CHPRC - REVIEW COMMENT RECORD (RCR)

1. Date	2. Review No.
11/29/2011	
3. Project No.	Page 1 of 2

5. Document Number(s)/Title(s)	6. Program/Project/Building Number	7. Reviewer	8. Organization/Group	9. Location/Phone
VSR12-003		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) 11/29/2011 Date Author/Originator (print and sign)	Scot Fitzgerald Reviewer/Point of Contact (print and sign) 12/5/2011 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	On page 6 of 1030 under the MS/MSD discussion, SDG SL1137 batch 1272023 a J- is applied for Ms due to low MS/MSD recoveries. On page 31 of the data validation procedure it states "If the concentration of an analyte in the unspiked sample used for the MS is >4x the spike concentration, no qualification based on matrix spike %R is necessary."		Remove J- flag from Mn results in SDG SL1137 batch 1272023.	Y	App3_Inorganic and memos corrected. Also information on worksheet corrected	closed

CHPRC - REVIEW COMMENT RECORD (RCR)

1. Date	2. Review No.
11/30/11	RCR-VSR12-003
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
100-K-63 Unexcavated Area VSR12-003 KW Floodplain	SGRP	SL Huggins	SGRP QA	2753E/B106 373-3630

17. Comment Submittal Approval	10. Agreement With Indicated Comment Disposition(s)	11. CLOSED
11/30/11 — Date SL Huggins 11/30/11 — Organization Manager (optional) (print and sign)	Date Reviewer/Point of Contact (print and sign) Author/Originator (print and sign)	12/5/11 — Date SL HUGGINS — Reviewer/Point of Contact (print and sign) 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 comments					

REVIEW COMMENT RECORD (RCR)

1. Date	2. Review No.
12/05/2011	
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: VSR12-003, Project KW Floodplain, 100-K-63 Unexcavated Area	100-K-63 Unexcavated Area	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): ____	Deanna L. Klages Reviewer/Point of Contact (print and sign) 12/05/2011 Date Deanna L. Klages Author/Originator (print and sign)	Deanna L. Klages Reviewer/Point of Contact (print and sign) 12/05/2011 Date 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.					

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Data Validation Report for CH2M Hill Plateau Remediation Company

100-K-63 Unexcavated Area
VSR12-003
KW Floodplain
Chemical Validation - Level C

Validation Performed By: Eyda Hergenreder **Date:** **11-04-2011**

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Date: 27 December 2011
To: CH2M Hill (technical representative)
From: Analytical Quality Associates, Inc.
Project: KW Floodplain
Subject: Inorganics - Sample Data Groups (SDGs) SL1137, WSCF113047 and WSCF113057

INTRODUCTION

This memorandum presents the results of data validation for SDG SL1137 prepared by TestAmerica Laboratories and SDGs WSCF113047 and WSCF113057 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
B2H561	09/15/11	Soil	C	6020 & 7471A
B2FXJ1	09/15/11	Soil	C	6020 & 7471A
B2H563	09/15/11	Soil	C	6020 & 7471A
B2FXB5	08/30/11	Soil	C	200.8 & 7471A
B2FXB6	08/30/11	Soil	C	200.8 & 7471A
B2FXB7	08/30/11	Soil	C	200.8 & 7471A
B2FXB8	08/30/11	Soil	C	200.8 & 7471A
B2FXB9	08/30/11	Soil	C	200.8 & 7471A
B2FXC0	08/30/11	Soil	C	200.8 & 7471A
B2FXC1	08/30/11	Soil	C	200.8 & 7471A
B2FXC2	08/30/11	Soil	C	200.8 & 7471A
B2FXC3	08/30/11	Soil	C	200.8 & 7471A
B2FXC4	08/30/11	Soil	C	200.8 & 7471A
B2FXC6	08/31/11	Soil	C	6020 & 7471A
B2FXC7	08/31/11	Soil	C	6020 & 7471A
B2FXC8	08/31/11	Soil	C	6020 & 7471A
B2FXC9	08/31/11	Soil	C	6020 & 7471A
B2FXD0	08/31/11	Soil	C	6020 & 7471A
B2FXD1	09/07/11	Soil	C	6020 & 7471A
B2FXD2	09/07/11	Soil	C	6020 & 7471A
B2FXD3	09/07/11	Soil	C	6020 & 7471A
B2FXD4	09/07/11	Soil	C	6020 & 7471A
B2FXD5	09/12/11	Soil	C	6020 & 7471A
B2FXD7	09/12/11	Soil	C	6020 & 7471A
B2FXD8	09/12/11	Soil	C	6020 & 7471A
B2FXD9	09/12/11	Soil	C	6020 & 7471A
B2FXF0	09/12/11	Soil	C	6020 & 7471A
B2FXF1	09/13/11	Soil	C	6020 & 7471A
B2FXF2	09/13/11	Soil	C	6020 & 7471A
B2FXF3	09/13/11	Soil	C	6020 & 7471A
B2FXF4	09/13/11	Soil	C	6020 & 7471A

B2FXF5	09/13/11	Soil	C	6020 & 7471A
B2FXF6	09/13/11	Soil	C	6020 & 7471A
B2FXF8	09/13/11	Soil	C	6020 & 7471A
B2FXF9	09/13/11	Soil	C	6020 & 7471A
B2FXH0	09/13/11	Soil	C	6020 & 7471A
B2FXH1	09/13/11	Soil	C	6020 & 7471A
B2FXH2	09/14/11	Soil	C	6020 & 7471A
B2FXH3	09/14/11	Soil	C	6020 & 7471A
B2FXH4	09/14/11	Soil	C	6020 & 7471A
B2FXH5	09/14/11	Soil	C	6020 & 7471A
B2FXH6	09/14/11	Soil	C	6020 & 7471A
B2FXH7	09/14/11	Soil	C	6020 & 7471A
B2FXH9	09/14/11	Soil	C	6020 & 7471A
B2FXJ0	09/14/11	Soil	C	6020 & 7471A
B2FXJ4	09/07/11	Soil	C	6020 & 7471A
B2FXJ5	08/31/11	Soil	C	6020 & 7471A
B2FXJ6	09/14/11	Soil	C	6020 & 7471A
B2FXJ7	09/14/11	Soil	C	6020 & 7471A
B2FXJ8	08/30/11	Soil	C	200.8 & 7471A
B2FXJ9	08/30/11	Soil	C	200.8 & 7471A
B2H560	09/15/11	Soil	C	6020 & 7471A
B2H562	09/15/11	Soil	C	6020 & 7471A
B2FXK0	08/30/11	Soil	C	200.8 & 7471A
B2FXK1	08/30/11	Soil	C	200.8 & 7471A
B2FXJ2	08/29/11	Soil	C	200.8
B2FXJ3	08/29/11	Soil	C	200.8
B2FXF7	08/29/11	Soil	C	200.8
B2FXH8	08/29/11	Soil	C	200.8
B2FXB4	08/29/11	Soil	C	200.8
B2FXC5	08/29/11	Soil	C	200.8
B2FXD6	08/29/11	Soil	C	200.8

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 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 soil samples requires chilling to 4 degrees Celsius.

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

For SDG SL1137, numerous samples were analyzed for Hg beyond the holding time but within 2X the holding time. The Hg result for sample B2FXK0 was a detect and should be qualified as an estimate and flagged "J-." Based on professional judgment, all non-detect sample results should be qualified as estimates and flagged "UJ." 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 with the following exceptions.

For SDG SL1137, batch 1272022, the B laboratory blank result was > the method detection limit (MDL) but < the reporting limit (RL). All associated sample results were non-detects and should not be qualified.

For SDG SL1137, batch 1272023, the Sn laboratory blank result was > the MDL but < the RL. The Sn result for samples B2FXF8, B2FXF9, B2FXH0, B2FXH1, B2FXH3, B2FXH4, B2FXH5, B2FXH6, B2FXH7, B2FXH9, B2FXJ4, B2FXJ6, B2H560 and B2H562 were detects > the RL but <5X the blank result and should be qualified as estimates and flagged "J," based on professional judgment. The Sn result for samples B2FXJ5 and B2FXJ7 were detects < the RL and should be qualified as non-detects at the RL (0.20 mg/kg) and flagged "U." All other associated sample results were detects >RL and >5X the blank value and should not be qualified.

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.

Ba, Co, Mn, Ni, Pb, Sn, Sr and U were detected in equipment blank B2FXJ5. The Sn result has been flagged “U” due to laboratory blank contamination.

Ba, Mn, Ni, Pb, Sn and U were detected in equipment blank B2FXJ7. The Sn result has been flagged "U" due to laboratory blank contamination.

Mn, Ba, B, V and Sr were detected in equipment blank B2FXJ3.

- **Accuracy**

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

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

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

For SDGs WSCF113047 and WSCF113057, the MS or MSD recoveries for Mn were > the upper acceptance limit. All associated sample results were detects and should be qualified as estimates and flagged "J+." See the table in Appendix 2 for listing of all affected sample results.

Laboratory Control Samples (LCSs)

All LCS recoveries were acceptable with the following exceptions.

For SDG WSCF113047, the LCS recoveries for Hg and Mo were > the upper acceptance limits. The Mo result for samples B2FXJ2, B2FXF7, B2FXH8, B2FXB4, B2FXC5 and B2FXD6 were detects and should be qualified as estimates and flagged "J+." The Mo result for sample B2FXJ3 and all associated Hg sample results were non-detects and should not be qualified.

For SDG WSCF113057, the LCS recovery for Hg was > the upper acceptance limit. All associated sample results were non-detects and should not be qualified.

ICP-AES Interference Check Samples (ICSs)

ICS data was not included in the data package. Sample results should not be qualified based on this.

- **Precision**

Precision is evaluated by reviewing MS/MSD results, field duplicate sample results, field split sample results, and ICP serial dilution 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 SAP required detection limits with differences <2X the required detection limits no precision infraction occurred. The serial dilution limits are ones specified by the DV procedure.

MS/MSD Samples

All MS/MSD RPD values were acceptable with the following exceptions.

For SDG WSCF113057, the Mn RPD was above the upper acceptance limit. All Mn sample results were detects and should be qualified as estimates and would be flagged "J," but were further flagged “J+” due to MS recovery infraction. See the table in Appendix 2 for a listing of all affected sample results.

Field Duplicate Samples

All field duplicate results were acceptable with the following exception. Samples B2FXJ4 and B2FXD1 had a Pb RPD = 31%.

Field Split Samples

No field splits were submitted for validation.

ICP Serial Dilution Samples

ICS serial dilution data was not included in the data package. Sample results should not be qualified based on this.

- **ICP-MS Internal Standards**

The analysis of ICP-MS internal standards is used to determine the existences and magnitude of instrument drift and physical interferences. The criteria for evaluation of internal standard results apply to all samples (including QC) analyzed during the analytical run, beginning with the calibration.

ICP-MS internal standards data was not included in the data package. Sample results should not be qualified based on this.

- **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 SL1137, WSCF113047 and WSCF113057 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 sample results as estimates were due to holding time infraction for Hg, laboratory blank infraction for Sn, LCS infraction for Mo, MS/MSD recoveries and MS/MSD precision infractions for Mn. 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			
SDG: SL1137, WSCF113047, WSCF113057	Reviewer: AQA	Project: KW Floodplain	Page 1 of 1
Analyte(s)	**Qualifier**	**Samples Affected**	**Reason**
Hg	UJ	B2FXB5, B2FXB6, B2FXB7, B2FXB8, B2FXB9, B2FXC0, B2FXC1, B2FXC2, B2FXC3, B2FXC4, B2FXC6, B2FXC7, B2FXC8, B2FXC9, B2FXD0, B2FXD1, B2FXD2, B2FXD3, B2FXD4, B2FXD5, B2FXD7, B2FXD8, B2FXD9, B2FXF0, B2FXJ4, B2FXJ5, B2FXJ8, B2FXJ9, B2FXK1	Analyzed beyond but within 2X the holding time
Hg	J-	B2FXK0	Analyzed beyond but within 2X the holding time
Sn	J	B2FXF8, B2FXF9, B2FXH0, B2FXH1, B2FXH3, B2FXH4, B2FXH5, B2FXH6, B2FXH7, B2FXH9, B2FXJ4, B2FXJ6, B2H560, B2H562	Laboratory blank contamination
Sn	0.20U	B2FXJ5, B2FXJ7	Laboratory blank contamination
Mn	J+	B2FXJ2, B2FXJ3, B2FXF7, B2FXH8, B2FXB4, B2FXC5, B2FXD6,	High matrix spike recovery
Mn	J+	B2FXJ8, B2FXJ9, B2FXK0, B2FXK1, B2FXB5, B2FXB6, B2FXB7, B2FXB8, B2FXB9, B2FXC0, B2FXC1, B2FXC2, B2FXC3, B2FXC4,	High matrix spike recovery and poor MS/MSD precision

Mo	J+	B2FXJ2, B2FXF7, B2FXH8, B2FXB4, B2FXC5, B2FXD6,	High LCS recovery

Comments: None

Appendix 3

Annotated Laboratory Reports

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2H561

TOTAL Metals

Lot-Sample #...: F1I280432-001 Matrix.....: SOLID
Date Sampled...: 09/15/11 Date Received..: 09/28/11
% Moisture.....: 0.96

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1272022						
Silver	0.045 B	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRNA1AF
		Dilution Factor: 1		MDL.....: 0.014		
Arsenic	2.6	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRNA1AG
		Dilution Factor: 1		MDL.....: 0.20		
Barium	65.0	2.0	mg/kg	SW846 6020	09/29-10/06/11	MMRNA1AH
		Dilution Factor: 1		MDL.....: 0.058		
Beryllium	0.33	0.10	mg/kg	SW846 6020	09/29-10/06/11	MMRNA1AJ
		Dilution Factor: 1		MDL.....: 0.017		
Boron	ND D	50.5	mg/kg	SW846 6020	09/29-10/10/11	MMRNA1AK
		Dilution Factor: 5		MDL.....: 16.9		
Cadmium	0.16	0.050	mg/kg	SW846 6020	09/29-10/06/11	MMRNA1AL
		Dilution Factor: 1		MDL.....: 0.016		
Cobalt	8.4	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRNA1AM
		Dilution Factor: 1		MDL.....: 0.043		
Chromium	9.4	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRNA1AN
		Dilution Factor: 1		MDL.....: 0.45		
Copper	15.9	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRNA1AP
		Dilution Factor: 1		MDL.....: 0.065		
Manganese	332	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRNA1AQ
		Dilution Factor: 1		MDL.....: 0.075		
Molybdenum	0.39 B	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRNA1AR
		Dilution Factor: 1		MDL.....: 0.078		
Nickel	12.4	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRNA1AT
		Dilution Factor: 1		MDL.....: 0.083		
Lead	7.4	0.30	mg/kg	SW846 6020	09/29-10/06/11	MMRNA1AU
		Dilution Factor: 1		MDL.....: 0.10		
Selenium	1.3	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRNA1AV
		Dilution Factor: 1		MDL.....: 0.16		

(Continued on next page)

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2H561

TOTAL Metals

Lot-Sample #...: F1I280432-001 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Tin	0.56	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRNA1AW
		Dilution Factor: 1		MDL.....: 0.10		
Strontium	22.7	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRNA1AX
		Dilution Factor: 1		MDL.....: 0.21		
Uranium	0.60	0.10	mg/kg	SW846 6020	09/29-10/06/11	MMRNA1A0
		Dilution Factor: 1		MDL.....: 0.020		
Vanadium	48.8	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRNA1AA
		Dilution Factor: 1		MDL.....: 0.74		
Zinc	52.0	5.0	mg/kg	SW846 6020	09/29-10/06/11	MMRNA1AC
		Dilution Factor: 1		MDL.....: 1.3		
Prep Batch #...: 1278047						
Antimony	0.25 B	0.50	mg/kg	SW846 6020	10/06-10/11/11	MMRNA1DD
		Dilution Factor: 1		MDL.....: 0.065		
Prep Batch #...: 1282013						
Mercury	ND	0.033	mg/kg	SW846 7471A	10/09-10/10/11	MMRNA1AE
		Dilution Factor: 1		MDL.....: 0.011		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

D Result was obtained from the analysis of a dilution.

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXJ1

TOTAL Metals

Lot-Sample #...: F1I280432-002 Matrix.....: SOLID
Date Sampled...: 09/15/11 Date Received..: 09/28/11
% Moisture.....: 1.3

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1272022						
Silver	0.056 B	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRNF1AG
		Dilution Factor: 1		MDL.....: 0.014		
Arsenic	2.7	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRNF1AH
		Dilution Factor: 1		MDL.....: 0.21		
Barium	68.2	2.0	mg/kg	SW846 6020	09/29-10/06/11	MMRNF1AJ
		Dilution Factor: 1		MDL.....: 0.058		
Beryllium	0.42	0.10	mg/kg	SW846 6020	09/29-10/06/11	MMRNF1AK
		Dilution Factor: 1		MDL.....: 0.017		
Boron	ND D	50.7	mg/kg	SW846 6020	09/29-10/10/11	MMRNF1AL
		Dilution Factor: 5		MDL.....: 16.9		
Cadmium	0.12	0.051	mg/kg	SW846 6020	09/29-10/06/11	MMRNF1AM
		Dilution Factor: 1		MDL.....: 0.016		
Cobalt	10.0	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRNF1AN
		Dilution Factor: 1		MDL.....: 0.044		
Chromium	8.8	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRNF1AP
		Dilution Factor: 1		MDL.....: 0.46		
Copper	18.8	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRNF1AQ
		Dilution Factor: 1		MDL.....: 0.065		
Manganese	377	0.51	mg/kg	SW846 6020	09/29-10/06/11	MMRNF1AR
		Dilution Factor: 1		MDL.....: 0.075		
Molybdenum	0.43 B	0.51	mg/kg	SW846 6020	09/29-10/06/11	MMRNF1AT
		Dilution Factor: 1		MDL.....: 0.078		
Nickel	12.1	0.51	mg/kg	SW846 6020	09/29-10/06/11	MMRNF1AU
		Dilution Factor: 1		MDL.....: 0.083		
Lead	7.0	0.30	mg/kg	SW846 6020	09/29-10/06/11	MMRNF1AV
		Dilution Factor: 1		MDL.....: 0.10		
Selenium	1.4	0.51	mg/kg	SW846 6020	09/29-10/06/11	MMRNF1AW
		Dilution Factor: 1		MDL.....: 0.16		

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CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXJ1

TOTAL Metals

Lot-Sample #...: F1I280432-002 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Tin	0.59	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRNF1AX
		Dilution Factor: 1		MDL.....: 0.10		
Strontium	27.4	0.51	mg/kg	SW846 6020	09/29-10/06/11	MMRNF1A0
		Dilution Factor: 1		MDL.....: 0.21		
Uranium	0.47	0.10	mg/kg	SW846 6020	09/29-10/06/11	MMRNF1AA
		Dilution Factor: 1		MDL.....: 0.020		
Vanadium	57.5	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRNF1AC
		Dilution Factor: 1		MDL.....: 0.74		
Zinc	58.7	5.1	mg/kg	SW846 6020	09/29-10/06/11	MMRNF1AD
		Dilution Factor: 1		MDL.....: 1.3		
Prep Batch #...: 1278047						
Antimony	0.28 B	0.50	mg/kg	SW846 6020	10/06-10/11/11	MMRNF1A1
		Dilution Factor: 1		MDL.....: 0.065		
Prep Batch #...: 1282013						
Mercury	ND	0.033	mg/kg	SW846 7471A	10/09-10/10/11	MMRNF1AF
		Dilution Factor: 1		MDL.....: 0.011		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

D Result was obtained from the analysis of a dilution.

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2H563

TOTAL Metals

Lot-Sample #...: F1I280432-003 Matrix.....: SOLID
Date Sampled...: 09/15/11 Date Received..: 09/28/11
% Moisture.....: 1.1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1272022						
Silver	0.049 B	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRNJ1AG
		Dilution Factor: 1		MDL.....: 0.014		
Arsenic	2.6	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRNJ1AH
		Dilution Factor: 1		MDL.....: 0.21		
Barium	70.2	2.0	mg/kg	SW846 6020	09/29-10/06/11	MMRNJ1AJ
		Dilution Factor: 1		MDL.....: 0.058		
Beryllium	0.37	0.10	mg/kg	SW846 6020	09/29-10/06/11	MMRNJ1AK
		Dilution Factor: 1		MDL.....: 0.017		
Boron	ND D	50.6	mg/kg	SW846 6020	09/29-10/10/11	MMRNJ1AL
		Dilution Factor: 5		MDL.....: 16.9		
Cadmium	0.13	0.051	mg/kg	SW846 6020	09/29-10/06/11	MMRNJ1AM
		Dilution Factor: 1		MDL.....: 0.016		
Cobalt	8.5	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRNJ1AN
		Dilution Factor: 1		MDL.....: 0.043		
Chromium	10.4	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRNJ1AP
		Dilution Factor: 1		MDL.....: 0.45		
Copper	17.2	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRNJ1AQ
		Dilution Factor: 1		MDL.....: 0.065		
Manganese	344	0.51	mg/kg	SW846 6020	09/29-10/06/11	MMRNJ1AR
		Dilution Factor: 1		MDL.....: 0.075		
Molybdenum	0.35 B	0.51	mg/kg	SW846 6020	09/29-10/06/11	MMRNJ1AT
		Dilution Factor: 1		MDL.....: 0.078		
Nickel	13.8	0.51	mg/kg	SW846 6020	09/29-10/06/11	MMRNJ1AU
		Dilution Factor: 1		MDL.....: 0.083		
Lead	8.0	0.30	mg/kg	SW846 6020	09/29-10/06/11	MMRNJ1AV
		Dilution Factor: 1		MDL.....: 0.10		
Selenium	1.2	0.51	mg/kg	SW846 6020	09/29-10/06/11	MMRNJ1AW
		Dilution Factor: 1		MDL.....: 0.16		

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CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2H563

TOTAL Metals

Lot-Sample #...: F1I280432-003 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Tin	0.46	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRNJ1AX
		Dilution Factor: 1		MDL.....: 0.10		
Strontium	26.6	0.51	mg/kg	SW846 6020	09/29-10/06/11	MMRNJ1A0
		Dilution Factor: 1		MDL.....: 0.21		
Uranium	0.42	0.10	mg/kg	SW846 6020	09/29-10/06/11	MMRNJ1AA
		Dilution Factor: 1		MDL.....: 0.020		
Vanadium	46.8	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRNJ1AC
		Dilution Factor: 1		MDL.....: 0.74		
Zinc	55.7	5.1	mg/kg	SW846 6020	09/29-10/06/11	MMRNJ1AD
		Dilution Factor: 1		MDL.....: 1.3		
Prep Batch #...: 1278047						
Antimony	0.21 B	0.50	mg/kg	SW846 6020	10/06-10/11/11	MMRNJ1A1
		Dilution Factor: 1		MDL.....: 0.065		
Prep Batch #...: 1282013						
Mercury	ND	0.033	mg/kg	SW846 7471A	10/09-10/10/11	MMRNJ1AF
		Dilution Factor: 1		MDL.....: 0.011		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

D Result was obtained from the analysis of a dilution.

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXB5

TOTAL Metals

Lot-Sample #...: F1I280432-004 **Matrix.....:** SOLID
Date Sampled...: 08/30/11 **Date Received..:** 09/28/11
% Moisture.....: 1.3

PARAMETER		RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1282013							
Mercury	UJ	ND	0.033	mg/kg	SW846 7471A	10/09-10/10/11	MMRV21AC
			Dilution Factor: 1		MDL.....: 0.011		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

EH
11/04/11

OCTOBER 14, 2011

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXB6

TOTAL Metals

Lot-Sample #...: F1I280432-005 **Matrix.....:** SOLID
Date Sampled...: 08/30/11 **Date Received..:** 09/28/11
% Moisture.....: 2.0

PARAMETER		RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1282013							
Mercury	UJ	ND	0.034	mg/kg	SW846 7471A	10/09-10/10/11	MMRV51AC
			Dilution Factor: 1		MDL.....: 0.011		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

EH
11/04/11

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXB7

TOTAL Metals

Lot-Sample #...: F1I280432-006 **Matrix.....:** SOLID
Date Sampled...: 08/30/11 **Date Received..:** 09/28/11
% Moisture.....: 1.4

PARAMETER		RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1282013							
Mercury	UJ	ND	0.033	mg/kg	SW846 7471A	10/09-10/10/11	MMRV61AC
			Dilution Factor: 1		MDL.....: 0.011		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

EH
11/04/11

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXB8

TOTAL Metals

Lot-Sample #...: F1I280432-007 **Matrix.....:** SOLID
Date Sampled...: 08/30/11 **Date Received..:** 09/28/11
% Moisture.....: 1.7

PARAMETER		RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1282013							
Mercury	UJ	ND	0.034	mg/kg	SW846 7471A	10/09-10/10/11	MMRV71AC
			Dilution Factor: 1		MDL.....: 0.011		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

EH
11/04/11

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXB9

TOTAL Metals

Lot-Sample #...: F1I280432-008 **Matrix.....:** SOLID
Date Sampled...: 08/30/11 **Date Received..:** 09/28/11
% Moisture.....: 1.2

PARAMETER		RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1282013							
Mercury	UJ	ND	0.033	mg/kg	SW846 7471A	10/09-10/10/11	MMRV81AC
			Dilution Factor: 1		MDL.....: 0.011		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

EH
11/04/11

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXC0

TOTAL Metals

Lot-Sample #...: F1I280432-009 **Matrix.....:** SOLID
Date Sampled...: 08/30/11 **Date Received..:** 09/28/11
% Moisture.....: 1.4

PARAMETER		RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1282013							
Mercury	UJ	ND	0.033	mg/kg	SW846 7471A	10/09-10/10/11	MMRV91AC
			Dilution Factor: 1		MDL.....: 0.011		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

EH
11/04/11

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXC1

TOTAL Metals

Lot-Sample #...: F1I280432-010 **Matrix.....:** SOLID
Date Sampled...: 08/30/11 **Date Received..:** 09/28/11
% Moisture.....: 1.1

PARAMETER		RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1282013							
Mercury	UJ	ND	0.033	mg/kg	SW846 7471A	10/09-10/10/11	MMRWA1AC
			Dilution Factor: 1		MDL.....: 0.011		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

EH
11/04/11

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXC2

TOTAL Metals

Lot-Sample #...: F1I280432-011 **Matrix.....:** SOLID
Date Sampled...: 08/30/11 **Date Received..:** 09/28/11
% Moisture.....: 1.1

PARAMETER		RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1282013							
Mercury	UJ	ND	0.033	mg/kg	SW846 7471A	10/09-10/10/11	MMRWC1AC
			Dilution Factor: 1		MDL.....: 0.011		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

EH
11/04/11

OCTOBER 14, 2011

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXC3

TOTAL Metals

Lot-Sample #...: F1I280432-012 **Matrix.....:** SOLID
Date Sampled...: 08/30/11 **Date Received..:** 09/28/11
% Moisture.....: 1.0

PARAMETER		RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1282013							
Mercury	UJ	ND	0.033	mg/kg	SW846 7471A	10/09-10/10/11	MMRWD1AC
			Dilution Factor: 1		MDL.....: 0.011		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

EH
11/04/11

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXC4

TOTAL Metals

Lot-Sample #...: F1I280432-013 **Matrix.....:** SOLID
Date Sampled...: 08/30/11 **Date Received..:** 09/28/11
% Moisture.....: 5.0

PARAMETER		RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1282013							
Mercury	UJ	ND	0.035	mg/kg	SW846 7471A	10/09-10/10/11	MMRWE1AC
			Dilution Factor: 1		MDL.....: 0.012		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

EH
11/04/11

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXC6

TOTAL Metals

Lot-Sample #...: F1I280432-014 Matrix.....: SOLID
Date Sampled...: 08/31/11 Date Received..: 09/28/11
% Moisture.....: 1.3

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1278046						
Silver	0.062 B	0.20	mg/kg	SW846 6020	10/05-10/07/11	MMRWF1AE
		Dilution Factor: 1		MDL.....: 0.014		
Arsenic	3.0	1.0	mg/kg	SW846 6020	10/05-10/07/11	MMRWF1AF
		Dilution Factor: 1		MDL.....: 0.21		
Barium	63.6	2.0	mg/kg	SW846 6020	10/05-10/07/11	MMRWF1AG
		Dilution Factor: 1		MDL.....: 0.058		
Beryllium	0.35	0.10	mg/kg	SW846 6020	10/05-10/07/11	MMRWF1AH
		Dilution Factor: 1		MDL.....: 0.017		
Boron	6.7 B	10.1	mg/kg	SW846 6020	10/05-10/07/11	MMRWF1AJ
		Dilution Factor: 1		MDL.....: 3.4		
Cadmium	0.32	0.051	mg/kg	SW846 6020	10/05-10/07/11	MMRWF1AK
		Dilution Factor: 1		MDL.....: 0.016		
Cobalt	7.8	0.20	mg/kg	SW846 6020	10/05-10/07/11	MMRWF1AL
		Dilution Factor: 1		MDL.....: 0.044		
Chromium	13.4	1.0	mg/kg	SW846 6020	10/05-10/07/11	MMRWF1AM
		Dilution Factor: 1		MDL.....: 0.46		
Copper	21.1	1.0	mg/kg	SW846 6020	10/05-10/07/11	MMRWF1AN
		Dilution Factor: 1		MDL.....: 0.065		
Manganese	322	0.51	mg/kg	SW846 6020	10/05-10/07/11	MMRWF1AP
		Dilution Factor: 1		MDL.....: 0.075		
Molybdenum	0.52	0.51	mg/kg	SW846 6020	10/05-10/07/11	MMRWF1AQ
		Dilution Factor: 1		MDL.....: 0.078		
Nickel	15.2	0.51	mg/kg	SW846 6020	10/05-10/07/11	MMRWF1AR
		Dilution Factor: 1		MDL.....: 0.083		
Lead	15.8	0.30	mg/kg	SW846 6020	10/05-10/07/11	MMRWF1AT
		Dilution Factor: 1		MDL.....: 0.10		
Selenium	1.1	0.51	mg/kg	SW846 6020	10/05-10/07/11	MMRWF1AU
		Dilution Factor: 1		MDL.....: 0.16		

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CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXC6

TOTAL Metals

Lot-Sample #...: F1I280432-014 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Tin	0.62	0.20	mg/kg	SW846 6020	10/05-10/07/11	MMRWF1AV
		Dilution Factor: 1		MDL.....: 0.10		
Strontium	28.3	0.51	mg/kg	SW846 6020	10/05-10/07/11	MMRWF1AW
		Dilution Factor: 1		MDL.....: 0.21		
Uranium	0.44	0.10	mg/kg	SW846 6020	10/05-10/07/11	MMRWF1AX
		Dilution Factor: 1		MDL.....: 0.020		
Vanadium	46.9	1.0	mg/kg	SW846 6020	10/05-10/07/11	MMRWF1A0
		Dilution Factor: 1		MDL.....: 0.74		
Zinc	73.9	1.3	mg/kg	SW846 6020	10/05-10/07/11	MMRWF1A1
		Dilution Factor: 1		MDL.....: 1.3		
Prep Batch #...: 1278047						
Antimony	0.25 B	0.50	mg/kg	SW846 6020	10/06-10/11/11	MMRWF1A2
		Dilution Factor: 1		MDL.....: 0.065		
Prep Batch #...: 1282013						
Mercury UJ	ND	0.033	mg/kg	SW846 7471A	10/09-10/10/11	MMRWF1AC
		Dilution Factor: 1		MDL.....: 0.011		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

EH
11/04/11

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXC7

TOTAL Metals

Lot-Sample #...: F1I280432-015 **Matrix.....:** SOLID
Date Sampled...: 08/31/11 **Date Received..:** 09/28/11
% Moisture.....: 0.67

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1272022						
Silver	0.038 B	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRWG1AE
		Dilution Factor: 1		MDL.....: 0.014		
Arsenic	2.1	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWG1AF
		Dilution Factor: 1		MDL.....: 0.20		
Barium	60.3	2.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWG1AG
		Dilution Factor: 1		MDL.....: 0.057		
Beryllium	0.26	0.10	mg/kg	SW846 6020	09/29-10/06/11	MMRWG1AH
		Dilution Factor: 1		MDL.....: 0.017		
Boron	ND D	50.3	mg/kg	SW846 6020	09/29-10/10/11	MMRWG1AJ
		Dilution Factor: 5		MDL.....: 16.8		
Cadmium	0.24	0.050	mg/kg	SW846 6020	09/29-10/06/11	MMRWG1AK
		Dilution Factor: 1		MDL.....: 0.016		
Cobalt	6.9	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRWG1AL
		Dilution Factor: 1		MDL.....: 0.043		
Chromium	9.2	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWG1AM
		Dilution Factor: 1		MDL.....: 0.45		
Copper	14.2	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWG1AN
		Dilution Factor: 1		MDL.....: 0.064		
Manganese	298	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWG1AP
		Dilution Factor: 1		MDL.....: 0.074		
Molybdenum	0.38 B	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWG1AQ
		Dilution Factor: 1		MDL.....: 0.078		
Nickel	11.4	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWG1AR
		Dilution Factor: 1		MDL.....: 0.083		
Lead	8.4	0.30	mg/kg	SW846 6020	09/29-10/06/11	MMRWG1AT
		Dilution Factor: 1		MDL.....: 0.10		
Selenium	0.85	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWG1AU
		Dilution Factor: 1		MDL.....: 0.16		

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CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXC7

TOTAL Metals

Lot-Sample #...: F1I280432-015 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Tin	0.43	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRWG1AV
		Dilution Factor: 1		MDL.....: 0.10		
Strontium	19.2	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWG1AW
		Dilution Factor: 1		MDL.....: 0.21		
Uranium	0.39	0.10	mg/kg	SW846 6020	09/29-10/06/11	MMRWG1AX
		Dilution Factor: 1		MDL.....: 0.020		
Vanadium	44.6	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWG1A0
		Dilution Factor: 1		MDL.....: 0.74		
Zinc	57.6	5.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWG1AA
		Dilution Factor: 1		MDL.....: 1.3		
Prep Batch #...: 1278047						
Antimony	0.18 B	0.50	mg/kg	SW846 6020	10/06-10/11/11	MMRWG1A1
		Dilution Factor: 1		MDL.....: 0.065		
Prep Batch #...: 1282013						
Mercury UJ	ND	0.033	mg/kg	SW846 7471A	10/09-10/10/11	MMRWG1AD
		Dilution Factor: 1		MDL.....: 0.011		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

D Result was obtained from the analysis of a dilution.

EH
11/04/11

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXC8

TOTAL Metals

Lot-Sample #...: F1I280432-016 **Matrix.....:** SOLID
Date Sampled...: 08/31/11 **Date Received..:** 09/28/11
% Moisture.....: 0.72

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1272022						
Silver	0.050 B	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRWH1AE
		Dilution Factor: 1		MDL.....: 0.014		
Arsenic	2.5	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWH1AF
		Dilution Factor: 1		MDL.....: 0.20		
Barium	66.2	2.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWH1AG
		Dilution Factor: 1		MDL.....: 0.057		
Beryllium	0.28	0.10	mg/kg	SW846 6020	09/29-10/06/11	MMRWH1AH
		Dilution Factor: 1		MDL.....: 0.017		
Boron	ND D	50.4	mg/kg	SW846 6020	09/29-10/10/11	MMRWH1AJ
		Dilution Factor: 5		MDL.....: 16.8		
Cadmium	0.25	0.050	mg/kg	SW846 6020	09/29-10/06/11	MMRWH1AK
		Dilution Factor: 1		MDL.....: 0.016		
Cobalt	6.9	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRWH1AL
		Dilution Factor: 1		MDL.....: 0.043		
Chromium	9.9	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWH1AM
		Dilution Factor: 1		MDL.....: 0.45		
Copper	15.7	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWH1AN
		Dilution Factor: 1		MDL.....: 0.064		
Manganese	300	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWH1AP
		Dilution Factor: 1		MDL.....: 0.075		
Molybdenum	0.35 B	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWH1AQ
		Dilution Factor: 1		MDL.....: 0.078		
Nickel	12.5	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWH1AR
		Dilution Factor: 1		MDL.....: 0.083		
Lead	10.7	0.30	mg/kg	SW846 6020	09/29-10/06/11	MMRWH1AT
		Dilution Factor: 1		MDL.....: 0.10		
Selenium	0.88	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWH1AU
		Dilution Factor: 1		MDL.....: 0.16		

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CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXC8

TOTAL Metals

Lot-Sample #...: F1I280432-016 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Tin	0.65	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRWH1AV
		Dilution Factor: 1		MDL.....: 0.10		
Strontium	21.8	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWH1AW
		Dilution Factor: 1		MDL.....: 0.21		
Uranium	0.48	0.10	mg/kg	SW846 6020	09/29-10/06/11	MMRWH1AX
		Dilution Factor: 1		MDL.....: 0.020		
Vanadium	45.0	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWH1A0
		Dilution Factor: 1		MDL.....: 0.74		
Zinc	61.2	5.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWH1AA
		Dilution Factor: 1		MDL.....: 1.3		
Prep Batch #...: 1278047						
Antimony	0.23 B	0.50	mg/kg	SW846 6020	10/06-10/11/11	MMRWH1A1
		Dilution Factor: 1		MDL.....: 0.065		
Prep Batch #...: 1282013						
Mercury UJ	ND	0.033	mg/kg	SW846 7471A	10/09-10/10/11	MMRWH1AD
		Dilution Factor: 1		MDL.....: 0.011		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

D Result was obtained from the analysis of a dilution.

EH
11/04/11

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXC9

TOTAL Metals

Lot-Sample #...: F1I280432-017 Matrix.....: SOLID
Date Sampled...: 08/31/11 Date Received..: 09/28/11
% Moisture.....: 0.89

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1272022						
Silver	0.050 B	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRWJ1AE
		Dilution Factor: 1		MDL.....: 0.014		
Arsenic	2.5	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWJ1AF
		Dilution Factor: 1		MDL.....: 0.20		
Barium	70.2	2.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWJ1AG
		Dilution Factor: 1		MDL.....: 0.058		
Beryllium	0.33	0.10	mg/kg	SW846 6020	09/29-10/06/11	MMRWJ1AH
		Dilution Factor: 1		MDL.....: 0.017		
Boron	ND D	50.4	mg/kg	SW846 6020	09/29-10/10/11	MMRWJ1AJ
		Dilution Factor: 5		MDL.....: 16.8		
Cadmium	0.20	0.050	mg/kg	SW846 6020	09/29-10/06/11	MMRWJ1AK
		Dilution Factor: 1		MDL.....: 0.016		
Cobalt	8.7	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRWJ1AL
		Dilution Factor: 1		MDL.....: 0.043		
Chromium	8.4	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWJ1AM
		Dilution Factor: 1		MDL.....: 0.45		
Copper	16.9	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWJ1AN
		Dilution Factor: 1		MDL.....: 0.065		
Manganese	338	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWJ1AP
		Dilution Factor: 1		MDL.....: 0.075		
Molybdenum	0.40 B	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWJ1AQ
		Dilution Factor: 1		MDL.....: 0.078		
Nickel	12.0	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWJ1AR
		Dilution Factor: 1		MDL.....: 0.083		
Lead	9.3	0.30	mg/kg	SW846 6020	09/29-10/06/11	MMRWJ1AT
		Dilution Factor: 1		MDL.....: 0.10		
Selenium	1.4	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWJ1AU
		Dilution Factor: 1		MDL.....: 0.16		

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CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXC9

TOTAL Metals

Lot-Sample #...: F1I280432-017 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Tin	0.55	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRWJ1AV
		Dilution Factor: 1		MDL.....: 0.10		
Strontium	23.9	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWJ1AW
		Dilution Factor: 1		MDL.....: 0.21		
Uranium	0.40	0.10	mg/kg	SW846 6020	09/29-10/06/11	MMRWJ1AX
		Dilution Factor: 1		MDL.....: 0.020		
Vanadium	56.6	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWJ1A0
		Dilution Factor: 1		MDL.....: 0.74		
Zinc	60.4	5.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWJ1AA
		Dilution Factor: 1		MDL.....: 1.3		
Prep Batch #...: 1278047						
Antimony	0.17 B	0.50	mg/kg	SW846 6020	10/06-10/11/11	MMRWJ1A1
		Dilution Factor: 1		MDL.....: 0.065		
Prep Batch #...: 1282013						
Mercury UJ	ND	0.033	mg/kg	SW846 7471A	10/09-10/10/11	MMRWJ1AD
		Dilution Factor: 1		MDL.....: 0.011		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

D Result was obtained from the analysis of a dilution.

EH
11/04/11

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXD0

TOTAL Metals

Lot-Sample #...: F1I280432-018 Matrix.....: SOLID
Date Sampled...: 08/31/11 Date Received..: 09/28/11
% Moisture.....: 0.90

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1272022						
Silver	0.052 B	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRWK1AE
		Dilution Factor: 1		MDL.....: 0.014		
Arsenic	2.5	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWK1AF
		Dilution Factor: 1		MDL.....: 0.20		
Barium	74.3	2.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWK1AG
		Dilution Factor: 1		MDL.....: 0.058		
Beryllium	0.36	0.10	mg/kg	SW846 6020	09/29-10/06/11	MMRWK1AH
		Dilution Factor: 1		MDL.....: 0.017		
Boron	ND D	50.5	mg/kg	SW846 6020	09/29-10/10/11	MMRWK1AJ
		Dilution Factor: 5		MDL.....: 16.9		
Cadmium	0.26	0.050	mg/kg	SW846 6020	09/29-10/06/11	MMRWK1AK
		Dilution Factor: 1		MDL.....: 0.016		
Cobalt	10.1	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRWK1AL
		Dilution Factor: 1		MDL.....: 0.043		
Chromium	10	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWK1AM
		Dilution Factor: 1		MDL.....: 0.45		
Copper	19.5	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWK1AN
		Dilution Factor: 1		MDL.....: 0.065		
Manganese	389	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWK1AP
		Dilution Factor: 1		MDL.....: 0.075		
Molybdenum	0.42 B	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWK1AQ
		Dilution Factor: 1		MDL.....: 0.078		
Nickel	13.8	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWK1AR
		Dilution Factor: 1		MDL.....: 0.083		
Lead	12.6	0.30	mg/kg	SW846 6020	09/29-10/06/11	MMRWK1AT
		Dilution Factor: 1		MDL.....: 0.10		
Selenium	1.3	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWK1AU
		Dilution Factor: 1		MDL.....: 0.16		

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CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXD0

TOTAL Metals

Lot-Sample #...: F1I280432-018 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Tin	0.58	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRWK1AV
		Dilution Factor: 1		MDL.....: 0.10		
Strontium	25.0	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWK1AW
		Dilution Factor: 1		MDL.....: 0.21		
Uranium	0.45	0.10	mg/kg	SW846 6020	09/29-10/06/11	MMRWK1AX
		Dilution Factor: 1		MDL.....: 0.020		
Vanadium	55.3	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWK1A0
		Dilution Factor: 1		MDL.....: 0.74		
Zinc	66.8	5.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWK1AA
		Dilution Factor: 1		MDL.....: 1.3		
Prep Batch #...: 1278047						
Antimony	0.22 B	0.50	mg/kg	SW846 6020	10/06-10/11/11	MMRWK1A1
		Dilution Factor: 1		MDL.....: 0.065		
Prep Batch #...: 1282013						
Mercury UJ	ND	0.033	mg/kg	SW846 7471A	10/09-10/10/11	MMRWK1AD
		Dilution Factor: 1		MDL.....: 0.011		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

D Result was obtained from the analysis of a dilution.

