notebook No. 7270 pg.054												
S009151-01			B27M10	1.13	0.250			47		157			17	09/29/10	09/30	SS-031
S009151-02			B27M12	1.30	0.250			37		157			17	09/29/10	09/30	SS-032
S009151-03			B27M13	0.822	0.250			85		157			17	09/29/10	09/30	SS-033
S009151-04			B27M14	0.941	0.250			53		158			16	09/29/10	09/30	SS-034
S009151-05			B27M15	1.08	0.250			47		154			16	09/29/10	09/30	SS-030
S009151-06			B27M17	0.850	0.250			59		161			16	09/29/10	09/30	SS-035
S009151-07			B27M89	1.07	0.250			37		161			17	09/29/10	09/30	SS-036
S009151-08			B27M91	1.30	0.250			36		173			22	09/29/10	10/05	SS-030
S009151-09			B27M92	0.776	0.250			78		161			17	09/29/10	09/30	SS-038
S009151-10			B27M93	0.981	0.250			44		161			16	09/29/10	09/30	SS-040
S009151-11			B27M94	0.644	0.250			81		190			17	09/29/10	10/01	SS-040
S009151-12			B27M96	0.695	0.250			94		158			21	09/29/10	10/05	SS-038
S009151-13			B27MJ0	0.780	0.250			79		166			18	09/29/10	10/01	SS-031
S009151-14			B27MJ2	0.689	0.250			94		166			18	09/29/10	10/01	SS-032
S009151-15			B27MJ3	0.698	0.250			101		166			18	09/29/10	10/01	SS-033
S009151-16			B27MJ4	0.719	0.250			83		166			17	09/29/10	10/01	SS-034
S009151-17			B27MJ7	0.609	0.250			99		166			17	09/29/10	10/01	SS-040
S009151-18			B27MN3	0.699	0.250			85		152			18	09/29/10	10/01	SS-035
S009151-19			B27MN5	0.652	0.250			96		152			18	09/29/10	10/01	SS-036
S009151-20			B27MN6	0.793	0.250			89		152			18	09/29/10	10/01	SS-037
S009151-21			B27MP0	0.687	0.250			100		152			17	09/29/10	10/01	SS-038
S009151-22			Lab Control Sample	0.722	0.250			87		152				09/29/10	10/01	SS-030
S009151-23			Method Blank	0.768	0.250			74		192				09/29/10	10/01	SS-033
S009151-24			Duplicate (S009151-01)	1.37	0.250			38		163			22	09/29/10	10/05	SS-037
Nominal values and limits from method				1.00	0.250			30-110		150			180			

PROCEDURES	REFERENCE	THISO_IE_PLATE_AEA
	SPP-070	Soil Dissolution, < 1.0g Aliquot, rev 1
	CP-900	Thorium in Water and Dissolved Solid Samples by Extraction Chromatography, rev 5
	CP-008	Heavy Element Electroplating, rev 13

AVERAGES ± 2 SD FOR 24 SAMPLES				
MDA	0.866	±	0.455
YIELD	72	±	47

Lab id EBRLNE
Protocol CHPRC
Version Ver 1.0
Form DVD-LMS
Version 3.06
Report date 10/13/10

EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4393

Test C Matrix SOLID
SDG 7704
Contact N. Joseph Verville

LAB METHOD SUMMARY

CARBON 14 IN SOLIDS

LIQUID SCINTILLATION COUNTING

Client CHPRC
Contract No. 33677
Contract SDG H4393

RESULTS

LAB SAMPLE ID	RAW TEST	SUF-FIX	PLANCHET	CLIENT SAMPLE ID	Carbon 14	
Preparation batch 7270-054						
S009151-01			7704-001	B27M10	116	
S009151-02			7704-002	B27M12	U	
S009151-03			7704-003	B27M13	U	
S009151-04			7704-004	B27M14	U	
S009151-05			7704-005	B27M15	U	
S009151-06			7704-006	B27M17	U	
S009151-07			7704-007	B27M89	U	
S009151-08			7704-008	B27M91	U	
S009151-09			7704-009	B27M92	U	
S009151-10			7704-010	B27M93	U	
S009151-11			7704-011	B27M94	U	
S009151-12			7704-012	B27M96	U	
S009151-13			7704-013	B27MJ0	U	
S009151-14			7704-014	B27MJ2	U	
S009151-15			7704-015	B27MJ3	U	
S009151-16			7704-016	B27MJ4	U	
S009151-17			7704-017	B27MJ7	U	
S009151-18			7704-018	B27MN3	U	
S009151-19			7704-019	B27MN5	U	
S009151-20			7704-020	B27MN6	U	
S009151-21			7704-021	B27MP0	U	
S009151-22			7704-022	Lab Control Sample	ok	
S009151-23			7704-023	Method Blank	U	
S009151-24			7704-024	Duplicate (S009151-01)	OUT	U
S009151-25			7704-025	Duplicate (S009151-01)	OUT	U

Nominal values and limits from method RDLs (pCi/g) 50.0

Lab id EBRLNE
Protocol CHPRC
Version Ver 1.0
Form DVD-LMS
Version 3.06
Report date 10/13/10

EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4393

Test C Matrix SOLID
SDG 7704
Contact N. Joseph Verville

LAB METHOD SUMMARY

CARBON 14 IN SOLIDS

LIQUID SCINTILLATION COUNTING

Client CHPRC
Contract No. 33677
Contract SDG H4393

METHOD PERFORMANCE

LAB SAMPLE ID	RAW TEST	SUF-FIX	CLIENT SAMPLE ID	MDA pCi/g	ALIQ g	PREP FAC	DILU-TION	YIELD %	EFF %	COUNT min	FWHM keV	DRIFT KeV	DAYS HELD	PREPARED	ANAL-YZED	DETECTOR
Preparation batch 7270-054			2σ prep error 10.0 %	Reference Lab Notebook No. 7270 pg.054												
S009151-01			B27M10	4.01	0.252			100		100			17	09/30/10	09/30	LSC-004
S009151-02			B27M12	6.55	0.210			100		50			17	09/30/10	09/30	LSC-004
S009151-03			B27M13	6.01	0.224			100		50			17	09/30/10	09/30	LSC-004
S009151-04			B27M14	5.67	0.240			100		50			16	09/30/10	09/30	LSC-004
S009151-05			B27M15	6.31	0.210			100		50			16	09/30/10	09/30	LSC-004
S009151-06			B27M17	5.74	0.244			100		50			16	09/30/10	09/30	LSC-004
S009151-07			B27M89	6.84	0.202			100		50			17	09/30/10	09/30	LSC-004
S009151-08			B27M91	5.90	0.234			100		50			17	09/30/10	09/30	LSC-004
S009151-09			B27M92	6.08	0.231			100		50			17	09/30/10	09/30	LSC-004
S009151-10			B27M93	6.52	0.220			100		50			16	09/30/10	09/30	LSC-004
S009151-11			B27M94	5.75	0.244			100		50			16	09/30/10	09/30	LSC-004
S009151-12			B27M96	5.52	0.253			100		50			16	09/30/10	09/30	LSC-004
S009151-13			B27MJ0	5.73	0.247			100		50			17	09/30/10	09/30	LSC-004
S009151-14			B27MJ2	6.85	0.207			100		50			17	09/30/10	09/30	LSC-004
S009151-15			B27MJ3	6.67	0.209			100		50			17	09/30/10	09/30	LSC-004
S009151-16			B27MJ4	6.12	0.225			100		50			16	09/30/10	09/30	LSC-004
S009151-17			B27MJ7	6.07	0.234			100		50			16	09/30/10	09/30	LSC-004
S009151-18			B27MN3	5.49	0.252			100		50			17	09/30/10	09/30	LSC-004
S009151-19			B27MN5	5.92	0.237			100		50			17	09/30/10	09/30	LSC-004
S009151-20			B27MN6	6.29	0.220			100		50			17	09/30/10	09/30	LSC-004
S009151-21			B27MP0	6.57	0.218			100		50			16	09/30/10	09/30	LSC-004
S009151-22			Lab Control Sample	6.52	0.200			100		50				09/30/10	10/01	LSC-004
S009151-23			Method Blank	6.74	0.200			100		50				09/30/10	09/30	LSC-004
S009151-24			Duplicate (S009151-01)	3.86	0.256			100		100			17	09/30/10	09/30	LSC-004
S009151-25			Duplicate (S009151-01)	4.76	0.257			100		50			22	10/04/10	10/05	LSC-005
Nominal values and limits from method				50.0	0.200					10			180			

PROCEDURES REFERENCE C14_COX_LSC
CP-251 Tritium/Carbon-14 Oxidation, rev 11

AVERAGES ± 2 SD FOR 25 SAMPLES
MDA 5.94 ± 1.56
YIELD 100 ± 0

Lab id EBRLNE
Protocol CHPRC
Version Ver 1.0
Form DVD-LMS
Version 3.06
Report date 10/13/10

EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4393

Test H Matrix SOLID
SDG 7704
Contact N. Joseph Verville

LAB METHOD SUMMARY

TRITIUM IN SOLIDS

LIQUID SCINTILLATION COUNTING

Client CHPRC
Contract No. 33677
Contract SDG H4393

RESULTS

LAB SAMPLE ID	RAW TEST	SUF-FIX	PLANCHET	CLIENT SAMPLE ID	Tritium	
Preparation batch 7270-054						
S009151-01			7704-001	B27M10	U	
S009151-02			7704-002	B27M12	U	
S009151-03			7704-003	B27M13	U	
S009151-04			7704-004	B27M14	U	
S009151-05			7704-005	B27M15	U	
S009151-06			7704-006	B27M17	U	
S009151-07			7704-007	B27M89	U	
S009151-08			7704-008	B27M91	U	
S009151-09			7704-009	B27M92	U	
S009151-10			7704-010	B27M93	U	
S009151-11			7704-011	B27M94	U	
S009151-12			7704-012	B27M96	U	
S009151-13			7704-013	B27MJ0	U	
S009151-14			7704-014	B27MJ2	U	
S009151-15			7704-015	B27MJ3	U	
S009151-16			7704-016	B27MJ4	U	
S009151-17			7704-017	B27MJ7	U	
S009151-18			7704-018	B27MN3	U	
S009151-19			7704-019	B27MN5	U	
S009151-20			7704-020	B27MN6	U	
S009151-21			7704-021	B27MP0	U	
S009151-22			7704-022	Lab Control Sample	ok	
S009151-23			7704-023	Method Blank	U	
S009151-24			7704-024	Duplicate (S009151-01)	-	U