EH
11/04/11

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXD1

TOTAL Metals

Lot-Sample #...: F1I280432-019 Matrix.....: SOLID
Date Sampled...: 09/07/11 Date Received..: 09/28/11
% Moisture.....: 0.83

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1272022						
Silver	0.045 B	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRWL1AE
		Dilution Factor: 1		MDL.....: 0.014		
Arsenic	1.9	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWL1AF
		Dilution Factor: 1		MDL.....: 0.20		
Barium	64.8	2.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWL1AG
		Dilution Factor: 1		MDL.....: 0.057		
Beryllium	0.25	0.10	mg/kg	SW846 6020	09/29-10/06/11	MMRWL1AH
		Dilution Factor: 1		MDL.....: 0.017		
Boron	ND D	50.4	mg/kg	SW846 6020	09/29-10/10/11	MMRWL1AJ
		Dilution Factor: 5		MDL.....: 16.8		
Cadmium	0.29	0.050	mg/kg	SW846 6020	09/29-10/06/11	MMRWL1AK
		Dilution Factor: 1		MDL.....: 0.016		
Cobalt	7.1	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRWL1AL
		Dilution Factor: 1		MDL.....: 0.043		
Chromium	8.4	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWL1AM
		Dilution Factor: 1		MDL.....: 0.45		
Copper	15.7	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWL1AN
		Dilution Factor: 1		MDL.....: 0.065		
Manganese	303	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWL1AP
		Dilution Factor: 1		MDL.....: 0.075		
Molybdenum	0.37 B	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWL1AQ
		Dilution Factor: 1		MDL.....: 0.078		
Nickel	10.8	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWL1AR
		Dilution Factor: 1		MDL.....: 0.083		
Lead	9.7	0.30	mg/kg	SW846 6020	09/29-10/06/11	MMRWL1AT
		Dilution Factor: 1		MDL.....: 0.10		
Selenium	1.1	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWL1AU
		Dilution Factor: 1		MDL.....: 0.16		

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CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXD1

TOTAL Metals

Lot-Sample #...: F1I280432-019 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Tin	0.48	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRWL1AV
		Dilution Factor: 1		MDL.....: 0.10		
Strontium	20.4	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWL1AW
		Dilution Factor: 1		MDL.....: 0.21		
Uranium	0.41	0.10	mg/kg	SW846 6020	09/29-10/06/11	MMRWL1AX
		Dilution Factor: 1		MDL.....: 0.020		
Vanadium	48.8	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWL1A0
		Dilution Factor: 1		MDL.....: 0.74		
Zinc	60.1	5.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWL1AA
		Dilution Factor: 1		MDL.....: 1.3		
Prep Batch #...: 1278047						
Antimony	0.12 B	0.50	mg/kg	SW846 6020	10/06-10/11/11	MMRWL1A1
		Dilution Factor: 1		MDL.....: 0.065		
Prep Batch #...: 1282013						
Mercury UJ	ND	0.033	mg/kg	SW846 7471A	10/09-10/10/11	MMRWL1AD
		Dilution Factor: 1		MDL.....: 0.011		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

D Result was obtained from the analysis of a dilution.

EH
11/04/11

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXD2

TOTAL Metals

Lot-Sample #...: F1I280432-020 **Matrix.....:** SOLID
Date Sampled...: 09/07/11 **Date Received..:** 09/28/11
% Moisture.....: 0.61

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1272022						
Silver	0.035 B	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRWM1AE
		Dilution Factor: 1		MDL.....: 0.014		
Arsenic	2.0	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWM1AF
		Dilution Factor: 1		MDL.....: 0.20		
Barium	63.7	2.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWM1AG
		Dilution Factor: 1		MDL.....: 0.057		
Beryllium	0.21	0.10	mg/kg	SW846 6020	09/29-10/06/11	MMRWM1AH
		Dilution Factor: 1		MDL.....: 0.017		
Boron	ND D	50.3	mg/kg	SW846 6020	09/29-10/10/11	MMRWM1AJ
		Dilution Factor: 5		MDL.....: 16.8		
Cadmium	0.16	0.050	mg/kg	SW846 6020	09/29-10/06/11	MMRWM1AK
		Dilution Factor: 1		MDL.....: 0.016		
Cobalt	6.2	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRWM1AL
		Dilution Factor: 1		MDL.....: 0.043		
Chromium	9.4	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWM1AM
		Dilution Factor: 1		MDL.....: 0.45		
Copper	15.5	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWM1AN
		Dilution Factor: 1		MDL.....: 0.064		
Manganese	277	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWM1AP
		Dilution Factor: 1		MDL.....: 0.074		
Molybdenum	0.30 B	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWM1AQ
		Dilution Factor: 1		MDL.....: 0.077		
Nickel	11.9	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWM1AR
		Dilution Factor: 1		MDL.....: 0.083		
Lead	8.3	0.30	mg/kg	SW846 6020	09/29-10/06/11	MMRWM1AT
		Dilution Factor: 1		MDL.....: 0.10		
Selenium	0.60	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWM1AU
		Dilution Factor: 1		MDL.....: 0.16		

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CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXD2

TOTAL Metals

Lot-Sample #...: F1I280432-020 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Tin	0.51	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRWM1AV
		Dilution Factor: 1		MDL.....: 0.10		
Strontium	18.7	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWM1AW
		Dilution Factor: 1		MDL.....: 0.21		
Uranium	0.42	0.10	mg/kg	SW846 6020	09/29-10/06/11	MMRWM1AX
		Dilution Factor: 1		MDL.....: 0.020		
Vanadium	41.6	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWM1A0
		Dilution Factor: 1		MDL.....: 0.74		
Zinc	48.9	5.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWM1AA
		Dilution Factor: 1		MDL.....: 1.3		
Prep Batch #...: 1278047						
Antimony	0.12 B	0.50	mg/kg	SW846 6020	10/06-10/11/11	MMRWM1A1
		Dilution Factor: 1		MDL.....: 0.065		
Prep Batch #...: 1282013						
Mercury UJ	ND	0.033	mg/kg	SW846 7471A	10/09-10/10/11	MMRWM1AD
		Dilution Factor: 1		MDL.....: 0.011		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

D Result was obtained from the analysis of a dilution.

EH
11/04/11

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXD3

TOTAL Metals

Lot-Sample #...: F1I280432-021 Matrix.....: SOLID
Date Sampled...: 09/07/11 Date Received..: 09/28/11
% Moisture.....: 0.70

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1272022						
Silver	0.038 B	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRWN1AE
		Dilution Factor: 1		MDL.....: 0.014		
Arsenic	1.9	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWN1AF
		Dilution Factor: 1		MDL.....: 0.20		
Barium	62.7	2.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWN1AG
		Dilution Factor: 1		MDL.....: 0.057		
Beryllium	0.23	0.10	mg/kg	SW846 6020	09/29-10/06/11	MMRWN1AH
		Dilution Factor: 1		MDL.....: 0.017		
Boron	ND D	50.4	mg/kg	SW846 6020	09/29-10/10/11	MMRWN1AJ
		Dilution Factor: 5		MDL.....: 16.8		
Cadmium	0.16	0.050	mg/kg	SW846 6020	09/29-10/06/11	MMRWN1AK
		Dilution Factor: 1		MDL.....: 0.016		
Cobalt	7.0	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRWN1AL
		Dilution Factor: 1		MDL.....: 0.043		
Chromium	7.8	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWN1AM
		Dilution Factor: 1		MDL.....: 0.45		
Copper	13.3	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWN1AN
		Dilution Factor: 1		MDL.....: 0.064		
Manganese	292	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWN1AP
		Dilution Factor: 1		MDL.....: 0.075		
Molybdenum	0.31 B	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWN1AQ
		Dilution Factor: 1		MDL.....: 0.078		
Nickel	10.6	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWN1AR
		Dilution Factor: 1		MDL.....: 0.083		
Lead	7.0	0.30	mg/kg	SW846 6020	09/29-10/06/11	MMRWN1AT
		Dilution Factor: 1		MDL.....: 0.10		
Selenium	0.94	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWN1AU
		Dilution Factor: 1		MDL.....: 0.16		

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CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXD3

TOTAL Metals

Lot-Sample #...: F1I280432-021 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Tin	0.41	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRWN1AV
		Dilution Factor: 1		MDL.....: 0.10		
Strontium	20.4	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWN1AW
		Dilution Factor: 1		MDL.....: 0.21		
Uranium	0.37	0.10	mg/kg	SW846 6020	09/29-10/06/11	MMRWN1AX
		Dilution Factor: 1		MDL.....: 0.020		
Vanadium	47.3	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWN1A0
		Dilution Factor: 1		MDL.....: 0.74		
Zinc	47.7	5.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWN1AA
		Dilution Factor: 1		MDL.....: 1.3		
Prep Batch #...: 1278047						
Antimony	0.12 B	0.50	mg/kg	SW846 6020	10/06-10/11/11	MMRWN1A2
		Dilution Factor: 1		MDL.....: 0.065		
Prep Batch #...: 1282014						
Mercury UJ	ND	0.033	mg/kg	SW846 7471A	10/11/11	MMRWN1AD
		Dilution Factor: 1		MDL.....: 0.011		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

D Result was obtained from the analysis of a dilution.

EH
11/04/11

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXD4

TOTAL Metals

Lot-Sample #...: F1I280432-022 Matrix.....: SOLID
Date Sampled...: 09/07/11 Date Received..: 09/28/11
% Moisture.....: 1.0

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1272022						
Silver	0.054 B	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRWP1AE
		Dilution Factor: 1		MDL.....: 0.014		
Arsenic	3.1	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWP1AF
		Dilution Factor: 1		MDL.....: 0.21		
Barium	81.9	2.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWP1AG
		Dilution Factor: 1		MDL.....: 0.058		
Beryllium	0.42	0.10	mg/kg	SW846 6020	09/29-10/06/11	MMRWP1AH
		Dilution Factor: 1		MDL.....: 0.017		
Boron	ND D	50.5	mg/kg	SW846 6020	09/29-10/10/11	MMRWP1AJ
		Dilution Factor: 5		MDL.....: 16.9		
Cadmium	0.13	0.051	mg/kg	SW846 6020	09/29-10/06/11	MMRWP1AK
		Dilution Factor: 1		MDL.....: 0.016		
Cobalt	10.8	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRWP1AL
		Dilution Factor: 1		MDL.....: 0.043		
Chromium	10	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWP1AM
		Dilution Factor: 1		MDL.....: 0.45		
Copper	18.8	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWP1AN
		Dilution Factor: 1		MDL.....: 0.065		
Manganese	386	0.51	mg/kg	SW846 6020	09/29-10/06/11	MMRWP1AP
		Dilution Factor: 1		MDL.....: 0.075		
Molybdenum	0.43 B	0.51	mg/kg	SW846 6020	09/29-10/06/11	MMRWP1AQ
		Dilution Factor: 1		MDL.....: 0.078		
Nickel	13.6	0.51	mg/kg	SW846 6020	09/29-10/06/11	MMRWP1AR
		Dilution Factor: 1		MDL.....: 0.083		
Lead	8.8	0.30	mg/kg	SW846 6020	09/29-10/06/11	MMRWP1AT
		Dilution Factor: 1		MDL.....: 0.10		
Selenium	1.5	0.51	mg/kg	SW846 6020	09/29-10/06/11	MMRWP1AU
		Dilution Factor: 1		MDL.....: 0.16		

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CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXD4

TOTAL Metals

Lot-Sample #...: F1I280432-022 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Tin	0.54	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRWP1AV
		Dilution Factor: 1		MDL.....: 0.10		
Strontium	27.4	0.51	mg/kg	SW846 6020	09/29-10/06/11	MMRWP1AW
		Dilution Factor: 1		MDL.....: 0.21		
Uranium	0.49	0.10	mg/kg	SW846 6020	09/29-10/06/11	MMRWP1AX
		Dilution Factor: 1		MDL.....: 0.020		
Vanadium	53.3	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWP1A0
		Dilution Factor: 1		MDL.....: 0.74		
Zinc	53.5	5.1	mg/kg	SW846 6020	09/29-10/06/11	MMRWP1AA
		Dilution Factor: 1		MDL.....: 1.3		
Prep Batch #...: 1278047						
Antimony	0.23 B	0.50	mg/kg	SW846 6020	10/06-10/11/11	MMRWP1A1
		Dilution Factor: 1		MDL.....: 0.065		
Prep Batch #...: 1282014						
Mercury UJ	ND	0.033	mg/kg	SW846 7471A	10/11/11	MMRWP1AD
		Dilution Factor: 1		MDL.....: 0.011		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

D Result was obtained from the analysis of a dilution.

EH
11/04/11

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXD5

TOTAL Metals

Lot-Sample #...: F1I280432-023 Matrix.....: SOLID
Date Sampled...: 09/12/11 Date Received..: 09/28/11
% Moisture.....: 0.91

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1272022						
Silver	0.049 B	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRWQ1AE
		Dilution Factor: 1		MDL.....: 0.014		
Arsenic	2.5	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWQ1AF
		Dilution Factor: 1		MDL.....: 0.20		
Barium	68.4	2.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWQ1AG
		Dilution Factor: 1		MDL.....: 0.058		
Beryllium	0.31	0.10	mg/kg	SW846 6020	09/29-10/06/11	MMRWQ1AH
		Dilution Factor: 1		MDL.....: 0.017		
Boron	ND D	50.5	mg/kg	SW846 6020	09/29-10/10/11	MMRWQ1AJ
		Dilution Factor: 5		MDL.....: 16.9		
Cadmium	0.19	0.050	mg/kg	SW846 6020	09/29-10/06/11	MMRWQ1AK
		Dilution Factor: 1		MDL.....: 0.016		
Cobalt	8.4	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRWQ1AL
		Dilution Factor: 1		MDL.....: 0.043		
Chromium	10.6	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWQ1AM
		Dilution Factor: 1		MDL.....: 0.45		
Copper	16.3	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWQ1AN
		Dilution Factor: 1		MDL.....: 0.065		
Manganese	331	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWQ1AP
		Dilution Factor: 1		MDL.....: 0.075		
Molybdenum	0.36 B	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWQ1AQ
		Dilution Factor: 1		MDL.....: 0.078		
Nickel	12.6	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWQ1AR
		Dilution Factor: 1		MDL.....: 0.083		
Lead	8.3	0.30	mg/kg	SW846 6020	09/29-10/06/11	MMRWQ1AT
		Dilution Factor: 1		MDL.....: 0.10		
Selenium	1.2	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWQ1AU
		Dilution Factor: 1		MDL.....: 0.16		

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CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXD5

TOTAL Metals

Lot-Sample #...: F1I280432-023 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Tin	2.3	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRWQ1AV
		Dilution Factor: 1		MDL.....: 0.10		
Strontium	25.3	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWQ1AW
		Dilution Factor: 1		MDL.....: 0.21		
Uranium	0.66	0.10	mg/kg	SW846 6020	09/29-10/06/11	MMRWQ1AX
		Dilution Factor: 1		MDL.....: 0.020		
Vanadium	49.5	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWQ1A0
		Dilution Factor: 1		MDL.....: 0.74		
Zinc	56.3	5.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWQ1AA
		Dilution Factor: 1		MDL.....: 1.3		
Prep Batch #...: 1278047						
Antimony	0.20 B	0.50	mg/kg	SW846 6020	10/06-10/11/11	MMRWQ1A1
		Dilution Factor: 1		MDL.....: 0.065		
Prep Batch #...: 1282014						
Mercury UJ	ND	0.033	mg/kg	SW846 7471A	10/11/11	MMRWQ1AD
		Dilution Factor: 1		MDL.....: 0.011		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

D Result was obtained from the analysis of a dilution.

EH
11/04/11

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXD7

TOTAL Metals

Lot-Sample #...: F1I280432-024 Matrix.....: SOLID
Date Sampled...: 09/12/11 Date Received..: 09/28/11
% Moisture.....: 0.92

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1272022						
Silver	0.050 B	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRWR1AE
		Dilution Factor: 1		MDL.....: 0.014		
Arsenic	2.2	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWR1AF
		Dilution Factor: 1		MDL.....: 0.20		
Barium	68.7	2.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWR1AG
		Dilution Factor: 1		MDL.....: 0.058		
Beryllium	0.30	0.10	mg/kg	SW846 6020	09/29-10/06/11	MMRWR1AH
		Dilution Factor: 1		MDL.....: 0.017		
Boron	ND D	50.5	mg/kg	SW846 6020	09/29-10/10/11	MMRWR1AJ
		Dilution Factor: 5		MDL.....: 16.9		
Cadmium	0.20	0.050	mg/kg	SW846 6020	09/29-10/06/11	MMRWR1AK
		Dilution Factor: 1		MDL.....: 0.016		
Cobalt	9.1	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRWR1AL
		Dilution Factor: 1		MDL.....: 0.043		
Chromium	9.0	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWR1AM
		Dilution Factor: 1		MDL.....: 0.45		
Copper	16.7	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWR1AN
		Dilution Factor: 1		MDL.....: 0.065		
Manganese	356	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWR1AP
		Dilution Factor: 1		MDL.....: 0.075		
Molybdenum	0.41 B	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWR1AQ
		Dilution Factor: 1		MDL.....: 0.078		
Nickel	12.5	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWR1AR
		Dilution Factor: 1		MDL.....: 0.083		
Lead	9.0	0.30	mg/kg	SW846 6020	09/29-10/06/11	MMRWR1AT
		Dilution Factor: 1		MDL.....: 0.10		
Selenium	1.3	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWR1AU
		Dilution Factor: 1		MDL.....: 0.16		

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CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXD7

TOTAL Metals

Lot-Sample #...: F1I280432-024 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Tin	0.53	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRWR1AV
		Dilution Factor: 1		MDL.....: 0.10		
Strontium	24.1	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWR1AW
		Dilution Factor: 1		MDL.....: 0.21		
Uranium	0.45	0.10	mg/kg	SW846 6020	09/29-10/06/11	MMRWR1AX
		Dilution Factor: 1		MDL.....: 0.020		
Vanadium	55.0	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWR1A0
		Dilution Factor: 1		MDL.....: 0.74		
Zinc	57.6	5.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWR1AA
		Dilution Factor: 1		MDL.....: 1.3		
Prep Batch #...: 1278047						
Antimony	0.17 B	0.50	mg/kg	SW846 6020	10/06-10/11/11	MMRWR1A1
		Dilution Factor: 1		MDL.....: 0.065		
Prep Batch #...: 1282014						
Mercury UJ	ND	0.033	mg/kg	SW846 7471A	10/11/11	MMRWR1AD
		Dilution Factor: 1		MDL.....: 0.011		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

D Result was obtained from the analysis of a dilution.

EH
11/04/11

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXD8

TOTAL Metals

Lot-Sample #...: F1I280432-025 Matrix.....: SOLID
Date Sampled...: 09/12/11 Date Received..: 09/28/11
% Moisture.....: 0.89

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1272022						
Silver	0.055 B	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRWV1AE
		Dilution Factor: 1		MDL.....: 0.014		
Arsenic	2.4	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWV1AF
		Dilution Factor: 1		MDL.....: 0.20		
Barium	68.1	2.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWV1AG
		Dilution Factor: 1		MDL.....: 0.058		
Beryllium	0.30	0.10	mg/kg	SW846 6020	09/29-10/06/11	MMRWV1AH
		Dilution Factor: 1		MDL.....: 0.017		
Boron	ND D	50.4	mg/kg	SW846 6020	09/29-10/10/11	MMRWV1AJ
		Dilution Factor: 5		MDL.....: 16.8		
Cadmium	0.15	0.050	mg/kg	SW846 6020	09/29-10/06/11	MMRWV1AK
		Dilution Factor: 1		MDL.....: 0.016		
Cobalt	8.4	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRWV1AL
		Dilution Factor: 1		MDL.....: 0.043		
Chromium	9.9	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWV1AM
		Dilution Factor: 1		MDL.....: 0.45		
Copper	16.7	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWV1AN
		Dilution Factor: 1		MDL.....: 0.065		
Manganese	330	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWV1AP
		Dilution Factor: 1		MDL.....: 0.075		
Molybdenum	0.34 B	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWV1AQ
		Dilution Factor: 1		MDL.....: 0.078		
Nickel	13.0	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWV1AR
		Dilution Factor: 1		MDL.....: 0.083		
Lead	8.2	0.30	mg/kg	SW846 6020	09/29-10/06/11	MMRWV1AT
		Dilution Factor: 1		MDL.....: 0.10		
Selenium	1.1	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWV1AU
		Dilution Factor: 1		MDL.....: 0.16		

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CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXD8

TOTAL Metals

Lot-Sample #...: F1I280432-025 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Tin	0.66	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRWV1AV
		Dilution Factor: 1		MDL.....: 0.10		
Strontium	22.0	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWV1AW
		Dilution Factor: 1		MDL.....: 0.21		
Uranium	0.42	0.10	mg/kg	SW846 6020	09/29-10/06/11	MMRWV1AX
		Dilution Factor: 1		MDL.....: 0.020		
Vanadium	49.6	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWV1A0
		Dilution Factor: 1		MDL.....: 0.74		
Zinc	50.5	5.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWV1AA
		Dilution Factor: 1		MDL.....: 1.3		
Prep Batch #...: 1278047						
Antimony	0.23 B	0.50	mg/kg	SW846 6020	10/06-10/11/11	MMRWV1A1
		Dilution Factor: 1		MDL.....: 0.065		
Prep Batch #...: 1282014						
Mercury UJ	ND	0.033	mg/kg	SW846 7471A	10/11/11	MMRWV1AD
		Dilution Factor: 1		MDL.....: 0.011		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

D Result was obtained from the analysis of a dilution.

EH
11/04/11

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXD9

TOTAL Metals

Lot-Sample #...: F1I280432-026 Matrix.....: SOLID
Date Sampled...: 09/12/11 Date Received..: 09/28/11
% Moisture.....: 0.96

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1272022						
Silver	0.055 B	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRWW1AE
		Dilution Factor: 1		MDL.....: 0.014		
Arsenic	2.6	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWW1AF
		Dilution Factor: 1		MDL.....: 0.20		
Barium	70.6	2.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWW1AG
		Dilution Factor: 1		MDL.....: 0.058		
Beryllium	0.34	0.10	mg/kg	SW846 6020	09/29-10/06/11	MMRWW1AH
		Dilution Factor: 1		MDL.....: 0.017		
Boron	ND D	50.5	mg/kg	SW846 6020	09/29-10/10/11	MMRWW1AJ
		Dilution Factor: 5		MDL.....: 16.9		
Cadmium	0.16	0.050	mg/kg	SW846 6020	09/29-10/06/11	MMRWW1AK
		Dilution Factor: 1		MDL.....: 0.016		
Cobalt	9.1	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRWW1AL
		Dilution Factor: 1		MDL.....: 0.043		
Chromium	9.4	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWW1AM
		Dilution Factor: 1		MDL.....: 0.45		
Copper	16.8	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWW1AN
		Dilution Factor: 1		MDL.....: 0.065		
Manganese	365	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWW1AP
		Dilution Factor: 1		MDL.....: 0.075		
Molybdenum	0.41 B	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWW1AQ
		Dilution Factor: 1		MDL.....: 0.078		
Nickel	13.0	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWW1AR
		Dilution Factor: 1		MDL.....: 0.083		
Lead	8.9	0.30	mg/kg	SW846 6020	09/29-10/06/11	MMRWW1AT
		Dilution Factor: 1		MDL.....: 0.10		
Selenium	1.3	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWW1AU
		Dilution Factor: 1		MDL.....: 0.16		

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CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXD9

TOTAL Metals

Lot-Sample #...: F1I280432-026 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Tin	0.51	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRWW1AV
		Dilution Factor: 1		MDL.....: 0.10		
Strontium	24.8	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWW1AW
		Dilution Factor: 1		MDL.....: 0.21		
Uranium	0.45	0.10	mg/kg	SW846 6020	09/29-10/06/11	MMRWW1AX
		Dilution Factor: 1		MDL.....: 0.020		
Vanadium	56.8	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWW1A0
		Dilution Factor: 1		MDL.....: 0.74		
Zinc	55.2	5.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWW1AA
		Dilution Factor: 1		MDL.....: 1.3		
Prep Batch #...: 1278047						
Antimony	0.22 B	0.50	mg/kg	SW846 6020	10/06-10/11/11	MMRWW1A1
		Dilution Factor: 1		MDL.....: 0.065		
Prep Batch #...: 1282014						
Mercury UJ	ND	0.033	mg/kg	SW846 7471A	10/11/11	MMRWW1AD
		Dilution Factor: 1		MDL.....: 0.011		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

D Result was obtained from the analysis of a dilution.

EH
11/04/11

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXF0

TOTAL Metals

Lot-Sample #...: F1I280432-027 Matrix.....: SOLID
Date Sampled...: 09/12/11 Date Received..: 09/28/11
% Moisture.....: 0.84

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1272022						
Silver	0.049 B	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRWX1AE
		Dilution Factor: 1		MDL.....: 0.014		
Arsenic	2.7	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWX1AF
		Dilution Factor: 1		MDL.....: 0.20		
Barium	65.8	2.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWX1AG
		Dilution Factor: 1		MDL.....: 0.057		
Beryllium	0.29	0.10	mg/kg	SW846 6020	09/29-10/06/11	MMRWX1AH
		Dilution Factor: 1		MDL.....: 0.017		
Boron	ND D	50.4	mg/kg	SW846 6020	09/29-10/10/11	MMRWX1AJ
		Dilution Factor: 5		MDL.....: 16.8		
Cadmium	0.19	0.050	mg/kg	SW846 6020	09/29-10/06/11	MMRWX1AK
		Dilution Factor: 1		MDL.....: 0.016		
Cobalt	7.6	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRWX1AL
		Dilution Factor: 1		MDL.....: 0.043		
Chromium	10.4	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWX1AM
		Dilution Factor: 1		MDL.....: 0.45		
Copper	17.7	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWX1AN
		Dilution Factor: 1		MDL.....: 0.065		
Manganese	309	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWX1AP
		Dilution Factor: 1		MDL.....: 0.075		
Molybdenum	0.57	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWX1AQ
		Dilution Factor: 1		MDL.....: 0.078		
Nickel	13.0	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWX1AR
		Dilution Factor: 1		MDL.....: 0.083		
Lead	13.0	0.30	mg/kg	SW846 6020	09/29-10/06/11	MMRWX1AT
		Dilution Factor: 1		MDL.....: 0.10		
Selenium	1.0	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWX1AU
		Dilution Factor: 1		MDL.....: 0.16		

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CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXF0

TOTAL Metals

Lot-Sample #...: F1I280432-027 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Tin	0.48	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRWX1AV
		Dilution Factor: 1		MDL.....: 0.10		
Strontium	22.8	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRWX1AW
		Dilution Factor: 1		MDL.....: 0.21		
Uranium	0.47	0.10	mg/kg	SW846 6020	09/29-10/06/11	MMRWX1AX
		Dilution Factor: 1		MDL.....: 0.020		
Vanadium	45.3	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWX1A0
		Dilution Factor: 1		MDL.....: 0.74		
Zinc	56.0	5.0	mg/kg	SW846 6020	09/29-10/06/11	MMRWX1AA
		Dilution Factor: 1		MDL.....: 1.3		
Prep Batch #...: 1278047						
Antimony	0.24 B	0.50	mg/kg	SW846 6020	10/06-10/11/11	MMRWX1A1
		Dilution Factor: 1		MDL.....: 0.065		
Prep Batch #...: 1282014						
Mercury UJ	ND	0.033	mg/kg	SW846 7471A	10/11/11	MMRWX1AD
		Dilution Factor: 1		MDL.....: 0.011		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

D Result was obtained from the analysis of a dilution.

EH
11/04/11

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXF1

TOTAL Metals

Lot-Sample #...: F1I280432-028 Matrix.....: SOLID
Date Sampled...: 09/13/11 Date Received..: 09/28/11
% Moisture.....: 0.89

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1272022						
Silver	0.052 B	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRW01AE
		Dilution Factor: 1		MDL.....: 0.014		
Arsenic	2.2	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRW01AF
		Dilution Factor: 1		MDL.....: 0.20		
Barium	70.0	2.0	mg/kg	SW846 6020	09/29-10/06/11	MMRW01AG
		Dilution Factor: 1		MDL.....: 0.058		
Beryllium	0.30	0.10	mg/kg	SW846 6020	09/29-10/06/11	MMRW01AH
		Dilution Factor: 1		MDL.....: 0.017		
Boron	ND D	50.4	mg/kg	SW846 6020	09/29-10/10/11	MMRW01AJ
		Dilution Factor: 5		MDL.....: 16.8		
Cadmium	0.18	0.050	mg/kg	SW846 6020	09/29-10/06/11	MMRW01AK
		Dilution Factor: 1		MDL.....: 0.016		
Cobalt	8.3	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRW01AL
		Dilution Factor: 1		MDL.....: 0.043		
Chromium	9.0	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRW01AM
		Dilution Factor: 1		MDL.....: 0.45		
Copper	16.7	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRW01AN
		Dilution Factor: 1		MDL.....: 0.065		
Manganese	327	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRW01AP
		Dilution Factor: 1		MDL.....: 0.075		
Molybdenum	0.50	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRW01AQ
		Dilution Factor: 1		MDL.....: 0.078		
Nickel	11.9	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRW01AR
		Dilution Factor: 1		MDL.....: 0.083		
Lead	11.7	0.30	mg/kg	SW846 6020	09/29-10/06/11	MMRW01AT
		Dilution Factor: 1		MDL.....: 0.10		
Selenium	1.4	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRW01AU
		Dilution Factor: 1		MDL.....: 0.16		

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CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXF1

TOTAL Metals

Lot-Sample #...: F1I280432-028 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Tin	0.51	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRW01AV
		Dilution Factor: 1		MDL.....: 0.10		
Strontium	26.1	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRW01AW
		Dilution Factor: 1		MDL.....: 0.21		
Uranium	0.44	0.10	mg/kg	SW846 6020	09/29-10/06/11	MMRW01AX
		Dilution Factor: 1		MDL.....: 0.020		
Vanadium	55.0	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRW01A0
		Dilution Factor: 1		MDL.....: 0.74		
Zinc	57.3	5.0	mg/kg	SW846 6020	09/29-10/06/11	MMRW01AA
		Dilution Factor: 1		MDL.....: 1.3		
Prep Batch #...: 1278047						
Antimony	0.27 B	0.50	mg/kg	SW846 6020	10/06-10/11/11	MMRW01A1
		Dilution Factor: 1		MDL.....: 0.065		
Prep Batch #...: 1282014						
Mercury	ND	0.033	mg/kg	SW846 7471A	10/11/11	MMRW01AD
		Dilution Factor: 1		MDL.....: 0.011		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

D Result was obtained from the analysis of a dilution.

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXF2

TOTAL Metals

Lot-Sample #...: F1I280432-029 Matrix.....: SOLID
Date Sampled...: 09/13/11 Date Received..: 09/28/11
% Moisture.....: 0.90

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1272022						
Silver	0.072 B	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRW21AE
		Dilution Factor: 1		MDL.....: 0.014		
Arsenic	2.1	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRW21AF
		Dilution Factor: 1		MDL.....: 0.20		
Barium	66.1	2.0	mg/kg	SW846 6020	09/29-10/06/11	MMRW21AG
		Dilution Factor: 1		MDL.....: 0.058		
Beryllium	0.29	0.10	mg/kg	SW846 6020	09/29-10/06/11	MMRW21AH
		Dilution Factor: 1		MDL.....: 0.017		
Boron	ND D	50.5	mg/kg	SW846 6020	09/29-10/10/11	MMRW21AJ
		Dilution Factor: 5		MDL.....: 16.9		
Cadmium	0.17	0.050	mg/kg	SW846 6020	09/29-10/06/11	MMRW21AK
		Dilution Factor: 1		MDL.....: 0.016		
Cobalt	9.4	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRW21AL
		Dilution Factor: 1		MDL.....: 0.043		
Chromium	9.0	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRW21AM
		Dilution Factor: 1		MDL.....: 0.45		
Copper	17.5	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRW21AN
		Dilution Factor: 1		MDL.....: 0.065		
Manganese	353	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRW21AP
		Dilution Factor: 1		MDL.....: 0.075		
Molybdenum	0.43 B	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRW21AQ
		Dilution Factor: 1		MDL.....: 0.078		
Nickel	11.6	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRW21AR
		Dilution Factor: 1		MDL.....: 0.083		
Lead	7.4	0.30	mg/kg	SW846 6020	09/29-10/06/11	MMRW21AT
		Dilution Factor: 1		MDL.....: 0.10		
Selenium	1.5	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRW21AU
		Dilution Factor: 1		MDL.....: 0.16		

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CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXF2

TOTAL Metals

Lot-Sample #...: F1I280432-029 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Tin	0.49	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRW21AV
		Dilution Factor: 1		MDL.....: 0.10		
Strontium	24.5	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRW21AW
		Dilution Factor: 1		MDL.....: 0.21		
Uranium	0.42	0.10	mg/kg	SW846 6020	09/29-10/06/11	MMRW21AX
		Dilution Factor: 1		MDL.....: 0.020		
Vanadium	59.2	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRW21A0
		Dilution Factor: 1		MDL.....: 0.74		
Zinc	53.8	5.0	mg/kg	SW846 6020	09/29-10/06/11	MMRW21AA
		Dilution Factor: 1		MDL.....: 1.3		
Prep Batch #...: 1278047						
Antimony	0.18 B	0.50	mg/kg	SW846 6020	10/06-10/11/11	MMRW21A1
		Dilution Factor: 1		MDL.....: 0.065		
Prep Batch #...: 1282014						
Mercury	ND	0.033	mg/kg	SW846 7471A	10/11/11	MMRW21AD
		Dilution Factor: 1		MDL.....: 0.011		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

D Result was obtained from the analysis of a dilution.

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXF3

TOTAL Metals

Lot-Sample #...: F1I280432-030 Matrix.....: SOLID
Date Sampled...: 09/13/11 Date Received..: 09/28/11
% Moisture.....: 0.71

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1272022						
Silver	0.039 B	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRW31AE
		Dilution Factor: 1		MDL.....: 0.014		
Arsenic	2.2	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRW31AF
		Dilution Factor: 1		MDL.....: 0.20		
Barium	62.3	2.0	mg/kg	SW846 6020	09/29-10/06/11	MMRW31AG
		Dilution Factor: 1		MDL.....: 0.057		
Beryllium	0.29	0.10	mg/kg	SW846 6020	09/29-10/06/11	MMRW31AH
		Dilution Factor: 1		MDL.....: 0.017		
Boron	ND D	50.4	mg/kg	SW846 6020	09/29-10/10/11	MMRW31AJ
		Dilution Factor: 5		MDL.....: 16.8		
Cadmium	0.21	0.050	mg/kg	SW846 6020	09/29-10/06/11	MMRW31AK
		Dilution Factor: 1		MDL.....: 0.016		
Cobalt	7.3	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRW31AL
		Dilution Factor: 1		MDL.....: 0.043		
Chromium	9.8	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRW31AM
		Dilution Factor: 1		MDL.....: 0.45		
Copper	14.7	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRW31AN
		Dilution Factor: 1		MDL.....: 0.064		
Manganese	305	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRW31AP
		Dilution Factor: 1		MDL.....: 0.075		
Molybdenum	0.35 B	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRW31AQ
		Dilution Factor: 1		MDL.....: 0.078		
Nickel	12.9	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRW31AR
		Dilution Factor: 1		MDL.....: 0.083		
Lead	8.6	0.30	mg/kg	SW846 6020	09/29-10/06/11	MMRW31AT
		Dilution Factor: 1		MDL.....: 0.10		
Selenium	0.83	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRW31AU
		Dilution Factor: 1		MDL.....: 0.16		

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CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXF3

TOTAL Metals

Lot-Sample #...: F1I280432-030 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Tin	0.43	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRW31AV
		Dilution Factor: 1		MDL.....: 0.10		
Strontium	21.3	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMRW31AW
		Dilution Factor: 1		MDL.....: 0.21		
Uranium	0.39	0.10	mg/kg	SW846 6020	09/29-10/06/11	MMRW31AX
		Dilution Factor: 1		MDL.....: 0.020		
Vanadium	46.3	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRW31A0
		Dilution Factor: 1		MDL.....: 0.74		
Zinc	52.9	5.0	mg/kg	SW846 6020	09/29-10/06/11	MMRW31AA
		Dilution Factor: 1		MDL.....: 1.3		
Prep Batch #...: 1278047						
Antimony	0.15 B	0.50	mg/kg	SW846 6020	10/06-10/11/11	MMRW31A1
		Dilution Factor: 1		MDL.....: 0.065		
Prep Batch #...: 1282014						
Mercury	ND	0.033	mg/kg	SW846 7471A	10/11/11	MMRW31AD
		Dilution Factor: 1		MDL.....: 0.011		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

D Result was obtained from the analysis of a dilution.

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXF4

TOTAL Metals

Lot-Sample #...: F1I280432-031 Matrix.....: SOLID
Date Sampled...: 09/13/11 Date Received..: 09/28/11
% Moisture.....: 1.0

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1272022						
Silver	0.11 B	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRW41AE
		Dilution Factor: 1		MDL.....: 0.014		
Arsenic	3.2	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRW41AF
		Dilution Factor: 1		MDL.....: 0.21		
Barium	75.5	2.0	mg/kg	SW846 6020	09/29-10/06/11	MMRW41AG
		Dilution Factor: 1		MDL.....: 0.058		
Beryllium	0.38	0.10	mg/kg	SW846 6020	09/29-10/06/11	MMRW41AH
		Dilution Factor: 1		MDL.....: 0.017		
Boron	ND D	50.5	mg/kg	SW846 6020	09/29-10/10/11	MMRW41AJ
		Dilution Factor: 5		MDL.....: 16.9		
Cadmium	0.16	0.051	mg/kg	SW846 6020	09/29-10/06/11	MMRW41AK
		Dilution Factor: 1		MDL.....: 0.016		
Cobalt	9.0	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRW41AL
		Dilution Factor: 1		MDL.....: 0.043		
Chromium	13.8	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRW41AM
		Dilution Factor: 1		MDL.....: 0.45		
Copper	18.5	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRW41AN
		Dilution Factor: 1		MDL.....: 0.065		
Manganese	354	0.51	mg/kg	SW846 6020	09/29-10/06/11	MMRW41AP
		Dilution Factor: 1		MDL.....: 0.075		
Molybdenum	0.39 B	0.51	mg/kg	SW846 6020	09/29-10/06/11	MMRW41AQ
		Dilution Factor: 1		MDL.....: 0.078		
Nickel	14.7	0.51	mg/kg	SW846 6020	09/29-10/06/11	MMRW41AR
		Dilution Factor: 1		MDL.....: 0.083		
Lead	9.8	0.30	mg/kg	SW846 6020	09/29-10/06/11	MMRW41AT
		Dilution Factor: 1		MDL.....: 0.10		
Selenium	1.1	0.51	mg/kg	SW846 6020	09/29-10/06/11	MMRW41AU
		Dilution Factor: 1		MDL.....: 0.16		

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CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXF4

TOTAL Metals

Lot-Sample #...: F1I280432-031 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Tin	0.52	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMRW41AV
		Dilution Factor: 1		MDL.....: 0.10		
Strontium	33.8	0.51	mg/kg	SW846 6020	09/29-10/06/11	MMRW41AW
		Dilution Factor: 1		MDL.....: 0.21		
Uranium	0.53	0.10	mg/kg	SW846 6020	09/29-10/06/11	MMRW41AX
		Dilution Factor: 1		MDL.....: 0.020		
Vanadium	51.4	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMRW41A0
		Dilution Factor: 1		MDL.....: 0.74		
Zinc	55.6	5.1	mg/kg	SW846 6020	09/29-10/06/11	MMRW41AA
		Dilution Factor: 1		MDL.....: 1.3		
Prep Batch #...: 1278048						
Antimony	0.21 B	0.50	mg/kg	SW846 6020	10/06-10/11/11	MMRW41A1
		Dilution Factor: 1		MDL.....: 0.065		
Prep Batch #...: 1282014						
Mercury	ND	0.033	mg/kg	SW846 7471A	10/11/11	MMRW41AD
		Dilution Factor: 1		MDL.....: 0.011		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

D Result was obtained from the analysis of a dilution.

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXF5

TOTAL Metals

Lot-Sample #...: F1I280432-032 Matrix.....: SOLID
Date Sampled...: 09/13/11 Date Received..: 09/28/11
% Moisture.....: 1.0

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1272023						
Silver	0.054 B	0.20	mg/kg	SW846 6020	09/29-10/07/11	MMRW61AE
		Dilution Factor: 1		MDL.....: 0.014		
Arsenic	2.3	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRW61AF
		Dilution Factor: 1		MDL.....: 0.21		
Barium	74.5	2.0	mg/kg	SW846 6020	09/29-10/07/11	MMRW61AG
		Dilution Factor: 1		MDL.....: 0.058		
Beryllium	0.38	0.10	mg/kg	SW846 6020	09/29-10/07/11	MMRW61AH
		Dilution Factor: 1		MDL.....: 0.017		
Boron	ND D	50.5	mg/kg	SW846 6020	09/29-10/10/11	MMRW61AJ
		Dilution Factor: 5		MDL.....: 16.9		
Cadmium	0.14	0.051	mg/kg	SW846 6020	09/29-10/07/11	MMRW61AK
		Dilution Factor: 1		MDL.....: 0.016		
Cobalt	11.0	0.20	mg/kg	SW846 6020	09/29-10/07/11	MMRW61AL
		Dilution Factor: 1		MDL.....: 0.043		
Chromium	9.0	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRW61AM
		Dilution Factor: 1		MDL.....: 0.45		
Copper	22.3 D	5.1	mg/kg	SW846 6020	09/29-10/10/11	MMRW61AN
		Dilution Factor: 5		MDL.....: 0.32		
Manganese	432 N	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRW61AP
		Dilution Factor: 1		MDL.....: 0.075		
Molybdenum	0.46 B	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRW61AQ
		Dilution Factor: 1		MDL.....: 0.078		
Nickel	12.5	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRW61AR
		Dilution Factor: 1		MDL.....: 0.083		
Lead	6.6	0.30	mg/kg	SW846 6020	09/29-10/07/11	MMRW61AT
		Dilution Factor: 1		MDL.....: 0.10		
Selenium	1.6	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRW61AU
		Dilution Factor: 1		MDL.....: 0.16		

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OCTOBER 14, 2011

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXF5

TOTAL Metals

Lot-Sample #...: F1I280432-032 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Tin	0.73	**0.20**	**mg/kg**	**SW846 6020**	**09/29-10/07/11**	**MMRW61AV**
		Dilution Factor: 1		MDL.....: 0.10		
Strontium	**28.5**	**0.51**	**mg/kg**	**SW846 6020**	**09/29-10/07/11**	**MMRW61AW**
		Dilution Factor: 1		MDL.....: 0.21		
Uranium	**0.48**	**0.10**	**mg/kg**	**SW846 6020**	**09/29-10/07/11**	**MMRW61AX**
		Dilution Factor: 1		MDL.....: 0.020		
Vanadium	**60.3**	**1.0**	**mg/kg**	**SW846 6020**	**09/29-10/07/11**	**MMRW61A0**
		Dilution Factor: 1		MDL.....: 0.74		
Zinc	**57.3**	**5.1**	**mg/kg**	**SW846 6020**	**09/29-10/07/11**	**MMRW61AA**
		Dilution Factor: 1		MDL.....: 1.3		
Prep Batch #...: 1278048						
Antimony	**0.16 B**	**0.50**	**mg/kg**	**SW846 6020**	**10/06-10/11/11**	**MMRW61DC**
		Dilution Factor: 1		MDL.....: 0.065		
Prep Batch #...: 1282014						
Mercury	ND	0.033	mg/kg	SW846 7471A	10/11/11	MMRW61AD
		Dilution Factor: 1		MDL.....: 0.011		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

D Result was obtained from the analysis of a dilution.

N Spiked analyte recovery is outside stated control limits.

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXF6

TOTAL Metals

Lot-Sample #...: F1I280432-033 Matrix.....: SOLID
Date Sampled...: 09/13/11 Date Received..: 09/28/11
% Moisture.....: 2.8

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1272023						
Silver	0.055 B	0.21	mg/kg	SW846 6020	09/29-10/07/11	MMRW91AE
		Dilution Factor: 1		MDL.....: 0.014		
Arsenic	2.7	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRW91AF
		Dilution Factor: 1		MDL.....: 0.21		
Barium	69.8	2.1	mg/kg	SW846 6020	09/29-10/07/11	MMRW91AG
		Dilution Factor: 1		MDL.....: 0.059		
Beryllium	0.39	0.10	mg/kg	SW846 6020	09/29-10/07/11	MMRW91AH
		Dilution Factor: 1		MDL.....: 0.017		
Boron	ND D	51.4	mg/kg	SW846 6020	09/29-10/10/11	MMRW91AJ
		Dilution Factor: 5		MDL.....: 17.2		
Cadmium	0.12	0.051	mg/kg	SW846 6020	09/29-10/07/11	MMRW91AK
		Dilution Factor: 1		MDL.....: 0.016		
Cobalt	9.8	0.21	mg/kg	SW846 6020	09/29-10/07/11	MMRW91AL
		Dilution Factor: 1		MDL.....: 0.044		
Chromium	10.9	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRW91AM
		Dilution Factor: 1		MDL.....: 0.46		
Copper	21.7 D	5.1	mg/kg	SW846 6020	09/29-10/10/11	MMRW91AN
		Dilution Factor: 5		MDL.....: 0.33		
Manganese	374 N	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRW91AP
		Dilution Factor: 1		MDL.....: 0.076		
Molybdenum	0.44 B	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRW91AQ
		Dilution Factor: 1		MDL.....: 0.079		
Nickel	13.2	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRW91AR
		Dilution Factor: 1		MDL.....: 0.085		
Lead	6.6	0.31	mg/kg	SW846 6020	09/29-10/07/11	MMRW91AT
		Dilution Factor: 1		MDL.....: 0.10		
Selenium	1.2	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRW91AU
		Dilution Factor: 1		MDL.....: 0.16		

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CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXF6

TOTAL Metals

Lot-Sample #...: F1I280432-033 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Tin	0.74	0.21	mg/kg	SW846 6020	09/29-10/07/11	MMRW91AV
		Dilution Factor: 1		MDL.....: 0.10		
Strontium	31.1	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRW91AW
		Dilution Factor: 1		MDL.....: 0.22		
Uranium	0.53	0.10	mg/kg	SW846 6020	09/29-10/07/11	MMRW91AX
		Dilution Factor: 1		MDL.....: 0.020		
Vanadium	58.9	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRW91A0
		Dilution Factor: 1		MDL.....: 0.76		
Zinc	54.2	5.1	mg/kg	SW846 6020	09/29-10/07/11	MMRW91AA
		Dilution Factor: 1		MDL.....: 1.4		
Prep Batch #...: 1278048						
Antimony	0.14 B	0.50	mg/kg	SW846 6020	10/06-10/11/11	MMRW91A1
		Dilution Factor: 1		MDL.....: 0.065		
Prep Batch #...: 1282014						
Mercury	ND	0.034	mg/kg	SW846 7471A	10/11/11	MMRW91AD
		Dilution Factor: 1		MDL.....: 0.012		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

D Result was obtained from the analysis of a dilution.

N Spiked analyte recovery is outside stated control limits.

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXF8

TOTAL Metals

Lot-Sample #...: F1I280432-034 Matrix.....: SOLID
Date Sampled...: 09/13/11 Date Received..: 09/28/11
% Moisture.....: 2.9

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1272023						
Silver	0.047 B	0.21	mg/kg	SW846 6020	09/29-10/07/11	MMRXA1AE
		Dilution Factor: 1		MDL.....: 0.014		
Arsenic	2.6	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXA1AF
		Dilution Factor: 1		MDL.....: 0.21		
Barium	67.7	2.1	mg/kg	SW846 6020	09/29-10/07/11	MMRXA1AG
		Dilution Factor: 1		MDL.....: 0.059		
Beryllium	0.37	0.10	mg/kg	SW846 6020	09/29-10/07/11	MMRXA1AH
		Dilution Factor: 1		MDL.....: 0.018		
Boron	ND D	51.5	mg/kg	SW846 6020	09/29-10/10/11	MMRXA1AJ
		Dilution Factor: 5		MDL.....: 17.2		
Cadmium	0.12	0.051	mg/kg	SW846 6020	09/29-10/07/11	MMRXA1AK
		Dilution Factor: 1		MDL.....: 0.016		
Cobalt	9.0	0.21	mg/kg	SW846 6020	09/29-10/07/11	MMRXA1AL
		Dilution Factor: 1		MDL.....: 0.044		
Chromium	10.7	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXA1AM
		Dilution Factor: 1		MDL.....: 0.46		
Copper	21.1 D	5.1	mg/kg	SW846 6020	09/29-10/10/11	MMRXA1AN
		Dilution Factor: 5		MDL.....: 0.33		
Manganese	346 N	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXA1AP
		Dilution Factor: 1		MDL.....: 0.076		
Molybdenum	0.40 B	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXA1AQ
		Dilution Factor: 1		MDL.....: 0.079		
Nickel	12.0	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXA1AR
		Dilution Factor: 1		MDL.....: 0.085		
Lead	6.5	0.31	mg/kg	SW846 6020	09/29-10/07/11	MMRXA1AT
		Dilution Factor: 1		MDL.....: 0.10		
Selenium	1.1	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXA1AU
		Dilution Factor: 1		MDL.....: 0.16		

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CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXF8

TOTAL Metals

Lot-Sample #...: F1I280432-034 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Tin J	0.63	0.21	mg/kg	SW846 6020	09/29-10/07/11	MMRXA1AV
		Dilution Factor: 1		MDL.....: 0.10		
Strontium	31.1	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXA1AW
		Dilution Factor: 1		MDL.....: 0.22		
Uranium	0.51	0.10	mg/kg	SW846 6020	09/29-10/07/11	MMRXA1AX
		Dilution Factor: 1		MDL.....: 0.020		
Vanadium	52.2	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXA1A0
		Dilution Factor: 1		MDL.....: 0.76		
Zinc	51.7	5.1	mg/kg	SW846 6020	09/29-10/07/11	MMRXA1AA
		Dilution Factor: 1		MDL.....: 1.4		
Prep Batch #...: 1278048						
Antimony	0.14 B	0.50	mg/kg	SW846 6020	10/06-10/11/11	MMRXA1A1
		Dilution Factor: 1		MDL.....: 0.065		
Prep Batch #...: 1282014						
Mercury	0.029 B	0.034	mg/kg	SW846 7471A	10/11/11	MMRXA1AD
		Dilution Factor: 1		MDL.....: 0.012		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

D Result was obtained from the analysis of a dilution.

N Spiked analyte recovery is outside stated control limits.

EH
11/04/11

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXF9

TOTAL Metals

Lot-Sample #...: F1I280432-035 Matrix.....: SOLID
Date Sampled...: 09/13/11 Date Received..: 09/28/11
% Moisture.....: 0.92

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1272023						
Silver	0.057 B	0.20	mg/kg	SW846 6020	09/29-10/07/11	MMRXC1AE
		Dilution Factor: 1		MDL.....: 0.014		
Arsenic	2.9	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXC1AF
		Dilution Factor: 1		MDL.....: 0.20		
Barium	70.4	2.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXC1AG
		Dilution Factor: 1		MDL.....: 0.058		
Beryllium	0.40	0.10	mg/kg	SW846 6020	09/29-10/07/11	MMRXC1AH
		Dilution Factor: 1		MDL.....: 0.017		
Boron	ND D	50.5	mg/kg	SW846 6020	09/29-10/10/11	MMRXC1AJ
		Dilution Factor: 5		MDL.....: 16.9		
Cadmium	0.15	0.050	mg/kg	SW846 6020	09/29-10/07/11	MMRXC1AK
		Dilution Factor: 1		MDL.....: 0.016		
Cobalt	10.7	0.20	mg/kg	SW846 6020	09/29-10/07/11	MMRXC1AL
		Dilution Factor: 1		MDL.....: 0.043		
Chromium	9.1	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXC1AM
		Dilution Factor: 1		MDL.....: 0.45		
Copper	23.0 D	5.0	mg/kg	SW846 6020	09/29-10/10/11	MMRXC1AN
		Dilution Factor: 5		MDL.....: 0.32		
Manganese	404 N	0.50	mg/kg	SW846 6020	09/29-10/07/11	MMRXC1AP
		Dilution Factor: 1		MDL.....: 0.075		
Molybdenum	0.44 B	0.50	mg/kg	SW846 6020	09/29-10/07/11	MMRXC1AQ
		Dilution Factor: 1		MDL.....: 0.078		
Nickel	13.4	0.50	mg/kg	SW846 6020	09/29-10/07/11	MMRXC1AR
		Dilution Factor: 1		MDL.....: 0.083		
Lead	8.5	0.30	mg/kg	SW846 6020	09/29-10/07/11	MMRXC1AT
		Dilution Factor: 1		MDL.....: 0.10		
Selenium	1.3	0.50	mg/kg	SW846 6020	09/29-10/07/11	MMRXC1AU
		Dilution Factor: 1		MDL.....: 0.16		

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CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXF9

TOTAL Metals

Lot-Sample #...: F1I280432-035 Matrix.....: SOLID

PARAMETER		RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Tin	J	0.69	0.20	mg/kg	SW846 6020	09/29-10/07/11	MMRXC1AV
			Dilution Factor: 1		MDL.....: 0.10		
Strontium		26.6	0.50	mg/kg	SW846 6020	09/29-10/07/11	MMRXC1AW
			Dilution Factor: 1		MDL.....: 0.21		
Uranium		0.48	0.10	mg/kg	SW846 6020	09/29-10/07/11	MMRXC1AX
			Dilution Factor: 1		MDL.....: 0.020		
Vanadium		57.5	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXC1A0
			Dilution Factor: 1		MDL.....: 0.74		
Zinc		58.6	5.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXC1AA
			Dilution Factor: 1		MDL.....: 1.3		
Prep Batch #...: 1278048							
Antimony		0.14 B	0.50	mg/kg	SW846 6020	10/06-10/11/11	MMRXC1A1
			Dilution Factor: 1		MDL.....: 0.065		
Prep Batch #...: 1282014							
Mercury		ND	0.033	mg/kg	SW846 7471A	10/11/11	MMRXC1AD
			Dilution Factor: 1		MDL.....: 0.011		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

D Result was obtained from the analysis of a dilution.

N Spiked analyte recovery is outside stated control limits.

EH
11/04/11

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXH0

TOTAL Metals

Lot-Sample #...: F1I280432-036 Matrix.....: SOLID
Date Sampled...: 09/13/11 Date Received..: 09/28/11
% Moisture.....: 1.0

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1272023						
Silver	0.055 B	0.20	mg/kg	SW846 6020	09/29-10/07/11	MMRXD1AE
		Dilution Factor: 1		MDL.....: 0.014		
Arsenic	3.0	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXD1AF
		Dilution Factor: 1		MDL.....: 0.21		
Barium	72.7	2.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXD1AG
		Dilution Factor: 1		MDL.....: 0.058		
Beryllium	0.40	0.10	mg/kg	SW846 6020	09/29-10/07/11	MMRXD1AH
		Dilution Factor: 1		MDL.....: 0.017		
Boron	ND D	50.5	mg/kg	SW846 6020	09/29-10/10/11	MMRXD1AJ
		Dilution Factor: 5		MDL.....: 16.9		
Cadmium	0.14	0.051	mg/kg	SW846 6020	09/29-10/07/11	MMRXD1AK
		Dilution Factor: 1		MDL.....: 0.016		
Cobalt	10.3	0.20	mg/kg	SW846 6020	09/29-10/07/11	MMRXD1AL
		Dilution Factor: 1		MDL.....: 0.043		
Chromium	10.7	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXD1AM
		Dilution Factor: 1		MDL.....: 0.45		
Copper	23.1 D	5.1	mg/kg	SW846 6020	09/29-10/10/11	MMRXD1AN
		Dilution Factor: 5		MDL.....: 0.32		
Manganese	395 N	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXD1AP
		Dilution Factor: 1		MDL.....: 0.075		
Molybdenum	0.40 B	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXD1AQ
		Dilution Factor: 1		MDL.....: 0.078		
Nickel	13.3	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXD1AR
		Dilution Factor: 1		MDL.....: 0.083		
Lead	7.1	0.30	mg/kg	SW846 6020	09/29-10/07/11	MMRXD1AT
		Dilution Factor: 1		MDL.....: 0.10		
Selenium	1.2	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXD1AU
		Dilution Factor: 1		MDL.....: 0.16		

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CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXH0

TOTAL Metals

Lot-Sample #...: F1I280432-036 Matrix.....: SOLID

PARAMETER		RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Tin	J	0.64	0.20	mg/kg	SW846 6020	09/29-10/07/11	MMRXD1AV
			Dilution Factor: 1		MDL.....: 0.10		
Strontium		28.0	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXD1AW
			Dilution Factor: 1		MDL.....: 0.21		
Uranium		0.49	0.10	mg/kg	SW846 6020	09/29-10/07/11	MMRXD1AX
			Dilution Factor: 1		MDL.....: 0.020		
Vanadium		55.0	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXD1A0
			Dilution Factor: 1		MDL.....: 0.74		
Zinc		55.3	5.1	mg/kg	SW846 6020	09/29-10/07/11	MMRXD1AA
			Dilution Factor: 1		MDL.....: 1.3		
Prep Batch #...: 1278048							
Antimony		0.16 B	0.50	mg/kg	SW846 6020	10/06-10/11/11	MMRXD1A1
			Dilution Factor: 1		MDL.....: 0.065		
Prep Batch #...: 1282014							
Mercury		0.013 B	0.033	mg/kg	SW846 7471A	10/11/11	MMRXD1AD
			Dilution Factor: 1		MDL.....: 0.011		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

D Result was obtained from the analysis of a dilution.

N Spiked analyte recovery is outside stated control limits.

EH
11/04/11

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXH1

TOTAL Metals

Lot-Sample #...: F1I280432-037 Matrix.....: SOLID
Date Sampled...: 09/13/11 Date Received..: 09/28/11
% Moisture.....: 1.1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1272023						
Silver	0.057 B	0.20	mg/kg	SW846 6020	09/29-10/07/11	MMRXE1AE
		Dilution Factor: 1		MDL.....: 0.014		
Arsenic	3.5	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXE1AF
		Dilution Factor: 1		MDL.....: 0.21		
Barium	72.9	2.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXE1AG
		Dilution Factor: 1		MDL.....: 0.058		
Beryllium	0.40	0.10	mg/kg	SW846 6020	09/29-10/07/11	MMRXE1AH
		Dilution Factor: 1		MDL.....: 0.017		
Boron	ND D	50.6	mg/kg	SW846 6020	09/29-10/10/11	MMRXE1AJ
		Dilution Factor: 5		MDL.....: 16.9		
Cadmium	0.16	0.051	mg/kg	SW846 6020	09/29-10/07/11	MMRXE1AK
		Dilution Factor: 1		MDL.....: 0.016		
Cobalt	9.5	0.20	mg/kg	SW846 6020	09/29-10/07/11	MMRXE1AL
		Dilution Factor: 1		MDL.....: 0.043		
Chromium	14.9	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXE1AM
		Dilution Factor: 1		MDL.....: 0.46		
Copper	23.1 D	5.1	mg/kg	SW846 6020	09/29-10/10/11	MMRXE1AN
		Dilution Factor: 5		MDL.....: 0.32		
Manganese	381 N	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXE1AP
		Dilution Factor: 1		MDL.....: 0.075		
Molybdenum	0.36 B	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXE1AQ
		Dilution Factor: 1		MDL.....: 0.078		
Nickel	15.1	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXE1AR
		Dilution Factor: 1		MDL.....: 0.083		
Lead	9.4	0.30	mg/kg	SW846 6020	09/29-10/07/11	MMRXE1AT
		Dilution Factor: 1		MDL.....: 0.10		
Selenium	1.2	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXE1AU
		Dilution Factor: 1		MDL.....: 0.16		

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CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXH1

TOTAL Metals

Lot-Sample #...: F1I280432-037 Matrix.....: SOLID

PARAMETER		RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Tin	J	0.66	0.20	mg/kg	SW846 6020	09/29-10/07/11	MMRXE1AV
			Dilution Factor: 1		MDL.....: 0.10		
Strontium		31.5	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXE1AW
			Dilution Factor: 1		MDL.....: 0.21		
Uranium		0.57	0.10	mg/kg	SW846 6020	09/29-10/07/11	MMRXE1AX
			Dilution Factor: 1		MDL.....: 0.020		
Vanadium		49.5	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXE1A0
			Dilution Factor: 1		MDL.....: 0.74		
Zinc		62.1	5.1	mg/kg	SW846 6020	09/29-10/07/11	MMRXE1AA
			Dilution Factor: 1		MDL.....: 1.3		
Prep Batch #...: 1278048							
Antimony		0.18 B	0.50	mg/kg	SW846 6020	10/06-10/11/11	MMRXE1A1
			Dilution Factor: 1		MDL.....: 0.065		
Prep Batch #...: 1282014							
Mercury		ND	0.033	mg/kg	SW846 7471A	10/11/11	MMRXE1AD
			Dilution Factor: 1		MDL.....: 0.011		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

D Result was obtained from the analysis of a dilution.

N Spiked analyte recovery is outside stated control limits.

EH
11/04/11

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXH2

TOTAL Metals

Lot-Sample #...: F1I280432-038 Matrix.....: SOLID
Date Sampled...: 09/14/11 Date Received..: 09/28/11
% Moisture.....: 1.3

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1272023						
Silver	0.057 B	0.20	mg/kg	SW846 6020	09/29-10/07/11	MMRXF1AE
		Dilution Factor: 1		MDL.....: 0.014		
Arsenic	6.2	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXF1AF
		Dilution Factor: 1		MDL.....: 0.21		
Barium	66.0	2.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXF1AG
		Dilution Factor: 1		MDL.....: 0.058		
Beryllium	0.35	0.10	mg/kg	SW846 6020	09/29-10/07/11	MMRXF1AH
		Dilution Factor: 1		MDL.....: 0.017		
Boron	ND D	50.6	mg/kg	SW846 6020	09/29-10/10/11	MMRXF1AJ
		Dilution Factor: 5		MDL.....: 16.9		
Cadmium	0.15	0.051	mg/kg	SW846 6020	09/29-10/07/11	MMRXF1AK
		Dilution Factor: 1		MDL.....: 0.016		
Cobalt	10.7	0.20	mg/kg	SW846 6020	09/29-10/07/11	MMRXF1AL
		Dilution Factor: 1		MDL.....: 0.044		
Chromium	11.1	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXF1AM
		Dilution Factor: 1		MDL.....: 0.46		
Copper	22.5 D	5.1	mg/kg	SW846 6020	09/29-10/10/11	MMRXF1AN
		Dilution Factor: 5		MDL.....: 0.32		
Manganese	405 N	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXF1AP
		Dilution Factor: 1		MDL.....: 0.075		
Molybdenum	1.2	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXF1AQ
		Dilution Factor: 1		MDL.....: 0.078		
Nickel	13.6	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXF1AR
		Dilution Factor: 1		MDL.....: 0.083		
Lead	8.4	0.30	mg/kg	SW846 6020	09/29-10/07/11	MMRXF1AT
		Dilution Factor: 1		MDL.....: 0.10		
Selenium	1.4	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXF1AU
		Dilution Factor: 1		MDL.....: 0.16		

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CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXH2

TOTAL Metals

Lot-Sample #...: F1I280432-038 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Tin	0.70	0.20	mg/kg	SW846 6020	09/29-10/07/11	MMRXF1AV
		Dilution Factor: 1		MDL.....: 0.10		
Strontium	26.7	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXF1AW
		Dilution Factor: 1		MDL.....: 0.21		
Uranium	1.0	0.10	mg/kg	SW846 6020	09/29-10/07/11	MMRXF1AX
		Dilution Factor: 1		MDL.....: 0.020		
Vanadium	62.9	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXF1A0
		Dilution Factor: 1		MDL.....: 0.74		
Zinc	62.6	5.1	mg/kg	SW846 6020	09/29-10/07/11	MMRXF1AA
		Dilution Factor: 1		MDL.....: 1.3		
Prep Batch #...: 1278048						
Antimony	0.13 B	0.50	mg/kg	SW846 6020	10/06-10/11/11	MMRXF1A1
		Dilution Factor: 1		MDL.....: 0.065		
Prep Batch #...: 1282014						
Mercury	0.042	0.033	mg/kg	SW846 7471A	10/11/11	MMRXF1AD
		Dilution Factor: 1		MDL.....: 0.011		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

D Result was obtained from the analysis of a dilution.

N Spiked analyte recovery is outside stated control limits.

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXH3

TOTAL Metals

Lot-Sample #...: F1I280432-039 Matrix.....: SOLID
Date Sampled...: 09/14/11 Date Received..: 09/28/11
% Moisture.....: 1.0

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1272023						
Silver	0.056 B	0.20	mg/kg	SW846 6020	09/29-10/07/11	MMRXG1AE
		Dilution Factor: 1		MDL.....: 0.014		
Arsenic	3.1	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXG1AF
		Dilution Factor: 1		MDL.....: 0.21		
Barium	67.0	2.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXG1AG
		Dilution Factor: 1		MDL.....: 0.058		
Beryllium	0.37	0.10	mg/kg	SW846 6020	09/29-10/07/11	MMRXG1AH
		Dilution Factor: 1		MDL.....: 0.017		
Boron	ND D	50.5	mg/kg	SW846 6020	09/29-10/10/11	MMRXG1AJ
		Dilution Factor: 5		MDL.....: 16.9		
Cadmium	0.15	0.051	mg/kg	SW846 6020	09/29-10/07/11	MMRXG1AK
		Dilution Factor: 1		MDL.....: 0.016		
Cobalt	10.3	0.20	mg/kg	SW846 6020	09/29-10/07/11	MMRXG1AL
		Dilution Factor: 1		MDL.....: 0.043		
Chromium	9.8	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXG1AM
		Dilution Factor: 1		MDL.....: 0.45		
Copper	22.5 D	5.1	mg/kg	SW846 6020	09/29-10/10/11	MMRXG1AN
		Dilution Factor: 5		MDL.....: 0.32		
Manganese	396 N	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXG1AP
		Dilution Factor: 1		MDL.....: 0.075		
Molybdenum	0.44 B	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXG1AQ
		Dilution Factor: 1		MDL.....: 0.078		
Nickel	14.6	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXG1AR
		Dilution Factor: 1		MDL.....: 0.083		
Lead	8.8	0.30	mg/kg	SW846 6020	09/29-10/07/11	MMRXG1AT
		Dilution Factor: 1		MDL.....: 0.10		
Selenium	1.3	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXG1AU
		Dilution Factor: 1		MDL.....: 0.16		

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CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXH3

TOTAL Metals

Lot-Sample #...: F1I280432-039 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Tin J	0.68	0.20	mg/kg	SW846 6020	09/29-10/07/11	MMRXG1AV
		Dilution Factor: 1		MDL.....: 0.10		
Strontium	26.3	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXG1AW
		Dilution Factor: 1		MDL.....: 0.21		
Uranium	0.47	0.10	mg/kg	SW846 6020	09/29-10/07/11	MMRXG1AX
		Dilution Factor: 1		MDL.....: 0.020		
Vanadium	56.8	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXG1A0
		Dilution Factor: 1		MDL.....: 0.74		
Zinc	57.6	5.1	mg/kg	SW846 6020	09/29-10/07/11	MMRXG1AA
		Dilution Factor: 1		MDL.....: 1.3		
Prep Batch #...: 1278048						
Antimony	0.13 B	0.50	mg/kg	SW846 6020	10/06-10/11/11	MMRXG1A1
		Dilution Factor: 1		MDL.....: 0.065		
Prep Batch #...: 1282014						
Mercury	ND	0.033	mg/kg	SW846 7471A	10/11/11	MMRXG1AD
		Dilution Factor: 1		MDL.....: 0.011		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

D Result was obtained from the analysis of a dilution.

N Spiked analyte recovery is outside stated control limits.

EH
11/04/11

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXH4

TOTAL Metals

Lot-Sample #...: F1I280432-040 Matrix.....: SOLID
Date Sampled...: 09/14/11 Date Received..: 09/28/11
% Moisture.....: 1.6

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1272023						
Silver	0.050 B	0.20	mg/kg	SW846 6020	09/29-10/07/11	MMRXH1AE
		Dilution Factor: 1		MDL.....: 0.014		
Arsenic	2.9	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXH1AF
		Dilution Factor: 1		MDL.....: 0.21		
Barium	62.7	2.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXH1AG
		Dilution Factor: 1		MDL.....: 0.058		
Beryllium	0.33	0.10	mg/kg	SW846 6020	09/29-10/07/11	MMRXH1AH
		Dilution Factor: 1		MDL.....: 0.017		
Boron	ND D	50.8	mg/kg	SW846 6020	09/29-10/10/11	MMRXH1AJ
		Dilution Factor: 5		MDL.....: 17.0		
Cadmium	0.17	0.051	mg/kg	SW846 6020	09/29-10/07/11	MMRXH1AK
		Dilution Factor: 1		MDL.....: 0.016		
Cobalt	8.8	0.20	mg/kg	SW846 6020	09/29-10/07/11	MMRXH1AL
		Dilution Factor: 1		MDL.....: 0.044		
Chromium	11.8	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXH1AM
		Dilution Factor: 1		MDL.....: 0.46		
Copper	21.0 D	5.1	mg/kg	SW846 6020	09/29-10/10/11	MMRXH1AN
		Dilution Factor: 5		MDL.....: 0.33		
Manganese	355 N	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXH1AP
		Dilution Factor: 1		MDL.....: 0.075		
Molybdenum	0.37 B	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXH1AQ
		Dilution Factor: 1		MDL.....: 0.078		
Nickel	14.0	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXH1AR
		Dilution Factor: 1		MDL.....: 0.084		
Lead	8.4	0.30	mg/kg	SW846 6020	09/29-10/07/11	MMRXH1AT
		Dilution Factor: 1		MDL.....: 0.10		
Selenium	1.1	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXH1AU
		Dilution Factor: 1		MDL.....: 0.16		

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OCTOBER 14, 2011

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXH4

TOTAL Metals

Lot-Sample #...: F1I280432-040 Matrix.....: SOLID

PARAMETER		RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Tin	J	0.58	0.20	mg/kg	SW846 6020	09/29-10/07/11	MMRXH1AV
			Dilution Factor: 1		MDL.....: 0.10		
Strontium		25.3	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXH1AW
			Dilution Factor: 1		MDL.....: 0.22		
Uranium		0.62	0.10	mg/kg	SW846 6020	09/29-10/07/11	MMRXH1AX
			Dilution Factor: 1		MDL.....: 0.020		
Vanadium		50.8	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXH1A0
			Dilution Factor: 1		MDL.....: 0.75		
Zinc		56.0	5.1	mg/kg	SW846 6020	09/29-10/07/11	MMRXH1AA
			Dilution Factor: 1		MDL.....: 1.4		
Prep Batch #...: 1278048							
Antimony		0.11 B	0.50	mg/kg	SW846 6020	10/06-10/11/11	MMRXH1A1
			Dilution Factor: 1		MDL.....: 0.065		
Prep Batch #...: 1282014							
Mercury		ND	0.034	mg/kg	SW846 7471A	10/11/11	MMRXH1AD
			Dilution Factor: 1		MDL.....: 0.011		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

D Result was obtained from the analysis of a dilution.

N Spiked analyte recovery is outside stated control limits.

EH
11/04/11

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXH5

TOTAL Metals

Lot-Sample #...: F1I280432-041 Matrix.....: SOLID
Date Sampled...: 09/14/11 Date Received..: 09/28/11
% Moisture.....: 1.0

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1272023						
Silver	0.047 B	0.20	mg/kg	SW846 6020	09/29-10/07/11	MMRXJ1AE
		Dilution Factor: 1		MDL.....: 0.014		
Arsenic	2.7	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXJ1AF
		Dilution Factor: 1		MDL.....: 0.21		
Barium	67.0	2.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXJ1AG
		Dilution Factor: 1		MDL.....: 0.058		
Beryllium	0.30	0.10	mg/kg	SW846 6020	09/29-10/07/11	MMRXJ1AH
		Dilution Factor: 1		MDL.....: 0.017		
Boron	ND D	50.5	mg/kg	SW846 6020	09/29-10/10/11	MMRXJ1AJ
		Dilution Factor: 5		MDL.....: 16.9		
Cadmium	0.17	0.051	mg/kg	SW846 6020	09/29-10/07/11	MMRXJ1AK
		Dilution Factor: 1		MDL.....: 0.016		
Cobalt	8.6	0.20	mg/kg	SW846 6020	09/29-10/07/11	MMRXJ1AL
		Dilution Factor: 1		MDL.....: 0.043		
Chromium	11.9	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXJ1AM
		Dilution Factor: 1		MDL.....: 0.45		
Copper	20.9 D	5.1	mg/kg	SW846 6020	09/29-10/10/11	MMRXJ1AN
		Dilution Factor: 5		MDL.....: 0.32		
Manganese	351 N	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXJ1AP
		Dilution Factor: 1		MDL.....: 0.075		
Molybdenum	0.37 B	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXJ1AQ
		Dilution Factor: 1		MDL.....: 0.078		
Nickel	14.8	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXJ1AR
		Dilution Factor: 1		MDL.....: 0.083		
Lead	7.8	0.30	mg/kg	SW846 6020	09/29-10/07/11	MMRXJ1AT
		Dilution Factor: 1		MDL.....: 0.10		
Selenium	1.3	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXJ1AU
		Dilution Factor: 1		MDL.....: 0.16		

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OCTOBER 14, 2011

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXH5

TOTAL Metals

Lot-Sample #...: F1I280432-041 Matrix.....: SOLID

PARAMETER		RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Tin	J	0.57	0.20	mg/kg	SW846 6020	09/29-10/07/11	MMRXJ1AV
			Dilution Factor: 1		MDL.....: 0.10		
Strontium		25.3	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXJ1AW
			Dilution Factor: 1		MDL.....: 0.21		
Uranium		0.53	0.10	mg/kg	SW846 6020	09/29-10/07/11	MMRXJ1AX
			Dilution Factor: 1		MDL.....: 0.020		
Vanadium		52.2	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXJ1A0
			Dilution Factor: 1		MDL.....: 0.74		
Zinc		55.2	5.1	mg/kg	SW846 6020	09/29-10/07/11	MMRXJ1AA
			Dilution Factor: 1		MDL.....: 1.3		
Prep Batch #...: 1278048							
Antimony		0.11 B	0.50	mg/kg	SW846 6020	10/06-10/11/11	MMRXJ1A2
			Dilution Factor: 1		MDL.....: 0.065		
Prep Batch #...: 1282015							
Mercury		ND	0.033	mg/kg	SW846 7471A	10/11/11	MMRXJ1AD
			Dilution Factor: 1		MDL.....: 0.011		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

D Result was obtained from the analysis of a dilution.

N Spiked analyte recovery is outside stated control limits.

EH
11/04/11

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXH6

TOTAL Metals

Lot-Sample #...: F1I280432-042 Matrix.....: SOLID
Date Sampled...: 09/14/11 Date Received..: 09/28/11
% Moisture.....: 1.3

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1272023						
Silver	0.054 B	0.20	mg/kg	SW846 6020	09/29-10/07/11	MMRXK1AE
		Dilution Factor: 1		MDL.....: 0.014		
Arsenic	2.7	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXK1AF
		Dilution Factor: 1		MDL.....: 0.21		
Barium	65.6	2.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXK1AG
		Dilution Factor: 1		MDL.....: 0.058		
Beryllium	0.32	0.10	mg/kg	SW846 6020	09/29-10/07/11	MMRXK1AH
		Dilution Factor: 1		MDL.....: 0.017		
Boron	ND D	50.6	mg/kg	SW846 6020	09/29-10/10/11	MMRXK1AJ
		Dilution Factor: 5		MDL.....: 16.9		
Cadmium	0.15	0.051	mg/kg	SW846 6020	09/29-10/07/11	MMRXK1AK
		Dilution Factor: 1		MDL.....: 0.016		
Cobalt	10.0	0.20	mg/kg	SW846 6020	09/29-10/07/11	MMRXK1AL
		Dilution Factor: 1		MDL.....: 0.044		
Chromium	10.2	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXK1AM
		Dilution Factor: 1		MDL.....: 0.46		
Copper	20.9 D	5.1	mg/kg	SW846 6020	09/29-10/10/11	MMRXK1AN
		Dilution Factor: 5		MDL.....: 0.32		
Manganese	392 N	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXK1AP
		Dilution Factor: 1		MDL.....: 0.075		
Molybdenum	0.39 B	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXK1AQ
		Dilution Factor: 1		MDL.....: 0.078		
Nickel	13.4	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXK1AR
		Dilution Factor: 1		MDL.....: 0.083		
Lead	8.3	0.30	mg/kg	SW846 6020	09/29-10/07/11	MMRXK1AT
		Dilution Factor: 1		MDL.....: 0.10		
Selenium	1.4	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXK1AU
		Dilution Factor: 1		MDL.....: 0.16		

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CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXH6

TOTAL Metals

Lot-Sample #...: F1I280432-042 Matrix.....: SOLID

PARAMETER		RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Tin	J	0.61	0.20	mg/kg	SW846 6020	09/29-10/07/11	MMRXK1AV
			Dilution Factor: 1		MDL.....: 0.10		
Strontium		25.6	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXK1AW
			Dilution Factor: 1		MDL.....: 0.21		
Uranium		0.51	0.10	mg/kg	SW846 6020	09/29-10/07/11	MMRXK1AX
			Dilution Factor: 1		MDL.....: 0.020		
Vanadium		58.6	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXK1A0
			Dilution Factor: 1		MDL.....: 0.74		
Zinc		63.6	5.1	mg/kg	SW846 6020	09/29-10/07/11	MMRXK1AA
			Dilution Factor: 1		MDL.....: 1.3		
Prep Batch #...: 1278048							
Antimony		0.12 B	0.50	mg/kg	SW846 6020	10/06-10/11/11	MMRXK1A1
			Dilution Factor: 1		MDL.....: 0.065		
Prep Batch #...: 1282015							
Mercury		ND	0.033	mg/kg	SW846 7471A	10/11/11	MMRXK1AD
			Dilution Factor: 1		MDL.....: 0.011		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

D Result was obtained from the analysis of a dilution.

N Spiked analyte recovery is outside stated control limits.

EH
11/04/11

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXH7

TOTAL Metals

Lot-Sample #...: F1I280432-043 Matrix.....: SOLID
Date Sampled...: 09/14/11 Date Received..: 09/28/11
% Moisture.....: 1.2

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1272023						
Silver	0.049 B	0.20	mg/kg	SW846 6020	09/29-10/07/11	MMRXL1AE
		Dilution Factor: 1		MDL.....: 0.014		
Arsenic	2.2	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXL1AF
		Dilution Factor: 1		MDL.....: 0.21		
Barium	59.7	2.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXL1AG
		Dilution Factor: 1		MDL.....: 0.058		
Beryllium	0.29	0.10	mg/kg	SW846 6020	09/29-10/07/11	MMRXL1AH
		Dilution Factor: 1		MDL.....: 0.017		
Boron	ND D	50.6	mg/kg	SW846 6020	09/29-10/10/11	MMRXL1AJ
		Dilution Factor: 5		MDL.....: 16.9		
Cadmium	0.16	0.051	mg/kg	SW846 6020	09/29-10/07/11	MMRXL1AK
		Dilution Factor: 1		MDL.....: 0.016		
Cobalt	8.8	0.20	mg/kg	SW846 6020	09/29-10/07/11	MMRXL1AL
		Dilution Factor: 1		MDL.....: 0.044		
Chromium	8.9	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXL1AM
		Dilution Factor: 1		MDL.....: 0.46		
Copper	18.9 D	5.1	mg/kg	SW846 6020	09/29-10/10/11	MMRXL1AN
		Dilution Factor: 5		MDL.....: 0.32		
Manganese	344 N	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXL1AP
		Dilution Factor: 1		MDL.....: 0.075		
Molybdenum	0.41 B	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXL1AQ
		Dilution Factor: 1		MDL.....: 0.078		
Nickel	12.0	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXL1AR
		Dilution Factor: 1		MDL.....: 0.083		
Lead	7.3	0.30	mg/kg	SW846 6020	09/29-10/07/11	MMRXL1AT
		Dilution Factor: 1		MDL.....: 0.10		
Selenium	1.4	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXL1AU
		Dilution Factor: 1		MDL.....: 0.16		

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CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXH7

TOTAL Metals

Lot-Sample #...: F1I280432-043 Matrix.....: SOLID

PARAMETER		RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Tin	J	0.62	0.20	mg/kg	SW846 6020	09/29-10/07/11	MMRXL1AV
			Dilution Factor: 1		MDL.....: 0.10		
Strontium		25.0	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXL1AW
			Dilution Factor: 1		MDL.....: 0.21		
Uranium		0.45	0.10	mg/kg	SW846 6020	09/29-10/07/11	MMRXL1AX
			Dilution Factor: 1		MDL.....: 0.020		
Vanadium		55.8	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXL1A0
			Dilution Factor: 1		MDL.....: 0.74		
Zinc		56.9	5.1	mg/kg	SW846 6020	09/29-10/07/11	MMRXL1AA
			Dilution Factor: 1		MDL.....: 1.3		
Prep Batch #...: 1278048							
Antimony		0.11 B	0.50	mg/kg	SW846 6020	10/06-10/11/11	MMRXL1A1
			Dilution Factor: 1		MDL.....: 0.065		
Prep Batch #...: 1282015							
Mercury		ND	0.033	mg/kg	SW846 7471A	10/11/11	MMRXL1AD
			Dilution Factor: 1		MDL.....: 0.011		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

D Result was obtained from the analysis of a dilution.

N Spiked analyte recovery is outside stated control limits.

EH
11/04/11

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXH9

TOTAL Metals

Lot-Sample #...: F1I280432-044 Matrix.....: SOLID
Date Sampled...: 09/14/11 Date Received..: 09/28/11
% Moisture.....: 1.2

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1272023						
Silver	0.050 B	0.20	mg/kg	SW846 6020	09/29-10/07/11	MMRXM1AE
		Dilution Factor: 1		MDL.....: 0.014		
Arsenic	2.7	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXM1AF
		Dilution Factor: 1		MDL.....: 0.21		
Barium	66.2	2.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXM1AG
		Dilution Factor: 1		MDL.....: 0.058		
Beryllium	0.33	0.10	mg/kg	SW846 6020	09/29-10/07/11	MMRXM1AH
		Dilution Factor: 1		MDL.....: 0.017		
Boron	ND D	50.6	mg/kg	SW846 6020	09/29-10/10/11	MMRXM1AJ
		Dilution Factor: 5		MDL.....: 16.9		
Cadmium	0.13	0.051	mg/kg	SW846 6020	09/29-10/07/11	MMRXM1AK
		Dilution Factor: 1		MDL.....: 0.016		
Cobalt	9.7	0.20	mg/kg	SW846 6020	09/29-10/07/11	MMRXM1AL
		Dilution Factor: 1		MDL.....: 0.044		
Chromium	9.2	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXM1AM
		Dilution Factor: 1		MDL.....: 0.46		
Copper	21.7 D	5.1	mg/kg	SW846 6020	09/29-10/10/11	MMRXM1AN
		Dilution Factor: 5		MDL.....: 0.32		
Manganese	368 N	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXM1AP
		Dilution Factor: 1		MDL.....: 0.075		
Molybdenum	0.45 B	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXM1AQ
		Dilution Factor: 1		MDL.....: 0.078		
Nickel	13.1	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXM1AR
		Dilution Factor: 1		MDL.....: 0.083		
Lead	7.7	0.30	mg/kg	SW846 6020	09/29-10/07/11	MMRXM1AT
		Dilution Factor: 1		MDL.....: 0.10		
Selenium	1.4	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXM1AU
		Dilution Factor: 1		MDL.....: 0.16		

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CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXH9

TOTAL Metals

Lot-Sample #...: F1I280432-044 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Tin J	0.59	0.20	mg/kg	SW846 6020	09/29-10/07/11	MMRXM1AV
		Dilution Factor: 1		MDL.....: 0.10		
Strontium	25.7	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXM1AW
		Dilution Factor: 1		MDL.....: 0.21		
Uranium	0.49	0.10	mg/kg	SW846 6020	09/29-10/07/11	MMRXM1AX
		Dilution Factor: 1		MDL.....: 0.020		
Vanadium	55.1	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXM1A0
		Dilution Factor: 1		MDL.....: 0.74		
Zinc	53.8	5.1	mg/kg	SW846 6020	09/29-10/07/11	MMRXM1AA
		Dilution Factor: 1		MDL.....: 1.3		
Prep Batch #...: 1278048						
Antimony	0.25 B	0.50	mg/kg	SW846 6020	10/06-10/11/11	MMRXM1A1
		Dilution Factor: 1		MDL.....: 0.065		
Prep Batch #...: 1282015						
Mercury	ND	0.033	mg/kg	SW846 7471A	10/11/11	MMRXM1AD
		Dilution Factor: 1		MDL.....: 0.011		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

D Result was obtained from the analysis of a dilution.

N Spiked analyte recovery is outside stated control limits.

EH
11/04/11

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXJ0

TOTAL Metals

Lot-Sample #...: F1I280432-045 Matrix.....: SOLID
Date Sampled...: 09/14/11 Date Received..: 09/28/11
% Moisture.....: 1.3

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1272023						
Silver	0.051 B	0.20	mg/kg	SW846 6020	09/29-10/07/11	MMRXN1AE
		Dilution Factor: 1		MDL.....: 0.014		
Arsenic	2.7	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXN1AF
		Dilution Factor: 1		MDL.....: 0.21		
Barium	66.3	2.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXN1AG
		Dilution Factor: 1		MDL.....: 0.058		
Beryllium	0.30	0.10	mg/kg	SW846 6020	09/29-10/07/11	MMRXN1AH
		Dilution Factor: 1		MDL.....: 0.017		
Boron	ND D	50.7	mg/kg	SW846 6020	09/29-10/10/11	MMRXN1AJ
		Dilution Factor: 5		MDL.....: 16.9		
Cadmium	0.19	0.051	mg/kg	SW846 6020	09/29-10/07/11	MMRXN1AK
		Dilution Factor: 1		MDL.....: 0.016		
Cobalt	10.0	0.20	mg/kg	SW846 6020	09/29-10/07/11	MMRXN1AL
		Dilution Factor: 1		MDL.....: 0.044		
Chromium	10.8	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXN1AM
		Dilution Factor: 1		MDL.....: 0.46		
Copper	22.8 D	5.1	mg/kg	SW846 6020	09/29-10/10/11	MMRXN1AN
		Dilution Factor: 5		MDL.....: 0.32		
Manganese	378 N	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXN1AP
		Dilution Factor: 1		MDL.....: 0.075		
Molybdenum	0.43 B	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXN1AQ
		Dilution Factor: 1		MDL.....: 0.078		
Nickel	16.5	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXN1AR
		Dilution Factor: 1		MDL.....: 0.083		
Lead	8.9	0.30	mg/kg	SW846 6020	09/29-10/07/11	MMRXN1AT
		Dilution Factor: 1		MDL.....: 0.10		
Selenium	1.4	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXN1AU
		Dilution Factor: 1		MDL.....: 0.16		

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OCTOBER 14, 2011

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXJ0

TOTAL Metals

Lot-Sample #...: F1I280432-045 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Tin	7.1	**0.20**	**mg/kg**	**SW846 6020**	**09/29-10/07/11**	**MMRXN1AV**
		Dilution Factor: 1		MDL.....: 0.10		
Strontium	26.3	**0.51**	**mg/kg**	**SW846 6020**	**09/29-10/07/11**	**MMRXN1AW**
		Dilution Factor: 1		MDL.....: 0.21		
Uranium	0.47	**0.10**	**mg/kg**	**SW846 6020**	**09/29-10/07/11**	**MMRXN1AX**
		Dilution Factor: 1		MDL.....: 0.020		
Vanadium	58.8	**1.0**	**mg/kg**	**SW846 6020**	**09/29-10/07/11**	**MMRXN1A0**
		Dilution Factor: 1		MDL.....: 0.74		
Zinc	62.1	**5.1**	**mg/kg**	**SW846 6020**	**09/29-10/07/11**	**MMRXN1AA**
		Dilution Factor: 1		MDL.....: 1.3		
Prep Batch #...: 1278048						
Antimony	**0.11 B**	**0.50**	**mg/kg**	**SW846 6020**	**10/06-10/11/11**	**MMRXN1A1**
		Dilution Factor: 1		MDL.....: 0.065		
Prep Batch #...: 1282015						
Mercury	ND	0.033	mg/kg	SW846 7471A	10/11/11	MMRXN1AD
		Dilution Factor: 1		MDL.....: 0.011		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

D Result was obtained from the analysis of a dilution.