Nominal values and limits from method RDLs (pCi/g) 400

Lab id EBRLNE
Protocol CHPRC
Version Ver 1.0
Form DVD-LMS
Version 3.06
Report date 10/13/10

EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4393

Test H Matrix SOLID
SDG 7704
Contact N. Joseph Verville

LAB METHOD SUMMARY

TRITIUM IN SOLIDS

LIQUID SCINTILLATION COUNTING

Client CHPRC
Contract No. 33677
Contract SDG H4393

METHOD PERFORMANCE

LAB SAMPLE ID	RAW TEST	SUF-FIX	CLIENT SAMPLE ID	MDA pCi/g	ALIQ g	PREP FAC	DILU-TION	YIELD %	EFF %	COUNT min	FWHM keV	DRIFT KeV	DAYS HELD	PREPARED	ANAL-YZED	DETECTOR
Preparation batch 7270-054			2σ prep error 10.0 %	Reference Lab Notebook No. 7270 pg.054												
S009151-01			B27M10	6.98	0.252			100		50			19	09/29/10	10/02	LSC-006
S009151-02			B27M12	8.55	0.210			100		50			19	09/29/10	10/02	LSC-006
S009151-03			B27M13	7.97	0.224			100		50			19	09/29/10	10/02	LSC-006
S009151-04			B27M14	7.39	0.240			100		50			18	09/29/10	10/02	LSC-006
S009151-05			B27M15	8.53	0.210			100		50			18	09/29/10	10/02	LSC-006
S009151-06			B27M17	7.11	0.244			100		50			18	09/29/10	10/02	LSC-006
S009151-07			B27M89	9.14	0.202			100		50			19	09/29/10	10/02	LSC-006
S009151-08			B27M91	7.53	0.234			100		50			19	09/29/10	10/02	LSC-006
S009151-09			B27M92	7.70	0.231			100		50			19	09/29/10	10/02	LSC-006
S009151-10			B27M93	8.05	0.220			100		50			18	09/29/10	10/02	LSC-006
S009151-11			B27M94	7.24	0.244			100		50			18	09/29/10	10/02	LSC-006
S009151-12			B27M96	6.99	0.253			100		50			18	09/29/10	10/02	LSC-006
S009151-13			B27MJ0	7.10	0.247			100		50			19	09/29/10	10/02	LSC-006
S009151-14			B27MJ2	8.61	0.207			100		50			19	09/29/10	10/02	LSC-006
S009151-15			B27MJ3	8.54	0.209			100		50			19	09/29/10	10/02	LSC-006
S009151-16			B27MJ4	7.83	0.225			100		50			18	09/29/10	10/02	LSC-006
S009151-17			B27MJ7	7.40	0.234			100		50			18	09/29/10	10/02	LSC-006
S009151-18			B27MN3	7.06	0.252			100		50			19	09/29/10	10/02	LSC-006
S009151-19			B27MN5	7.45	0.237			100		50			19	09/29/10	10/02	LSC-006
S009151-20			B27MN6	8.12	0.220			100		50			19	09/29/10	10/02	LSC-006
S009151-21			B27MP0	7.76	0.218			100		50			18	09/29/10	10/02	LSC-006
S009151-22			Lab Control Sample	8.31	0.200			100		50				09/29/10	10/03	LSC-006
S009151-23			Method Blank	9.01	0.200			100		50				09/29/10	10/02	LSC-006
S009151-24			Duplicate (S009151-01)	7.20	0.256			100		50			19	09/29/10	10/02	LSC-006
Nominal values and limits from method				400	0.200					25			180			

PROCEDURES REFERENCE TRITIUM_COX_LSC
CP-251 Tritium/Carbon-14 Oxidation, rev 11

AVERAGES ± 2 SD FOR 24 SAMPLES
MDA 7.82 ± 1.32
YIELD 100 ± 0

Lab id EBRLNE
Protocol CHPRC
Version Ver 1.0
Form DVD-LMS
Version 3.06
Report date 10/13/10

EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4393

Test NI L Matrix SOLID
SDG 7704
Contact N. Joseph Verville

LAB METHOD SUMMARY

NICKEL 63 IN SOLIDS

LIQUID SCINTILLATION COUNTING

Client CHPRC
Contract No. 33677
Contract SDG H4393

RESULTS

LAB SAMPLE ID	RAW TEST	SUF-FIX	PLANCHET	CLIENT SAMPLE ID	Nickel 63	
Preparation batch 7270-054						
S009151-01			7704-001	B27M10	U	
S009151-02			7704-002	B27M12	3.38	
S009151-03			7704-003	B27M13	U	
S009151-04			7704-004	B27M14	U	
S009151-05			7704-005	B27M15	3.57	
S009151-06			7704-006	B27M17	U	
S009151-07			7704-007	B27M89	U	
S009151-08			7704-008	B27M91	U	
S009151-09			7704-009	B27M92	U	
S009151-10			7704-010	B27M93	U	
S009151-11			7704-011	B27M94	U	
S009151-12			7704-012	B27M96	U	
S009151-13			7704-013	B27MJ0	U	
S009151-14			7704-014	B27MJ2	U	
S009151-15			7704-015	B27MJ3	U	
S009151-16			7704-016	B27MJ4	U	
S009151-17			7704-017	B27MJ7	U	
S009151-18			7704-018	B27MN3	U	
S009151-19			7704-019	B27MN5	U	
S009151-20			7704-020	B27MN6	U	
S009151-21			7704-021	B27MP0	U	
S009151-22			7704-022	Lab Control Sample	ok	
S009151-23			7704-023	Method Blank	U	
S009151-24			7704-024	Duplicate (S009151-01)	-	U

Nominal values and limits from method RDLs (pCi/g) 30.0

Lab id EBRLNE
Protocol CHPRC
Version Ver 1.0
Form DVD-LMS
Version 3.06
Report date 10/13/10

EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4393

Test NI L Matrix SOLID
SDG 7704
Contact N. Joseph Verville

LAB METHOD SUMMARY

NICKEL 63 IN SOLIDS

LIQUID SCINTILLATION COUNTING

Client CHPRC
Contract No. 33677
Contract SDG H4393

METHOD PERFORMANCE

LAB SAMPLE ID	RAW TEST	SUF-FIX	CLIENT SAMPLE ID	MDA pCi/g	ALIQ g	PREP FAC	DILU-TION	YIELD %	EFF %	COUNT min	FWHM keV	DRIFT KeV	DAYS HELD	PREPARED	ANAL-YZED	DETECTOR
Preparation batch 7270-054			2σ prep error 11.2 % Reference Lab Notebook No. 7270 pg.054													
S009151-01			B27M10	3.05	0.500			89		50			18	09/30/10	10/01	LSC-007
S009151-02			B27M12	2.92	0.500			92		50			18	09/30/10	10/01	LSC-007
S009151-03			B27M13	2.72	0.500			99		50			18	09/30/10	10/01	LSC-007
S009151-04			B27M14	3.18	0.500			85		50			17	09/30/10	10/01	LSC-007
S009151-05			B27M15	3.06	0.500			87		50			17	09/30/10	10/01	LSC-007
S009151-06			B27M17	3.04	0.500			90		50			17	09/30/10	10/01	LSC-007
S009151-07			B27M89	2.81	0.500			94		50			18	09/30/10	10/01	LSC-007
S009151-08			B27M91	2.95	0.500			93		50			18	09/30/10	10/01	LSC-007
S009151-09			B27M92	2.95	0.500			93		50			18	09/30/10	10/01	LSC-007
S009151-10			B27M93	3.00	0.500			90		50			17	09/30/10	10/01	LSC-007
S009151-11			B27M94	2.97	0.500			92		50			17	09/30/10	10/01	LSC-007
S009151-12			B27M96	3.02	0.500			91		50			17	09/30/10	10/01	LSC-007
S009151-13			B27MJ0	2.90	0.500			95		50			18	09/30/10	10/01	LSC-007
S009151-14			B27MJ2	3.11	0.500			88		50			18	09/30/10	10/01	LSC-007
S009151-15			B27MJ3	3.22	0.500			85		50			18	09/30/10	10/01	LSC-007
S009151-16			B27MJ4	2.82	0.500			97		50			17	09/30/10	10/01	LSC-007
S009151-17			B27MJ7	3.03	0.500			89		50			17	09/30/10	10/01	LSC-007
S009151-18			B27MN3	2.92	0.500			94		50			18	09/30/10	10/01	LSC-007
S009151-19			B27MN5	3.34	0.500			81		50			18	09/30/10	10/01	LSC-007
S009151-20			B27MN6	2.92	0.500			92		50			18	09/30/10	10/01	LSC-007
S009151-21			B27MP0	2.82	0.500			95		50			17	09/30/10	10/01	LSC-007
S009151-22			Lab Control Sample	2.78	0.500			99		50				09/30/10	10/01	LSC-007
S009151-23			Method Blank	2.72	0.500			100		50				09/30/10	10/01	LSC-007
S009151-24			Duplicate (S009151-01)	3.00	0.500			91		50			18	09/30/10	10/01	LSC-007
Nominal values and limits from method				30.0	0.500			40-110		25			180			

PROCEDURES	REFERENCE	NI63_LSC
	SPP-071	Soil Dissolution, > 1.0g Aliquot, rev 1
	CP-281	Nickel-63 Purification By Extraction Chromatography, rev 5

AVERAGES ± 2 SD FOR 24 SAMPLES
MDA 2.97 ± 0.305
YIELD 92 ± 9

Lab id EBRLNE
Protocol CHPRC
Version Ver 1.0
Form DVD-LMS
Version 3.06
Report date 10/13/10

EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4407

7706-013 **Method Blank**

METHOD BLANK

SDG	7706	Client/Case no	CHPRC	SDG H4407
Contact	N. Joseph Verville	Contract	No. 33677	
Lab sample id	S009218-13	Client sample id	Method Blank	
Dept sample id	7706-013	Material/Matrix		SOLID
		SAF No	F10-256	

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium	10028-17-8	-0.154	5.1	8.93	400	U	H
Carbon 14	14762-75-5	1.24	3.6	6.10	50.0	U	C
Nickel 63	13981-37-8	-0.657	1.8	3.05	30.0	U	NI_L
Thorium 228	14274-82-9	0.064	0.38	0.853	1.00	U	TH
Thorium 230	14269-63-7	-0.190	0.38	0.971	1.00	U	TH
Thorium 232	TH-232	0.063	0.13	0.485	1.00	U	TH

QC-BLANK #75135

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	10/12/10

EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4407

7706-012

Lab Control Sample

LAB CONTROL SAMPLE

SDG 7706
Contact N. Joseph Verville

Client/Case no CHPRC SDG H4407
Contract No. 33677

Lab sample id S009218-12
Dept sample id 7706-012

Client sample id Lab Control Sample
Material/Matrix SOLID
SAF No F10-256

ANALYTE	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST	ADDED pCi/g	2σ ERR pCi/g	REC %	3σ LMTS (TOTAL)	PROTOCOL LIMITS
Tritium	1090	27	9.02	400		H	1080	43	101	83-117	80-120
Carbon 14	2710	82	18.1	50.0		C	3190	130	85	85-115	80-120
Nickel 63	202	5.7	3.01	30.0		NI_L	218	8.7	93	83-117	80-120
Thorium 230	20.9	2.9	0.801	1.00		TH	18.9	0.76	111	73-127	80-120

QC-LCS #75134

Lab id EBRLNE
Protocol CHPRC
Version Ver 1.0
Form DVD-LCS
Version 3.06
Report date 10/12/10

EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4407

7706-014 B27M18

DUPLICATE

SDG	7706			Client/Case no	CHPRC SDG H4407
Contact	N. Joseph Verville			Contract	No. 33677
	DUPLICATE		ORIGINAL		
Lab sample id	S009218-14	Lab sample id	S009218-01	Client sample id	B27M18
Dept sample id	7706-014	Dept sample id	7706-001	Location/Matrix	100-K-63 location 16 Sur SOLID
		Received	09/23/10	Collected/Weight	09/20/10 07:30 145 g
% solids	90.8	% solids	96.8	Custody/SAF No	F10-256-183 F10-256

ANALYTE	DUPLICATE pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST	ORIGINAL pCi/g	2σ ERR (COUNT)	MDA pCi/g	QUALI-FIERS	RPD %	3σ TOT	DER σ
Tritium	1.96	4.8	8.09	400	U	H	4.66	4.7	7.70	U	-		0.8
Carbon 14	-1.91	3.2	5.51	50.0	U	C	-0.696	3.1	5.29	U	-		0.5
Nickel 63	-0.960	1.9	3.35	30.0	U	NI_L	-0.083	2.0	3.49	U	-		0.6
Thorium 228	1.16	0.90	1.10	1.00		TH	1.02	0.43	0.470		13	138	0.3
Thorium 230	0	0.53	1.19	1.00	U	TH	0.424	0.43	0.751	U	-		1.2
Thorium 232	1.60	0.74	0.680	1.00		TH	1.44	0.52	0.324		11	91	0.3

QC-DUP#1 75136

ARRA 100-K-63 KW Floodplain In Process Sampling - Soil

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DUP
Version	3.06
Report date	10/12/10

EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4407

Test TH Matrix SOLID
SDG 7706
Contact N. Joseph Verville

LAB METHOD SUMMARY

THORIUM, ISOTOPIC IN SOLIDS

ALPHA SPECTROSCOPY

Client CHPRC
Contract No. 33677
Contract SDG H4407

RESULTS

LAB SAMPLE ID	RAW TEST	SUF-FIX	PLANCHET	CLIENT SAMPLE ID	Thorium 228	Thorium 230	Thorium 232
Preparation batch 7265-111							
S009218-01			7706-001	B27M18	1.02	U	1.44
S009218-02			7706-002	B27M19	0.799	U	0.620
S009218-03			7706-003	B27M20	1.07	1.68	0.898
S009218-04			7706-004	B27M21	1.19	1.41	0.730
S009218-05			7706-005	B27M22	1.12	1.92	1.28
S009218-06			7706-006	B27M97	1.56	U	1.51
S009218-07			7706-007	B27M98	U	U	0.868
S009218-08			7706-008	B27M99	1.29	1.42	1.29
S009218-09			7706-009	B27MB0	1.51	1.13	1.47
S009218-10			7706-010	B27MB1	1.04	U	0.842
S009218-11			7706-011	B27MB2	U	U	0.856
S009218-12			7706-012	Lab Control Sample		ok	
S009218-13			7706-013	Method Blank	U	U	U
S009218-14			7706-014	Duplicate (S009218-01)	ok	- U	ok
Nominal values and limits from method				RDLs (pCi/g)	1.00	1.00	1.00