N Spiked analyte recovery is outside stated control limits.

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXJ4

TOTAL Metals

Lot-Sample #...: F1I280432-046 Matrix.....: SOLID
Date Sampled...: 09/07/11 Date Received..: 09/28/11
% Moisture.....: 1.0

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1272023						
Silver	0.042 B	0.20	mg/kg	SW846 6020	09/29-10/07/11	MMRXP1AE
		Dilution Factor: 1		MDL.....: 0.014		
Arsenic	1.8	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXP1AF
		Dilution Factor: 1		MDL.....: 0.21		
Barium	56.9	2.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXP1AG
		Dilution Factor: 1		MDL.....: 0.058		
Beryllium	0.21	0.10	mg/kg	SW846 6020	09/29-10/07/11	MMRXP1AH
		Dilution Factor: 1		MDL.....: 0.017		
Boron	ND D	50.5	mg/kg	SW846 6020	09/29-10/10/11	MMRXP1AJ
		Dilution Factor: 5		MDL.....: 16.9		
Cadmium	0.26	0.051	mg/kg	SW846 6020	09/29-10/07/11	MMRXP1AK
		Dilution Factor: 1		MDL.....: 0.016		
Cobalt	7.4	0.20	mg/kg	SW846 6020	09/29-10/07/11	MMRXP1AL
		Dilution Factor: 1		MDL.....: 0.043		
Chromium	9.0	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXP1AM
		Dilution Factor: 1		MDL.....: 0.45		
Copper	17.8 D	5.1	mg/kg	SW846 6020	09/29-10/10/11	MMRXP1AN
		Dilution Factor: 5		MDL.....: 0.32		
Manganese	295 N	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXP1AP
		Dilution Factor: 1		MDL.....: 0.075		
Molybdenum	0.41 B	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXP1AQ
		Dilution Factor: 1		MDL.....: 0.078		
Nickel	11.1	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXP1AR
		Dilution Factor: 1		MDL.....: 0.083		
Lead	7.1	0.30	mg/kg	SW846 6020	09/29-10/07/11	MMRXP1AT
		Dilution Factor: 1		MDL.....: 0.10		
Selenium	1.0	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXP1AU
		Dilution Factor: 1		MDL.....: 0.16		

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CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXJ4

TOTAL Metals

Lot-Sample #...: F1I280432-046 Matrix.....: SOLID

PARAMETER		RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Tin	J	0.54	0.20	mg/kg	SW846 6020	09/29-10/07/11	MMRXP1AV
			Dilution Factor: 1		MDL.....: 0.10		
Strontium		21.0	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXP1AW
			Dilution Factor: 1		MDL.....: 0.21		
Uranium		0.41	0.10	mg/kg	SW846 6020	09/29-10/07/11	MMRXP1AX
			Dilution Factor: 1		MDL.....: 0.020		
Vanadium		55.4	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXP1A0
			Dilution Factor: 1		MDL.....: 0.74		
Zinc		59.7	5.1	mg/kg	SW846 6020	09/29-10/07/11	MMRXP1AA
			Dilution Factor: 1		MDL.....: 1.3		
Prep Batch #...: 1278048							
Antimony		0.071 B	0.50	mg/kg	SW846 6020	10/06-10/11/11	MMRXP1A1
			Dilution Factor: 1		MDL.....: 0.065		
Prep Batch #...: 1282015							
Mercury	UJ	ND	0.033	mg/kg	SW846 7471A	10/11/11	MMRXP1AD
			Dilution Factor: 1		MDL.....: 0.011		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

D Result was obtained from the analysis of a dilution.

N Spiked analyte recovery is outside stated control limits.

EH
11/04/11

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXJ5

TOTAL Metals

Lot-Sample #...: F1I280432-047 **Matrix.....:** SOLID
Date Sampled...: 08/31/11 **Date Received..:** 09/28/11
% Moisture.....: 1.2

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1272023						
Silver	ND	0.20	mg/kg	SW846 6020	09/29-10/07/11	MMRXQ1AE
		Dilution Factor: 1		MDL.....: 0.014		
Arsenic	ND	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXQ1AF
		Dilution Factor: 1		MDL.....: 0.21		
Barium	**1.3 B**	**2.0**	**mg/kg**	**SW846 6020**	**09/29-10/07/11**	**MMRXQ1AG**
		Dilution Factor: 1		MDL.....: 0.058		
Beryllium	ND	0.10	mg/kg	SW846 6020	09/29-10/07/11	MMRXQ1AH
		Dilution Factor: 1		MDL.....: 0.017		
Boron	ND D	50.6	mg/kg	SW846 6020	09/29-10/10/11	MMRXQ1AJ
		Dilution Factor: 5		MDL.....: 16.9		
Cadmium	ND	0.051	mg/kg	SW846 6020	09/29-10/07/11	MMRXQ1AK
		Dilution Factor: 1		MDL.....: 0.016		
Cobalt	**0.063 B**	**0.20**	**mg/kg**	**SW846 6020**	**09/29-10/07/11**	**MMRXQ1AL**
		Dilution Factor: 1		MDL.....: 0.044		
Chromium	ND	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXQ1AM
		Dilution Factor: 1		MDL.....: 0.46		
Copper	ND D	5.1	mg/kg	SW846 6020	09/29-10/10/11	MMRXQ1AN
		Dilution Factor: 5		MDL.....: 0.32		
Manganese	**3.1 N**	**0.51**	**mg/kg**	**SW846 6020**	**09/29-10/07/11**	**MMRXQ1AP**
		Dilution Factor: 1		MDL.....: 0.075		
Molybdenum	ND	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXQ1AQ
		Dilution Factor: 1		MDL.....: 0.078		
Nickel	**0.18 B**	**0.51**	**mg/kg**	**SW846 6020**	**09/29-10/07/11**	**MMRXQ1AR**
		Dilution Factor: 1		MDL.....: 0.083		
Lead	**0.22 B**	**0.30**	**mg/kg**	**SW846 6020**	**09/29-10/07/11**	**MMRXQ1AT**
		Dilution Factor: 1		MDL.....: 0.10		
Selenium	ND	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRXQ1AU
		Dilution Factor: 1		MDL.....: 0.16		

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CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXJ5

TOTAL Metals

Lot-Sample #...: F1I280432-047 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Tin 0.20U	**0.16 B,C**	**0.20**	**mg/kg**	**SW846 6020**	**09/29-10/07/11**	**MMRXQ1AV**
		Dilution Factor: 1		MDL.....: 0.10		
Strontium	**0.43 B**	**0.51**	**mg/kg**	**SW846 6020**	**09/29-10/07/11**	**MMRXQ1AW**
		Dilution Factor: 1		MDL.....: 0.21		
Uranium	**0.069 B**	**0.10**	**mg/kg**	**SW846 6020**	**09/29-10/07/11**	**MMRXQ1AX**
		Dilution Factor: 1		MDL.....: 0.020		
Vanadium	ND	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXQ1A0
		Dilution Factor: 1		MDL.....: 0.74		
Zinc	ND	5.1	mg/kg	SW846 6020	09/29-10/07/11	MMRXQ1AA
		Dilution Factor: 1		MDL.....: 1.3		
Prep Batch #...: 1278048						
Antimony	ND	0.50	mg/kg	SW846 6020	10/06-10/11/11	MMRXQ1A1
		Dilution Factor: 1		MDL.....: 0.065		
Prep Batch #...: 1282015						
Mercury UJ	ND	0.033	mg/kg	SW846 7471A	10/11/11	MMRXQ1AD
		Dilution Factor: 1		MDL.....: 0.011		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

D Result was obtained from the analysis of a dilution.

N Spiked analyte recovery is outside stated control limits.

C Method blank contamination. The associated method blank contains the target analyte at a reportable level.

EH
11/04/11

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXJ6

TOTAL Metals

Lot-Sample #...: F1I280432-048 Matrix.....: SOLID
Date Sampled...: 09/14/11 Date Received..: 09/28/11
% Moisture.....: 0.040

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1272023						
Silver	0.045 B	0.20	mg/kg	SW846 6020	09/29-10/07/11	MMRXR1AE
		Dilution Factor: 1		MDL.....: 0.014		
Arsenic	2.4	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXR1AF
		Dilution Factor: 1		MDL.....: 0.20		
Barium	61.7	2.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXR1AG
		Dilution Factor: 1		MDL.....: 0.057		
Beryllium	0.28	0.10	mg/kg	SW846 6020	09/29-10/07/11	MMRXR1AH
		Dilution Factor: 1		MDL.....: 0.017		
Boron	ND D	50.0	mg/kg	SW846 6020	09/29-10/10/11	MMRXR1AJ
		Dilution Factor: 5		MDL.....: 16.7		
Cadmium	0.19	0.050	mg/kg	SW846 6020	09/29-10/07/11	MMRXR1AK
		Dilution Factor: 1		MDL.....: 0.016		
Cobalt	8.5	0.20	mg/kg	SW846 6020	09/29-10/07/11	MMRXR1AL
		Dilution Factor: 1		MDL.....: 0.043		
Chromium	9.7	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXR1AM
		Dilution Factor: 1		MDL.....: 0.45		
Copper	20.6 D	5.0	mg/kg	SW846 6020	09/29-10/10/11	MMRXR1AN
		Dilution Factor: 5		MDL.....: 0.32		
Manganese	340 N	0.50	mg/kg	SW846 6020	09/29-10/07/11	MMRXR1AP
		Dilution Factor: 1		MDL.....: 0.074		
Molybdenum	0.39 B	0.50	mg/kg	SW846 6020	09/29-10/07/11	MMRXR1AQ
		Dilution Factor: 1		MDL.....: 0.077		
Nickel	13.5	0.50	mg/kg	SW846 6020	09/29-10/07/11	MMRXR1AR
		Dilution Factor: 1		MDL.....: 0.082		
Lead	7.9	0.30	mg/kg	SW846 6020	09/29-10/07/11	MMRXR1AT
		Dilution Factor: 1		MDL.....: 0.10		
Selenium	1.1	0.50	mg/kg	SW846 6020	09/29-10/07/11	MMRXR1AU
		Dilution Factor: 1		MDL.....: 0.16		

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CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXJ6

TOTAL Metals

Lot-Sample #...: F1I280432-048 Matrix.....: SOLID

PARAMETER		RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Tin	J	0.63	0.20	mg/kg	SW846 6020	09/29-10/07/11	MMRXR1AV
			Dilution Factor: 1		MDL.....: 0.10		
Strontium		26.0	0.50	mg/kg	SW846 6020	09/29-10/07/11	MMRXR1AW
			Dilution Factor: 1		MDL.....: 0.21		
Uranium		0.45	0.10	mg/kg	SW846 6020	09/29-10/07/11	MMRXR1AX
			Dilution Factor: 1		MDL.....: 0.020		
Vanadium		49.7	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXR1A0
			Dilution Factor: 1		MDL.....: 0.74		
Zinc		56.4	5.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXR1AA
			Dilution Factor: 1		MDL.....: 1.3		
Prep Batch #...: 1278048							
Antimony		0.078 B	0.50	mg/kg	SW846 6020	10/06-10/11/11	MMRXR1A1
			Dilution Factor: 1		MDL.....: 0.065		
Prep Batch #...: 1282015							
Mercury		ND	0.033	mg/kg	SW846 7471A	10/11/11	MMRXR1AD
			Dilution Factor: 1		MDL.....: 0.011		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

D Result was obtained from the analysis of a dilution.

N Spiked analyte recovery is outside stated control limits.

EH
11/04/11

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXJ7

TOTAL Metals

Lot-Sample #...: F1I280432-049 **Matrix.....:** SOLID
Date Sampled...: 09/14/11 **Date Received..:** 09/28/11
% Moisture.....: 0.030

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1272023						
Silver	ND	0.20	mg/kg	SW846 6020	09/29-10/07/11	MMRXV1AE
		Dilution Factor: 1		MDL.....: 0.014		
Arsenic	ND	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXV1AF
		Dilution Factor: 1		MDL.....: 0.20		
Barium	**0.22 B**	**2.0**	**mg/kg**	**SW846 6020**	**09/29-10/07/11**	**MMRXV1AG**
		Dilution Factor: 1		MDL.....: 0.057		
Beryllium	ND	0.10	mg/kg	SW846 6020	09/29-10/07/11	MMRXV1AH
		Dilution Factor: 1		MDL.....: 0.017		
Boron	ND D	50.0	mg/kg	SW846 6020	09/29-10/10/11	MMRXV1AJ
		Dilution Factor: 5		MDL.....: 16.7		
Cadmium	ND	0.050	mg/kg	SW846 6020	09/29-10/07/11	MMRXV1AK
		Dilution Factor: 1		MDL.....: 0.016		
Cobalt	ND	0.20	mg/kg	SW846 6020	09/29-10/07/11	MMRXV1AL
		Dilution Factor: 1		MDL.....: 0.043		
Chromium	ND	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXV1AM
		Dilution Factor: 1		MDL.....: 0.45		
Copper	ND D	5.0	mg/kg	SW846 6020	09/29-10/10/11	MMRXV1AN
		Dilution Factor: 5		MDL.....: 0.32		
Manganese	**0.33 B,N**	**0.50**	**mg/kg**	**SW846 6020**	**09/29-10/07/11**	**MMRXV1AP**
		Dilution Factor: 1		MDL.....: 0.074		
Molybdenum	ND	0.50	mg/kg	SW846 6020	09/29-10/07/11	MMRXV1AQ
		Dilution Factor: 1		MDL.....: 0.077		
Nickel	**0.18 B**	**0.50**	**mg/kg**	**SW846 6020**	**09/29-10/07/11**	**MMRXV1AR**
		Dilution Factor: 1		MDL.....: 0.082		
Lead	**0.11 B**	**0.30**	**mg/kg**	**SW846 6020**	**09/29-10/07/11**	**MMRXV1AT**
		Dilution Factor: 1		MDL.....: 0.10		
Selenium	ND	0.50	mg/kg	SW846 6020	09/29-10/07/11	MMRXV1AU
		Dilution Factor: 1		MDL.....: 0.16		

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CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXJ7

TOTAL Metals

Lot-Sample #...: F1I280432-049 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Tin 0.20U	**0.13 B,C**	**0.20**	**mg/kg**	**SW846 6020**	**09/29-10/07/11**	**MMRXV1AV**
		Dilution Factor: 1		MDL.....: 0.10		
Strontium	ND	0.50	mg/kg	SW846 6020	09/29-10/07/11	MMRXV1AW
		Dilution Factor: 1		MDL.....: 0.21		
Uranium	**0.034 B**	**0.10**	**mg/kg**	**SW846 6020**	**09/29-10/07/11**	**MMRXV1AX**
		Dilution Factor: 1		MDL.....: 0.020		
Vanadium	ND	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXV1A0
		Dilution Factor: 1		MDL.....: 0.74		
Zinc	ND	5.0	mg/kg	SW846 6020	09/29-10/07/11	MMRXV1AA
		Dilution Factor: 1		MDL.....: 1.3		
Prep Batch #...: 1278048						
Antimony	ND	0.50	mg/kg	SW846 6020	10/06-10/11/11	MMRXV1A1
		Dilution Factor: 1		MDL.....: 0.065		
Prep Batch #...: 1282015						
Mercury	ND	0.033	mg/kg	SW846 7471A	10/11/11	MMRXV1AD
		Dilution Factor: 1		MDL.....: 0.011		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

D Result was obtained from the analysis of a dilution.

N Spiked analyte recovery is outside stated control limits.

C Method blank contamination. The associated method blank contains the target analyte at a reportable level.

EH
11/04/11

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXJ8

TOTAL Metals

Lot-Sample #...: F1I280432-050 **Matrix.....:** SOLID
Date Sampled...: 08/30/11 **Date Received..:** 09/28/11
% Moisture.....: 1.6

PARAMETER		RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1282015							
Mercury	UJ	ND	0.034	mg/kg	SW846 7471A	10/11/11	MMRXX1AC
			Dilution Factor: 1		MDL.....: 0.011		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

EH
11/04/11

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXJ9

TOTAL Metals

Lot-Sample #...: F1I280432-051 **Matrix.....:** SOLID
Date Sampled...: 08/30/11 **Date Received..:** 09/28/11
% Moisture.....: 1.7

PARAMETER		RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1282015							
Mercury	UJ	ND	0.034	mg/kg	SW846 7471A	10/11/11	MMRX01AC
			Dilution Factor: 1		MDL.....: 0.011		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

EH
11/04/11

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2H560

TOTAL Metals

Lot-Sample #...: F1I280432-052 **Matrix.....:** SOLID
Date Sampled...: 09/15/11 **Date Received..:** 09/28/11
% Moisture.....: 1.0

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1272023						
Silver	0.047 B	0.20	mg/kg	SW846 6020	09/29-10/07/11	MMRX11AE
		Dilution Factor: 1		MDL.....: 0.014		
Arsenic	2.2	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRX11AF
		Dilution Factor: 1		MDL.....: 0.21		
Barium	55.5	2.0	mg/kg	SW846 6020	09/29-10/07/11	MMRX11AG
		Dilution Factor: 1		MDL.....: 0.058		
Beryllium	0.26	0.10	mg/kg	SW846 6020	09/29-10/07/11	MMRX11AH
		Dilution Factor: 1		MDL.....: 0.017		
Boron	ND D	50.5	mg/kg	SW846 6020	09/29-10/10/11	MMRX11AJ
		Dilution Factor: 5		MDL.....: 16.9		
Cadmium	0.17	0.051	mg/kg	SW846 6020	09/29-10/07/11	MMRX11AK
		Dilution Factor: 1		MDL.....: 0.016		
Cobalt	8.8	0.20	mg/kg	SW846 6020	09/29-10/07/11	MMRX11AL
		Dilution Factor: 1		MDL.....: 0.043		
Chromium	10.6	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRX11AM
		Dilution Factor: 1		MDL.....: 0.45		
Copper	20.2 D	5.1	mg/kg	SW846 6020	09/29-10/10/11	MMRX11AN
		Dilution Factor: 5		MDL.....: 0.32		
Manganese	333 N	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRX11AP
		Dilution Factor: 1		MDL.....: 0.075		
Molybdenum	0.39 B	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRX11AQ
		Dilution Factor: 1		MDL.....: 0.078		
Nickel	14.4	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRX11AR
		Dilution Factor: 1		MDL.....: 0.083		
Lead	11.5	0.30	mg/kg	SW846 6020	09/29-10/07/11	MMRX11AT
		Dilution Factor: 1		MDL.....: 0.10		
Selenium	1.0	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRX11AU
		Dilution Factor: 1		MDL.....: 0.16		

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CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2H560

TOTAL Metals

Lot-Sample #...: F1I280432-052 Matrix.....: SOLID

PARAMETER		RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Tin	J	0.62	0.20	mg/kg	SW846 6020	09/29-10/07/11	MMRX11AV
			Dilution Factor: 1		MDL.....: 0.10		
Strontium		22.6	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRX11AW
			Dilution Factor: 1		MDL.....: 0.21		
Uranium		0.78	0.10	mg/kg	SW846 6020	09/29-10/07/11	MMRX11AX
			Dilution Factor: 1		MDL.....: 0.020		
Vanadium		54.0	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRX11A0
			Dilution Factor: 1		MDL.....: 0.74		
Zinc		57.2	5.1	mg/kg	SW846 6020	09/29-10/07/11	MMRX11AA
			Dilution Factor: 1		MDL.....: 1.3		
Prep Batch #...: 1278048							
Antimony		0.14 B	0.50	mg/kg	SW846 6020	10/06-10/11/11	MMRX11A1
			Dilution Factor: 1		MDL.....: 0.065		
Prep Batch #...: 1282015							
Mercury		ND	0.033	mg/kg	SW846 7471A	10/11/11	MMRX11AD
			Dilution Factor: 1		MDL.....: 0.011		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

D Result was obtained from the analysis of a dilution.

N Spiked analyte recovery is outside stated control limits.

EH
11/04/11

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2H562

TOTAL Metals

Lot-Sample #...: F1I280432-053 Matrix.....: SOLID
Date Sampled...: 09/15/11 Date Received..: 09/28/11
% Moisture.....: 1.1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1272023						
Silver	0.053 B	0.20	mg/kg	SW846 6020	09/29-10/07/11	MMRX31AE
		Dilution Factor: 1		MDL.....: 0.014		
Arsenic	3.0	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRX31AF
		Dilution Factor: 1		MDL.....: 0.21		
Barium	68.9	2.0	mg/kg	SW846 6020	09/29-10/07/11	MMRX31AG
		Dilution Factor: 1		MDL.....: 0.058		
Beryllium	0.33	0.10	mg/kg	SW846 6020	09/29-10/07/11	MMRX31AH
		Dilution Factor: 1		MDL.....: 0.017		
Boron	ND D	50.6	mg/kg	SW846 6020	09/29-10/10/11	MMRX31AJ
		Dilution Factor: 5		MDL.....: 16.9		
Cadmium	0.11	0.051	mg/kg	SW846 6020	09/29-10/07/11	MMRX31AK
		Dilution Factor: 1		MDL.....: 0.016		
Cobalt	9.6	0.20	mg/kg	SW846 6020	09/29-10/07/11	MMRX31AL
		Dilution Factor: 1		MDL.....: 0.043		
Chromium	11.7	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRX31AM
		Dilution Factor: 1		MDL.....: 0.45		
Copper	22.5 D	5.1	mg/kg	SW846 6020	09/29-10/10/11	MMRX31AN
		Dilution Factor: 5		MDL.....: 0.32		
Manganese	376 N	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRX31AP
		Dilution Factor: 1		MDL.....: 0.075		
Molybdenum	0.37 B	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRX31AQ
		Dilution Factor: 1		MDL.....: 0.078		
Nickel	14.8	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRX31AR
		Dilution Factor: 1		MDL.....: 0.083		
Lead	16.6	0.30	mg/kg	SW846 6020	09/29-10/07/11	MMRX31AT
		Dilution Factor: 1		MDL.....: 0.10		
Selenium	1.2	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRX31AU
		Dilution Factor: 1		MDL.....: 0.16		

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CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2H562

TOTAL Metals

Lot-Sample #...: F1I280432-053 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Tin J	0.69	0.20	mg/kg	SW846 6020	09/29-10/07/11	MMRX31AV
		Dilution Factor: 1		MDL.....: 0.10		
Strontium	28.5	0.51	mg/kg	SW846 6020	09/29-10/07/11	MMRX31AW
		Dilution Factor: 1		MDL.....: 0.21		
Uranium	0.50	0.10	mg/kg	SW846 6020	09/29-10/07/11	MMRX31AX
		Dilution Factor: 1		MDL.....: 0.020		
Vanadium	52.8	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMRX31A0
		Dilution Factor: 1		MDL.....: 0.74		
Zinc	56.8	5.1	mg/kg	SW846 6020	09/29-10/07/11	MMRX31AA
		Dilution Factor: 1		MDL.....: 1.3		
Prep Batch #...: 1278049						
Antimony	0.21 B	0.50	mg/kg	SW846 6020	10/06-10/10/11	MMRX31DC
		Dilution Factor: 1		MDL.....: 0.065		
Prep Batch #...: 1282015						
Mercury	ND	0.033	mg/kg	SW846 7471A	10/11/11	MMRX31AD
		Dilution Factor: 1		MDL.....: 0.011		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

D Result was obtained from the analysis of a dilution.

N Spiked analyte recovery is outside stated control limits.

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EH
11/04/11

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXK0

TOTAL Metals

Lot-Sample #...: F1I280432-054 Matrix.....: SOLID
Date Sampled...: 08/30/11 Date Received..: 09/28/11
% Moisture.....: 1.7

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1282015						
Mercury	J- 0.012 B	0.034	mg/kg	SW846 7471A	10/11/11	MMRX41AC
		Dilution Factor: 1		MDL.....: 0.011		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

EH
11/04/11

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2FXK1

TOTAL Metals

Lot-Sample #...: F1I280432-055 **Matrix.....:** SOLID
Date Sampled...: 08/30/11 **Date Received..:** 09/28/11
% Moisture.....: 1.4

PARAMETER		RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1282015							
Mercury	UJ	ND	0.033	mg/kg	SW846 7471A	10/11/11	MMRX51AC
			Dilution Factor: 1		MDL.....: 0.011		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

EH
11/04/11

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113047

Sample # 113047001
SAF# F11-159
Sample ID B2FXJ2

Matrix SOIL
Sampled 08/29/11
Received 08/29/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep										**09/06/11**
Cr(VI)										
~~Hexavalent chromium~~	~~18540-29-9~~	~~LA-265-403~~	~~UDN~~	~~<0.48~~		~~ug/g~~	~~5~~	~~0.48~~	~~2.4~~	~~09/07/11~~
ICPMS Prep										**09/02/11**
ICP-MS										
Manganese J+	7439-96-5	LA-505-412	N	368		mg/kg	1	0.10	1.0	09/04/11
Nickel	7440-02-0	LA-505-412		13.1		mg/kg	1	0.20	2.0	09/04/11
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/04/11
Antimony	7440-36-0	LA-505-412	U	<0.30		mg/kg	1	0.30	3.0	09/04/11
Barium	7440-39-3	LA-505-412		64.9		mg/kg	1	0.20	2.0	09/04/11
Beryllium	7440-41-7	LA-505-412	B	0.322		mg/kg	1	0.10	0.51	09/04/11
Boron	7440-42-8	LA-505-412	B	2.75		mg/kg	1	0.51	5.1	09/04/11
Cadmium	7440-43-9	LA-505-412	B	0.274		mg/kg	1	0.10	1.0	09/04/11
Chromium	7440-47-3	LA-505-412		10.5		mg/kg	1	0.51	5.1	09/04/11
Cobalt	7440-48-4	LA-505-412		8.79		mg/kg	1	0.10	0.51	09/04/11
Copper	7440-50-8	LA-505-412		18.9		mg/kg	1	0.10	1.0	09/04/11
Vanadium	7440-62-2	LA-505-412		57.8		mg/kg	1	0.20	2.0	09/04/11
Zinc	7440-66-6	LA-505-412		64.8		mg/kg	1	0.81	5.1	09/04/11
Lead	7439-92-1	LA-505-412		11.1		mg/kg	1	0.10	1.0	09/04/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113047

Sample # 113047001
SAF# F11-159
Sample ID B2FXJ2

Matrix SOIL
Sampled 08/29/11
Received 08/29/11

Test Performed		CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury		7439-97-6	LA-505-412	U	<0.051		mg/kg	1	0.051	0.20	09/04/11
Molybdenum	J+	7439-98-7	LA-505-412	B	0.407		mg/kg	1	0.10	1.0	09/04/11
Strontium		7440-24-6	LA-505-412		29.4		mg/kg	1	0.10	1.0	09/04/11
Tin		7440-31-5	LA-505-412		0.545		mg/kg	1	0.10	0.51	09/04/11
Uranium		7440-61-1	LA-505-412		0.512		mg/kg	1	0.10	0.51	09/04/11
Arsenic		7440-38-2	LA-505-412	B	3.20		mg/kg	1	0.40	4.0	09/04/11
Selenium		7782-49-2	LA-505-412	B	1.26		mg/kg	1	0.30	3.0	09/04/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113047

Sample # 113047002
SAF# F11-159
Sample ID B2FXJ3

Matrix SOIL
Sampled 08/29/11
Received 08/29/11

Test Performed		CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep											**09/06/11**
Cr(VI)											
~~Hexavalent chromium~~		~~18540-29-9~~	~~LA-265-403~~	~~UN~~	~~<0.096~~		~~ug/g~~	~~1~~	~~0.096~~	~~0.48~~	~~09/07/11~~
ICPMS Prep											**09/02/11**
ICP-MS											
Manganese	J+	7439-96-5	LA-505-412	BN	0.360		mg/kg	1	0.10	1.0	09/04/11
Nickel		7440-02-0	LA-505-412	U	<0.20		mg/kg	1	0.20	2.0	09/04/11
Silver		7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/04/11
Antimony		7440-36-0	LA-505-412	U	<0.30		mg/kg	1	0.30	3.0	09/04/11
Barium		7440-39-3	LA-505-412	B	0.278		mg/kg	1	0.20	2.0	09/04/11
Beryllium		7440-41-7	LA-505-412	U	<0.10		mg/kg	1	0.10	0.50	09/04/11
Boron		7440-42-8	LA-505-412	B	0.669		mg/kg	1	0.50	5.0	09/04/11
Cadmium		7440-43-9	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/04/11
Chromium		7440-47-3	LA-505-412	U	<0.50		mg/kg	1	0.50	5.0	09/04/11
Cobalt		7440-48-4	LA-505-412	U	<0.10		mg/kg	1	0.10	0.50	09/04/11
Copper		7440-50-8	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/04/11
Vanadium		7440-62-2	LA-505-412	B	0.227		mg/kg	1	0.20	2.0	09/04/11
Zinc		7440-66-6	LA-505-412	U	<0.80		mg/kg	1	0.80	5.0	09/04/11
Lead		7439-92-1	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/04/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113047

Sample # 113047002
SAF# F11-159
Sample ID B2FXJ3

Matrix SOIL
Sampled 08/29/11
Received 08/29/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury	7439-97-6	LA-505-412	U	<0.050		mg/kg	1	0.050	0.20	09/04/11
Molybdenum	7439-98-7	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/04/11
Strontium	7440-24-6	LA-505-412	B	0.216		mg/kg	1	0.10	1.0	09/04/11
Tin	7440-31-5	LA-505-412	U	<0.10		mg/kg	1	0.10	0.50	09/04/11
Uranium	7440-61-1	LA-505-412	U	<0.10		mg/kg	1	0.10	0.50	09/04/11
Arsenic	7440-38-2	LA-505-412	U	<0.40		mg/kg	1	0.40	4.0	09/04/11
Selenium	7782-49-2	LA-505-412	U	<0.30		mg/kg	1	0.30	3.0	09/04/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113047

Sample # 113047003
SAF# F11-159
Sample ID B2FXF7

Matrix SOIL
Sampled 08/29/11
Received 08/29/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep										**09/06/11**
Cr(VI)										
~~Hexavalent chromium~~	~~18540-29-9~~	~~LA-265-403~~	~~UDN~~	~~<0.51~~		~~ug/g~~	~~5~~	~~0.51~~	~~2.6~~	~~09/07/11~~
ICPMS Prep										**09/02/11**
ICP-MS										
Manganese J+	7439-96-5	LA-505-412	N	349		mg/kg	1	0.10	1.0	09/04/11
Nickel	7440-02-0	LA-505-412		12.6		mg/kg	1	0.20	2.0	09/04/11
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/04/11
Antimony	7440-36-0	LA-505-412	U	<0.30		mg/kg	1	0.30	3.0	09/04/11
Barium	7440-39-3	LA-505-412		62.3		mg/kg	1	0.20	2.0	09/04/11
Beryllium	7440-41-7	LA-505-412	B	0.306		mg/kg	1	0.10	0.50	09/04/11
Boron	7440-42-8	LA-505-412	B	2.55		mg/kg	1	0.50	5.0	09/04/11
Cadmium	7440-43-9	LA-505-412	B	0.221		mg/kg	1	0.10	1.0	09/04/11
Chromium	7440-47-3	LA-505-412		9.54		mg/kg	1	0.50	5.0	09/04/11
Cobalt	7440-48-4	LA-505-412		8.61		mg/kg	1	0.10	0.50	09/04/11
Copper	7440-50-8	LA-505-412		17.9		mg/kg	1	0.10	1.0	09/04/11
Vanadium	7440-62-2	LA-505-412		57.0		mg/kg	1	0.20	2.0	09/04/11
Zinc	7440-66-6	LA-505-412		61.7		mg/kg	1	0.80	5.0	09/04/11
Lead	7439-92-1	LA-505-412		9.63		mg/kg	1	0.10	1.0	09/04/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113047

Sample # 113047003
SAF# F11-159
Sample ID B2FXF7

Matrix SOIL
Sampled 08/29/11
Received 08/29/11

Test Performed		CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury		7439-97-6	LA-505-412	U	<0.050		mg/kg	1	0.050	0.20	09/04/11
Molybdenum	J+	7439-98-7	LA-505-412	B	0.396		mg/kg	1	0.10	1.0	09/04/11
Strontium		7440-24-6	LA-505-412		29.8		mg/kg	1	0.10	1.0	09/04/11
Tin		7440-31-5	LA-505-412		0.532		mg/kg	1	0.10	0.50	09/04/11
Uranium		7440-61-1	LA-505-412	B	0.446		mg/kg	1	0.10	0.50	09/04/11
Arsenic		7440-38-2	LA-505-412	B	3.13		mg/kg	1	0.40	4.0	09/04/11
Selenium		7782-49-2	LA-505-412	B	1.38		mg/kg	1	0.30	3.0	09/04/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113047

Sample # 113047004
SAF# F11-159
Sample ID B2FXH8

Matrix SOIL
Sampled 08/29/11
Received 08/29/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep										**09/06/11**
Cr(VI)										
~~Hexavalent chromium~~	~~18540-29-9~~	~~LA-265-403~~	~~UDN~~	~~<0.48~~		~~ug/g~~	~~5~~	~~0.48~~	~~2.4~~	~~09/07/11~~
ICPMS Prep										**09/02/11**
ICP-MS										
Manganese J+	7439-96-5	LA-505-412	N	345		mg/kg	1	0.093	0.93	09/04/11
Nickel	7440-02-0	LA-505-412		11.6		mg/kg	1	0.19	1.9	09/04/11
Silver	7440-22-4	LA-505-412	U	<0.093		mg/kg	1	0.093	0.93	09/04/11
Antimony	7440-36-0	LA-505-412	U	<0.28		mg/kg	1	0.28	2.8	09/04/11
Barium	7440-39-3	LA-505-412		65.6		mg/kg	1	0.19	1.9	09/04/11
Beryllium	7440-41-7	LA-505-412	B	0.358		mg/kg	1	0.093	0.46	09/04/11
Boron	7440-42-8	LA-505-412	B	2.29		mg/kg	1	0.46	4.6	09/04/11
Cadmium	7440-43-9	LA-505-412	B	0.156		mg/kg	1	0.093	0.93	09/04/11
Chromium	7440-47-3	LA-505-412		10.6		mg/kg	1	0.46	4.6	09/04/11
Cobalt	7440-48-4	LA-505-412		8.38		mg/kg	1	0.093	0.46	09/04/11
Copper	7440-50-8	LA-505-412		16.7		mg/kg	1	0.093	0.93	09/04/11
Vanadium	7440-62-2	LA-505-412		54.9		mg/kg	1	0.19	1.9	09/04/11
Zinc	7440-66-6	LA-505-412		54.2		mg/kg	1	0.74	4.6	09/04/11
Lead	7439-92-1	LA-505-412		8.27		mg/kg	1	0.093	0.93	09/04/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113047

Sample # 113047004
SAF# F11-159
Sample ID B2FXH8

Matrix SOIL
Sampled 08/29/11
Received 08/29/11

Test Performed		CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury		7439-97-6	LA-505-412	U	<0.046		mg/kg	1	0.046	0.19	09/04/11
Molybdenum	J+	7439-98-7	LA-505-412	B	0.431		mg/kg	1	0.093	0.93	09/04/11
Strontium		7440-24-6	LA-505-412		29.8		mg/kg	1	0.093	0.93	09/04/11
Tin		7440-31-5	LA-505-412		0.480		mg/kg	1	0.093	0.46	09/04/11
Uranium		7440-61-1	LA-505-412		0.461		mg/kg	1	0.093	0.46	09/04/11
Arsenic		7440-38-2	LA-505-412	B	3.33		mg/kg	1	0.37	3.7	09/04/11
Selenium		7782-49-2	LA-505-412	B	1.29		mg/kg	1	0.28	2.8	09/04/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113047

Sample # 113047005
SAF# F11-159
Sample ID B2FXB4

Matrix SOIL
Sampled 08/29/11
Received 08/29/11

Test Performed		CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep											**09/06/11**
Cr(VI)											
~~Hexavalent chromium~~		~~18540-29-9~~	~~LA-265-403~~	~~UDN~~	~~<0.45~~		~~ug/g~~	~~5~~	~~0.45~~	~~2.3~~	~~09/07/11~~
ICPMS Prep											**09/02/11**
ICP-MS											
Manganese	J+	7439-96-5	LA-505-412	N	282		mg/kg	1	0.095	0.95	09/04/11
Nickel		7440-02-0	LA-505-412		12.6		mg/kg	1	0.19	1.9	09/04/11
Silver		7440-22-4	LA-505-412	U	<0.095		mg/kg	1	0.095	0.95	09/04/11
Antimony		7440-36-0	LA-505-412	U	<0.28		mg/kg	1	0.28	2.8	09/04/11
Barium		7440-39-3	LA-505-412		63.3		mg/kg	1	0.19	1.9	09/04/11
Beryllium		7440-41-7	LA-505-412	B	0.269		mg/kg	1	0.095	0.47	09/04/11
Boron		7440-42-8	LA-505-412	B	1.11		mg/kg	1	0.47	4.7	09/04/11
Cadmium		7440-43-9	LA-505-412	B	0.234		mg/kg	1	0.095	0.95	09/04/11
Chromium		7440-47-3	LA-505-412		12.3		mg/kg	1	0.47	4.7	09/04/11
Cobalt		7440-48-4	LA-505-412		6.12		mg/kg	1	0.095	0.47	09/04/11
Copper		7440-50-8	LA-505-412		15.6		mg/kg	1	0.095	0.95	09/04/11
Vanadium		7440-62-2	LA-505-412		36.3		mg/kg	1	0.19	1.9	09/04/11
Zinc		7440-66-6	LA-505-412		70.4		mg/kg	1	0.76	4.7	09/04/11
Lead		7439-92-1	LA-505-412		11.7		mg/kg	1	0.095	0.95	09/04/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113047

Sample # 113047005
SAF# F11-159
Sample ID B2FXB4

Matrix SOIL
Sampled 08/29/11
Received 08/29/11

Test Performed		CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury		7439-97-6	LA-505-412	U	<0.047		mg/kg	1	0.047	0.19	09/04/11
Molybdenum	J+	7439-98-7	LA-505-412	B	0.267		mg/kg	1	0.095	0.95	09/04/11
Strontium		7440-24-6	LA-505-412		27.3		mg/kg	1	0.095	0.95	09/04/11
Tin		7440-31-5	LA-505-412	B	0.423		mg/kg	1	0.095	0.47	09/04/11
Uranium		7440-61-1	LA-505-412	B	0.422		mg/kg	1	0.095	0.47	09/04/11
Arsenic		7440-38-2	LA-505-412	B	2.96		mg/kg	1	0.38	3.8	09/04/11
Selenium		7782-49-2	LA-505-412	B	0.704		mg/kg	1	0.28	2.8	09/04/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113047

Sample # 113047006
SAF# F11-159
Sample ID B2FXC5

Matrix SOIL
Sampled 08/29/11
Received 08/29/11

Test Performed		CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep											**09/06/11**
Cr(VI)											
~~Hexavalent chromium~~		~~18540-29-9~~	~~LA-265-403~~	~~UDN~~	~~<0.49~~		~~ug/g~~	~~5~~	~~0.49~~	~~2.5~~	~~09/07/11~~
ICPMS Prep											**09/02/11**
ICP-MS											
Manganese	J+	7439-96-5	LA-505-412	N	300		mg/kg	1	0.096	0.96	09/04/11
Nickel		7440-02-0	LA-505-412		13.1		mg/kg	1	0.19	1.9	09/04/11
Silver		7440-22-4	LA-505-412	U	<0.096		mg/kg	1	0.096	0.96	09/04/11
Antimony		7440-36-0	LA-505-412	U	<0.29		mg/kg	1	0.29	2.9	09/04/11
Barium		7440-39-3	LA-505-412		62.5		mg/kg	1	0.19	1.9	09/04/11
Beryllium		7440-41-7	LA-505-412	B	0.305		mg/kg	1	0.096	0.48	09/04/11
Boron		7440-42-8	LA-505-412	B	1.41		mg/kg	1	0.48	4.8	09/04/11
Cadmium		7440-43-9	LA-505-412	B	0.190		mg/kg	1	0.096	0.96	09/04/11
Chromium		7440-47-3	LA-505-412		12.4		mg/kg	1	0.48	4.8	09/04/11
Cobalt		7440-48-4	LA-505-412		6.72		mg/kg	1	0.096	0.48	09/04/11
Copper		7440-50-8	LA-505-412		14.7		mg/kg	1	0.096	0.96	09/04/11
Vanadium		7440-62-2	LA-505-412		37.6		mg/kg	1	0.19	1.9	09/04/11
Zinc		7440-66-6	LA-505-412		51.7		mg/kg	1	0.77	4.8	09/04/11
Lead		7439-92-1	LA-505-412		7.74		mg/kg	1	0.096	0.96	09/04/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113047

Sample # 113047006
SAF# F11-159
Sample ID B2FXC5

Matrix SOIL
Sampled 08/29/11
Received 08/29/11

Test Performed		CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury		7439-97-6	LA-505-412	U	<0.048		mg/kg	1	0.048	0.19	09/04/11
Molybdenum	J+	7439-98-7	LA-505-412	B	0.273		mg/kg	1	0.096	0.96	09/04/11
Strontium		7440-24-6	LA-505-412		23.7		mg/kg	1	0.096	0.96	09/04/11
Tin		7440-31-5	LA-505-412	B	0.341		mg/kg	1	0.096	0.48	09/04/11
Uranium		7440-61-1	LA-505-412	B	0.366		mg/kg	1	0.096	0.48	09/04/11
Arsenic		7440-38-2	LA-505-412	B	2.50		mg/kg	1	0.39	3.9	09/04/11
Selenium		7782-49-2	LA-505-412	B	0.857		mg/kg	1	0.29	2.9	09/04/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113047

Sample # 113047007
SAF# F11-159
Sample ID B2FXD6

Matrix SOIL
Sampled 08/29/11
Received 08/29/11

Test Performed		CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep											**09/06/11**
Cr(VI)											
~~Hexavalent chromium~~		~~18540-29-9~~	~~LA-265-403~~	~~UDN~~	~~<0.50~~		~~ug/g~~	~~5~~	~~0.50~~	~~2.5~~	~~09/07/11~~
ICPMS Prep											**09/02/11**
ICP-MS											
Manganese	J+	7439-96-5	LA-505-412	N	316		mg/kg	1	0.098	0.98	09/04/11
Nickel		7440-02-0	LA-505-412		12.5		mg/kg	1	0.20	2.0	09/04/11
Silver		7440-22-4	LA-505-412	U	<0.098		mg/kg	1	0.098	0.98	09/04/11
Antimony		7440-36-0	LA-505-412	U	<0.29		mg/kg	1	0.29	2.9	09/04/11
Barium		7440-39-3	LA-505-412		67.4		mg/kg	1	0.20	2.0	09/04/11
Beryllium		7440-41-7	LA-505-412	B	0.348		mg/kg	1	0.098	0.49	09/04/11
Boron		7440-42-8	LA-505-412	B	2.16		mg/kg	1	0.49	4.9	09/04/11
Cadmium		7440-43-9	LA-505-412	B	0.243		mg/kg	1	0.098	0.98	09/04/11
Chromium		7440-47-3	LA-505-412		10.2		mg/kg	1	0.49	4.9	09/04/11
Cobalt		7440-48-4	LA-505-412		7.42		mg/kg	1	0.098	0.49	09/04/11
Copper		7440-50-8	LA-505-412		15.8		mg/kg	1	0.098	0.98	09/04/11
Vanadium		7440-62-2	LA-505-412		46.1		mg/kg	1	0.20	2.0	09/04/11
Zinc		7440-66-6	LA-505-412		57.6		mg/kg	1	0.78	4.9	09/04/11
Lead		7439-92-1	LA-505-412		10.2		mg/kg	1	0.098	0.98	09/04/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113047

Sample # 113047007
SAF# F11-159
Sample ID B2FXD6

Matrix SOIL
Sampled 08/29/11
Received 08/29/11

Test Performed		CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury		7439-97-6	LA-505-412	U	<0.049		mg/kg	1	0.049	0.20	09/04/11
Molybdenum	J+	7439-98-7	LA-505-412	B	0.399		mg/kg	1	0.098	0.98	09/04/11
Strontium		7440-24-6	LA-505-412		29.5		mg/kg	1	0.098	0.98	09/04/11
Tin		7440-31-5	LA-505-412	B	0.473		mg/kg	1	0.098	0.49	09/04/11
Uranium		7440-61-1	LA-505-412	B	0.386		mg/kg	1	0.098	0.49	09/04/11
Arsenic		7440-38-2	LA-505-412	B	2.83		mg/kg	1	0.39	3.9	09/04/11
Selenium		7782-49-2	LA-505-412	B	1.09		mg/kg	1	0.29	2.9	09/04/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113057

Sample # 113057001
SAF# F11-159
Sample ID B2FXJ8

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep										**09/06/11**
Cr(VI)										
~~Hexavalent chromium~~	~~18540-29-9~~	~~LA-265-403~~	~~UDN~~	~~<0.47~~		~~ug/g~~	~~5~~	~~0.47~~	~~2.4~~	~~09/07/11~~
ICPMS Prep										**09/02/11**
ICP-MS										
Manganese J+	7439-96-5	LA-505-412	N	369		mg/kg	1	0.096	0.96	09/04/11
Nickel	7440-02-0	LA-505-412		11.4		mg/kg	1	0.19	1.9	09/04/11
Silver	7440-22-4	LA-505-412	U	<0.096		mg/kg	1	0.096	0.96	09/04/11
Antimony	7440-36-0	LA-505-412	U	<0.29		mg/kg	1	0.29	2.9	09/04/11
Barium	7440-39-3	LA-505-412		63.8		mg/kg	1	0.19	1.9	09/04/11
Beryllium	7440-41-7	LA-505-412	B	0.320		mg/kg	1	0.096	0.48	09/04/11
Boron	7440-42-8	LA-505-412	B	2.52		mg/kg	1	0.48	4.8	09/04/11
Cadmium	7440-43-9	LA-505-412	B	0.121		mg/kg	1	0.096	0.96	09/04/11
Chromium	7440-47-3	LA-505-412		8.75		mg/kg	1	0.48	4.8	09/04/11
Cobalt	7440-48-4	LA-505-412		8.94		mg/kg	1	0.096	0.48	09/04/11
Copper	7440-50-8	LA-505-412		17.0		mg/kg	1	0.096	0.96	09/04/11
Vanadium	7440-62-2	LA-505-412		56.6		mg/kg	1	0.19	1.9	09/04/11
Zinc	7440-66-6	LA-505-412		51.0		mg/kg	1	0.77	4.8	09/04/11
Lead	7439-92-1	LA-505-412		7.33		mg/kg	1	0.096	0.96	09/04/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113057

Sample # 113057001
SAF# F11-159
Sample ID B2FXJ8

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury	7439-97-6	LA-505-412	UX	<0.048		mg/kg	1	0.048	0.19	09/04/11
Molybdenum	7439-98-7	LA-505-412	B	0.416		mg/kg	1	0.096	0.96	09/04/11
Strontium	7440-24-6	LA-505-412		25.7		mg/kg	1	0.096	0.96	09/04/11
Tin	7440-31-5	LA-505-412		0.513		mg/kg	1	0.096	0.48	09/04/11
Uranium	7440-61-1	LA-505-412	B	0.444		mg/kg	1	0.096	0.48	09/04/11
Arsenic	7440-38-2	LA-505-412	B	2.91		mg/kg	1	0.38	3.8	09/04/11
Selenium	7782-49-2	LA-505-412	B	1.37		mg/kg	1	0.29	2.9	09/04/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113057

Sample # 113057002
SAF# F11-159
Sample ID B2FXJ9

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed		CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep											**09/06/11**
Cr(VI)											
~~Hexavalent chromium~~		~~18540-29-9~~	~~LA-265-403~~	~~UDN~~	~~<0.48~~		~~ug/g~~	~~5~~	~~0.48~~	~~2.4~~	~~09/07/11~~
ICPMS Prep											**09/02/11**
ICP-MS											
Manganese	J+	7439-96-5	LA-505-412	N	354		mg/kg	1	0.10	1.0	09/04/11
Nickel		7440-02-0	LA-505-412		14.5		mg/kg	1	0.20	2.0	09/04/11
Silver		7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/04/11
Antimony		7440-36-0	LA-505-412	U	<0.30		mg/kg	1	0.30	3.0	09/04/11
Barium		7440-39-3	LA-505-412		69.0		mg/kg	1	0.20	2.0	09/04/11
Beryllium		7440-41-7	LA-505-412	B	0.332		mg/kg	1	0.10	0.51	09/04/11
Boron		7440-42-8	LA-505-412	B	2.17		mg/kg	1	0.51	5.1	09/04/11
Cadmium		7440-43-9	LA-505-412	B	0.124		mg/kg	1	0.10	1.0	09/04/11
Chromium		7440-47-3	LA-505-412		9.70		mg/kg	1	0.51	5.1	09/04/11
Cobalt		7440-48-4	LA-505-412		9.09		mg/kg	1	0.10	0.51	09/04/11
Copper		7440-50-8	LA-505-412		18.3		mg/kg	1	0.10	1.0	09/04/11
Vanadium		7440-62-2	LA-505-412		60.5		mg/kg	1	0.20	2.0	09/04/11
Zinc		7440-66-6	LA-505-412		54.4		mg/kg	1	0.81	5.1	09/04/11
Lead		7439-92-1	LA-505-412		7.64		mg/kg	1	0.10	1.0	09/04/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113057

Sample # 113057002
SAF# F11-159
Sample ID B2FXJ9

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury	7439-97-6	LA-505-412	UX	<0.051		mg/kg	1	0.051	0.20	09/04/11
Molybdenum	7439-98-7	LA-505-412	B	0.478		mg/kg	1	0.10	1.0	09/04/11
Strontium	7440-24-6	LA-505-412		27.7		mg/kg	1	0.10	1.0	09/04/11
Tin	7440-31-5	LA-505-412		0.586		mg/kg	1	0.10	0.51	09/04/11
Uranium	7440-61-1	LA-505-412	B	0.474		mg/kg	1	0.10	0.51	09/04/11
Arsenic	7440-38-2	LA-505-412	B	3.24		mg/kg	1	0.41	4.1	09/04/11
Selenium	7782-49-2	LA-505-412	B	1.48		mg/kg	1	0.30	3.0	09/04/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113057

Sample # 113057003
SAF# F11-159
Sample ID B2FXK0

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed		CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep											**09/06/11**
Cr(VI)											
~~Hexavalent chromium~~		~~18540-29-9~~	~~LA-265-403~~	~~UDN~~	~~<0.46~~		~~ug/g~~	~~5~~	~~0.46~~	~~2.3~~	~~09/07/11~~
ICPMS Prep											**09/02/11**
ICP-MS											
Manganese	J+	7439-96-5	LA-505-412	N	403		mg/kg	1	0.10	1.0	09/04/11
Nickel		7440-02-0	LA-505-412		12.9		mg/kg	1	0.20	2.0	09/04/11
Silver		7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/04/11
Antimony		7440-36-0	LA-505-412	U	<0.30		mg/kg	1	0.30	3.0	09/04/11
Barium		7440-39-3	LA-505-412		76.6		mg/kg	1	0.20	2.0	09/04/11
Beryllium		7440-41-7	LA-505-412	B	0.398		mg/kg	1	0.10	0.50	09/04/11
Boron		7440-42-8	LA-505-412	B	2.28		mg/kg	1	0.50	5.0	09/04/11
Cadmium		7440-43-9	LA-505-412	B	0.117		mg/kg	1	0.10	1.0	09/04/11
Chromium		7440-47-3	LA-505-412		10.6		mg/kg	1	0.50	5.0	09/04/11
Cobalt		7440-48-4	LA-505-412		9.60		mg/kg	1	0.10	0.50	09/04/11
Copper		7440-50-8	LA-505-412		18.9		mg/kg	1	0.10	1.0	09/04/11
Vanadium		7440-62-2	LA-505-412		59.0		mg/kg	1	0.20	2.0	09/04/11
Zinc		7440-66-6	LA-505-412		53.5		mg/kg	1	0.80	5.0	09/04/11
Lead		7439-92-1	LA-505-412		8.07		mg/kg	1	0.10	1.0	09/04/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113057

Sample # 113057003
SAF# F11-159
Sample ID B2FXK0

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury	7439-97-6	LA-505-412	UX	<0.050		mg/kg	1	0.050	0.20	09/04/11
Molybdenum	7439-98-7	LA-505-412	B	0.449		mg/kg	1	0.10	1.0	09/04/11
Strontium	7440-24-6	LA-505-412		28.4		mg/kg	1	0.10	1.0	09/04/11
Tin	7440-31-5	LA-505-412		0.594		mg/kg	1	0.10	0.50	09/04/11
Uranium	7440-61-1	LA-505-412		0.510		mg/kg	1	0.10	0.50	09/04/11
Arsenic	7440-38-2	LA-505-412	B	3.38		mg/kg	1	0.40	4.0	09/04/11
Selenium	7782-49-2	LA-505-412	B	1.56		mg/kg	1	0.30	3.0	09/04/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113057

Sample # 113057004
SAF# F11-159
Sample ID B2FXK1

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed		CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep											**09/06/11**
Cr(VI)											
~~Hexavalent chromium~~		~~18540-29-9~~	~~LA-265-403~~	~~UDN~~	~~<0.50~~		~~ug/g~~	~~5~~	~~0.50~~	~~2.5~~	~~09/07/11~~
ICPMS Prep											**09/02/11**
ICP-MS											
Manganese	J+	7439-96-5	LA-505-412	N	396		mg/kg	1	0.10	1.0	09/04/11
Nickel		7440-02-0	LA-505-412		13.3		mg/kg	1	0.20	2.0	09/04/11
Silver		7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/04/11
Antimony		7440-36-0	LA-505-412	U	<0.30		mg/kg	1	0.30	3.0	09/04/11
Barium		7440-39-3	LA-505-412		76.0		mg/kg	1	0.20	2.0	09/04/11
Beryllium		7440-41-7	LA-505-412	B	0.317		mg/kg	1	0.10	0.50	09/04/11
Boron		7440-42-8	LA-505-412	B	2.07		mg/kg	1	0.50	5.0	09/04/11
Cadmium		7440-43-9	LA-505-412	B	0.186		mg/kg	1	0.10	1.0	09/04/11
Chromium		7440-47-3	LA-505-412		16.3		mg/kg	1	0.50	5.0	09/04/11
Cobalt		7440-48-4	LA-505-412		9.96		mg/kg	1	0.10	0.50	09/04/11
Copper		7440-50-8	LA-505-412		19.0		mg/kg	1	0.10	1.0	09/04/11
Vanadium		7440-62-2	LA-505-412		61.0		mg/kg	1	0.20	2.0	09/04/11
Zinc		7440-66-6	LA-505-412		57.5		mg/kg	1	0.80	5.0	09/04/11
Lead		7439-92-1	LA-505-412		12.9		mg/kg	1	0.10	1.0	09/04/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113057

Sample # 113057004
SAF# F11-159
Sample ID B2FXK1

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury	7439-97-6	LA-505-412	UX	<0.050		mg/kg	1	0.050	0.20	09/04/11
Molybdenum	7439-98-7	LA-505-412	B	0.402		mg/kg	1	0.10	1.0	09/04/11
Strontium	7440-24-6	LA-505-412		32.1		mg/kg	1	0.10	1.0	09/04/11
Tin	7440-31-5	LA-505-412		0.558		mg/kg	1	0.10	0.50	09/04/11
Uranium	7440-61-1	LA-505-412	B	0.498		mg/kg	1	0.10	0.50	09/04/11
Arsenic	7440-38-2	LA-505-412	B	3.75		mg/kg	1	0.40	4.0	09/04/11
Selenium	7782-49-2	LA-505-412	B	1.44		mg/kg	1	0.30	3.0	09/04/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113057

Sample # 113057005
SAF# F11-159
Sample ID B2FXB5

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed		CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep											**09/06/11**
Cr(VI)											
~~Hexavalent chromium~~		~~18540-29-9~~	~~LA-265-403~~	~~UDN~~	~~<0.50~~		~~ug/g~~	~~5~~	~~0.50~~	~~2.5~~	~~09/07/11~~
ICPMS Prep											**09/02/11**
ICP-MS											
Manganese	J+	7439-96-5	LA-505-412	N	355		mg/kg	1	0.098	0.98	09/04/11
Nickel		7440-02-0	LA-505-412		11.9		mg/kg	1	0.20	2.0	09/04/11
Silver		7440-22-4	LA-505-412	U	<0.098		mg/kg	1	0.098	0.98	09/04/11
Antimony		7440-36-0	LA-505-412	U	<0.29		mg/kg	1	0.29	2.9	09/04/11
Barium		7440-39-3	LA-505-412		63.7		mg/kg	1	0.20	2.0	09/04/11
Beryllium		7440-41-7	LA-505-412	B	0.322		mg/kg	1	0.098	0.49	09/04/11
Boron		7440-42-8	LA-505-412	B	3.08		mg/kg	1	0.49	4.9	09/04/11
Cadmium		7440-43-9	LA-505-412	B	0.229		mg/kg	1	0.098	0.98	09/04/11
Chromium		7440-47-3	LA-505-412		8.72		mg/kg	1	0.49	4.9	09/04/11
Cobalt		7440-48-4	LA-505-412		9.07		mg/kg	1	0.098	0.49	09/04/11
Copper		7440-50-8	LA-505-412		18.8		mg/kg	1	0.098	0.98	09/04/11
Vanadium		7440-62-2	LA-505-412		61.9		mg/kg	1	0.20	2.0	09/04/11
Zinc		7440-66-6	LA-505-412		58.5		mg/kg	1	0.78	4.9	09/04/11
Lead		7439-92-1	LA-505-412		8.13		mg/kg	1	0.098	0.98	09/04/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113057

Sample # 113057005
SAF# F11-159
Sample ID B2FXB5

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury	7439-97-6	LA-505-412	UX	<0.049		mg/kg	1	0.049	0.20	09/04/11
Molybdenum	7439-98-7	LA-505-412	B	0.434		mg/kg	1	0.098	0.98	09/04/11
Strontium	7440-24-6	LA-505-412		29.7		mg/kg	1	0.098	0.98	09/04/11
Tin	7440-31-5	LA-505-412		0.561		mg/kg	1	0.098	0.49	09/04/11
Uranium	7440-61-1	LA-505-412	B	0.469		mg/kg	1	0.098	0.49	09/04/11
Arsenic	7440-38-2	LA-505-412	B	2.94		mg/kg	1	0.39	3.9	09/04/11
Selenium	7782-49-2	LA-505-412	B	1.39		mg/kg	1	0.29	2.9	09/04/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113057

Sample # 113057006
SAF# F11-159
Sample ID B2FXB6

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed		CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep											**09/06/11**
Cr(VI)											
~~Hexavalent chromium~~		~~18540-29-9~~	~~LA-265-403~~	~~UDN~~	~~<0.51~~		~~ug/g~~	~~5~~	~~0.51~~	~~2.6~~	~~09/07/11~~
ICPMS Prep											**09/02/11**
ICP-MS											
Manganese	J+	7439-96-5	LA-505-412	N	382		mg/kg	1	0.094	0.94	09/04/11
Nickel		7440-02-0	LA-505-412		12.0		mg/kg	1	0.19	1.9	09/04/11
Silver		7440-22-4	LA-505-412	U	<0.094		mg/kg	1	0.094	0.94	09/04/11
Antimony		7440-36-0	LA-505-412	U	<0.28		mg/kg	1	0.28	2.8	09/04/11
Barium		7440-39-3	LA-505-412		76.3		mg/kg	1	0.19	1.9	09/04/11
Beryllium		7440-41-7	LA-505-412	B	0.381		mg/kg	1	0.094	0.47	09/04/11
Boron		7440-42-8	LA-505-412	B	3.48		mg/kg	1	0.47	4.7	09/04/11
Cadmium		7440-43-9	LA-505-412	B	0.181		mg/kg	1	0.094	0.94	09/04/11
Chromium		7440-47-3	LA-505-412		11.0		mg/kg	1	0.47	4.7	09/04/11
Cobalt		7440-48-4	LA-505-412		8.61		mg/kg	1	0.094	0.47	09/04/11
Copper		7440-50-8	LA-505-412		16.8		mg/kg	1	0.094	0.94	09/04/11
Vanadium		7440-62-2	LA-505-412		55.9		mg/kg	1	0.19	1.9	09/04/11
Zinc		7440-66-6	LA-505-412		50.9		mg/kg	1	0.75	4.7	09/04/11
Lead		7439-92-1	LA-505-412		8.48		mg/kg	1	0.094	0.94	09/04/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113057

Sample # 113057006
SAF# F11-159
Sample ID B2FXB6

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury	7439-97-6	LA-505-412	UX	<0.047		mg/kg	1	0.047	0.19	09/04/11
Molybdenum	7439-98-7	LA-505-412	B	0.412		mg/kg	1	0.094	0.94	09/04/11
Strontium	7440-24-6	LA-505-412		32.9		mg/kg	1	0.094	0.94	09/04/11
Tin	7440-31-5	LA-505-412		0.527		mg/kg	1	0.094	0.47	09/04/11
Uranium	7440-61-1	LA-505-412		0.485		mg/kg	1	0.094	0.47	09/04/11
Arsenic	7440-38-2	LA-505-412	B	3.41		mg/kg	1	0.38	3.8	09/04/11
Selenium	7782-49-2	LA-505-412	B	1.06		mg/kg	1	0.28	2.8	09/04/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113057

Sample # 113057007
SAF# F11-159
Sample ID B2FXB7

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed		CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep											**09/06/11**
Cr(VI)											
~~Hexavalent chromium~~		~~18540-29-9~~	~~LA-265-403~~	~~UDN~~	~~<0.48~~		~~ug/g~~	~~5~~	~~0.48~~	~~2.4~~	~~09/07/11~~
ICPMS Prep											**09/02/11**
ICP-MS											
Manganese	J+	7439-96-5	LA-505-412	N	379		mg/kg	1	0.096	0.96	09/04/11
Nickel		7440-02-0	LA-505-412		13.4		mg/kg	1	0.19	1.9	09/04/11
Silver		7440-22-4	LA-505-412	U	<0.096		mg/kg	1	0.096	0.96	09/04/11
Antimony		7440-36-0	LA-505-412	U	<0.29		mg/kg	1	0.29	2.9	09/04/11
Barium		7440-39-3	LA-505-412		70.8		mg/kg	1	0.19	1.9	09/04/11
Beryllium		7440-41-7	LA-505-412	B	0.346		mg/kg	1	0.096	0.48	09/04/11
Boron		7440-42-8	LA-505-412	B	2.36		mg/kg	1	0.48	4.8	09/04/11
Cadmium		7440-43-9	LA-505-412	B	0.150		mg/kg	1	0.096	0.96	09/04/11
Chromium		7440-47-3	LA-505-412		12.5		mg/kg	1	0.48	4.8	09/04/11
Cobalt		7440-48-4	LA-505-412		9.73		mg/kg	1	0.096	0.48	09/04/11
Copper		7440-50-8	LA-505-412		18.8		mg/kg	1	0.096	0.96	09/04/11
Vanadium		7440-62-2	LA-505-412		61.5		mg/kg	1	0.19	1.9	09/04/11
Zinc		7440-66-6	LA-505-412		58.1		mg/kg	1	0.77	4.8	09/04/11
Lead		7439-92-1	LA-505-412		8.85		mg/kg	1	0.096	0.96	09/04/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113057

Sample # 113057007
SAF# F11-159
Sample ID B2FXB7

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury	7439-97-6	LA-505-412	UX	<0.048		mg/kg	1	0.048	0.19	09/04/11
Molybdenum	7439-98-7	LA-505-412	B	0.462		mg/kg	1	0.096	0.96	09/04/11
Strontium	7440-24-6	LA-505-412		31.4		mg/kg	1	0.096	0.96	09/04/11
Tin	7440-31-5	LA-505-412		0.534		mg/kg	1	0.096	0.48	09/04/11
Uranium	7440-61-1	LA-505-412		0.533		mg/kg	1	0.096	0.48	09/04/11
Arsenic	7440-38-2	LA-505-412	B	3.31		mg/kg	1	0.38	3.8	09/04/11
Selenium	7782-49-2	LA-505-412	B	1.08		mg/kg	1	0.29	2.9	09/04/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113057

Sample # 113057008
SAF# F11-159
Sample ID B2FXB8

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed		CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep											**09/06/11**
Cr(VI)											
~~Hexavalent chromium~~		~~18540-29-9~~	~~LA-265-403~~	~~UDN~~	~~<0.51~~		~~ug/g~~	~~5~~	~~0.51~~	~~2.5~~	~~09/07/11~~
ICPMS Prep											**09/02/11**
ICP-MS											
Manganese	J+	7439-96-5	LA-505-412	N	388		mg/kg	1	0.099	0.99	09/04/11
Nickel		7440-02-0	LA-505-412		13.4		mg/kg	1	0.20	2.0	09/04/11
Silver		7440-22-4	LA-505-412	U	<0.099		mg/kg	1	0.099	0.99	09/04/11
Antimony		7440-36-0	LA-505-412	U	<0.30		mg/kg	1	0.30	3.0	09/04/11
Barium		7440-39-3	LA-505-412		71.2		mg/kg	1	0.20	2.0	09/04/11
Beryllium		7440-41-7	LA-505-412	B	0.391		mg/kg	1	0.099	0.49	09/04/11
Boron		7440-42-8	LA-505-412	B	2.48		mg/kg	1	0.49	4.9	09/04/11
Cadmium		7440-43-9	LA-505-412	B	0.183		mg/kg	1	0.099	0.99	09/04/11
Chromium		7440-47-3	LA-505-412		12.1		mg/kg	1	0.49	4.9	09/04/11
Cobalt		7440-48-4	LA-505-412		10.0		mg/kg	1	0.099	0.49	09/04/11
Copper		7440-50-8	LA-505-412		18.9		mg/kg	1	0.099	0.99	09/04/11
Vanadium		7440-62-2	LA-505-412		64.1		mg/kg	1	0.20	2.0	09/04/11
Zinc		7440-66-6	LA-505-412		59.7		mg/kg	1	0.79	4.9	09/04/11
Lead		7439-92-1	LA-505-412		8.48		mg/kg	1	0.099	0.99	09/04/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113057

Sample # 113057008
SAF# F11-159
Sample ID B2FXB8

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury	7439-97-6	LA-505-412	UX	<0.049		mg/kg	1	0.049	0.20	09/04/11
Molybdenum	7439-98-7	LA-505-412	B	0.460		mg/kg	1	0.099	0.99	09/04/11
Strontium	7440-24-6	LA-505-412		31.1		mg/kg	1	0.099	0.99	09/04/11
Tin	7440-31-5	LA-505-412		0.546		mg/kg	1	0.099	0.49	09/04/11
Uranium	7440-61-1	LA-505-412	B	0.487		mg/kg	1	0.099	0.49	09/04/11
Arsenic	7440-38-2	LA-505-412	B	3.50		mg/kg	1	0.39	3.9	09/04/11
Selenium	7782-49-2	LA-505-412	B	1.37		mg/kg	1	0.30	3.0	09/04/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113057

Sample # 113057009
SAF# F11-159
Sample ID B2FXB9

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed		CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep											**09/06/11**
Cr(VI)											
~~Hexavalent chromium~~		~~18540-29-9~~	~~LA-265-403~~	~~UDN~~	~~<0.52~~		~~ug/g~~	~~5~~	~~0.52~~	~~2.6~~	~~09/07/11~~
ICPMS Prep											**09/02/11**
ICP-MS											
Manganese	J+	7439-96-5	LA-505-412	N	384		mg/kg	1	0.097	0.97	09/04/11
Nickel		7440-02-0	LA-505-412		13.4		mg/kg	1	0.19	1.9	09/04/11
Silver		7440-22-4	LA-505-412	U	<0.097		mg/kg	1	0.097	0.97	09/04/11
Antimony		7440-36-0	LA-505-412	U	<0.29		mg/kg	1	0.29	2.9	09/04/11
Barium		7440-39-3	LA-505-412		72.3		mg/kg	1	0.19	1.9	09/04/11
Beryllium		7440-41-7	LA-505-412	B	0.426		mg/kg	1	0.097	0.49	09/04/11
Boron		7440-42-8	LA-505-412	B	2.40		mg/kg	1	0.49	4.9	09/04/11
Cadmium		7440-43-9	LA-505-412	B	0.188		mg/kg	1	0.097	0.97	09/04/11
Chromium		7440-47-3	LA-505-412		11.3		mg/kg	1	0.49	4.9	09/04/11
Cobalt		7440-48-4	LA-505-412		9.65		mg/kg	1	0.097	0.49	09/04/11
Copper		7440-50-8	LA-505-412		18.6		mg/kg	1	0.097	0.97	09/04/11
Vanadium		7440-62-2	LA-505-412		62.8		mg/kg	1	0.19	1.9	09/04/11
Zinc		7440-66-6	LA-505-412		60.6		mg/kg	1	0.78	4.9	09/04/11
Lead		7439-92-1	LA-505-412		9.25		mg/kg	1	0.097	0.97	09/04/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113057

Sample # 113057009
SAF# F11-159
Sample ID B2FXB9

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury	7439-97-6	LA-505-412	UX	<0.049		mg/kg	1	0.049	0.19	09/04/11
Molybdenum	7439-98-7	LA-505-412	B	0.421		mg/kg	1	0.097	0.97	09/04/11
Strontium	7440-24-6	LA-505-412		30.4		mg/kg	1	0.097	0.97	09/04/11
Tin	7440-31-5	LA-505-412		0.626		mg/kg	1	0.097	0.49	09/04/11
Uranium	7440-61-1	LA-505-412	B	0.480		mg/kg	1	0.097	0.49	09/04/11
Arsenic	7440-38-2	LA-505-412	B	3.29		mg/kg	1	0.39	3.9	09/04/11
Selenium	7782-49-2	LA-505-412	B	1.63		mg/kg	1	0.29	2.9	09/04/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113057

Sample # 113057010
SAF# F11-159
Sample ID B2FXC0

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed		CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep											**09/06/11**
Cr(VI)											
~~Hexavalent chromium~~		~~18540-29-9~~	~~LA-265-403~~	~~UDN~~	~~<0.48~~		~~ug/g~~	~~5~~	~~0.48~~	~~2.4~~	~~09/07/11~~
ICPMS Prep											**09/02/11**
ICP-MS											
Manganese	J+	7439-96-5	LA-505-412	N	348		mg/kg	1	0.10	1.0	09/04/11
Nickel		7440-02-0	LA-505-412		12.0		mg/kg	1	0.20	2.0	09/04/11
Silver		7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/04/11
Antimony		7440-36-0	LA-505-412	U	<0.30		mg/kg	1	0.30	3.0	09/04/11
Barium		7440-39-3	LA-505-412		64.1		mg/kg	1	0.20	2.0	09/04/11
Beryllium		7440-41-7	LA-505-412	B	0.322		mg/kg	1	0.10	0.50	09/04/11
Boron		7440-42-8	LA-505-412	B	2.06		mg/kg	1	0.50	5.0	09/04/11
Cadmium		7440-43-9	LA-505-412	B	0.102		mg/kg	1	0.10	1.0	09/04/11
Chromium		7440-47-3	LA-505-412		8.96		mg/kg	1	0.50	5.0	09/04/11
Cobalt		7440-48-4	LA-505-412		9.01		mg/kg	1	0.10	0.50	09/04/11
Copper		7440-50-8	LA-505-412		17.4		mg/kg	1	0.10	1.0	09/04/11
Vanadium		7440-62-2	LA-505-412		59.2		mg/kg	1	0.20	2.0	09/04/11
Zinc		7440-66-6	LA-505-412		52.4		mg/kg	1	0.80	5.0	09/04/11
Lead		7439-92-1	LA-505-412		7.05		mg/kg	1	0.10	1.0	09/04/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113057

Sample # 113057010
SAF# F11-159
Sample ID B2FXC0

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury	7439-97-6	LA-505-412	UX	<0.050		mg/kg	1	0.050	0.20	09/04/11
Molybdenum	7439-98-7	LA-505-412	B	0.412		mg/kg	1	0.10	1.0	09/04/11
Strontium	7440-24-6	LA-505-412		28.8		mg/kg	1	0.10	1.0	09/04/11
Tin	7440-31-5	LA-505-412	B	0.482		mg/kg	1	0.10	0.50	09/04/11
Uranium	7440-61-1	LA-505-412		0.530		mg/kg	1	0.10	0.50	09/04/11
Arsenic	7440-38-2	LA-505-412	B	2.70		mg/kg	1	0.40	4.0	09/04/11
Selenium	7782-49-2	LA-505-412	B	1.56		mg/kg	1	0.30	3.0	09/04/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113057

Sample # 113057011
SAF# F11-159
Sample ID B2FXC1

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed		CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep											**09/06/11**
Cr(VI)											
~~Hexavalent chromium~~		~~18540-29-9~~	~~LA-265-403~~	~~UDN~~	~~<0.49~~		~~ug/g~~	~~5~~	~~0.49~~	~~2.4~~	~~09/07/11~~
ICPMS Prep											**09/02/11**
ICP-MS											
Manganese	J+	7439-96-5	LA-505-412	N	346		mg/kg	1	0.10	1.0	09/04/11
Nickel		7440-02-0	LA-505-412		12.8		mg/kg	1	0.20	2.0	09/04/11
Silver		7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/04/11
Antimony		7440-36-0	LA-505-412	U	<0.30		mg/kg	1	0.30	3.0	09/04/11
Barium		7440-39-3	LA-505-412		70.7		mg/kg	1	0.20	2.0	09/04/11
Beryllium		7440-41-7	LA-505-412	B	0.295		mg/kg	1	0.10	0.50	09/04/11
Boron		7440-42-8	LA-505-412	B	2.28		mg/kg	1	0.50	5.0	09/04/11
Cadmium		7440-43-9	LA-505-412	B	0.132		mg/kg	1	0.10	1.0	09/04/11
Chromium		7440-47-3	LA-505-412		11.6		mg/kg	1	0.50	5.0	09/04/11
Cobalt		7440-48-4	LA-505-412		8.73		mg/kg	1	0.10	0.50	09/04/11
Copper		7440-50-8	LA-505-412		18.4		mg/kg	1	0.10	1.0	09/04/11
Vanadium		7440-62-2	LA-505-412		57.9		mg/kg	1	0.20	2.0	09/04/11
Zinc		7440-66-6	LA-505-412		55.8		mg/kg	1	0.80	5.0	09/04/11
Lead		7439-92-1	LA-505-412		9.29		mg/kg	1	0.10	1.0	09/04/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113057

Sample # 113057011
SAF# F11-159
Sample ID B2FXC1

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury	7439-97-6	LA-505-412	UX	<0.050		mg/kg	1	0.050	0.20	09/04/11
Molybdenum	7439-98-7	LA-505-412	B	0.448		mg/kg	1	0.10	1.0	09/04/11
Strontium	7440-24-6	LA-505-412		29.6		mg/kg	1	0.10	1.0	09/04/11
Tin	7440-31-5	LA-505-412		0.522		mg/kg	1	0.10	0.50	09/04/11
Uranium	7440-61-1	LA-505-412	B	0.433		mg/kg	1	0.10	0.50	09/04/11
Arsenic	7440-38-2	LA-505-412	B	3.15		mg/kg	1	0.40	4.0	09/04/11
Selenium	7782-49-2	LA-505-412	B	1.26		mg/kg	1	0.30	3.0	09/04/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113057

Sample # 113057012
SAF# F11-159
Sample ID B2FXC2

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed		CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep											**09/06/11**
Cr(VI)											
~~Hexavalent chromium~~		~~18540-29-9~~	~~LA-265-403~~	~~UDN~~	~~<0.50~~		~~ug/g~~	~~5~~	~~0.50~~	~~2.5~~	~~09/07/11~~
ICPMS Prep											**09/02/11**
ICP-MS											
Manganese	J+	7439-96-5	LA-505-412	N	365		mg/kg	1	0.10	1.0	09/04/11
Nickel		7440-02-0	LA-505-412		12.0		mg/kg	1	0.20	2.0	09/04/11
Silver		7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/04/11
Antimony		7440-36-0	LA-505-412	U	<0.30		mg/kg	1	0.30	3.0	09/04/11
Barium		7440-39-3	LA-505-412		69.7		mg/kg	1	0.20	2.0	09/04/11
Beryllium		7440-41-7	LA-505-412	B	0.329		mg/kg	1	0.10	0.51	09/04/11
Boron		7440-42-8	LA-505-412	B	2.07		mg/kg	1	0.51	5.1	09/04/11
Cadmium		7440-43-9	LA-505-412	B	0.205		mg/kg	1	0.10	1.0	09/04/11
Chromium		7440-47-3	LA-505-412		11.1		mg/kg	1	0.51	5.1	09/04/11
Cobalt		7440-48-4	LA-505-412		9.58		mg/kg	1	0.10	0.51	09/04/11
Copper		7440-50-8	LA-505-412		18.1		mg/kg	1	0.10	1.0	09/04/11
Vanadium		7440-62-2	LA-505-412		58.9		mg/kg	1	0.20	2.0	09/04/11
Zinc		7440-66-6	LA-505-412		62.4		mg/kg	1	0.81	5.1	09/04/11
Lead		7439-92-1	LA-505-412		9.15		mg/kg	1	0.10	1.0	09/04/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113057

Sample # 113057012
SAF# F11-159
Sample ID B2FXC2

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury	7439-97-6	LA-505-412	UX	<0.051		mg/kg	1	0.051	0.20	09/04/11
Molybdenum	7439-98-7	LA-505-412	B	0.401		mg/kg	1	0.10	1.0	09/04/11
Strontium	7440-24-6	LA-505-412		29.9		mg/kg	1	0.10	1.0	09/04/11
Tin	7440-31-5	LA-505-412		0.562		mg/kg	1	0.10	0.51	09/04/11
Uranium	7440-61-1	LA-505-412	B	0.452		mg/kg	1	0.10	0.51	09/04/11
Arsenic	7440-38-2	LA-505-412	B	3.33		mg/kg	1	0.41	4.1	09/04/11
Selenium	7782-49-2	LA-505-412	B	1.43		mg/kg	1	0.30	3.0	09/04/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113057

Sample # 113057013
SAF# F11-159
Sample ID B2FXC3

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed		CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep											**09/06/11**
Cr(VI)											
~~Hexavalent chromium~~		~~18540-29-9~~	~~LA-265-403~~	~~UDN~~	~~<0.49~~		~~ug/g~~	~~5~~	~~0.49~~	~~2.5~~	~~09/07/11~~
ICPMS Prep											**09/02/11**
ICP-MS											
Manganese	J+	7439-96-5	LA-505-412	N	379		mg/kg	1	0.096	0.96	09/04/11
Nickel		7440-02-0	LA-505-412		13.3		mg/kg	1	0.19	1.9	09/04/11
Silver		7440-22-4	LA-505-412	U	<0.096		mg/kg	1	0.096	0.96	09/04/11
Antimony		7440-36-0	LA-505-412	U	<0.29		mg/kg	1	0.29	2.9	09/04/11
Barium		7440-39-3	LA-505-412		68.6		mg/kg	1	0.19	1.9	09/04/11
Beryllium		7440-41-7	LA-505-412	B	0.405		mg/kg	1	0.096	0.48	09/04/11
Boron		7440-42-8	LA-505-412	B	1.92		mg/kg	1	0.48	4.8	09/04/11
Cadmium		7440-43-9	LA-505-412	B	0.314		mg/kg	1	0.096	0.96	09/04/11
Chromium		7440-47-3	LA-505-412		10.1		mg/kg	1	0.48	4.8	09/04/11
Cobalt		7440-48-4	LA-505-412		8.94		mg/kg	1	0.096	0.48	09/04/11
Copper		7440-50-8	LA-505-412		22.7		mg/kg	1	0.096	0.96	09/04/11
Vanadium		7440-62-2	LA-505-412		59.9		mg/kg	1	0.19	1.9	09/04/11
Zinc		7440-66-6	LA-505-412		73.3		mg/kg	1	0.77	4.8	09/04/11
Lead		7439-92-1	LA-505-412		13.1		mg/kg	1	0.096	0.96	09/04/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113057

Sample # 113057013
SAF# F11-159
Sample ID B2FXC3

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury	7439-97-6	LA-505-412	UX	<0.048		mg/kg	1	0.048	0.19	09/04/11
Molybdenum	7439-98-7	LA-505-412	B	0.454		mg/kg	1	0.096	0.96	09/04/11
Strontium	7440-24-6	LA-505-412		29.3		mg/kg	1	0.096	0.96	09/04/11
Tin	7440-31-5	LA-505-412		1.06		mg/kg	1	0.096	0.48	09/04/11
Uranium	7440-61-1	LA-505-412		0.724		mg/kg	1	0.096	0.48	09/04/11
Arsenic	7440-38-2	LA-505-412	B	3.54		mg/kg	1	0.38	3.8	09/04/11
Selenium	7782-49-2	LA-505-412	B	1.46		mg/kg	1	0.29	2.9	09/04/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113057

Sample # 113057014
SAF# F11-159
Sample ID B2FXC4

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed		CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep											**09/08/11**
Cr(VI)											
~~Hexavalent chromium~~		~~18540-29-9~~	~~LA-265-403~~	~~UD~~	~~<0.50~~		~~ug/g~~	~~5~~	~~0.50~~	~~2.5~~	~~09/08/11~~
ICPMS Prep											**09/02/11**
ICP-MS											
Manganese	J+	7439-96-5	LA-505-412	N	362		mg/kg	1	0.10	1.0	09/04/11
Nickel		7440-02-0	LA-505-412		14.6		mg/kg	1	0.21	2.1	09/04/11
Silver		7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/04/11
Antimony		7440-36-0	LA-505-412	U	<0.31		mg/kg	1	0.31	3.1	09/04/11
Barium		7440-39-3	LA-505-412		76.5		mg/kg	1	0.21	2.1	09/04/11
Beryllium		7440-41-7	LA-505-412	B	0.396		mg/kg	1	0.10	0.51	09/04/11
Boron		7440-42-8	LA-505-412	B	3.04		mg/kg	1	0.51	5.1	09/04/11
Cadmium		7440-43-9	LA-505-412	B	0.171		mg/kg	1	0.10	1.0	09/04/11
Chromium		7440-47-3	LA-505-412		17.6		mg/kg	1	0.51	5.1	09/04/11
Cobalt		7440-48-4	LA-505-412		8.49		mg/kg	1	0.10	0.51	09/04/11
Copper		7440-50-8	LA-505-412		17.4		mg/kg	1	0.10	1.0	09/04/11
Vanadium		7440-62-2	LA-505-412		50.4		mg/kg	1	0.21	2.1	09/04/11
Zinc		7440-66-6	LA-505-412		58.0		mg/kg	1	0.82	5.1	09/04/11
Lead		7439-92-1	LA-505-412		9.90		mg/kg	1	0.10	1.0	09/04/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113057

Sample # 113057014
SAF# F11-159
Sample ID B2FXC4

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury	7439-97-6	LA-505-412	UX	<0.051		mg/kg	1	0.051	0.21	09/04/11
Molybdenum	7439-98-7	LA-505-412	B	0.391		mg/kg	1	0.10	1.0	09/04/11
Strontium	7440-24-6	LA-505-412		29.5		mg/kg	1	0.10	1.0	09/04/11
Tin	7440-31-5	LA-505-412	B	0.494		mg/kg	1	0.10	0.51	09/04/11
Uranium	7440-61-1	LA-505-412	B	0.453		mg/kg	1	0.10	0.51	09/04/11
Arsenic	7440-38-2	LA-505-412	B	3.85		mg/kg	1	0.41	4.1	09/04/11
Selenium	7782-49-2	LA-505-412	B	1.22		mg/kg	1	0.31	3.1	09/04/11

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)

Appendix 4

Laboratory Narrative and Chain-of-Custody Documentation

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CASE NARRATIVE

CH2MHill Plateau Remediation Company
P.O. Box 1600
MS B3-60
Richland, Washington 99352
October 13, 2011
Attention: Scot Fitzgerald

TestAmerica Laboratories, Inc.

SDG	: SL1137
Number of Samples	: 55 samples
Sample Matrix	: Solid
Data Deliverable	: Summary
Date SDG Closed	: September 28, 2011

II. Introduction

On September 28, 2011, 55 solid samples were received by TestAmerica - St. Louis for chemical analysis. The samples were received within temperature criteria. See the COC and CUR forms for documentation of any variations on receipt conditions and temperature. Upon receipt, the samples were given laboratory Ids to correspond with specific client Ids. Please refer to the Sample Summary sheets attached to this case narrative. This report is incomplete without the narrative.

The following SAFs are associated with this SDG: F11-159

III. Analytical Results/ Methodology

The analytical results for this report are presented by analytical test. Each set of data includes sample identification information, analytical results and the appropriate detection limits. All results are based upon samples as they were received, i.e. wet weight, unless otherwise noted on the data sheets. See the attached Methods Summary Form for the methods used in this SDG.

MS/MSD/Dup analysis was done per the client requirements. Analytical batches that did not contain matrix QC were analyzed with a LCS/LCS duplicate.

Deviation from Request: None

IV. Definitions

QCBLK-	Quality Control Blank, Method Blank
QCLCS-	Quality Control Laboratory Control Sample, Blank Spike
DUP-	Laboratory Duplicate
MS-	Matrix Spike
MSD-	Matrix Spike Duplicate

The term "Detection Limit" used in the analytical data report refers to either the lab's standard reporting limits or contractually required reporting limits, whichever is applicable.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CH2M Hill Plateau Remediation Company

TestAmerica Laboratories, Inc.

October 13, 2011
SDG: SL1137

The following data qualifiers may be applicable to the results in this report, as appropriate.