Lab id EBRLNE
Protocol CHPRC
Version Ver 1.0
Form DVD-LMS
Version 3.06
Report date 10/12/10

EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4407

Test TH Matrix SOLID
SDG 7706
Contact N. Joseph Verville

LAB METHOD SUMMARY

THORIUM, ISOTOPIC IN SOLIDS

ALPHA SPECTROSCOPY

Client CHPRC
Contract No. 33677
Contract SDG H4407

METHOD PERFORMANCE

LAB SAMPLE ID	RAW TEST	SUF-FIX	CLIENT SAMPLE ID	MAX MDA pCi/g	ALIQ g	PREP FAC	DILU-TION	YIELD %	EFF %	COUNT min	FWHM keV	DRIFT KeV	DAYS HELD	PREPARED	ANAL-YZED	DETECTOR
Preparation batch 7265-111			2σ prep error 8.0 %		Reference Lab Notebook No. 7265 pg.111											
S009218-01			B27M18	0.751	0.250			77		163			15	10/02/10	10/05	SS-039
S009218-02			B27M19	0.784	0.250			74		174			15	10/02/10	10/05	SS-033
S009218-03			B27M20	0.859	0.250			56		176			14	10/02/10	10/04	SS-032
S009218-04			B27M21	0.773	0.250			71		176			14	10/02/10	10/04	SS-033
S009218-05			B27M22	0.738	0.250			80		176			14	10/02/10	10/04	SS-034
S009218-06			B27M97	0.839	0.250			63		174			15	10/02/10	10/05	SS-034
S009218-07			B27M98	0.732	0.250			60		204			14	10/02/10	10/04	SS-036
S009218-08			B27M99	0.985	0.250			48		204			14	10/02/10	10/04	SS-037
S009218-09			B27MB0	0.722	0.250			70		204			14	10/02/10	10/04	SS-038
S009218-10			B27MB1	0.800	0.250			65		163			15	10/02/10	10/05	SS-035
S009218-11			B27MB2	0.853	0.250			61		163			15	10/02/10	10/05	SS-036
S009218-12			Lab Control Sample	0.801	0.250			64		157				10/02/10	10/05	SS-035
S009218-13			Method Blank	0.971	0.250			50		158				10/02/10	10/05	SS-036
S009218-14			Duplicate (S009218-01)	1.19	0.250			45		158			15	10/02/10	10/05	SS-037
Nominal values and limits from method				1.00	0.250			30-110		150			180			

PROCEDURES	REFERENCE	THISO_IE_PLATE_AEA
	SPP-070	Soil Dissolution, < 1.0g Aliquot, rev 1
	CP-900	Thorium in Water and Dissolved Solid Samples by Extraction Chromatography, rev 5
	CP-008	Heavy Element Electroplating, rev 13

AVERAGES ± 2 SD FOR 14 SAMPLES				
	MDA	0.843	±	0.258
	YIELD	63	±	22

Lab id EBRLNE
Protocol CHPRC
Version Ver 1.0
Form DVD-LMS
Version 3.06
Report date 10/12/10

EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4407

Test C Matrix SOLID
SDG 7706
Contact N. Joseph Verville

LAB METHOD SUMMARY

CARBON 14 IN SOLIDS

LIQUID SCINTILLATION COUNTING

Client CHPRC
Contract No. 33677
Contract SDG H4407

RESULTS

LAB SAMPLE ID	RAW TEST	SUF-FIX	PLANCHET	CLIENT SAMPLE ID	Carbon 14	
Preparation batch 7265-111						
S009218-01			7706-001	B27M18	U	
S009218-02			7706-002	B27M19	U	
S009218-03			7706-003	B27M20	U	
S009218-04			7706-004	B27M21	U	
S009218-05			7706-005	B27M22	U	
S009218-06			7706-006	B27M97	U	
S009218-07			7706-007	B27M98	U	
S009218-08			7706-008	B27M99	U	
S009218-09			7706-009	B27MB0	U	
S009218-10			7706-010	B27MB1	U	
S009218-11			7706-011	B27MB2	U	
S009218-12			7706-012	Lab Control Sample	ok	
S009218-13			7706-013	Method Blank	U	
S009218-14			7706-014	Duplicate (S009218-01)	-	U

Nominal values and limits from method RDLs (pCi/g) 50.0

Lab id EBRLNE
Protocol CHPRC
Version Ver 1.0
Form DVD-LMS
Version 3.06
Report date 10/12/10

EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4407

Test C Matrix SOLID
SDG 7706
Contact N. Joseph Verville

LAB METHOD SUMMARY

CARBON 14 IN SOLIDS

LIQUID SCINTILLATION COUNTING

Client CHPRC
Contract No. 33677
Contract SDG H4407

METHOD PERFORMANCE

LAB SAMPLE ID	RAW TEST	SUF-FIX	CLIENT SAMPLE ID	MDA pCi/g	ALIQ g	PREP FAC	DILU-TION	YIELD %	EFF %	COUNT min	FWHM keV	DRIFT KeV	DAYS HELD	PREPARED	ANAL-YZED	DETECTOR
Preparation batch 7265-111			2σ prep error 10.0 % Reference Lab Notebook No. 7265 pg.111													
S009218-01			B27M18	5.29	0.235			100		50			12	10/02/10	10/02	LSC-005
S009218-02			B27M19	4.77	0.248			100		50			12	10/02/10	10/02	LSC-005
S009218-03			B27M20	5.50	0.224			100		50			12	10/02/10	10/02	LSC-005
S009218-04			B27M21	5.88	0.209			100		50			12	10/02/10	10/02	LSC-005
S009218-05			B27M22	5.03	0.244			100		50			12	10/02/10	10/02	LSC-005
S009218-06			B27M97	5.38	0.232			100		50			12	10/02/10	10/02	LSC-005
S009218-07			B27M98	5.59	0.222			100		50			12	10/02/10	10/02	LSC-005
S009218-08			B27M99	5.16	0.240			100		50			12	10/02/10	10/02	LSC-005
S009218-09			B27MB0	6.02	0.202			100		50			12	10/02/10	10/02	LSC-005
S009218-10			B27MB1	5.88	0.218			100		50			12	10/02/10	10/02	LSC-005
S009218-11			B27MB2	5.49	0.226			100		50			12	10/02/10	10/02	LSC-005
S009218-12			Lab Control Sample	18.1	0.200			100		5				10/02/10	10/02	LSC-005
S009218-13			Method Blank	6.10	0.200			100		50				10/02/10	10/02	LSC-005
S009218-14			Duplicate (S009218-01)	5.51	0.228			100		50			12	10/02/10	10/02	LSC-005
Nominal values and limits from method				50.0	0.200					10			180			

PROCEDURES REFERENCE C14_COX_LSC
CP-251 Tritium/Carbon-14 Oxidation, rev 11

AVERAGES ± 2 SD FOR 14 SAMPLES
MDA 6.41 ± 6.77
YIELD 100 ± 0

Lab id EBRLNE
Protocol CHPRC
Version Ver 1.0
Form DVD-LMS
Version 3.06
Report date 10/12/10

EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4407

Test H Matrix SOLID
SDG 7706
Contact N. Joseph Verville

LAB METHOD SUMMARY

TRITIUM IN SOLIDS

LIQUID SCINTILLATION COUNTING

Client CHPRC
Contract No. 33677
Contract SDG H4407

RESULTS

LAB SAMPLE ID	RAW TEST	SUF-FIX	PLANCHET	CLIENT SAMPLE ID	Tritium	
Preparation batch 7265-111						
S009218-01			7706-001	B27M18	U	
S009218-02			7706-002	B27M19	U	
S009218-03			7706-003	B27M20	U	
S009218-04			7706-004	B27M21	U	
S009218-05			7706-005	B27M22	U	
S009218-06			7706-006	B27M97	U	
S009218-07			7706-007	B27M98	U	
S009218-08			7706-008	B27M99	U	
S009218-09			7706-009	B27MB0	U	
S009218-10			7706-010	B27MB1	U	
S009218-11			7706-011	B27MB2	U	
S009218-12			7706-012	Lab Control Sample	ok	
S009218-13			7706-013	Method Blank	U	
S009218-14			7706-014	Duplicate (S009218-01)	-	U

Nominal values and limits from method RDLs (pCi/g) 400

Lab id EBRLNE
Protocol CHPRC
Version Ver 1.0
Form DVD-LMS
Version 3.06
Report date 10/12/10

EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4407

Test H Matrix SOLID
SDG 7706
Contact N. Joseph Verville

LAB METHOD SUMMARY

TRITIUM IN SOLIDS

LIQUID SCINTILLATION COUNTING

Client CHPRC
Contract No. 33677
Contract SDG H4407

METHOD PERFORMANCE

LAB SAMPLE ID	RAW TEST	SUF-FIX	CLIENT SAMPLE ID	MDA pCi/g	ALIQ g	PREP FAC	DILU-TION	YIELD %	EFF %	COUNT min	FWHM keV	DRIFT KeV	DAYS HELD	PREPARED	ANAL-YZED	DETECTOR
Preparation batch 7265-111			2σ prep error 10.0 %	Reference Lab Notebook No. 7265 pg.111												
S009218-01			B27M18	7.70	0.235			100		50			14	10/02/10	10/04	LSC-006
S009218-02			B27M19	7.39	0.248			100		50			14	10/02/10	10/04	LSC-006
S009218-03			B27M20	7.99	0.224			100		50			14	10/02/10	10/04	LSC-006
S009218-04			B27M21	8.69	0.209			100		50			14	10/02/10	10/04	LSC-006
S009218-05			B27M22	7.21	0.244			100		50			14	10/02/10	10/04	LSC-006
S009218-06			B27M97	7.62	0.232			100		50			14	10/02/10	10/04	LSC-006
S009218-07			B27M98	8.16	0.222			100		50			14	10/02/10	10/04	LSC-006
S009218-08			B27M99	7.39	0.240			100		50			15	10/02/10	10/05	LSC-006
S009218-09			B27MB0	8.86	0.202			100		50			15	10/02/10	10/05	LSC-006
S009218-10			B27MB1	8.22	0.218			100		50			15	10/02/10	10/05	LSC-006
S009218-11			B27MB2	7.74	0.226			100		50			15	10/02/10	10/05	LSC-006
S009218-12			Lab Control Sample	9.02	0.200			100		50				10/02/10	10/05	LSC-006
S009218-13			Method Blank	8.93	0.200			100		50				10/02/10	10/04	LSC-006
S009218-14			Duplicate (S009218-01)	8.09	0.228			100		50			14	10/02/10	10/04	LSC-006
Nominal values and limits from method				400	0.200					25			180			