- **B** – For inorganic analyses, the sample result is greater than the MDL but less than the RL.
- **B** – For organic analyses, Method Blank contamination. The Method Blank contains the target analyte at a concentration above the MDL.
- **J** – For organic analyses, the sample is estimated and less than the RL.
- **C** – For inorganic analyses, Method Blank contamination. The Method Blank contains the target analyte at a concentration above the MDL.
- **D** – For all analyses, the sample result was obtained from the analysis of a dilution.
- **N** – For inorganics and GC analyses, the spike/spike duplicate recoveries are outside QC limits.
- **T** – For GCMS analyses, the spike/spike duplicate recoveries are outside QC limits.

ICPMS Metals

Batch: 1272022

The samples were analyzed at a dilution for Boron due to the presence of matrix interferences which caused internal standard failures. The reporting limit has been adjusted for the dilution. The analyte is qualified with a "D" flag.

Affected Samples:
F1I280432 (1): B2H561
F1I280432 (2): B2FXJ1
F1I280432 (3): B2H563
F1I280432 (14): B2FXC6
F1I280432 (15): B2FXC7
F1I280432 (16): B2FXC8
F1I280432 (17): B2FXC9
F1I280432 (18): B2FXD0
F1I280432 (19): B2FXD1
F1I280432 (20): B2FXD2
F1I280432 (21): B2FXD3
F1I280432 (22): B2FXD4
F1I280432 (23): B2FXD5
F1I280432 (24): B2FXD7
F1I280432 (25): B2FXD8
F1I280432 (26): B2FXD9
F1I280432 (27): B2FXF0
F1I280432 (28): B2FXF1
F1I280432 (29): B2FXF2
F1I280432 (30): B2FXF3
F1I280432 (31): B2FXF4

Boron was detected in the method blank at a concentration above the MDL but below the RL. The analyte was not detected above the MDL in the associated samples. No qualifier is required.

Affected Samples:
F1I280432 (1): B2H561
F1I280432 (2): B2FXJ1
F1I280432 (3): B2H563
F1I280432 (14): B2FXC6
F1I280432 (15): B2FXC7
F1I280432 (16): B2FXC8
F1I280432 (17): B2FXC9
F1I280432 (18): B2FXD0
F1I280432 (19): B2FXD1
F1I280432 (20): B2FXD2
F1I280432 (21): B2FXD3
F1I280432 (22): B2FXD4
F1I280432 (23): B2FXD5
F1I280432 (24): B2FXD7
F1I280432 (25): B2FXD8
F1I280432 (26): B2FXD9
F1I280432 (27): B2FXF0
F1I280432 (28): B2FXF1
F1I280432 (29): B2FXF2
F1I280432 (30): B2FXF3
F1I280432 (31): B2FXF4

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THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.

The internal standard was outside QC limits in the CCV/CCB. All analytes were within acceptable limits, showing that there was no bias. Original results will be reported. Due to LDR failures, the LDR has been lowered for Beryllium. The MS/MSD concentrations were above the LDR. The LCS and MS/MSD recoveries were within acceptable QC limits. The MS/MSD results are reported as estimated values.

Affected Samples:
F1I280432 (1): B2H561
F1I280432 (2): B2FXJ1
F1I280432 (3): B2H563
F1I280432 (14): B2FXC6
F1I280432 (15): B2FXC7
F1I280432 (16): B2FXC8
F1I280432 (17): B2FXC9
F1I280432 (18): B2FXD0
F1I280432 (19): B2FXD1
F1I280432 (20): B2FXD2
F1I280432 (21): B2FXD3
F1I280432 (22): B2FXD4
F1I280432 (23): B2FXD5
F1I280432 (24): B2FXD7
F1I280432 (25): B2FXD8
F1I280432 (26): B2FXD9
F1I280432 (27): B2FXF0
F1I280432 (28): B2FXF1
F1I280432 (29): B2FXF2
F1I280432 (30): B2FXF3
F1I280432 (31): B2FXF4

Batch: 1272023

The samples were analyzed at a dilution for Boron and Copper due to the presence of matrix interferences which caused internal standard failures. The reporting limit has been adjusted for the dilution. The analytes are qualified with a "D" flag.

Affected Samples:
F1I280432 (32): B2FXF5
F1I280432 (33): B2FXF6
F1I280432 (34): B2FXF8
F1I280432 (35): B2FXF9
F1I280432 (36): B2FXH0
F1I280432 (37): B2FXH1
F1I280432 (38): B2FXH2
F1I280432 (39): B2FXH3
F1I280432 (40): B2FXH4
F1I280432 (41): B2FXH5
F1I280432 (42): B2FXH6
F1I280432 (43): B2FXH7
F1I280432 (44): B2FXH9
F1I280432 (45): B2FXJ0
F1I280432 (46): B2FXJ4
F1I280432 (47): B2FXJ5
F1I280432 (48): B2FXJ6
F1I280432 (49): B2FXJ7
F1I280432 (52): B2H560

Tin was detected in the method blank at a concentration above the MDL but below the RL. The analyte was detected above the MDL in the associated samples. The analyte is qualified accordingly with a "C" flag.

Affected Samples:
F1I280432 (32): B2FXF5
F1I280432 (33): B2FXF6
F1I280432 (34): B2FXF8
F1I280432 (35): B2FXF9
F1I280432 (36): B2FXH0
F1I280432 (37): B2FXH1
F1I280432 (38): B2FXH2
F1I280432 (39): B2FXH3
F1I280432 (40): B2FXH4
F1I280432 (41): B2FXH5
F1I280432 (42): B2FXH6
F1I280432 (43): B2FXH7
F1I280432 (44): B2FXH9
F1I280432 (45): B2FXJ0
F1I280432 (46): B2FXJ4
F1I280432 (47): B2FXJ5
F1I280432 (48): B2FXJ6
F1I280432 (49): B2FXJ7
F1I280432 (52): B2H560

The MS/MSD recovery for Manganese is outside the established QC limits. The said analyte concentration in the original sample is greater than four times the amount spiked, making percent recovery information ineffective. Method performance is demonstrated by acceptable LCS recovery. The analyte is qualified with a "D" flag.

Affected Samples:
F1I280432 (32): B2FXF5
F1I280432 (33): B2FXF6
F1I280432 (34): B2FXF8
F1I280432 (35): B2FXF9
F1I280432 (36): B2FXH0
F1I280432 (37): B2FXH1
F1I280432 (38): B2FXH2

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THE LEADER IN ENVIRONMENTAL TESTING

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TestAmerica Laboratories, Inc.

F1I280432 (39): B2FXH3
F1I280432 (40): B2FXH4
F1I280432 (41): B2FXH5
F1I280432 (42): B2FXH6
F1I280432 (43): B2FXH7
F1I280432 (44): B2FXH9
F1I280432 (45): B2FXJ0
F1I280432 (46): B2FXJ4
F1I280432 (47): B2FXJ5
F1I280432 (48): B2FXJ6
F1I280432 (49): B2FXJ7
F1I280432 (52): B2H560

The internal standard was outside QC limits in the CCV/CCB and ICSA/ICSAB. All analytes were within acceptable limits, showing that there was no bias. Original results will be reported. Due to LDR failures, the LDR has been lowered for Beryllium. The MS/MSD concentrations were above the LDR. The LCS and MS/MSD recoveries were within acceptable QC limits. The MS/MSD results are reported as estimated values.

Affected Samples:
F1I280432 (32): B2FXF5
F1I280432 (33): B2FXF6
F1I280432 (34): B2FXF8
F1I280432 (35): B2FXF9
F1I280432 (36): B2FXH0
F1I280432 (37): B2FXH1
F1I280432 (38): B2FXH2
F1I280432 (39): B2FXH3
F1I280432 (40): B2FXH4
F1I280432 (41): B2FXH5
F1I280432 (42): B2FXH6
F1I280432 (43): B2FXH7
F1I280432 (44): B2FXH9
F1I280432 (45): B2FXJ0
F1I280432 (46): B2FXJ4
F1I280432 (47): B2FXJ5
F1I280432 (48): B2FXJ6
F1I280432 (49): B2FXJ7
F1I280432 (52): B2H560

Batch: 1278046

Due to LDR failures, the LDR has been lowered for Beryllium. The MS/MSD concentrations were above the LDR. The LCS and MS/MSD recoveries were within acceptable QC limits. The MS/MSD results are reported as estimated values.

Affected Samples:
F1I280432 (14): B2FXC6

Batch: 1278047

The internal standard was outside QC limits in the ICSA/ICSAB. All analytes were within acceptable limits, showing that there was no bias. Original results will be reported.

Affected Samples:
F1I280432 (1): B2H561
F1I280432 (2): B2FXJ1
F1I280432 (3): B2H563
F1I280432 (14): B2FXC6
F1I280432 (15): B2FXC7
F1I280432 (16): B2FXC8
F1I280432 (17): B2FXC9
F1I280432 (18): B2FXD0
F1I280432 (19): B2FXD1
F1I280432 (20): B2FXD2
F1I280432 (21): B2FXD3
F1I280432 (22): B2FXD4
F1I280432 (23): B2FXD5
F1I280432 (24): B2FXD7
F1I280432 (25): B2FXD8
F1I280432 (26): B2FXD9
F1I280432 (27): B2FXF0
F1I280432 (28): B2FXF1
F1I280432 (29): B2FXF2
F1I280432 (30): B2FXF3
F1I280432 (31): B2FXF4

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Batch: 1278048

The internal standard was outside QC limits in the CCV/CCB and ICSA/ICSAB. All analytes were within acceptable limits, showing that there was no bias. Original results will be reported.

Affected Samples:
F1I280432 (32): B2FXF5
F1I280432 (33): B2FXF6
F1I280432 (34): B2FXF8
F1I280432 (35): B2FXF9
F1I280432 (36): B2FXH0
F1I280432 (37): B2FXH1
F1I280432 (38): B2FXH2
F1I280432 (39): B2FXH3
F1I280432 (40): B2FXH4
F1I280432 (41): B2FXH5
F1I280432 (42): B2FXH6
F1I280432 (43): B2FXH7
F1I280432 (44): B2FXH9
F1I280432 (45): B2FXJ0
F1I280432 (46): B2FXJ4
F1I280432 (47): B2FXJ5
F1I280432 (48): B2FXJ6
F1I280432 (49): B2FXJ7
F1I280432 (52): B2H560

Mercury

Batch: 1282013

Due to a counting error eleven samples were run in between CCV/CCBs. QC bracketing the eleven samples were both within acceptable control limits.

Affected Samples:
F1I280432 (1): B2H561
F1I280432 (2): B2FXJ1
F1I280432 (3): B2H563
F1I280432 (4): B2FXB5
F1I280432 (5): B2FXB6
F1I280432 (6): B2FXB7
F1I280432 (7): B2FXB8
F1I280432 (8): B2FXB9
F1I280432 (9): B2FXC0
F1I280432 (10): B2FXC1
F1I280432 (11): B2FXC2
F1I280432 (12): B2FXC3
F1I280432 (13): B2FXC4
F1I280432 (14): B2FXC6
F1I280432 (15): B2FXC7
F1I280432 (16): B2FXC8
F1I280432 (17): B2FXC9
F1I280432 (18): B2FXD0
F1I280432 (19): B2FXD1
F1I280432 (20): B2FXD2

I certify that this Summary Package is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed above. The Laboratory Manager or a designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Reviewed and approved:

Michael Franks
St. Louis Project Manager

CH2MHill Plateau Remediation Company CUK 124

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-082 – D PAGE 1 OF 2

COLLECTOR: SL1137

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days

SAMPLING LOCATION: FM Hall CHPRC

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

AIR QUALITY: ☐ Sal 9/27/11

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #60

FIELD LOGBOOK NO.: HNF-N-507-23

ACTUAL SAMPLE DEPTH: 0 – 1'

COA: 302676ES10

METHOD OF SHIPMENT: Sal 9/27/11 ~~GOVERNMENT VEHICLE~~ Commercial Carrier

ICE CHEST NO.: 278 GWS-278 Sal 9/27/11 ~~GWS-001~~

SHIPPED TO: Sal 9/27/11 TASL ~~Waste Sampling & Characterization~~

OFFSITE PROPERTY NO.: ~~N/A~~ Sal 9/27/11 ~~See PTR~~ 3192 LW. 9/27/11

BILL OF LADING/AIR BILL NO.: ~~N/A~~ Sal 9/27/11 ~~See PTR~~ 8 5954 6035 438 LW. 9/27/11

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2H561	3	SOIL	9/15/11	1135	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 15 2011 1450	TA Brazier	SEP 15 2011 1450
M. Nelson	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1000	DON BROTHERTON / CHPRC	SEP 27 2011 1000
DON BROTHERTON / CHPRC	SEP 27 2011 1400	FED EX	
FEDEX		Brian Daniels	9/28/11 0915

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

PRINTED ON 8/29/2011

A-6003-618 (REV 2)

SDG# SL1137

OCTOBER 14, 2011

TestAmerica St. Louis

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-082 - D

COLLECTOR: FM Hall CHPRC 54137

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: Sal 9/27/11 ~~12 Days / 12 Days~~ 15 Days

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #60

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

AIR QUALITY: ☐

ICE CHEST NO.: 6WS ~~276298~~ ~~6WS-007~~ DWB 9-27-11

FIELD LOGBOOK NO.: HNF-N-507-23.

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: Sal 9/27/11 ~~GOVERNMENT VEHICLE~~ Commercial Carrier

ORIGINAL

SHIPPED TO: Sal 9/27/11 TASL

~~Waste Sampling & Characterization~~

OFFSITE PROPERTY NO.: ~~N/A~~ Sal 9/27-11 ~~See PTR~~ KW. 9/27/11 3192

BILL OF LADING/AIR BILL NO.: ~~N/A~~ Sal 9/27/11 ~~See PTR~~ KW. 9/27/11 8595 4603 5438

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.

** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; ~~200.8 HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ Sal 9/27/11

~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 - Total Sr;~~

Hg {Mercury} - 7471

OCTOBER 14, 2011

SDG# SL1137

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-070 -D

COLLECTOR: FM Hall CHPRC SL1137

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01 Sal 9/27/11

DATA TURNAROUND: ~~12 Days~~ / ~~12 Days~~ 15 days

AIR QUALITY: ☐

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #52

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

ICE CHEST NO.: 298 GWS-~~246~~ DWS 9-27-11 ~~GWS-007~~ DWS-9-27-11

FIELD LOGBOOK NO.: HNF-N-507-23

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: ~~GOVERNMENT VEHICLE~~ Sal 9/27/11 Commercial Carrier

ORIGINAL

SHIPPED TO: ~~Waste Sampling & Characterization~~ Sal 9/27/11 TASL

OFFSITE PROPERTY NO.: ~~N/A~~ ~~Sal 9/27/11~~ ~~See PTR~~ RW.9/27/11 3192

BILL OF LADING/AIR BILL NO.: ~~N/A~~ ~~Sal 9/27/11~~ ~~See PTR~~ RW.9/27/11 859546035438

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)

113205

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool~4C	None	None
HOLDING TIME	6 Months	6 Months	6 Months
TYPE OF CONTAINER	G/P	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXJ1	SOIL	9/13/11	1045	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 15 2011 1450	TA Filazien	SEP 15 2011 1450
M. Nelson	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1000	DON BROTHERTON / CHPRC	SEP 27 2011 1000
DON BROTHERTON / CHPRC	SEP 27 2011 1400	FED EX	
FEDEX		Brian Daniels	9/28/11 0915

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

Please email copies of chain of custody, Sample receipt form, and final report to Marisol Avila (marisol_Avila@rl.gov) and Heather Medley (Heather_A_Medley@rl.gov) WSCF Project Manager

LABORATORY SECTION: RECEIVED BY | TITLE | DATE/TIME

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

TestAmerica St. Louis

OCTOBER 14, 2011

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-070 D

COLLECTOR: FM Hall CHPRC SL1137	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days		
AIR QUALITY: ☐	Sal 9/27/11		
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #52	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-298 ~~GWS-007~~ ~~GWS-246~~ DWB 9-27-11	FIELD LOGBOOK NO.: HNF-N-507-23.	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: ~~GOVERNMENT VEHICLE~~ Commercial Carrier Sal 9/27/11			
SHIPPED TO: ~~Waste Sampling & Characterization~~ TASL Sal 9/27/11	OFFSITE PROPERTY NO.: ~~N/A~~ ~~See PTR~~ 3192 Sal 9/27/11 LW 9/27/11		BILL OF LADING/AIR BILL NO.: ~~N/A~~ ~~See PTR~~ 859546035438 Sal 9/27/11 LW 9/27/11

ORIGINAL

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; ~~200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;~~

(2) ~~Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~

(3) ~~Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;~~

Hg {Mercury} - 7471

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-084 ~D

COLLECTOR: FM Hall CHPRC SL1137

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days

AIR QUALITY: ☐ Sal 9/27/11

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #62

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

ICE CHEST NO.: 298 DWB 9-27-11 GWS ~~298 GWS-007~~ DWB 9-27-11

FIELD LOGBOOK NO.: HNF-N-507-23. N/A

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: Sal 9/27/11 ~~GOVERNMENT VEHICLE~~ Commercial Carrier

ORIGINAL

SHIPPED TO: TASL

~~Waste Sampling & Characterization~~ Sal 9/27/11

OFFSITE PROPERTY NO.: ~~N/A~~ Sal 9/27/11 ~~See PTR~~ 3192 DW 9/27/11

BILL OF LADING/AIR BILL NO.: ~~N/A~~ Sal 9/27/11 ~~See PTR~~ 859546035438 DW 9/27/11

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	P	G/P
NO. OF CONTAINER(S)	1	1	
VOLUME	250mL	500mL	250mL
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			
B2H563 5	SOIL	9/15/11	1200	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 15 2011 1450	TA Frozen Vault	SEP 15 2011 1450
M. Neiss	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU- 1	SEP 26 2011 1400
SSU- 1	SEP 27 2011 1000	DON BROTHERTON / CHPRC	SEP 27 2011 ~~1400~~ 1000 DWB 9-27-11
DON BROTHERTON / CHPRC	SEP 27 2011 1400	FED EX	
FEDEX		Brian Davis	9/28/11 1115

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

PRINTED ON 9/28/2011

A-6003-618 (REV 2)

OCTOBER 14, 2011

TestAmerica St. Louis

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | F11-159-084 | PAGE 2 OF 2

COLLECTOR FM Hall CHPRC SL1137	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN
PRICE CODE C01	**DATA TURNAROUND** 12 Days / 12 Days		
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #62	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil	**SAF NO.** F11-159	**AIR QUALITY** ☐
ICE CHEST NO. GWS-298 ~~GWS-007~~ DWD 9-27-11	**FIELD LOGBOOK NO.** HNF-N-507-23. N/A	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 302676ES10
METHOD OF SHIPMENT ~~GOVERNMENT VEHICLE~~ Commercial Carrier	**ORIGINAL**		
SHIPPED TO ~~Waste Sampling & Characterization~~ Sal 9/27/11 TASL	**OFFSITE PROPERTY NO.** ~~N/A~~ Sal 9/27/11 ~~See PTR~~ AW.9/27/11	**BILL OF LADING/AIR BILL NO.** ~~N/A~~ Sal 9/27/11 ~~See PTR~~ AW.9/27/11	8595 4603 5438

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.

** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; ~~200.8 HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ Sal 9/27/11

(2) ~~Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}~~;

(3) ~~Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;~~

Hg {MERCURY} - 7471

CWL 124

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

87165

F11-159-024 -D

COLLECTOR: FM Hall, CHPRC SC1137

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: ~~C01~~ 7C KJ 9/27/11

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15day/15day

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #10

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

AIR QUALITY: ☐

ICE CHEST NO.: GWS-~~007~~ 246 N/A 9-27-11

FIELD LOGBOOK NO.: HNF-N-507-23. N/A

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: KJ 9/27/11 ~~GOVERNMENT VEHICLE~~ Commercial Carrier

ORIGINAL

SHIPPED TO: KJ 9/27/11 ~~Waste Sampling & Characterization~~ TASL

OFFSITE PROPERTY NO.: KJ ~~N/A~~ 9/27/11 3192

BILL OF LADING/AIR BILL NO.: KJ ~~N/A~~ 9/27/11 8595 4603 5449

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KJB 9/26/11

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXB5 5	SOIL	8/30/11	1009	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 30 2011 1500	M. Nelson M. Nelson	AUG 30 2011 1500
K.B. Brazel K.B. Brazel	9/26/11 1315	L.D. Wall CHPRC L.D. Wall	9/26/11 1315
L.D. Wall CHPRC L.D. Wall	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1000	DON BROTHERTON / CHPRC	SEP 27 2011 1000
DON BROTHERTON / CHPRC	SEP 27 2011 1400	FEDEX	
FedEx		B-1 Brian Daniels	9/28/11 0915

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

Please email copies of chain of custody, Sample receipt Forms, and final report to Marisol Avila (marisol_Avila@rl.gov) and Heather A Medley (Heather_A_Medley@rl.gov)

WSCF Project Managers

LABORATORY SECTION: RECEIVED BY | TITLE | DATE/TIME

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

TestAmerica St. Louis

DDG# SL1137

OCTOBER 14, 2011

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-024 -D

COLLECTOR FM Hall CHPRC SL1137

COMPANY CONTACT LUKE, SN

TELEPHONE NO. 372-1667

PROJECT COORDINATOR LUKE, SN

PRICE CODE ~~C01~~ 7C KW 9/27/11

DATA TURNAROUND ~~12 Days / 12 Days~~ 15 Days / 15 Days

AIR QUALITY ☐

SAMPLING LOCATION 100-K-63 Grubbed Area Sample #10

PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO. F11-159

ICE CHEST NO. GWS-~~007~~ 246 DA 9-22-11

FIELD LOGBOOK NO. HNF-N-507-23. N/A

ACTUAL SAMPLE DEPTH 0-1'

COA 302676ES10

METHOD OF SHIPMENT KW 9/27/11 ~~GOVERNMENT VEHICLE~~ Commercial carrier

ORIGINAL

SHIPPED TO KW 9/27/11 ~~Waste Sampling & Characterization~~ TASL

OFFSITE PROPERTY NO. KW ~~N/A~~ 9/27/11 3192

BILL OF LADING/AIR BILL NO. KW ~~N/A~~ 9/27/11 8595 4603 5449

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

KW 9/27/11

(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8-HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ 7471-HG {Mercury}

(2) ~~Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}~~;

(3) ~~Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium 89,90 - Total Sr~~;

PRINTED ON 7/25/2011

A-6003-618 (REV

OCTOBER 14, 2011

TestAmerica St. Louis

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-025 -D | PAGE 1 OF 2

COLLECTOR	FM Hall CHPRC 54137
SAMPLING LOCATION	100-K-63 Grubbed Area Sample #11
ICE CHEST NO.	GWS ~~-007~~ 246 NA 9-27-11
SHIPPED TO	~~Waste Sampling & Characterization~~ TASL KJI 9/27/11
COMPANY CONTACT	LUKE, SN
TELEPHONE NO.	372-1667
PROJECT DESIGNATION	100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil
FIELD LOGBOOK NO.	HNF-N-507-23 N/A
ACTUAL SAMPLE DEPTH	0 – 1'
OFFSITE PROPERTY NO.	~~N/A~~ KJI 9/27/11 3192
PROJECT COORDINATOR	LUKE, SN
SAF NO.	F11-159
COA	302676ES10
BILL OF LADING/AIR BILL NO.	~~N/A~~ KJI 9/27/11 8595 4603 5449
PRICE CODE	~~C01~~ 7C KJI 9/27/11
AIR QUALITY	☐
DATA TURNAROUND	~~12 Days / 12 Days~~ 15days/15days
METHOD OF SHIPMENT	~~GOVERNMENT VEHICLE~~ KJI 9/27/11 Commercial Carrier

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KJI 9/26/11

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXB6 6	SOIL	8/30/11	0950	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 30 2011 1500	M. Nelson Morales	AUG 30 2011 1500
FM Hall CHPRC	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1400	DON BROTHERTON / CHPRC	SEP 27 2011 1400
DON BROTHERTON / CHPRC	SEP 27 2011	FEDEX	
FEDEX		Brian Daniels	9/28/11 095

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
Please email copies of chain of custody, sample receipt form, and final report to Marisol Avila (Marisol_Avila@rl.gov) and Heather Medley (Heather_A_Medley@rl.) WSCF project managers

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

PRINTED ON 7/25/2011

A-6003-618 (REV.

OCTOBER 14, 2011

TestAmerica St. Louis

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-025-D

COLLECTOR FM Hall CHPRC SL1137

COMPANY CONTACT LUKE, SN

TELEPHONE NO. 372-1667

PROJECT COORDINATOR LUKE, SN

PRICE CODE ~~C01~~ 7C KJ 9/27/11

DATA TURNAROUND ~~12 Days / 12 Days~~ 15days/15days

SAMPLING LOCATION 100-K-63 Grubbed Area Sample #11

PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO. F11-159

AIR QUALITY ☐

ICE CHEST NO. GWS-~~007~~ 246 9-27-11

FIELD LOGBOOK NO. HNF-N-507-23. N/A

ACTUAL SAMPLE DEPTH 0-1'

COA 302676ES10

METHOD OF SHIPMENT KJ 9/27/11 ~~GOVERNMENT VEHICLE~~ Commercial Carrier

ORIGINAL

SHIPPED TO KJ 9/27/11 ~~Waste Sampling & Characterization~~ TASL

OFFSITE PROPERTY NO. KJ ~~N/A~~ 9/27/11 3192

BILL OF LADING/AIR BILL NO. KJ ~~N/A~~ 9/27/11 8595 4603 5449

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

KJ 9/27/11

(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8 HG - ICPMS {Mercury}; Chromium Hex - 7196~~; 7471 Hg {Mercury}

(2) ~~Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}~~;

(3) ~~Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium 89,90 - Total Sr~~;

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

TestAmerica St. Louis

OCTOBER 14, 2011

SDG# SL1137

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-1S9-026 - D

COLLECTOR	FM Hall CHPRC SL1137
SAMPLING LOCATION	100-K-63 Grubbed Area Sample #12
ICE CHEST NO.	6WS-~~007~~ 246 NA 9-27-11
SHIPPED TO	KJ 9/27/11 ~~Waste Sampling & Characterization~~ TASL
COMPANY CONTACT	LUKE, SN
TELEPHONE NO.	372-1667
PROJECT DESIGNATION	100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil
FIELD LOGBOOK NO.	HNF-N-507-23 - N/A
OFFSITE PROPERTY NO.	KJ ~~NA~~ 9/27/11 3192
PROJECT COORDINATOR	LUKE, SN
SAF NO.	F11-159
COA	302676ES10
BILL OF LADING/AIR BILL NO.	KJ ~~NA~~ 9/27/11 8595 4603 5449
PRICE CODE	~~C01~~ 7C KJ 9/27/11
AIR QUALITY	☐
DATA TURNAROUND	~~12 Days / 12 Days~~ 15days/15days
METHOD OF SHIPMENT	KJ 9/27/11 ~~GOVERNMENT VEHICLE~~ Commercial Carrier

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 9/26/11

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXB7	7	SOIL	8/30/11	1020	✓	✓ ✓

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME
FM Hall CHPRC	AUG 30 2011 1500
Brazel Green CHPRC	9/26/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400
SSU-1	SEP 27 2011 1000
DON BROTHERTON / CHPRC	SEP 27 2011 1400
FedEx	

SIGN/ PRINT NAMES

RECEIVED BY/STORED IN	DATE/TIME
M. Nelson	AUG 30 2011 1500
L.D. Wall CHPRC	9/26/11 1315
SSU-1	SEP 26 2011 1400
DON BROTHERTON/CHPRC	SEP 27 2011 1000
FEDEX	
Brian Daniels	9/28/11 0915

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

Please email copies of chain of custody, ~~Sample~~ Sample Receipt Form, and final report to Marisol Arila (Marisol_Arila@rl.gov) and Heather Medley (Heather_A_Medley@rl.gov) WSCF Project Managers

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

TestAmerica St. Louis

OCTOBER 14, 2011

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CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-026 -D

COLLECTOR FM Hall CHPRC SL1137

COMPANY CONTACT LUKE, SN

TELEPHONE NO. 372-1667

PROJECT COORDINATOR LUKE, SN

PRICE CODE ~~G01~~ KJI 9/07/11

DATA TURNAROUND ~~12 Days / 12 Days~~ 15days/15days

AIR QUALITY ☐

SAMPLING LOCATION 100-K-63 Grubbed Area Sample #12

PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO. F11-159

ICE CHEST NO. GWS ~~-007~~ 246 9-27-11

FIELD LOGBOOK NO. HNF-N-507-23

ACTUAL SAMPLE DEPTH 0-1'

COA 302676ES10

METHOD OF SHIPMENT KJI 9/07/11 ~~GOVERNMENT VEHICLE~~ Commercial Carrier

ORIGINAL

SHIPPED TO ~~Waste Sampling & Characterization~~ KJI 9/07/11 TASL

OFFSITE PROPERTY NO. ~~N/A~~ KJI 9/07/11 3192

BILL OF LADING/AIR BILL NO. ~~N/A~~ KJI 9/07/11 8595 4603 5449

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

KJI 9/07/11 ~~(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8-HG - ICPMS {Mercury}; Chromium-Hex - 7196;~~ 7471_Hg {~~Mercury~~ Mercury} KJI 9/07/11

~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;~~

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

OCTOBER 14, 2011

TestAmerica St. Louis

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-027 - D | PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC — SL1137

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: ~~C01~~ PC KJI 9/27/11

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15days/15days

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #13

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

AIR QUALITY: ☐

ICE CHEST NO.: GWS-007 246 9-27-11

FIELD LOGBOOK NO.: HNF-N-507-23 - N/A

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: ~~GOVERNMENT VEHICLE~~ Commercial Carrier KJI 9/27/11

ORIGINAL

SHIPPED TO: ~~Waste Sampling & Characterization~~ TASL KJI 9/27/11

OFFSITE PROPERTY NO.: 3192 KJI ~~N/A~~ 9/27/11

BILL OF LADING/AIR BILL NO.: 8595 4603 5449 KJI ~~N/A~~ 9/27/11

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

VB 9/26/11

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXB8	SOIL	8/30/11	1031	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall	AUG 30 2011 1500	M. Nelson	AUG 30 2011 1500
VBeazal-HBrem	9/26/11 1315	L.D. Wall, CHPRC	9/26/11 1315
L.D. Wall, CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1000	DON BROTHERTON / CHPRC	SEP 27 2011 1000
DON BROTHERTON / CHPRC	SEP 27 2011 1400	FEDEX	
FEDEX		Brian Daniels	9/28/11 0915

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

* Please email copies of chain of custody, sample receipt form, and final report to Marisol Avila (Marisol_Avila@rl.gov) and Heather Medley (Heather_A_Medley@rl.gov) WSCF project managers

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

PRINTED ON 7/25/2011

A-6003-618 (REV 3)

OCTOBER 14, 2011

TestAmerica St. Louis

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-027-D

COLLECTOR: ~~FM Hall~~ CHPRC ~~FM Hall~~ CHPRC SL1137	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #13	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: 246 GWS-~~007~~ 9-27-11	FIELD LOGBOOK NO.: HNF-N-507-23. N/A	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: KJ 9/07/11 ~~Waste Sampling & Characterization~~ TASL	OFFSITE PROPERTY NO.: KJ ~~N/A~~ 9/07/11 3192		BILL OF LADING/AIR BILL NO.: KJ ~~N/A~~ 9/07/11 8595 4603 5449

PRICE CODE: ~~C01.~~ 7C KJ 9/07/11

AIR QUALITY: ☐

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15days/15days

ORIGINAL

METHOD OF SHIPMENT: KJ 9/07/11 ~~GOVERNMENT VEHICLE~~ Commercial Carrier

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

KJ 9/07/11

(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196~~; 7471_Hg {Mercury}

(2) ~~Gamma Spectroscopy {Cesium 137, Cobalt 60, Europium 152, Europium 154, Europium 155}~~;

(3) ~~Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium 89,90 - Total Sr~~;

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TestAmerica St. Louis

SDG# SL1137

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-1S9-028 - D | PAGE 1 OF 2

COLLECTOR	FM Hall, CHPRC SL1137
SAMPLING LOCATION	100-K-63 Grubbed Area Sample #14
ICE CHEST NO.	246 GW3-004 9-22-11
SHIPPED TO	~~Waste Sampling & Characterization~~ TASL 9/07/11
COMPANY CONTACT	LUKE, SN
TELEPHONE NO.	372-1667
PROJECT DESIGNATION	100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil
FIELD LOGBOOK NO.	HNF-N-507-23 - N/A
ACTUAL SAMPLE DEPTH	0 - 1'
OFFSITE PROPERTY NO.	~~N/A~~ 3192 9/07/11
PROJECT COORDINATOR	LUKE, SN
SAF NO.	F11-159
COA	302676ES10
BILL OF LADING/AIR BILL NO.	~~N/A~~ 8595 4603 5449 9/07/11
PRICE CODE	~~C01~~ C 9/07/11
AIR QUALITY	☐
DATA TURNAROUND	~~12 Days / 12 Days~~ 15days/15days
METHOD OF SHIPMENT	~~GOVERNMENT VEHICLE~~ Commercial Carrier 9/07/11
	ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 9/26/11

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXB9 9	SOIL	8/30/11	1044	✓	✓	✓

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall, CHPRC	AUG 30 2011 1500	H. Nelson H. Nelson	AUG 30 2011 1500
Brazzal Brown	9/26/11 1315	L.D. Wall, CHPRC	9/26/11 1315
L.D. Wall, CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1000	DON BROTHERTON / CHPRC	SEP 27 2011 1000
DON BROTHERTON / CHPRC	SEP 27 2011 1400	FEDEX	
FEDEX		Brian Daniels	9/28/11 0915

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

Please email copies of chain of custody, sample receipt form, and final report to Marisol Avila (marisol_avila@rl.gov) and Heather Medley (Heather_A_Medley@rl.gov) WSCF project managers.

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

TestAmerica St. Louis

OCTOBER 14, 2011

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CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-028 -D PAGE 2 OF 2

COLLECTOR FM Hall CHPRC SL1137	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #14	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		**SAF NO.** F11-159
ICE CHEST NO. GWS-~~007~~ 246 9-27-11	**FIELD LOGBOOK NO.** HNF-N-507-23. N/A	**ACTUAL SAMPLE DEPTH** 0-11	**COA** 302676ES10
SHIPPED TO ~~Waste Sampling & Characterization~~ TASL KJH 9/07/11	**OFFSITE PROPERTY NO.** ~~N/A~~ 3192 KJH 9/07/11		**BILL OF LADING/AIR BILL NO.** ~~N/A~~ 8595 4603 5449 KJH 9/07/11

PRICE CODE ~~C01~~ KJH 9/07/11 **DATA TURNAROUND** ~~12 Days / 12 Days~~ 15days/15days

AIR QUALITY ☐

METHOD OF SHIPMENT ~~GOVERNMENT VEHICLE~~ Commercial Carrier KJH 9/07/11

ORIGINAL

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ 7471_Hg {Mercury} KJH 9/07/11

(2) ~~Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}~~;

(3) ~~Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 - Total Sr~~;

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

OCTOBER 14, 2011

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-029 - D

COLLECTOR FM Hall CHPRC SL1137

COMPANY CONTACT LUKE, SN

TELEPHONE NO. 372-1667

PROJECT COORDINATOR LUKE, SN

PRICE CODE ~~C01~~ LSL 9/27/11

DATA TURNAROUND ~~12 Days / 12 Days~~ 15days/15days

AIR QUALITY B

SAMPLING LOCATION 100-K-63 Grubbed Area Sample #15

PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO. F11-159

ICE CHEST NO. GWS-~~007~~ 246 9-27-11

FIELD LOGBOOK NO. HNF-N-507-23. N/A

ACTUAL SAMPLE DEPTH 0-1'

COA 302676ES10

METHOD OF SHIPMENT ~~GOVERNMENT VEHICLE~~

ORIGINAL

SHIPPED TO LSL 9/27/11 ~~Waste Sampling & Characterization~~ TASL

OFFSITE PROPERTY NO. ~~N/A~~ LSL 9/27/11 3192

BILL OF LADING/AIR BILL NO. ~~N/A~~ RW 9/27/11 8595 4603 5449

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 9/26/11

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXC0 / 0	SOIL	8/30/11	1056	✓	✓	—

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 30 2011 1500	M. Nelson M. Nelson	AUG 30 2011 1500
L.D. Wall CHPRC	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1000	DON BROTHERTON / CHPRC	SEP 27 2011 1000
DON BROTHERTON / CHPRC	SEP 27 2011 1400	FEDEX	SEP 27 2011 1400
FEDEX		B-1 Brian Daniels	9/28/11 0915

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

Please email copies of chain of custody, sample receipt form, and final report to Marisol Avila (marisol_avila@rl.gov) and Heather Medley (Heather_A_Medley@rl.gov) WSCF project managers

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

PRINTED ON 7/25/2011

A-6003-618 (REV 4)

OCTOBER 14, 2011

TestAmerica St. Louis

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-029 - D

PAGE 2 OF 2

COLLECTOR FM Hall CHPRC SL1137

COMPANY CONTACT LUKE, SN

TELEPHONE NO. 372-1667

PROJECT COORDINATOR LUKE, SN

PRICE CODE ~~C01~~ KJ 9/27/11

DATA TURNAROUND ~~12 Days / 12 Days~~ 15days/15days

SAMPLING LOCATION 100-K-63 Grubbed Area Sample #15

PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO. F11-159

AIR QUALITY ☐

ICE CHEST NO. GWS-~~007~~ 246 9-27-11

FIELD LOGBOOK NO. INF-N-507-23 - N/A

ACTUAL SAMPLE DEPTH 0-1'

COA 302676ES10

METHOD OF SHIPMENT 9/27/11 KJ ~~GOVERNMENT VEHICLE~~ Commercial Carrier

ORIGINAL

SHIPPED TO KJ 9/27/11 ~~Waste Sampling & Characterization~~ TASL

OFFSITE PROPERTY NO. KJ N/A 9/27/11 3192

BILL OF LADING/AIR BILL NO. KJ N/A 9/27/11 8595 4603 5449

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ 7471_Hg {Mercury}

KJ 9/27/11

(2) ~~Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~

(3) ~~Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 - Total Sr;~~

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

OCTOBER 14, 2011

TestAmerica St. Louis

SDG# SL1137

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-1S9-030 - D | PAGE 1 OF 2

COLLECTOR FM Hall CHPRC SL1137	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #16	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		**SAF NO.** F11-159
ICE CHEST NO. 246 GWS ~~007~~ MA 9-27-11	**FIELD LOGBOOK NO.** HNF-N-507-23. N/A	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 302676ES10
SHIPPED TO ~~Waste Sampling & Characterization~~ TASL	**OFFSITE PROPERTY NO.** 3192		**BILL OF LADING/AIR BILL NO.** 8595 4603 5449

PRICE CODE ~~C01~~ C KJ 9/07/11 | **AIR QUALITY** ☐ | **DATA TURNAROUND** ~~12 Days / 12 Days~~ 15days/15days

METHOD OF SHIPMENT KJ 9/07/11 ~~GOVERNMENT VEHICLE~~ Commercial Carrier

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 9/26/11

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B2FXC1	SOIL	8/30/11	1109

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 30 2011 1500	M. Nelson M. Nelson	AUG 30 2011 1500
L.D. Wall CHPRC	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1000	DON BROTHERTON / CHPRC	SEP 27 2011 1000
DON BROTHERTON / CHPRC	SEP 27 2011 1400	FEDEX	
FedEx		Brian Daniels	9/28/11 0915

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
Please email copies of chain of custody, sample receipt form, and final reports to Marisol Arika (Marisol_Arika@rl.gov) and Heather Medley (Heather_A_Medley@rl.gov) WSCF project managers.

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

PRINTED ON 7/25/2011 A-6003-618 (REV.

OCTOBER 14, 2011

TestAmerica St. Louis

SDG# SL1137

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-030 - D

COLLECTOR FM Hall CHPRC SL1137

COMPANY CONTACT LUKE, SN

TELEPHONE NO. 372-1667

PROJECT COORDINATOR LUKE, SN

PRICE CODE ~~C01~~ 8C KDI 9/27/11

DATA TURNAROUND ~~12 Days / 12 Days~~ 15days/15days

SAMPLING LOCATION 100-K-63 Grubbed Area Sample #16

PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO. F11-159

AIR QUALITY ☐

ICE CHEST NO. GWS - ~~007~~ 246 NA ~~9-27-11~~

FIELD LOGBOOK NO. HNF-N-507-23 . N/A

ACTUAL SAMPLE DEPTH 0-1'

COA 302676ES10

METHOD OF SHIPMENT KDI 9/27/11 ~~GOVERNMENT VEHICLE~~ Commercial Carrier

ORIGINAL

SHIPPED TO KDI 9/27/11 ~~Waste Sampling & Characterization~~ TASL

OFFSITE PROPERTY NO. KDI ~~N/A~~ 9/27/11 3192

BILL OF LADING/AIR BILL NO. KDI ~~N/A~~ 9/27/11 8595 4603 5449

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

KDI 9/27/11

~~(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ 7471_Hg {Mercury}

~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 - Total Sr;~~

PRINTED ON 7/25/2011

A-6003-618 (REV.3)

TestAmerica St. Louis

OCTOBER 14, 2011

SDG# SL1137

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-031 - D

COLLECTOR FM Hall CHPRC SL1137

COMPANY CONTACT LUKE, SN

TELEPHONE NO. 372-1667

PROJECT COORDINATOR LUKE, SN

PRICE CODE ~~C01~~ SC KJL 9/07/11

DATA TURNAROUND ~~12 Days / 12 Days~~ 15day/15day

SAMPLING LOCATION 100-K-63 Grubbed Area Sample #17

PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO. F11-159

AIR QUALITY ☐

ICE CHEST NO. GWS-~~007~~ 246 NA 9-27-11

FIELD LOGBOOK NO. HNF-N-507-23. N/A

ACTUAL SAMPLE DEPTH 0-1'

COA 302676ES10

METHOD OF SHIPMENT KJL 9/07/11 ~~GOVERNMENT VEHICLE~~ Commercial Carrier

ORIGINAL

SHIPPED TO KJL 9/07/11 ~~Waste Sampling & Characterization~~ TASL

OFFSITE PROPERTY NO. ~~N/A~~ KJL 9/07/11 3192

BILL OF LADING/AIR BILL NO. ~~N/A~~ KJL 9/07/11 8595 4603 5449

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 9/26/11

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXC2 12	SOIL	8/30/11	1120	✓	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall ~~CHPRC~~	AUG 30 2011 1500	M.Nelson M.Nelson	AUG 30 2011 1500
CHPRC KBiernacki KBiernacki	9/26/11 1315	L.D. Wall CHPRC L.D. Wall	1315 9/26/11
L.D. Wall CHPRC L.D. Wall	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1000	DON BROTHERTON / CHPRC	SEP 27 2011 1000
DON BROTHERTON / CHPRC	SEP 27 2011 1400	FEDEX	SEP 27 2011
FEDEX		B-1 Brian Daniels	9/28/11 09:15
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

Please email copies of chain of custody, sample receipt form, and final report to Marisol Arila (marisol_Arila@rl.gov) and Heather Medley (Heather_A_Medley@rl.gov) WSCF project managers

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

PRINTED ON: 7/25/2011

A-6003-618 (REV. 2)

OCTOBER 14, 2011

TestAmerica St. Louis

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-031-D

COLLECTOR FM Hall CHPRC SL1137

COMPANY CONTACT LUKE, SN

TELEPHONE NO. 372-1667

PROJECT COORDINATOR LUKE, SN

PRICE CODE ~~G01~~ 8C KGI 9/07/11

DATA TURNAROUND ~~12 Days / 12 Days~~ 15days/15days

AIR QUALITY ☐

SAMPLING LOCATION 100-K-63 Grubbed Area Sample #17

PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO. F11-159

ICE CHEST NO. CWS-~~007~~ 246 AA 9-27-11

FIELD LOGBOOK NO. HNF-N-507-23. N/A

ACTUAL SAMPLE DEPTH 0-1'

COA 302676ES10

METHOD OF SHIPMENT KGI 9/07/11 ~~GOVERNMENT VEHICLE~~ Commercial Carrier

ORIGINAL

SHIPPED TO KGI 9/07/11 ~~Waste Sampling & Characterization~~ TASL

OFFSITE PROPERTY NO. KGI ~~N/A~~ 9/07/11 3192

BILL OF LADING/AIR BILL NO. KGI ~~N/A~~ 9/07/11 8595 4603 5449

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

KGI 9/07/11

(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium-Hex - 7196;~~ 7471_Hg {Mercury}

(2) ~~Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~

(3) ~~Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 - Total Sr;~~

A-6003-618 (REV 2)

OCTOBER 14, 2011

TestAmerica St. Louis

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-032 D | PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: ~~C01~~ 8C LJ 9/07/11	DATA TURNAROUND: ~~12 Days / 12 Days~~ 15days/15days		
AIR QUALITY: ☐			
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #18	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-~~007~~ 246 MA 9-27-11	FIELD LOGBOOK NO.: HNF-N-507-23. N/A	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: ~~GOVERNMENT VEHICLE~~	ORIGINAL		
SHIPPED TO: ~~Waste Sampling & Characterization~~ TASL 9/07/11 LJ	OFFSITE PROPERTY NO.: 3192 9/07/11 MA LJ		BILL OF LADING/AIR BILL NO.: 8595 4603 5449 9/07/11 MA LJ

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 9/23/11

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXC3 13	SOIL	8/30/11	1135	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 30 2011 1500	M. Nelson M. Nelson	AUG 30 2011 1500
CHPRC	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1000	DON BROTHERTON / CHPRC	SEP 27 2011 1000
DON BROTHERTON / CHPRC	SEP 27 2011 1400	FEDEX	
FEDEX		Brian Daniels	9/28/11 0915

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

Please email copies of chain of custody, sample receipt form, and final report to Marisol Avila (Marisol_Avila@rl.gov) and Heather ~~A~~ Medley (Heather_A_Medley@rl.gov) WSCF project managers

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

TestAmerica St. Louis

OCTOBER 14, 2011

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-032 - D

COLLECTOR FM Hall CHPRC SL1137

COMPANY CONTACT LUKE, SN

TELEPHONE NO. 372-1667

PROJECT COORDINATOR LUKE, SN

PRICE CODE ~~C01~~ 8C LW 9/07/11

DATA TURNAROUND ~~12 Days / 12 Days~~

AIR QUALITY ☐

SAMPLING LOCATION 100-K-63 Grubbed Area Sample #18

PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO. F11-159

ICE CHEST NO. GWS-~~007~~ 246 9-27-11

FIELD LOGBOOK NO. HNF-N-507-23. N/A

ACTUAL SAMPLE DEPTH 0-1'

COA 302676ES10

METHOD OF SHIPMENT ~~GOVERNMENT VEHICLE~~ Commercial Carrier LW 9/07/11

ORIGINAL

SHIPPED TO ~~Waste Sampling & Characterization~~ TASL LW 9/07/11

OFFSITE PROPERTY NO. N/A LW 9/07/11 3192

BILL OF LADING/AIR BILL NO. N/A LW 9/07/11 8595 4603 5449

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ 7471 - Hg {Mercury}

(2) ~~Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}~~;

(3) ~~Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 - Total Sr;~~

LW 9/07/11

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

OCTOBER 14, 2011

SDG# SL1137

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-033 D | PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC SL1137	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: ~~C01~~ KJ			DATA TURNAROUND: ~~12 Days / 12 Days~~ 15days/15days
AIR QUALITY: ☐ 9/27/11			
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #19	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-~~007~~ 246 9-27-11	FIELD LOGBOOK NO.: HNF-N-507-23. N/A	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: KJ 9/27/11 ~~GOVERNMENT VEHICLE~~ Commercial Carrier			ORIGINAL
SHIPPED TO: KJ 9/27/11 ~~Waste Sampling & Characterization~~ TASL	OFFSITE PROPERTY NO.: KJ 9/27/11 3192		BILL OF LADING/AIR BILL NO.: KJ N/A 9/27/11 8595 4603 5449

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	P	G/P
NO. OF CONTAINER(S)	1	1	
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 9/26/11

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXC4 14	SOIL	8/30/11	1200	✓	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall	AUG 30 2011 1500	M. Nelson	AUG 30 2011 1500
L.D. Wall CHPRC	9/26/11 1315	L.D. Wall CHPRC	1315 9/26/11
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1000	DON BROTHERTON / CHPRC	SEP 27 2011 1000
DON BROTHERTON / CHPRC	SEP 27 2011 1400	FEDEX	
FEDEX		Brian Daniels	9/28/11 0915

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
Please email copies of chain of custody, Sample Receipt Forms, and final report to: Marisol Arila (marisol_arila@rl.gov) and Heather Medley (Heather_A_Medley@rl.gov) WSLF project managers

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

TestAmerica St. Louis

OCTOBER 14, 2011

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-033 - D

COLLECTOR FM Hall CHPRC SL1137

COMPANY CONTACT LUKE, SN

TELEPHONE NO. 372-1667

PROJECT COORDINATOR LUKE, SN

PRICE CODE ~~C01~~ 8C KW 9/07/11

DATA TURNAROUND ~~12 Days / 12 Days~~ 15days/15days

AIR QUALITY ☐

SAMPLING LOCATION 100-K-63 Grubbed Area Sample #19

PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO. F11-159

ICE CHEST NO. GWS-~~007~~ 246 9-27-11

FIELD LOGBOOK NO. HNF-~~N-507~~-23. N/A

ACTUAL SAMPLE DEPTH 0-1'

COA 302676ES10

METHOD OF SHIPMENT KW 9/07/11 ~~GOVERNMENT VEHICLE~~ Commercial Carrier

ORIGINAL

SHIPPED TO KW 9/07/11 ~~Waste Sampling & Characterization~~ TASL

OFFSITE PROPERTY NO. KW ~~N/A~~ 9/07/11 3192

BILL OF LADING/AIR BILL NO. KW ~~N/A~~ 9/07/11 8595 4603 5449

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

KW 9/07/11

(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196~~; 7471_Hg {Mercury}

(2) ~~Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}~~;

(3) ~~Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 - Total Sr~~;

A-6003-618 (REV 2)

OCTOBER 14, 2011

TestAmerica St. Louis

SDG# SL1137

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-035 | PAGE 1 OF 2

COLLECTOR FM Hall CHPRC SL1137

SAMPLING LOCATION 100-K-63 Grubbed Area Sample #20

ICE CHEST NO. GWS-~~023~~ 246 9-27-11

SHIPPED TO Sal 9/27/11 TASL ~~Waste Sampling & Characterization~~

COMPANY CONTACT LUKE, SN

TELEPHONE NO. 372-1667

PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

FIELD LOGBOOK NO. HNF-N-507-23 - N/A

ACTUAL SAMPLE DEPTH 0-1'

OFFSITE PROPERTY NO. ~~N/A~~ Sal 9/27/11 ~~See PTR~~ 3192 LW. 9/27/11

PROJECT COORDINATOR LUKE, SN

SAF NO. F11-159

COA 302676ES10

PRICE CODE C01

AIR QUALITY ☐

DATA TURNAROUND Sal 9/27/11 ~~12 Days / 12 Days~~ 15 Days

METHOD OF SHIPMENT Sal 9/27/11 ~~GOVERNMENT VEHICLE~~ Commercial Carrier

ORIGINAL

BILL OF LADING/AIR BILL NO. ~~N/A~~ Sal 9/27/11 ~~See PTR~~ 859546035449 LW. 9/27/11

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 9/26/11

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXC6	SOIL	8/31/11	0930	✓	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 31 2011 / 1300	M01109SSU #1	AUG 31 2011 / 1300
M01109 SSU #1	9-7-11 1230	FM HALL	9-7-11 1230
FM HALL	9-7-11 1415	M. Nelson	9-7-11 1415
	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1000	KB Huise CHPRC	SEP 27 2011 1000
KB Huise CHPRC	SEP 27 2011 1400	FEDEX	

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
Please email copies of chain of custody, sample receipt form, and final report to Marisol Avila (marisol_avila@rl.gov) and Heather Medley (Heather_A_Medley@rl.gov)
WSCF project mangers

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
	Brian Daniels	9/28/11 0915	

FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

OCTOBER 14, 2011

TestAmerica St. Louis

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-035 D

COLLECTOR FM Hall CHPRC SL1137

COMPANY CONTACT LUKE, SN

TELEPHONE NO. 372-1667

PROJECT COORDINATOR LUKE, SN

PRICE CODE C01

DATA TURNAROUND ~~12 Days / 12 Days~~ Sal 9/27/11 15 Days

AIR QUALITY ☐

SAMPLING LOCATION 100-K-63 Grubbed Area Sample #20

PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO. F11-159

ICE CHEST NO. 6WS ~~023~~ 246 DWB

FIELD LOGBOOK NO. HNF-N-507-23 - N/A

ACTUAL SAMPLE DEPTH 0-1'

COA 302676ES10

METHOD OF SHIPMENT Sal 9/27/11 ~~GOVERNMENT VEHICLE~~ Commercial Carrier

ORIGINAL

SHIPPED TO 9/27/11 SAL ~~Waste Sampling & Characterization~~ TASL

OFFSITE PROPERTY NO. ~~N/A~~ ~~See PFR~~ JW 9/27/11 Sal 9/27/11 3192

BILL OF LADING/AIR BILL NO. ~~N/A~~ Sal 9/27/11 ~~See PFR~~ JW 9/27/11 8595 4603 5449

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; ~~200.8-HG - ICPMS {Mercury};~~ Chromium Hex - 7196;
~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;~~ Hg {Mercury} - 7471
Sal 9/27/11

A-6003-618 (REV 2)

OCTOBER 14, 2011

TestAmerica St. Louis

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-036 -D | PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC SL137	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days		
AIR QUALITY: ☐ Sal 9-27-11			
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #21	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: 6WS ~~023~~ 246 Sal 9-27-11	FIELD LOGBOOK NO.: HNF-N-507-23-N/A	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: ~~GOVERNMENT VEHICLE~~ Commercial Carrier			
SHIPPED TO: Sal 9-27-11 ~~Waste Sampling & Characterization~~ TASL	OFFSITE PROPERTY NO.: N/A Sal 9/27/11 See PTR 3192 LW. 9/27/11		BILL OF LADING/AIR BILL NO.: N/A Sal 9/27/11 See PTR 8595 4603 5449 LW. 9/27/11

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXC7	SOIL	8/31/11	0950	✓	✓	✓

KB 9/26/11

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall, CHPRC	AUG 31 2011 1300	MO1109SSU #1	AUG 31 2011 1300
MO1109 SSU #1	9-7-11 1230	FM Hall	9-7-11 1230
FM Hall	9-7-11 1415	M. Nelson	9-7-11 1415
	9/22/11 1315	L.D. Wall, CHPRC	9/22/11 1315
L.D. Wall, CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1000	KB Huise, CHPRC	SEP 27 2011 1000
KB Huise, CHPRC	SEP 27 2011 1400	FEDEX	

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

Please email copies of chain of custody, Sample receipt Form, and final report to Marisol Arila (Marisol_Arila@rl.gov) and Heather Medley (Heather_A_Medley@rl.gov) WSLF project mangers

LABORATORY SECTION	RECEIVED BY: Brian Daniels	TITLE	DATE/TIME: 9/28/11 0945
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

PRINTED ON 7/26/2011

A-6003-618 (REV 2)

OCTOBER 14, 2011

TestAmerica St. Louis

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-036 -1

COLLECTOR FM Hall CHPRC 54137	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #21	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		**SAF NO.** F11-159
ICE CHEST NO. GWS ~~-023~~ 246 Dwb 9-27-11	**FIELD LOGBOOK NO.** HNF-N-507-23 - N/A	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 302676ES10
SHIPPED TO Sal 9/27/11 ~~Waste Sampling & Characterization~~ TASL	**OFFSITE PROPERTY NO.** ~~N/A~~ ~~Sal 9/29/11~~ Sal 9/27/11 See PTR 3192 Lw. 9/27/11		**BILL OF LADING/AIR BILL NO.** ~~N/A~~ Sal 9/27/11 See PTR 8595460354449 Lw. 9/27/11

PRICE CODE C01 **DATA TURNAROUND** ~~12 Days / 12 Days~~ 15 Days Sal 9-27-11

AIR QUALITY ☐

METHOD OF SHIPMENT Sal 9/27/11 ~~GOVERNMENT VEHICLE~~ Commercial Carrier

ORIGINAL

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; ~~200.8 HG - ICPMS {Mercury};~~ Chromium Hex - 7196;
~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;~~ Hg {Mercury} 3-7471
Sal 9-27-11

A-6003-618 (REV 2)

OCTOBER 14, 2011

TestAmerica St. Louis

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-037 - D

COLLECTOR FM Hall CHPRC 54137

COMPANY CONTACT LUKE, SN

TELEPHONE NO. 372-1667

PROJECT COORDINATOR LUKE, SN

PRICE CODE C01

DATA TURNAROUND ~~12 Days / 12 Days~~ 15 DAYS

AIR QUALITY ☐

SAMPLING LOCATION 100-K-63 Grubbed Area Sample #22

PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO. F11-159

ICE CHEST NO. GWS-~~023~~ 246

FIELD LOGBOOK NO. HNF-N-507-23 . N/A

ACTUAL SAMPLE DEPTH 0 - 1'

COA 302676ES10

METHOD OF SHIPMENT ~~GOVERNMENT VEHICLE~~ Commercial Carrier

ORIGINAL

SHIPPED TO Sal 9-27-11 ~~Waste Sampling & Characterization~~ TASL

OFFSITE PROPERTY NO. ~~N/A~~ Sal 9/27/11 See PTR

BILL OF LADING/AIR BILL NO. ~~N/A~~ Sal 9/27/11 See PTR 859546035449 KW 9/27/11

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 9/26/11

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXC8	SOIL	8/31/11	1010	✓	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 31 2011 1300	M01109SSU #1	AUG 31 2011 1300
M01109 SSU #1	9-7-11 1230	FM Hall	9-7-11 1230
FM Hall	9-7-11 1415	M. Nelson M. Nels	9-7-11 1415
	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1000	KB Hulse CHPRC	SEP 27 2011 1000
KB Hulse CHPRC	SEP 27 2011 1400	FEDEX	

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
	Brian Daniels	9/28/11	0915
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618 (REV. 2)

OCTOBER 14, 2011

TestAmerica St. Louis

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-037 D

COLLECTOR FM Hall SL1137 CHPRC

COMPANY CONTACT LUKE, SN

TELEPHONE NO. 372-1667

PROJECT COORDINATOR LUKE, SN

PRICE CODE C01

DATA TURNAROUND ~~12 Days / 12 Days~~ 15 Days

SAMPLING LOCATION 100-K-63 Grubbed Area Sample #22

PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO. F11-159

AIR QUALITY ☐ Sal 9/27/11

ICE CHEST NO. GWS

FIELD LOGBOOK NO. HNF-N-507-23 . N/A

ACTUAL SAMPLE DEPTH 0 - 1'

COA 302676ES10

METHOD OF SHIPMENT ~~Sal 9/27/11~~ ~~GOVERNMENT VEHICLE~~ Commercial Carrier

ORIGINAL

SHIPPED TO Sal 9-27-11 TASL

~~Waste Sampling & Characterization~~

OFFSITE PROPERTY NO. ~~N/A~~ Sal 9/27/11 See PR

BILL OF LADING/AIR BILL NO. ~~N/A~~ Sal 9/27/11 See PR 859546035449

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; ~~200.8 HG - ICPMS {Mercury}~~; Chromium Hex - 7196;
~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}~~;
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 Total Sr;~~ Hg {Mercury} - 7471
Sal 9-27-11

A-6003-618 (REV 2)

OCTOBER 14, 2011

TestAmerica St. Louis

SDG# SL1137

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | F11-159-038 - D | PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC SL1137

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days

AIR QUALITY: ☐

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #23

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

ICE CHEST NO.: GWS ~~-023~~ 246 DWB 9/27/11

FIELD LOGBOOK NO.: ~~HNF-N-507-~~ 23. N/A

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: ~~GOVERNMENT VEHICLE~~ Sal 9/27/11 Commercial Carrier

ORIGINAL

SHIPPED TO: SAL 9/27/11 TASL

~~Waste Sampling & Characterization~~

OFFSITE PROPERTY NO.: ~~N/A~~ Sal 9/27/11 ~~See PTR~~ 3192 AW 9/27/11

BILL OF LADING/AIR BILL NO.: ~~N/A~~ Sal 9/27/11 ~~See PTR~~ 859 5460 3544 9 AW 9/27/11

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXC9	SOIL	8/31/11	1030	✓	✓	✓

DWB 9/26/11

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 31 2011 1300	M01109SSU #1	AUG 31 2011 1300
M01109 SSU #1	9-7-11 1230	FM HALL	9-7-11 1230
FM HALL	9-7-11 1415	M. Nelson	9-7-11 1415
Bryan Daniels	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
CHPRC L.D. Wall	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1000	KB Huise CHPRC	SEP 27 2011 1000
KB Huise CHPRC	SEP 27 2011 1400	FEDEX	

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION: RECEIVED BY: By Brian Daniels 9/28/11 0915 | TITLE | DATE/TIME

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

OCTOBER 14, 2011

TestAmerica St. Louis

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-038 D

COLLECTOR FM Hall CHPRC SL1137

COMPANY CONTACT LUKE, SN

TELEPHONE NO. 372-1667

PROJECT COORDINATOR LUKE, SN

PRICE CODE C01

DATA TURNAROUND ~~12 Days / 12 Days~~ 5 DAYS

AIR QUALITY ☐ Sal 9-27-11

SAMPLING LOCATION 100-K-63 Grubbed Area Sample #23

PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO. F11-159

ICE CHEST NO. GWS-023

FIELD LOGBOOK NO. HNF-~~N-507~~-23-N/A

ACTUAL SAMPLE DEPTH 0-1'

COA 302676ES10

METHOD OF SHIPMENT Sal 9/27/11 ~~GOVERNMENT VEHICLE~~ Commercial Carrier

ORIGINAL

SHIPPED TO 9-27-11 Sal ~~Waste Sampling & Characterization~~ TASL

OFFSITE PROPERTY NO. ~~N/A~~ Sal 9/27/11 LW 9/27/11 ~~See PTR~~ 3192

BILL OF LADING/AIR BILL NO. ~~N/A~~ Sal 9/27/11 ~~See PTR~~ LW 9/27/11 8595 4603 5449

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; ~~200.8 HG - ICPMS {Mercury}~~; Chromium Hex - 7196;
~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;~~ Hg {Mercury} - 7471
SAL 9-27-11

A-6003-618 (REV 2)

OCTOBER 14, 2011

TestAmerica St. Louis

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-039-D | PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC 54137	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days		
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #24	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
AIR QUALITY: ☐ Sal 9/27/11			
ICE CHEST NO.: GWS-~~023~~ 246 DWB 9-27-11	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: ~~GOVERNMENT VEHICLE~~ Sal 9/27/11 Commercial Carrier			
SHIPPED TO: Sal 9/27/11 ~~Waste Sampling & Characterization~~ TASL	OFFSITE PROPERTY NO.: N/A Sal 9/27/11 ~~See PTR~~ 9-27-11 DWB 3192		BILL OF LADING/AIR BILL NO.: N/A Sal 9/27/11 ~~See PTR~~ DWB 9-27-11

ORIGINAL

859546035449

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)

13116

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool~4C	None	None	
HOLDING TIME	6 Months	6 Months	6 Months	
TYPE OF CONTAINER	G/P	P	G/P	
NO. OF CONTAINER(S)	1	1	1	
VOLUME	250mL	500mL	250mL	
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	
SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B2FXD0	SOIL	8/31/11	1056	

VB 9/26/11

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 3 1 2011 1300	MQ1109 SSU #1	AUG 3 1 2011 1300
MQ1109 SSU #1	9-7-11 1230	FM Hall	9-7-11 1230
FM Hall	9-7-11 1415	M. Nelson M.Nels	9-7-11 1415
Breazeal/Breazeal	9/26/11 1315	L.D. Wall L.D. Wall	9/26/11 1315
CHPRC L.D. Wall	SEP 2 6 2011 1400	SSU-1	SEP 2 6 2011 1400
SSU-1	SEP 2 7 2011 1000	KB Huise CHPRC	SEP 2 7 2011 1000
KB Huise CHPRC	SEP 2 7 2011 1400	FED EX	

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

* Please email chain of custodies, Sample receipt Forms, and Final report to Marisol Avila (marisol_Avila@rl.gov) and Heather Medley (Heather_A_Medley@rl.gov), WSCF Project managers

LABORATORY SECTION	RECEIVED BY: Brian Daniels 9/28/11 095	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

PRINTED ON 7/25/2011

A-6002-618 (REV 2)

OCTOBER 14, 2011

TestAmerica St. Louis

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | F11-159-039 D | PAGE 2 OF 2

COLLECTOR SL1137	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN
SAMPLING LOCATION FM Hall CHPRC 100-K-63 Grubbed Area Sample #24	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		**SAF NO.** F11-159
ICE CHEST NO. GWS ~~033~~ 476 DWB 9-27-11	**FIELD LOGBOOK NO.** HNF-N-507-23	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 302676ES10
SHIPPED TO Sal 9-27-11 ~~Waste Sampling & Characterization~~ TASL	**OFFSITE PROPERTY NO.** DWB 9-27-11 ~~N/A~~ ~~See PTR~~ 3192 Sal 9/27/11		**BILL OF LADING/AIR BILL NO.** ~~N/A~~ ~~See PTR~~ DWB 9-27-11 859546035449 Sal 9/27/11

PRICE CODE C01 Sal 9/27/11 | **DATA TURNAROUND** ~~12 Days / 12 Days~~ 15 Days

AIR QUALITY ☐

METHOD OF SHIPMENT Sal 9/27/11 ~~GOVERNMENT VEHICLE~~ Commercial Carrier

ORIGINAL

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; ~~200.8 HG - ICPMS {Mercury};~~ Chromium Hex - 7196;
~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}~~;
~~(3) Gross Alpha~~ {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 ~~-- Total Sr~~;
Sal 9/27/11 Hg {Mercury} - 7471

SDG# SL1137

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-040 - D

PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC — SL1137

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 days

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #25

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

AIR QUALITY: ☐ Sal 9/27/11

ICE CHEST NO.: GWS-246

FIELD LOGBOOK NO.: N/A

ACTUAL SAMPLE DEPTH: SURFACE

COA: 302676ES10

METHOD OF SHIPMENT: Sal 9/27/11 ~~GOVERNMENT VEHICLE~~ Commercial carrier

ORIGINAL

SHIPPED TO: Sal 9/27/11 ~~Waste Sampling & Characterization~~ TASC

OFFSITE PROPERTY NO.: ~~N/A~~ Sal 9/27/11 DWB 9-27-11 ~~See PTR~~ 3192

BILL OF LADING/AIR BILL NO.: ~~N/A~~ Sal 9/27/11 ~~See PTR~~ DWB 9-27-11 8595460354 49

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 9/26/11 — Sal 9-27-11

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B2FXD1	SOIL	SEP 07 2011	0830

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall, CHPRC	1415 SEP 07 2011	M. Nelson	SEP 07 2011 1415
K Bierzal-Ibrom	9/26/11 1315	L.D. Wall, CHPRC	9/26/11 1315
L.D. Wall, CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1000	KB Hulse, CHPRC	SEP 27 2011 1000
KB Hulse, CHPRC	SEP 27 2011 1400	FED EX	
			10-04-11
FEDEX		Brian Daniels	9/28/11 0915

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

Please email copies of chain of custody, sample receipt form, and Final report to Marisol Arila (Marisol_Arila@rl.gov) and Heather Medley (Heather_A_Medley@rl.gov) ~~WCS~~ WSLF project managers

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

TestAmerica St. Louis

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-040-D

PAGE 2 OF 2

COLLECTOR FM Hall CHPRC SL1137	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #25	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		**SAF NO.** F11-159
ICE CHEST NO. GWS-246	**FIELD LOGBOOK NO.** N/A	**ACTUAL SAMPLE DEPTH** SURFACE	**COA** 302676ES10
SHIPPED TO Sal 9/27/11 ~~Waste Sampling & Characterization~~ TASL	**OFFSITE PROPERTY NO.** ~~N/A~~ ~~See PTR~~ 3192 DWB 9-27-11 Sal 9/27/11		**BILL OF LADING/AIR BILL NO.** N/A ~~See PTR~~ 859546035449 Sal 9/27/11 DWB 9-27-11

PRICE CODE C01

DATA TURNAROUND ~~12 Days / 12 Days~~ 15 DAYS

AIR QUALITY ☐ Sal 9/27/11

METHOD OF SHIPMENT Sal 9-27-11 ~~GOVERNMENT VEHICLE~~ Commercial Carrier

ORIGINAL

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; ~~200.8 HG - ICPMS {Mercury};~~ Chromium Hex - 7196;
~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;~~ Hg {Mercury} - 7471

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

OCTOBER 14, 2011

TestAmerica St. Louis

SDG# SL1137

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-041 D | PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC SL1137	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #26	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-246	FIELD LOGBOOK NO.: N/A	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: Sal 9/27/11 ~~Waste Sampling & Characterization~~ TASL	OFFSITE PROPERTY NO.: ~~N/A~~ Sal 9/27/11 ~~See PTR~~ DWB 9-27-11 3192		BILL OF LADING/AIR BILL NO.: ~~N/A~~ Sal 9/27/11 ~~See PTR~~ DWB 9-27-11 859546035449

PRICE CODE: C01

AIR QUALITY: ☐ Sal 9/27/11

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days

METHOD OF SHIPMENT: Sal 9/27/11 ~~GOVERNMENT VEHICLE~~ Commercial Carrier

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXD2 3	SOIL	SEP 07 2011	0940	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall, CHPRC	SEP 07 2011 1415	M. Nelson	SEP 07 2011 1415
L.D. Wall, CHPRC	9/26/11 1315	L.D. Wall, CHPRC	9/26/11 1315
L.D. Wall, CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1000	KB Hulse, CHPRC	SEP 27 2011 1000
KB Hulse, CHPRC	SEP 27 2011 1400	FED EX	
FEDEX		Brian Daniels	9/28/11 0915

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

Please email copies of chain of custody, Sample Receipt Form, and final report to marisol avila (marisol_avila@rl.gov) and Heather Medley (Heather_A_Medley@rl.gov)

WSLF project managers

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

PRINTED ON: 7/25/2011 A-6003-618 (REV. 2)

OCTOBER 14, 2011

TestAmerica St. Louis

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-041 D

COLLECTOR SL1137 FM Hall	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN
SAMPLING LOCATION CHPRC 100-K-63 Grubbed Area Sample #26	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		**SAF NO.** F11-159
ICE CHEST NO. GUS-246	**FIELD LOGBOOK NO.** N/A	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 302676ES10
SHIPPED TO Sal 9/27/11 TASL ~~Waste Sampling & Characterization~~	**OFFSITE PROPERTY NO.** DWB 9-27-11 ~~N/A~~ ~~See PTR~~ Sal 9/27/11 3192		**BILL OF LADING/AIR BILL NO.** ~~N/A~~ ~~See PTR~~ Sal 9/27/11 DWB 9-27-11 859546035449

PRICE CODE C01

DATA TURNAROUND ~~12 Days / 12 Days~~ Sal 9/27/11 15 Days

AIR QUALITY ☐

METHOD OF SHIPMENT Sal 9/27/11 ~~GOVERNMENT VEHICLE~~ Commercial Carrier

ORIGINAL

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; ~~200.8 HG - ICPMS {Mercury}~~; Chromium Hex - 7196;
~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~
(3) Gross Alpha {Gross alpha}; ~~Gross Beta {Gross beta}; Strontium-89,90 Total Sr;~~ Hg {Mercury} - 7471
Sal 9/27/11

A-6003-618 (REV 2)

OCTOBER 14, 2011

TestAmerica St. Louis

SDG# SL1137

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-042-D | PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC SL1137	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01			DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days
AIR QUALITY: ☐ Sal 9/27/11			
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #27	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-246	FIELD LOGBOOK NO.: N/A	ACTUAL SAMPLE DEPTH: SURFACE	COA: 302676ES10
SHIPPED TO: Sal 9/27/11 ~~Waste Sampling & Characterization~~ TASL	OFFSITE PROPERTY NO.: ~~N/A~~ Sal 9/29/11 AW 9/27/11 ~~See PTR~~		METHOD OF SHIPMENT: Sal 9/27/11 ~~GOVERNMENT VEHICLE~~ Commercial Carrier
			BILL OF LADING/AIR BILL NO.: N/A ~~See PTR~~ Sal 9/27/11 AW 9/27/11 8595 4603 5449

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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
B2FXD3 4	SOIL	SEP 07 2011	1014

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall, CHPRC	SEP 07 2011 1415	M. Nelson M. Nelson	SEP 07 2011 1415
L.D. Wall, CHPRC	9/26/11 1315	L.D. Wall, CHPRC	9/26/11 1315
SSU-1	SEP 26 2011 1400	KD Huise, CHPRC	SEP 26 2011 1400
KD Huise, CHPRC	SEP 27 2011 1000	FED EX	SEP 27 2011 1000
FedEx	SEP 27 2011 1400	B-1 Brian Daniels	9/28/11 0915

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

Please email copies of chain of custody, sample receipt form, and final report to Marisol Avila (Marisol_Avila@rl.gov) and Heather Medley (Heather_A_Medley@rl.gov) WSCF project managers

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

OCTOBER 14, 2011

TestAmerica St. Louis

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-042 -D

COLLECTOR: FM Hall, CHPRC SL1137

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days

AIR QUALITY: ☐ Sal 9-27-11

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #27

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

ICE CHEST NO.: GWS-246

FIELD LOGBOOK NO.: N/A

ACTUAL SAMPLE DEPTH: SURFACE

COA: 302676ES10

METHOD OF SHIPMENT: ~~GOVERNMENT VEHICLE~~ Commercial carrier Sal 9/27/11

ORIGINAL

SHIPPED TO: ~~Waste Sampling & Characterization~~ Sal 9/27/11 TASL

OFFSITE PROPERTY NO.: ~~N/A~~ ~~See PTR~~ 3192 9/27/11 Sal LW 9/27/11

BILL OF LADING/AIR BILL NO.: ~~N/A~~ ~~See PTR~~ 8 595 4603 5449 Sal 9/27/11 LW 9/27/11

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; ~~200.8_HG - ICPMS {Mercury}~~; Chromium Hex - 7196;
~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;~~
SAL 9/27/11

Hg {Mercury} - 7471

A-6003-618 (REV 2)

OCTOBER 14, 2011

TestAmerica St. Louis

SDG# SL1137

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-043-1 | PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC 54137

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #28

ICE CHEST NO.: GWS-246 Sal 9/27/11

SHIPPED TO: Sal 9/27/11 TASL

~~Waste Sampling & Characterization~~

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

FIELD LOGBOOK NO.: N/A

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

OFFSITE PROPERTY NO.: ~~N/A~~ Sal 9/27/11 ~~See PTR~~ 3192 JW.9/27/11

BILL OF LADING/AIR BILL NO.: ~~N/A~~ Sal 9/27/11 ~~See PTR~~ 859546035449 JW.9/27/11

PRICE CODE: C01

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days

AIR QUALITY: [ ] Sal 9/27/11

METHOD OF SHIPMENT: Sal 9/27/11 ~~GOVERNMENT VEHICLE~~ Commercial Carrier

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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
B2FXD4	SOIL	SEP 07 2011	1624

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 07 2011 1415	M. Nelson CHPRC	9/7/11 1415
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Bearal Bueny	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
SSU-1	SEP 27 2011 1000	KB Hulse CHPRC	SEP 27 2011 1000
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
KB Hulse	SEP 27 2011 1400	FEDEX	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FEDEX		B-1 Brian Daniels	9/28/11 0915
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

Please email copies of chain of custody, sample receipt form, and final report to Marisol Avila (marisol_avila@rl.gov) and Heather Medley (heather_a_medley@rl.gov) WSLF project managers

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

TestAmerica St. Louis

OCTOBER 14, 2011

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-043 → D

COLLECTOR: FM Hall CHPRC SL1137	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days	AIR QUALITY: ☐ Sal 9-27-11	
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #28	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil	SAF NO.: F11-159	
ICE CHEST NO.: Gas-246	FIELD LOGBOOK NO.: N/A	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: ~~GOVERNMENT VEHICLE~~ Sal 9/27/11 Commercial Carrier			
SHIPPED TO: 9/27/11 Sal ~~Waste Sampling & Characterization~~ TASL	OFFSITE PROPERTY NO.: ~~N/A~~ ~~See PTR~~ Sal 9/27/11 LW. 9/27/11	3192	BILL OF LADING/AIR BILL NO.: ~~N/A~~ ~~See PTR~~ Sal 9/27/11 LW. 9/27/11 8595 4603 5449

ORIGINAL

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; ~~200.8 HG - ICPMS {Mercury};~~ Chromium Hex - 7196;
~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;~~ ~~E~~ Hg {Mercury} - 7471
Sal 9-27-11
Sal 9/27/11

A-6003-618 (REV 2)

OCTOBER 14, 2011

TestAmerica St. Louis

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-044 -D

COLLECTOR: FM Hall CHPRC 54137

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days

AIR QUALITY: ☐ Sal 9/27/11

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #29

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

ICE CHEST NO.: 246 GWS - ~~60~~ 9-27-11

FIELD LOGBOOK NO.: HNF-N-507-23

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: ~~Sal 9/27/11~~ ~~GOVERNMENT VEHICLE~~ Commercial Carrier

ORIGINAL

SHIPPED TO: Sal 9/27/11 ~~Waste Sampling & Characterization~~ TASL

OFFSITE PROPERTY NO.: ~~N/A~~ Sal 9/27/11 See PTR 3192 DWB 9-27-11

BILL OF LADING/AIR BILL NO.: ~~N/A~~ Sal 9/27/11 See PTR DWB 9-27-11

859546035449

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXD5	2	SOIL	SEP 12 2011	0940	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 12 2011 1450	TA Frazier	SEP 12 2011 1450
Bernard Hearn	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1000	KB Hulse CHPRC	SEP 27 2011 1000
KB Hulse CHPRC	SEP 27 2011 1400	FED EX	
FED EX		Brian Daniels	9/28/11 0915

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

OCTOBER 14, 2011

TestAmerica St. Louis

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-044 D

COLLECTOR FM Hall CHPRC SL1137

COMPANY CONTACT LUKE, SN

TELEPHONE NO. 372-1667

PROJECT COORDINATOR LUKE, SN

PRICE CODE C01

DATA TURNAROUND ~~12 Days / 12 Days~~ 15 Days

AIR QUALITY ☐ Sal 9/27/11

SAMPLING LOCATION 100-K-63 Grubbed Area Sample #29

PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO. F11-159

ICE CHEST NO. GWS-246 ~~001~~ 9-27-11

FIELD LOGBOOK NO. HNF-N-507-23

ACTUAL SAMPLE DEPTH 0-1'

COA 302676ES10

METHOD OF SHIPMENT Sal 9/27/11 ~~GOVERNMENT VEHICLE~~ Commercial carrier

ORIGINAL

SHIPPED TO Sal 9/27/11 ~~Waste Sampling & Characterization~~ TASL

OFFSITE PROPERTY NO. ~~N/A~~ ~~See PTS~~ Sal 9/27/11 DWB 9-27-11 3192

BILL OF LADING/AIR BILL NO. ~~N/A~~ ~~See PTS~~ Sal 9/27/11 DWB 9-27-11 859546035449

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; ~~200.8_HG - ICPMS {Mercury};~~ Chromium Hex - 7196;
~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;~~
Hg {Mercury} - 7471
Sal 9/27/11

A-6003-618 (REV 2)

OCTOBER 14, 2011

TestAmerica St. Louis

SDG# SL1137

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-046

PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC SL1137

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days

AIR QUALITY: ☐

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #30

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

ICE CHEST NO.: 6WS-~~001~~ 246 9-27-11

FIELD LOGBOOK NO.: HNF-N-507-23

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: ~~GOVERNMENT VEHICLE~~ Commercial Carrier

ORIGINAL

SHIPPED TO: ~~Waste Sampling & Characterization~~ TASL

OFFSITE PROPERTY NO.: ~~N/A~~ ~~See PTR 3192~~ DWB 9-27-11

BILL OF LADING/AIR BILL NO.: ~~N/A~~ ~~See PTR~~ DWB 9-27-11

859546035449

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 9/26/11

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXD7 3	SOIL	SEP 12 2011	1010	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 12 2011 1450	TA Frazier	SEP 12 2011 1450
		L.D. Wall CHPRC	9/26/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1000	KB Hulse CHPRC	SEP 27 2011 1000
KB Hulse CHPRC	SEP 27 2011 1408	FEDEX	
FEDEX		Brian Daniel	9/28/11 0915

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

OCTOBER 14, 2011

TestAmerica St. Louis

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-046 D

COLLECTOR FM Hall CHPRC SL1137	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN
PRICE CODE C01	**DATA TURNAROUND** ~~12 Days / 12 Days~~ 15 Days		
AIR QUALITY [ ] Sal 9/27/11			
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #30	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil	**SAF NO.** F11-159	
ICE CHEST NO. GWS - ~~001~~ 246 9-27-11	**FIELD LOGBOOK NO.** HNF-N-507-23	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 302676ES10
METHOD OF SHIPMENT Sal 9/27/11 ~~GOVERNMENT VEHICLE~~ Commercial Carrier			
SHIPPED TO Sal 9/27/11 ~~Waste Sampling & Characterization~~ TASL	**OFFSITE PROPERTY NO.** DWB 9-27-11 ~~N/A~~ ~~See PTR~~ 3192 Sal 9/27/11	**BILL OF LADING/AIR BILL NO.** ~~N/A~~ ~~See PTR~~ 859546035449 Sal 9/27/11 DWB 9-27-11	

ORIGINAL

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.□□** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; ~~200.8_HG - ICPMS {Mercury};~~ Chromium Hex - 7196;
~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 - Total Sr;~~
Sal 9/27/11

Hg {Mercury} - 7471

A-6003-618 (REV 2)

OCTOBER 14, 2011

TestAmerica St. Louis

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-047 - D | PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC SL137

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 days

AIR QUALITY: ☐ Sal 9/29/11

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #31

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

ICE CHEST NO.: GWS-~~001~~ 246 JA 9-27-11

FIELD LOGBOOK NO.: HNF-N-507-23.

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: ~~GOVERNMENT VEHICLE~~ Sal 9/27/11 Commercial Carrier

ORIGINAL

SHIPPED TO: Sal 9/27/11 TASL

~~Waste Sampling & Characterization~~

OFFSITE PROPERTY NO.: ~~N/A~~ Sal 9/27/11 ~~See PTR~~ 3192 DWB 9-27-11

BILL OF LADING/AIR BILL NO.: ~~N/A~~ Sal 9/27/11 ~~See PTR~~ DWB 9-27-11

859546035449

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 9/26/11

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B2FXD8 4	SOIL	SEP 12 2011	1040

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall	SEP 12 2011 1450	TA Frazier	SEP 17 2011 1450
CHPRC	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1000	KD Hulse CHPRC	SEP 27 2011 1000
KD Hulse CHPRC	SEP 27 2011 1400	FED EX	
FEDEX		Brian Daniels	9/28/11 09:15

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

OCTOBER 14, 2011

TestAmerica St. Louis

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-047 -1 | PAGE 2 OF 2

COLLECTOR FM Hall CHPRC SL1137

SAMPLING LOCATION 100-K-63 Grubbed Area Sample #31

ICE CHEST NO. GWS - ~~001~~ 246 9-27-11

SHIPPED TO Sal 9/27/11 ~~Waste Sampling & Characterization~~ TASL

COMPANY CONTACT LUKE, SN

TELEPHONE NO. 372-1667

PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

FIELD LOGBOOK NO. HNF-N-507-23.