PROCEDURES REFERENCE TRITIUM_COX_LSC
CP-251 Tritium/Carbon-14 Oxidation, rev 11

AVERAGES ± 2 SD FOR 14 SAMPLES
MDA 8.07 ± 1.22
YIELD 100 ± 0

Lab id EBRLNE
Protocol CHPRC
Version Ver 1.0
Form DVD-LMS
Version 3.06
Report date 10/12/10

EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4407

Test NI L Matrix SOLID
SDG 7706
Contact N. Joseph Verville

LAB METHOD SUMMARY

NICKEL 63 IN SOLIDS

LIQUID SCINTILLATION COUNTING

Client CHPRC
Contract No. 33677
Contract SDG H4407

RESULTS

LAB SAMPLE ID	RAW TEST	SUF-FIX	PLANCHET	CLIENT SAMPLE ID	Nickel 63	
Preparation batch 7265-111						
S009218-01			7706-001	B27M18	U	
S009218-02			7706-002	B27M19	U	
S009218-03			7706-003	B27M20	U	
S009218-04			7706-004	B27M21	U	
S009218-05			7706-005	B27M22	U	
S009218-06			7706-006	B27M97	U	
S009218-07			7706-007	B27M98	U	
S009218-08			7706-008	B27M99	U	
S009218-09			7706-009	B27MB0	U	
S009218-10			7706-010	B27MB1	U	
S009218-11			7706-011	B27MB2	U	
S009218-12			7706-012	Lab Control Sample	ok	
S009218-13			7706-013	Method Blank	U	
S009218-14			7706-014	Duplicate (S009218-01)	-	U

Nominal values and limits from method RDLs (pCi/g) 30.0

Lab id EBRLNE
Protocol CHPRC
Version Ver 1.0
Form DVD-LMS
Version 3.06
Report date 10/12/10

EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP H4407

Test NI L Matrix SOLID
SDG 7706
Contact N. Joseph Verville

LAB METHOD SUMMARY

NICKEL 63 IN SOLIDS

LIQUID SCINTILLATION COUNTING

Client CHPRC
Contract No. 33677
Contract SDG H4407

METHOD PERFORMANCE

LAB SAMPLE ID	RAW TEST	SUF-FIX	CLIENT SAMPLE ID	MDA pCi/g	ALIQ g	PREP FAC	DILU-TION	YIELD %	EFF %	COUNT min	FWHM keV	DRIFT KeV	DAYS HELD	PREPARED	ANAL-YZED	DETECTOR
Preparation batch 7265-111			2σ prep error 11.2 % Reference Lab Notebook No. 7265 pg.111													
S009218-01			B27M18	3.49	0.500			86		50			14	10/01/10	10/04	LSC-004
S009218-02			B27M19	2.92	0.500			102		50			14	10/01/10	10/04	LSC-004
S009218-03			B27M20	3.24	0.500			93		50			14	10/01/10	10/04	LSC-004
S009218-04			B27M21	3.36	0.500			88		50			14	10/01/10	10/04	LSC-004
S009218-05			B27M22	2.99	0.500			99		50			14	10/01/10	10/04	LSC-004
S009218-06			B27M97	3.41	0.500			87		50			14	10/01/10	10/04	LSC-004
S009218-07			B27M98	3.21	0.500			95		50			14	10/01/10	10/04	LSC-004
S009218-08			B27M99	3.24	0.500			92		50			14	10/01/10	10/04	LSC-004
S009218-09			B27MB0	3.69	0.500			82		50			14	10/01/10	10/04	LSC-004
S009218-10			B27MB1	2.97	0.500			102		50			14	10/01/10	10/04	LSC-004
S009218-11			B27MB2	3.23	0.500			94		50			14	10/01/10	10/04	LSC-004
S009218-12			Lab Control Sample	3.01	0.500			99		50				09/30/10	10/04	LSC-004
S009218-13			Method Blank	3.05	0.500			99		50				09/30/10	10/04	LSC-004
S009218-14			Duplicate (S009218-01)	3.35	0.500			90		50			14	09/30/10	10/04	LSC-004
Nominal values and limits from method				30.0	0.500			40-110		25			180			

PROCEDURES	REFERENCE	NI63_LSC
	SPP-071	Soil Dissolution, > 1.0g Aliquot, rev 1
	CP-281	Nickel-63 Purification By Extraction Chromatography, rev 5

AVERAGES ± 2 SD FOR 14 SAMPLES				
	MDA	3.23	±	0.446
	YIELD	93	±	13

Lab id EBRLNE
Protocol CHPRC
Version Ver 1.0
Form DVD-LMS
Version 3.06
Report date 10/12/10