ACTUAL SAMPLE DEPTH 0 - 1'

OFFSITE PROPERTY NO. ~~N/A~~ Sal 9/27/11 ~~See PTR~~ 3192 DWB 9-27-11

PROJECT COORDINATOR LUKE, SN

SAF NO. F11-159

COA 302676ES10

BILL OF LADING/AIR BILL NO. ~~N/A~~ Sal 9/27/11 ~~See PTR~~ 8595460354 49 DWB 9-27-11

PRICE CODE C01

DATA TURNAROUND ~~12 Days / 12 Days~~ Sal 9/27/11 15 Days

AIR QUALITY ☐

METHOD OF SHIPMENT ~~GOVERNMENT VEHICLE~~ Sal 9/27/11 Commercial Carrier

ORIGINAL

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; ~~200.8 HG - ICPMS {Mercury};~~ Chromium Hex - 7196;
~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}~~;
(3) ~~Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;~~
Sal 9/27/11 Hg {Mercury} - 7471

SDG# SL1137

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-048 – D PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC SL1137	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days		
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #32	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
AIR QUALITY: ☐ Sal 9-27-11			
ICE CHEST NO.: ~~HNF-N-507~~ GWS-001 KZ 9/12/11 9/16 DWB 9-27-11	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: ~~GOVERNMENT VEHICLE~~ Sal 9/27/11 Commercial Carrier			
SHIPPED TO: Sal 9/27/11 ~~Waste Sampling & Characterization~~ TASL	OFFSITE PROPERTY NO.: DWB 9-27-11 ~~N/A~~ ~~See PTR~~ 3192 Sal 9/27/11		BILL OF LADING/AIR BILL NO.: ~~N/A~~ ~~See PTR~~ Sal 9/27/11 DWB 9-27-11 859546035449

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXD9 5	SOIL	SEP 12 2011	1107	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 12 2011 1450	TA Brazier	SEP 12 2011 1450
K Breazeal / Bream	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1000	KB Hulse CHPRC	SEP 27 2011 1000
KB Hulse CHPRC	SEP 27 2011 1400	FED EX	
FED EX		Brian Daniels	9/28/11 0915

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

OCTOBER 14, 2011

TestAmerica St. Louis

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-048-D

COLLECTOR: FM Hall CHPRC SL1137	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	AIR QUALITY: ☐	DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days	
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #32	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil	SAF NO.: F11-159	
ICE CHEST NO.: GWS-OOT-276 9-27-11 DWB	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0 - 1'	COA: 302676ES10
METHOD OF SHIPMENT: Sal 9/27/11 ~~GOVERNMENT VEHICLE~~ Commercial Carrier	ORIGINAL		
SHIPPED TO: Sal 9/27/11 ~~Waste Sampling & Characterization~~ TASL	OFFSITE PROPERTY NO.: ~~N/A~~ ~~See PTR~~ 3192 DWB 9-27-11 Sal 9/27/11	BILL OF LADING/AIR BILL NO.: ~~N/A~~ ~~See PTR~~ 859546035449 DWB 9-27-11 Sal 9/27/11	

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; ~~200.8_HG - ICPMS {Mercury};~~ Chromium Hex - 7196;
~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;~~
Sal 9/27/11 Hg {Mercury} 7471

A-6003-618 (REV 2)

OCTOBER 14, 2011

TestAmerica St. Louis

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-049 -D

COLLECTOR: FM Hall, CHPRC SL1137

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days

AIR QUALITY: ☐

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #33

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

ICE CHEST NO.: 246 6WS - ~~001~~ M 9-27-11

FIELD LOGBOOK NO.: HNF-N-507-23

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: Sal 9/27/11 ~~GOVERNMENT VEHICLE~~ Commercial carrier

ORIGINAL

SHIPPED TO: Sal 9/27/11 ~~Waste Sampling & Characterization~~ TASL

OFFSITE PROPERTY NO.: Sal 9/27/11 N/A See PTR DWB 9-27-11 3192

BILL OF LADING/AIR BILL NO.: Sal 9/27/11 N/A See PTR DWB 9-27-11 8595460354 49

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)

113154

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool~4C	None	None
HOLDING TIME	6 Months	6 Months	6 Months
TYPE OF CONTAINER	G/P	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXF0	SOIL	SEP 12 2011	1149	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall, CHPRC	SEP 12 2011 1450	TA Brazier	SEP 12 2011 1450
Beatrice A. Brazier	9/26/11 1315	L.D. Wall	9/26/11 1315
L.D. Wall, CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1000	KB Hulse, CHPRC	SEP 27 2011 1000
KB Hulse, CHPRC	SEP 27 2011 1400	FED EX	
FEDEX		Brian Daniels	9/28/11 0915

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

* Please email copies of chain of custodies, Sample receipt Forms, and Final Report to Marisol Avila (marisol_Avila@rl.gov) and Heather Medley (Heather_A_Medley@rl.gov) WSCF Project Managers

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

OCTOBER 14, 2011

TestAmerica St. Louis

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-049 - D

COLLECTOR: FM Hall CHPRC SL1137	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #33	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: 6WS-246 ~~001~~ NA 9-27-11	FIELD LOGBOOK NO.: HNF-~~N-507~~-23.	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: Sal 9/27/11 ~~Waste Sampling & Characterization~~ TASC	OFFSITE PROPERTY NO.: ~~N/A~~ ~~SEE PTR~~ DWB 9-27-11 3192 Sal 9/27/11		BILL OF LADING/AIR BILL NO.: Sal 9/27/11 ~~N/A~~ ~~See Ptr~~ DWB 9-27-11 8595416035449

PRICE CODE: C01

AIR QUALITY: ☐

DATA TURNAROUND: Sal 9/27/11 ~~12 Days / 12 Days~~ 15 Days

METHOD OF SHIPMENT: Sal 9/27/11 ~~GOVERNMENT VEHICLE~~ Commercial Carrier

ORIGINAL

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; ~~200.8 HG - ICPMS {Mercury};~~ Chromium Hex - 7196;
~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 Total Sr;~~
Sal 9/27/11

Hg {Mercury} - 7471

A-6003-618 (REV 2)

OCTOBER 14, 2011

TestAmerica St. Louis

SDG# SL1137

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | F11-159-050 – 0 | PAGE 1 OF 2

COLLECTOR FM Hall CHPRC SL1137	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN
PRICE CODE C01	**DATA TURNAROUND** ~~12 Days / 12 Days~~ 15 Days/15 Days	**AIR QUALITY** ☐	
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #34	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil	**SAF NO.** F11-159	
ICE CHEST NO. GWS-246 ~~GWS-1027~~ 9-27-11	**FIELD LOGBOOK NO.** HNF-N-507-23 . N/A	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 302676ES10
METHOD OF SHIPMENT ~~GOVERNMENT VEHICLE~~ Federal Express	**ORIGINAL**		
SHIPPED TO ~~Waste Sampling & Characterization~~ TASL	**OFFSITE PROPERTY NO.** ~~N/A~~ 3192	**BILL OF LADING/AIR BILL NO.** ~~N/A~~ ~~See PTR~~ 859546035449	

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)

113177

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION			Cool~4C	None	None
HOLDING TIME			6 Months	6 Months	6 Months
TYPE OF CONTAINER			G/P	P	G/P
NO. OF CONTAINER(S)			1	1	
VOLUME			250mL	500mL	250mL
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**		
B2FXF1	SOIL	SEP 13 2011	0927	✓	✓ ✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 13 2011 1400	K Brazeal	SEP 13 2011 1400
K Brazeal	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1030	DON BROTHERTON / CHPRC	SEP 27 2011 1030
DON BROTHERTON / CHPRC	SEP 27 2011 1400	FED EX	
FEDEX		Brian Daniels	9/28/11 09:5

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

Please email copies of chain of custody, Sample receipt form, and Final report to Marisol Anla (Marisol_Anla@rl.gov) and Heather Medley (Heather_A_Medley@rl.gov) WSCF project managers

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

PRINTED ON: 7/25/2011 A-6003-618 (REV 2)

TestAmerica St. Louis

OCTOBER 14, 2011

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-050 – Δ | PAGE 2 OF 2

COLLECTOR F. HALL 54137	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #34	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		**SAF NO.** F11-159
ICE CHEST NO. GWS-246 ~~LC7~~ PE 9-27-11	**FIELD LOGBOOK NO.** HNF ~~-N-507-~~ 23 N/A	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 302676ES10
SHIPPED TO ~~Waste Sampling & Characterization~~ TASL mm 9/27/11	**OFFSITE PROPERTY NO.** mm 9/27/11 ~~N/A~~ ~~See PTR~~ JW 9/27/11	3192	**BILL OF LADING/AIR BILL NO.** mm 9/27/11 ~~N/A~~ ~~See PTR~~ JW 9/27/11

PRICE CODE C01

AIR QUALITY ☐

DATA TURNAROUND ~~12 Days / 12 Days~~ mm 9/27/11 15 Days/15 Days

ORIGINAL

METHOD OF SHIPMENT mm 9/27/11 ~~GOVERNMENT VEHICLE~~ Federal Express 859546035449

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.~~ ~~** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.~~ mm 9/27/11

(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; ~~200.8 HG - ICPMS {Mercury}; Chromium Hex 7196;~~ mm 9/27/11

~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~ mm 9/27/11

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;~~ mm 9/27/11

Hg (Mercury) - 7471

SDG# SL1137

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-051 – D | PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC SL1137

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days/15 Days

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #35

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

AIR QUALITY: ☐

ICE CHEST NO.: 246 Re CGWS-~~107~~ 9-27-11

FIELD LOGBOOK NO.: HNF-N-~~507~~-23 - N/A

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: ~~GOVERNMENT VEHICLE~~ Federal Express

ORIGINAL

SHIPPED TO: ~~Waste Sampling & Characterization~~ TASL

OFFSITE PROPERTY NO.: ~~N/A~~ ~~See PTR~~ 3192

BILL OF LADING/AIR BILL NO.: ~~N/A~~ ~~See PTR~~ 859546035449

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXF2 2	SOIL	SEP 13 2011	0940	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 13 2011 1400	Beazal Bream	SEP 13 2011 1400
Beazal Bream	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU- 1	SEP 26 2011 1400
SSU- 1	9-27-11 1030	DON BROTHERTON / CHPRC	9-27-11 1030
DON BROTHERTON / CHPRC	9-27-11 1410	FED EX	
FedEx		Brian Daniels	9/28/11 0915

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

PRINTED ON 7/25/2011

A-6007-618 (REV. 2)

OCTOBER 14, 2011

TestAmerica St. Louis

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-051– D

COLLECTOR FM Hall SL1137 CHPRC

COMPANY CONTACT LUKE, SN

TELEPHONE NO. 372-1667

PROJECT COORDINATOR LUKE, SN

PRICE CODE C01

DATA TURNAROUND ~~12 Days / 12 Days~~ mm 9/27/11 15 Days / 15 Days

SAMPLING LOCATION 100-K-63 Grubbed Area Sample #35

PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO. F11-159

AIR QUALITY ☐

ICE CHEST NO. 246 RL CoWS-~~107~~ 9-27-11

FIELD LOGBOOK NO. ~~HNF-N-607-23~~ - N/A

ACTUAL SAMPLE DEPTH 0-1'

COA 302676ES10

METHOD OF SHIPMENT mm 9/27/11 ~~GOVERNMENT VEHICLE~~ Federal Express

ORIGINAL

SHIPPED TO mm 9/27/11 ~~Waste Sampling & Characterization~~ TASL

OFFSITE PROPERTY NO. mm 9/27/11 ~~N/A~~ ~~See PTR~~ LW. 9/27/11 3192

BILL OF LADING/AIR BILL NO. mm 9/27/11 ~~N/A~~ ~~See PTR~~ LW. 9/27/11 859546035449

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.~~ mm 9/27/11

(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; ~~200.8_HG - ICPMS (Mercury); Chromium Hex - 7196;~~ mm 9/27/11

~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~ mm 9/27/11

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;~~ mm 9/27/11

Hg (Mercury) - 7471

SDG# SL1137

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-052 – D

COLLECTOR: FM Hall CHPRC SL1137	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #36	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: 24G R GWS - ~~107~~ 9-27-11	FIELD LOGBOOK NO.: HNF-N-507-23 . N/A	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: ~~Waste Sampling & Characterization~~ TASL (aum 9/27/11)	OFFSITE PROPERTY NO.: ~~N/A~~ (aum 9/27/11) ~~See PTR~~ LW 9/27/11 3192		BILL OF LADING/AIR BILL NO.: ~~N/A~~ (aum 9/27/11) ~~See PTR~~ LW 9/27/11 859546035449

PRICE CODE: C01

AIR QUALITY: [ ]

DATA TURNAROUND: ~~12 Days / 12 Days~~ (aum 9/27/11) 15 Days / 15 Days

METHOD OF SHIPMENT: (aum 9/27/11) ~~GOVERNMENT VEHICLE~~ Federal Express

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXF3 3	SOIL	SEP 13 2011	0951	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall	SEP 13 2011 1450	Brazell-Bream	SEP 13 2011 1450
Brazell-Bream	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	9-27-11 1000	DON BROTHERTON / CHPRC	9-27-11 1000
DON BROTHERTON / CHPRC	9-27-1400	FED EX	
FED EX		Brian Daniels	9/28/11 0915

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

OCTOBER 14, 2011

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-052 – D

COLLECTOR: FM Hall SL1137 CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #36	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐
ICE CHEST NO.: 246 RY CoWS-tcf 9-27-11	FIELD LOGBOOK NO.: HNF-N-507-23. N/A	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: mm 9/27/11 ~~GOVERNMENT VEHICLE~~ Federal Express
SHIPPED TO: mm 9/27/11 ~~Waste Sampling & Characterization~~ TASL	OFFSITE PROPERTY NO.: mm 9/27/11 ~~N/A~~ ~~See PTR~~ JW, 9/27/11	3192	BILL OF LADING/AIR BILL NO.: mm 9/27/11 ~~N/A~~ ~~See PTR~~ JW 9/27/11	859546035449

DATA TURNAROUND: ~~12 Days / 12 Days~~ mm 9/27/11 15 Days/15 Days

ORIGINAL

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.~~ mm 9/27/11

(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; ~~200.8 HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ mm 9/27/11

~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~ mm 9/27/11

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;~~ mm 9/27/11

Hg (Mercury) - 7471

A-6003-618 (REV 2)

OCTOBER 14, 2011

SDG# SL1137

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-053 – D | PAGE 1 OF 2

COLLECTOR: SL1137 FM Hall CHPRC

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days / 15 Days

AIR QUALITY: ☐

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #37

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

ICE CHEST NO.: GWS-~~107~~ 246

FIELD LOGBOOK NO.: HNF-N-507-23 N/A

ACTUAL SAMPLE DEPTH: G-1'

COA: 302676ES10

METHOD OF SHIPMENT: ~~GOVERNMENT VEHICLE~~ Federal Express

ORIGINAL

SHIPPED TO: ~~Waste Sampling & Characterization~~ TASL

OFFSITE PROPERTY NO.: ~~N/A~~ See PTR

BILL OF LADING/AIR BILL NO.: ~~N/A~~ See PTR 8595460354 49

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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
B2FXF4	SOIL	SEP 13 2011	1012

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 13 2011 1450	Brazel-Flynn	SEP 13 2011 1400
Brazel-Flynn	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1000	DON BROTHERTON / CHPRC	9-27-11 1000
DON BROTHERTON / CHPRC	9-27-11 1400	FEDEX	
FEDEX		Brian Daniels	9/28/11 09:5

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

TestAmerica St. Louis

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-053 – D

COLLECTOR FM Hall CHPRC SL1137	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #37	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		**SAF NO.** F11-159
ICE CHEST NO. GWS-~~107~~ 246 9-27-11	**FIELD LOGBOOK NO.** HNF-N-507-23 . N/A	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 302676ES10
SHIPPED TO ~~Waste Sampling & Characterization~~ TASL 9/27/11	**OFFSITE PROPERTY NO.** ~~N/A~~ 9/27/11 ~~See PTR~~ 3192 LW 9/27/11		**BILL OF LADING/AIR BILL NO.** ~~N/A~~ 9/27/11 ~~See PTR~~ 859546035449 LW 9/27/11

PRICE CODE C01

AIR QUALITY ☐

DATA TURNAROUND ~~12 Days / 12 Days~~ 9/27/11 15 Days / 15 Days

ORIGINAL

METHOD OF SHIPMENT 9/27/11 ~~GOVERNMENT VEHICLE~~ Federal Express

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.~~ ~~** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.~~ 9/27/11

(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; ~~200.8 HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ 9/27/11

~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~ 9/27/11

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 Total Sr;~~ 9/27/11

Hg (Mercury) - 7471

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

OCTOBER 14, 2011

TestAmerica St. Louis

SDG# SL1137

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-054 — D

COLLECTOR: FM Hall CHPRC SL1137

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: ~~12 Days / 12 Days~~ 7/27/11 15 Days/15 Days

AIR QUALITY: ☐

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #38

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

ICE CHEST NO.: GWS-~~107~~ 246 9-27-11

FIELD LOGBOOK NO.: HNF-N-507-23-N/A

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: 9/27/11 ~~GOVERNMENT VEHICLE~~ Federal Express

ORIGINAL

SHIPPED TO: ~~Waste Sampling & Characterization~~ TASL 9/27/11

OFFSITE PROPERTY NO.: 9/27/11 ~~N/A~~ ~~See PTR~~ LW 9/27/11 3192

BILL OF LADING/AIR BILL NO.: 9/27/11 ~~N/A~~ ~~See PTR~~ LW 9/27/11 859546035449

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	P	~~G/P~~
NO. OF CONTAINER(S)	1	1	
VOLUME	250mL	500mL	250mL
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			
B2FXF5 5	SOIL	SEP 13 2011	1035	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 13 2011 1450	TA FMZIRA	SEP 13 2011 1450
	9/26/11 1315	L.D. Wall CHPRC	1315 9/26/11
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1000	DON BROTHERTON / CHPRC	9-27-11
DON BROTHERTON / CHPRC	9-27-11 1400	FED EX	
FEDEX		Brian Daniels	9/28/11 0915

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

TestAmerica St. Louis

OCTOBER 14, 2011

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-054 – D | PAGE 2 OF 2

COLLECTOR FM Hall CHPRC SL1137

COMPANY CONTACT LUKE, SN

TELEPHONE NO. 372-1667

PROJECT COORDINATOR LUKE, SN

PRICE CODE C01

DATA TURNAROUND ~~12 Days / 12 Days~~ mm 9/27/11 15 Days/15 Days

AIR QUALITY ☐

SAMPLING LOCATION 100-K-63 Grubbed Area Sample #38

PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO. F11-159

ICE CHEST NO. 246 RE GWS-167 9-27-11

FIELD LOGBOOK NO. HNF-N-507-23 . N/A

ACTUAL SAMPLE DEPTH 0-1'

COA 302676ES10

METHOD OF SHIPMENT mm 9/27/11 ~~GOVERNMENT VEHICLE~~ Federal Express

ORIGINAL

SHIPPED TO mm 9/27/11 ~~Waste Sampling & Characterization~~ TASL

OFFSITE PROPERTY NO. mm 9/27/11 ~~N/A~~ ~~See PTR~~ JW. 9/27/11 3192

BILL OF LADING/AIR BILL NO. mm 9/27/11 ~~N/A~~ ~~See PTR~~ JW. 9/27/11 859546035449

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.~~ mm 9/27/11

(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; ~~200.8 HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ mm 9/27/11

~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~ mm 9/27/11

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;~~ mm 9/27/11

Hg (Mercury) - 7471

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

OCTOBER 14, 2011

TestAmerica St. Louis

SDG# SL1137

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-055 – D

COLLECTOR: FM Hall CHPRC SL137

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days / 15 Days

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #39

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

AIR QUALITY: ☐

ICE CHEST NO.: 246 RE GWS - ~~107~~ 9-27-11

FIELD LOGBOOK NO.: HNF-N-507-23 N/A

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: ~~GOVERNMENT VEHICLE~~ Federal Express

ORIGINAL

SHIPPED TO: ~~Waste Sampling & Characterization~~ TASL

OFFSITE PROPERTY NO.: ~~N/A~~ 3192 See PTR 9/27/11

BILL OF LADING/AIR BILL NO.: ~~N/A~~ 859546035449 See PTR 9/27/11

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXF6	SOIL	SEP 13 2011	1054	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall	SEP 13 2011 1450	TA Frazier	SEP 13 2011 1450
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Bierral Brown	9/26/11 1315	L.D. Wall CHPRC	1315 9/26/11
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
SSU-1	SEP 27 2011 1000	DON BROTHERTON / CHPRC	9-27-11 1000
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
DON BROTHERTON / CHPRC	9-27-11 1400	FED EX	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FedEx		Brian Daniels	9/28/11 0915
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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

OCTOBER 14, 2011

TestAmerica St. Louis

SDG# SL1137

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | F11-159-055 – Δ | PAGE 2 OF 2

COLLECTOR FM Hall CHPRC SL1137

SAMPLING LOCATION 100-K-63 Grubbed Area Sample #39

ICE CHEST NO. 24G RE GWS-~~107~~ 9-27-11

SHIPPED TO ~~Waste Sampling & Characterization~~ TASL mm 9/27/11

COMPANY CONTACT LUKE, SN

TELEPHONE NO. 372-1667

PROJECT COORDINATOR LUKE, SN

PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO. F11-159

FIELD LOGBOOK NO. HNF-N-507-23-N/A

ACTUAL SAMPLE DEPTH 0 – 1'

COA 302676ES10

OFFSITE PROPERTY NO. mm 9/27/11 ~~N/A~~ ~~See PTR~~ 3192 LW, 9/27/11

BILL OF LADING/AIR BILL NO. mm 9/27/11 ~~N/A~~ ~~See PTR~~ 859546073449 LW, 9/27/11

PRICE CODE C01

AIR QUALITY ☐

DATA TURNAROUND ~~12 Days / 12 Days~~ mm 9/27/11 15 Days/15 Days

METHOD OF SHIPMENT mm 9/27/11 ~~GOVERNMENT VEHICLE~~ Federal Express

ORIGINAL

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.~~ ~~** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.~~ mm 9/27/11

(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; ~~200.8 HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ mm 9/27/11

~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~ mm 9/27/11

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 - Total Sr;~~ mm 9/27/11

Hg (Mercury) - 7471

PRINTED ON 7/25/2011 | A-6003-618 (REV 2)

OCTOBER 14, 2011

SDG# SL1137

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-057-D

PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC SL1137

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: ~~12 Days / 12 Days~~ 9/27/11 15 Days / 15 Days

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #40

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

AIR QUALITY: ☐

ICE CHEST NO.: 244 Re GWS-~~107~~ 9-27-11

FIELD LOGBOOK NO.: HNF-N-507-23. N/A

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: ~~GOVERNMENT VEHICLE~~ Federal Express

ORIGINAL

SHIPPED TO: ~~Waste Sampling & Characterization~~ TASL 9/27/11

OFFSITE PROPERTY NO.: ~~N/A~~ 9/27/11 ~~SEE PTR~~ LW 9/27/11 3192

BILL OF LADING/AIR BILL NO.: ~~N/A~~ 9/27/11 ~~SEE PTR~~ LW 9/27/11 8595460354 49

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXF8 7	SOIL	SEP 13 2011	1109	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 13 2011 1450	TA Fredrick Jones Jr.	SEP 13 2011 1450
Bierzal H Bum	9/26/11 1315	L.D. Wall CHPRC L.D. Wall	1315 9/26/11
L.D. Wall CHPRC L.D. Wall	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1000	DON BROTHERTON / CHPRC	9-27-11 1000
DON BROTHERTON / CHPRC	9-27-11 1400	FED EX	
FedEx		Brian Daniels	9/28/11 09:5

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

PRINTED ON: 7/25/2011

A-6003-618 (REV. 2)

OCTOBER 14, 2011

TestAmerica St. Louis

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-057 – D | PAGE 2 OF 2

COLLECTOR: FM Hall CHPRC SL1137	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #40	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: 246 22 GWS - ~~107~~ 9-27-11	FIELD LOGBOOK NO.: HNF-N-~~507~~-23 . N/A	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: ~~Waste Sampling & Characterization~~ TASL (mm 9/27/11)	OFFSITE PROPERTY NO.: ~~N/A~~ (mm 9/27/11) 3192 See PTR LW 9/27/11		BILL OF LADING/AIR BILL NO.: ~~N/A~~ (mm 9/27/11) 859546035449 See PTR LW 9/27/11

PRICE CODE: C01

AIR QUALITY: ☐

DATA TURNAROUND: ~~12 Days / 12 Days~~ (mm 7/27/11) 15 Days / 15 Days

METHOD OF SHIPMENT: ~~GOVERNMENT VEHICLE~~ (mm 9/27/11) Federal Express

ORIGINAL

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.~~ ☐☐ ~~** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.~~ (mm 7/27/11)

(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; ~~200.8 HG - ICPMS {Mercury}; Chromium Hex - 7196~~; (mm 9/27/11)

~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~ (mm 9/27/11)

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 - Total Sr;~~ (mm 9/27/11)

Hg (Mercury) - 7471

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

OCTOBER 14, 2011

SDG# SL1137

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-058 — D

COLLECTOR: FM Hall CHPRC SL1137

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days / 15 Days

AIR QUALITY: ☐

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #41

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

ICE CHEST NO.: 246 Re GWS-~~107~~ 9-27-11

FIELD LOGBOOK NO.: HNF-N-507-23 . N/A

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: ~~GOVERNMENT VEHICLE~~ Federal Express

ORIGINAL

SHIPPED TO: ~~Waste Sampling & Characterization~~ TASL

OFFSITE PROPERTY NO.: ~~N/A~~ ~~See PTR~~ 3192

BILL OF LADING/AIR BILL NO.: ~~N/A~~ ~~SEE PTR~~ 8595460354449

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXF9 8	SOIL	SEP 13 2011	1126	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 13 2011 1450	TA Emazlier Jones Jr.	SEP 13 2011 1450
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
KB Bierod KB Bierod	9/26/11 1315	L.D. Wall CHPRC L.D. Wall	1315 9/26/11
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
L.D. Wall CHPRC L.D. Wall	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
SSU-1	SEP 27 2011 1000	DON BROTHERTON / CHPRC	SEP 27 2011 1000
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
DON BROTHERTON / CHPRC	SEP 27 2011 1400	FED EX	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FEDEX		B. Brian Daniels	9/28/11 09:5
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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

OCTOBER 14, 2011

TestAmerica St. Louis

SDG# SL1137

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-058 — Δ

COLLECTOR FM Hall CHPRC SL1137

COMPANY CONTACT LUKE, SN

TELEPHONE NO. 372-1667

PROJECT COORDINATOR LUKE, SN

PRICE CODE C01

DATA TURNAROUND ~~12 Days / 12 Days~~ 9/27/11 15 Days / 15 Days

AIR QUALITY ☐

SAMPLING LOCATION 100-K-63 Grubbed Area Sample #41

PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO. F11-159

ICE CHEST NO. 246 RL GWS-107 9-27-11

FIELD LOGBOOK NO. ~~FINF-N-507-23~~ - N/A

ACTUAL SAMPLE DEPTH 0-1'

COA 302676ES10

METHOD OF SHIPMENT ~~GOVERNMENT VEHICLE~~ 9/27/11 Federal Express

ORIGINAL

SHIPPED TO ~~Waste Sampling & Characterization~~ TASL 9/27/11

OFFSITE PROPERTY NO. ~~N/A~~ 9/27/11 ~~See PTR~~ LW. 9/27/11 3192

BILL OF LADING/AIR BILL NO. ~~N/A~~ 9/27/11 ~~See PTR~~ LW. 9/27/11 8595460354 49

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; ~~200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ 9/27/11
~~(2) Gamma Spectroscopy {Cesium 137, Cobalt 60, Europium-152, Europium-154, Europium-155};~~ 9/27/11
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium 89,90 - Total Sr;~~ 9/27/11
Hg (Mercury) - 7471

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

OCTOBER 14, 2011

TestAmerica St. Louis

SDG# SL1137

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-059-D | PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC SL1137

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: ~~12 Days / 12 Days~~ 9/27/11 15 Days/15 Days

AIR QUALITY: ☐

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #42

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

ICE CHEST NO.: GWS-~~107~~ 246 RE 9-27-11

FIELD LOGBOOK NO.: HNF-N-507-23 . N/A

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: 9/27/11 ~~GOVERNMENT VEHICLE~~ Federal Express

ORIGINAL

SHIPPED TO: ~~Waste Sampling & Characterization~~ TASL 9/27/11

OFFSITE PROPERTY NO.: 9/27/11 ~~N/A~~ ~~See PTR~~ 9/27/11 3192

BILL OF LADING/AIR BILL NO.: 9/27/11 ~~N/A~~ ~~See PTR~~ 859546075449 9/27/11

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXH0 9	SOIL	SEP 13 2011	1150	✓	✓	✓

VOB 9/26/11

9/27/11

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 13 2011 1450	TA Frazier	SEP 13 2011 1450
Bearal-Brown	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1000	DON BROTHERTON / CHPRC	SEP 27 2011 1000
DON BROTHERTON / CHPRC	SEP 27 2011 1400	FED EX	
FEDEX		Brian Daniels	9/28/11 0915

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

PRINTED ON: 7/25/2011

A-6003-618 (05/2)

OCTOBER 14, 2011

TestAmerica St. Louis

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-059 – D

COLLECTOR FM Hall CHPRC SL1137	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN	**PRICE CODE** C01
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #42	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		**SAF NO.** F11-159	**AIR QUALITY** ☐
ICE CHEST NO. 244 GWS-~~107~~ 9-27-11	**FIELD LOGBOOK NO.** HNF-N-~~507~~-23 . N/A	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 302676ES10	**METHOD OF SHIPMENT** ~~GOVERNMENT VEHICLE~~ Federal Express
SHIPPED TO ~~Waste Sampling & Characterization~~ TASL	**OFFSITE PROPERTY NO.** ~~N/A~~ 3192		**BILL OF LADING/AIR BILL NO.** ~~N/A~~ 859546035449	

DATA TURNAROUND ~~12 Days / 12 Days~~ 15 Days / 15 Days

ORIGINAL

SPECIAL INSTRUCTIONS

~~**The CACN for WSCF Analytical is 402579ES20.☐☐**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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; ~~200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;~~

~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;~~

Hg (Mercury) – 7471

OCTOBER 14, 2011

SDG# SL1137

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-060 — D

PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC SL1137

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: ~~12 Days / 12 Days~~ 9/27 15 Days/15 Days

AIR QUALITY: ☐

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #43

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

ICE CHEST NO.: ~~GLUS-107~~ DWB 9-27-11

FIELD LOGBOOK NO.: HNF-N-507-23.N/A

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: ~~GOVERNMENT VEHICLE~~ Federal Express 9/27/11

ORIGINAL

SHIPPED TO: ~~Waste Sampling & Characterization~~ TASL 9/27/11

OFFSITE PROPERTY NO.: ~~N/A~~ ~~SEE PTR~~ 9/27/11 3192

BILL OF LADING/AIR BILL NO.: ~~N/A~~ ~~SEE PTR~~ 9/27/11 859546035449

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXH1 ID	SOIL	SEP 13 2011	1219	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 13 2011 1450	TA Frazier	SEP 13 2011 1450
Bearcat Bream	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1000	DON BROTHERTON / CHPRC	SEP 27 2011 1000
DON BROTHERTON / CHPRC	SEP 27 2011 1400	FED EX	
FED EX		Brian Daniels	9/28/11 0915

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

TestAmerica St. Louis

OCTOBER 14, 2011

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-060 – D

COLLECTOR FM Hall CHPRC SL137

COMPANY CONTACT LUKE, SN

TELEPHONE NO. 372-1667

PROJECT COORDINATOR LUKE, SN

PRICE CODE C01

DATA TURNAROUND ~~12 Days / 12 Days~~ 15 Days/15 Days

AIR QUALITY ☐

SAMPLING LOCATION 100-K-63 Grubbed Area Sample #43

PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO. F11-159

ICE CHEST NO. GWS-246 FL

FIELD LOGBOOK NO. HNF-N-507-23. N/A

ACTUAL SAMPLE DEPTH 0-1'

COA 302676ES10

METHOD OF SHIPMENT ~~GOVERNMENT VEHICLE~~ Federal Express

ORIGINAL

SHIPPED TO ~~Waste Sampling & Characterization~~ TASL

OFFSITE PROPERTY NO. ~~N/A~~ 3192

BILL OF LADING/AIR BILL NO. ~~N/A~~ 859546035449

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.~~ ~~** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; ~~200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;~~

~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;~~

Hg (Mercury) - 7471

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

OCTOBER 14, 2011

SDG# SL1137

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-061 – D | PAGE 1 OF 2

COLLECTOR: FM Hall SL1137

SAMPLING LOCATION: CHPRC

100-K-63 Grubbed Area Sample #44

ICE CHEST NO.: GWS-246 RY 9-27-11

SHIPPED TO: ~~Waste Sampling & Characterization~~ TASL 9/27/11

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

FIELD LOGBOOK NO.: HNF-N-507-23-N/A

ACTUAL SAMPLE DEPTH: 0-1'

OFFSITE PROPERTY NO.: ~~N/A~~ 9/27/11 ~~See PTR~~ 9/27/11 3192

PROJECT COORDINATOR: LUKE, SN

SAF NO.: F11-159

COA: 302676ES10

BILL OF LADING/AIR BILL NO.: ~~N/A~~ 9/27/11 ~~See PTR~~ 9/27/11 859546035449

PRICE CODE: C01

AIR QUALITY: ☐

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days / 15 Days 9/26

METHOD OF SHIPMENT: ~~GOVERNMENT VEHICLE~~ Federal Express 9/27/11

ORIGINAL

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)

113P92

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool~4C	None	None
HOLDING TIME	6 Months	6 Months	6 Months
TYPE OF CONTAINER	G/P	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXH2	SOIL	SEP 14 2011	0854	✓	✓	✓

9/26/11

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall	SEP 14 2011 1450	M. Nelson Hines	SEP 14 2011 1450
CHPRC	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU- 1	SEP 26 2011 1400
SSU- 1	SEP 27 2011 1000	DON BROTHERTON / CHPRC	SEP 27 2011 1000
DON BROTHERTON / CHPRC	SEP 27 2011 1400	FED EX	
FEDEX		Brian Davis	9/28/11 0915

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

Please email copies of chain of custodies, Sample receipt form, and final report to Marisol Avila (Marisol_Avila@rlsgov) and Heather Medley (Heather_A_Medley@rlsgov)

WSLF project managers

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

TestAmerica St. Louis

OCTOBER 14, 2011

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-061 - D

COLLECTOR FM Hall CHPRC SL1137	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #44	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		**SAF NO.** F11-159
ICE CHEST NO. 246 R4 GWS-~~106~~ 9-27-11	**FIELD LOGBOOK NO.** HNF-N-507-23 . N/A	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 302676ES10
SHIPPED TO ~~Waste Sampling & Characterization~~ TASL mm 9/27/11	**OFFSITE PROPERTY NO.** ~~N/A~~ mm 9/27/11 ~~See PTR~~ 3192 LW 9/27/11		**BILL OF LADING/AIR BILL NO.** ~~N/A~~ mm 9/27/11 ~~See PTR~~ 859546035449 LW 9/27/11

PRICE CODE C01

AIR QUALITY ☐

DATA TURNAROUND ~~12 Days / 12 Days~~ mm 9/27/11 15 Day / 15 Day

ORIGINAL

METHOD OF SHIPMENT mm 9/27/11 ~~GOVERNMENT VEHICLE~~ Federal Express

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20 ☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.~~ mm 9/27/11

(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; ~~200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ mm 9/27/11

~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~ mm 9/27/11

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;~~ mm 9/27/11

Hg (Mercury) - 7471

A-6003-618 (REV 2)

OCTOBER 14, 2011

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-062 – D | PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC SL1137	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #45	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-~~106~~ 246 RE 9-27-11	FIELD LOGBOOK NO.: HNF-N-507-23 N/A	ACTUAL SAMPLE DEPTH: 0 - 1'	COA: 302676ES10
SHIPPED TO: ~~Waste Sampling & Characterization~~ TASL mm 9/27/11	OFFSITE PROPERTY NO.: ~~N/A~~ mm 9/27/11 ~~See PTR~~ LW 9/27/11 3192		BILL OF LADING/AIR BILL NO.: ~~N/A~~ mm 9/27/11 ~~See PTR~~ LW 9/27/11 859546035449

PRICE CODE: C01

AIR QUALITY: ☐

DATA TURNAROUND: ~~12 Days / 12 Days~~ mm 9/27/11 15 Days/15 Days

METHOD OF SHIPMENT: mm 9/27/11 ~~GOVERNMENT VEHICLE~~ Federal Express

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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
B2FXH3 2	SOIL	SEP 14 2011	0910

9/26/11

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall	SEP 14 2011 1450	M. Nelson	SEP 14 2011 1450
L.D. Wall	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU- 1	SEP 26 2011 1400
SSU- 1	SEP 27 2011 1000	DON BROTHERTON / CHPRC	SEP 27 2011 1000
DON BROTHERTON / CHPRC	SEP 27 2011 1400	FED EX	
FEDEX		Brian Daniels	9/28/11 0905

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

OCTOBER 14, 2011

TestAmerica St. Louis

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-062 – D

COLLECTOR: FM Hall CHPRC SL1137

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days / 15 Days mm 9/27/11

AIR QUALITY: ☐

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #45

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

ICE CHEST NO.: 246 ft GWS - ~~100~~ 9-27-11

FIELD LOGBOOK NO.: HNF-N-507-~~3~~ - N/A

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: mm 9/27/11 ~~GOVERNMENT VEHICLE~~ Federal Express

ORIGINAL

SHIPPED TO: ~~Waste Sampling & Characterization~~ TASL mm 9/27/11

OFFSITE PROPERTY NO.: mm 9/27/11 ~~N/A~~ ~~SEE PTR~~ 3192 DW. 9/27/11

BILL OF LADING/AIR BILL NO.: mm 9/27/11 ~~N/A~~ ~~SEE PTR~~ 859846035449 DW. 9/27/11

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20. ** The 100-Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.~~ mm 9/27/11

(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; ~~200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ mm 9/27/11

~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~ mm 9/27/11

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 - Total Sr;~~ mm 9/27/11

Hg (Mercury) - 7471

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

TestAmerica St. Louis

OCTOBER 14, 2011

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-063 D

COLLECTOR: FM Hall CHPRC SL1137

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: ~~22 Days / 12 Days~~ 15 Days

AIR QUALITY: ☐ Sal 9/27/11

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #46

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

ICE CHEST NO.: ~~GLOS-1016~~ DWB 9-27-11

FIELD LOGBOOK NO.: HNF-N-507-23 . N/A

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: Sal 9/27/11 ~~GOVERNMENT VEHICLE~~ Commercial Carrier

ORIGINAL

SHIPPED TO: Sal 9/27/11 TASL

~~Waste Sampling & Characterization~~

OFFSITE PROPERTY NO.: N/A ~~Sal~~ 9/27/11 3192 See PTR AW 9/27/11

BILL OF LADING/AIR BILL NO.: N/A ~~Sal~~ 9/27/11 See PTR AW 9/27/11

859546035449

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXH4 3	SOIL	SEP 14 2011	0920	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 14 2011 1450	M. Nelson	SEP 14 2011 1450
M. Nelson	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU- 1	SEP 26 2011 1400
SSU- 1	SEP 27 2011 1000	DON BROTHERTON / CHPRC	SEP 27 2011 1000
DON BROTHERTON / CHPRC	SEP 27 2011 1400	FED EX	
FEDEX		B. Brian Daniels	9/28/11 0915

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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A-6003-618 (REV 2)

OCTOBER 14, 2011

TestAmerica St. Louis

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-063 ~ D

PAGE 2 OF 2

COLLECTOR FM Hall CHPRC SL1137

COMPANY CONTACT LUKE, SN

TELEPHONE NO. 372-1667

PROJECT COORDINATOR LUKE, SN

PRICE CODE C01 Sal 9/27/11

DATA TURNAROUND ~~12 Days / 12 Days~~ 15 Days

SAMPLING LOCATION 100-K-63 Grubbed Area Sample #46

PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO. F11-159

AIR QUALITY ☐

ICE CHEST NO. 246 R2 GWS-106 9-27-11

FIELD LOGBOOK NO. HNF-~~N-507-23~~ . N/A

ACTUAL SAMPLE DEPTH 0-1'

COA 302676ES10

METHOD OF SHIPMENT ~~Sal 9/27/11~~ ~~GOVERNMENT VEHICLE~~ Commercial Carrier

ORIGINAL

SHIPPED TO Sal 9/27/11 ~~Waste Sampling & Characterization~~ TASL

OFFSITE PROPERTY NO. ~~N/A~~ ~~See PTR~~ Sal 9/27/11 3192

BILL OF LADING/AIR BILL NO. ~~N/A~~ ~~See PTR~~ Sal 9/27/11 8595460354 49

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; ~~200.8 HG -- ICPMS {Mercury}; Chromium-Hex - 7196;~~ Sal 9/27/11

(2) ~~Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~

(3) ~~Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;~~

Hg {Mercury} - 7471

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

OCTOBER 14, 2011

TestAmerica St. Louis

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-064 D

COLLECTOR: FM Hall CHPRC SL1137	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #47	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: ~~SWS-106~~ DWB 9-27-11	FIELD LOGBOOK NO.: ~~HNF-N-507-~~ 23 N/A	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: Sal 9/27/11 ~~Waste Sampling & Characterization~~ TASL	OFFSITE PROPERTY NO.: ~~N/A~~ ~~See PTR~~ Sal 9/27/11 DW 9/27/11 3192		BILL OF LADING/AIR BILL NO.: ~~N/A~~ ~~See PTR~~ Sal 9/27/11 DW 9/27/11 859546035449

PRICE CODE: C01 Sal 9/27/11

AIR QUALITY: ☐

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days

METHOD OF SHIPMENT: ~~GOVERNMENT VEHICLE~~ Sal 9/27/11 Commercial Carrier

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXH5 4	SOIL	SEP 14 2011	0935	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 14 2011 1450	M. Nelson	SEP 14 2011 1450
M. Nelson	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1000	DON BROTHERTON / CHPRC	SEP 27 2011 1000
DON BROTHERTON / CHPRC	SEP 27 2011 1400	FED EX	
FED EX		Brian Daniels	9/28/11 0915

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

OCTOBER 14, 2011

TestAmerica St. Louis

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-064 D

COLLECTOR: FM Hall CHPRC SL1137	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #47	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: 6WS-~~106~~ 246 FE 9-27-11	FIELD LOGBOOK NO.: HNF-N-507-23. N/A	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: Sal 9/27/11 TASC ~~Waste Sampling & Characterization~~	OFFSITE PROPERTY NO.: ~~N/A~~ ~~See PTR~~ 9/27/11 Sal 9/27/11 3192		BILL OF LADING/AIR BILL NO.: ~~N/A~~ Sal 9/27/11 ~~See PTR~~ 859546035449 Sal 9/27/11

PRICE CODE: C01 Sal 9/27/11

AIR QUALITY: ☐

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days

METHOD OF SHIPMENT: Sal 9/27/11 ~~GOVERNMENT VEHICLE~~ Commercial Carrier

ORIGINAL

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; ~~200.8 HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ Sal 9/27/11
~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;~~
Hg {Mercury 3-7471}

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

TestAmerica St. Louis

OCTOBER 14, 2011

SDG# SL1137

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-065 – 0 | PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC SL1137

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days/15 Days mm 9/27/11

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #48

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

AIR QUALITY: [ ]

ICE CHEST NO.: 246 RE GWS-~~106~~ 9-27-11

FIELD LOGBOOK NO.: HNF-N-507-23 . N/A

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: ~~GOVERNMENT VEHICLE~~ Federal Express mm 9/27/11

ORIGINAL

SHIPPED TO: ~~Waste Sampling & Characterization~~ TASL mm 9/27/11

OFFSITE PROPERTY NO.: ~~N/A~~ ~~See PTR~~ 3192 mm 9/27/11 LW 9/27/11

BILL OF LADING/AIR BILL NO.: ~~N/A~~ ~~See PTR~~ 859546035449 mm 9/27/11 LW 9/27/11

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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
B2FXH6 5	SOIL	SEP 14 2011	0942

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 14 2011 1450	M. Nelson	SEP 14 2011 1450
M. Nelson	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU- 1	SEP 26 2011 1400
SSU- 1	SEP 27 2011 1000	DON BROTHERTON / CHPRC	SEP 27 2011 1000
DON BROTHERTON / CHPRC	SEP 27 2011 1400	FED EX	
FEDEX		Brian Daniels	9/28/11 0915

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

PRINTED ON 7/25/2011

A-6002-618 (REV 2)

TestAmerica St. Louis

OCTOBER 14, 2011

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-065 – D PAGE 2 OF 2

COLLECTOR FM Hall CHPRC SL1137

COMPANY CONTACT LUKE, SN

TELEPHONE NO. 372-1667

PROJECT COORDINATOR LUKE, SN

PRICE CODE C01

DATA TURNAROUND ~~12 Days / 12 Days~~ mm 9/27/11 15 Day / 15 Days

AIR QUALITY ☐

SAMPLING LOCATION 100-K-63 Grubbed Area Sample #48

PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO. F11-159

ICE CHEST NO. GWS-~~160~~ 246 RE 9-27-11

FIELD LOGBOOK NO. HNF-~~N-507-23~~ N/A

ACTUAL SAMPLE DEPTH 0-1'

COA 302676ES10

METHOD OF SHIPMENT mm 9/27/11 ~~GOVERNMENT VEHICLE~~ Federal Express

ORIGINAL

SHIPPED TO mm 9/27/11 ~~Waste Sampling & Characterization~~ TASL

OFFSITE PROPERTY NO. mm 9/27/11 ~~N/A~~ ~~See PTR~~ JW. 9/27/11 3192

BILL OF LADING/AIR BILL NO. mm 9/27/11 ~~N/A~~ ~~See PTR~~ JW. 9/27/11 859546035449

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.~~ mm 7/27/11

(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; ~~200.8 HG - ICPMS {Mercury}; Chromium Hex 7196;~~ mm 7/27/11

~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~ mm 9/27/11

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;~~ mm 7/27/11

Hg (Mercury) - 7471

OCTOBER 14, 2011

SDG# SL1137

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-066 - D

COLLECTOR: FM Hall CHPRC SL1137

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15/15 9/27/11

AIR QUALITY: ☐

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #49

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

ICE CHEST NO.: ~~GWS-106~~ GWS-246 DWS 9-27-11

FIELD LOGBOOK NO.: HNF-~~N-507~~-23. N/A

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: ~~GOVERNMENT VEHICLE~~ Federal Express 9/27/11

ORIGINAL

SHIPPED TO: ~~Waste Sampling & Characterization~~ TASL 9/27/11

OFFSITE PROPERTY NO.: ~~N/A~~ 9/27/11 See PTR 9/27/11 3192

BILL OF LADING/AIR BILL NO.: ~~N/A~~ 9/27/11 See PTR 859546035449 9/27/11

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXH7	SOIL	SEP 14 2011	1000	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall	SEP 14 2011 1450	M. Nelson	SEP 14 2011 1450
M. Nelson	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU- 1	SEP 26 2011 1400
SSU- 1	SEP 27 2011 1000	DON BROTHERTON / CHPRC	SEP 27 2011 1000
DON BROTHERTON / CHPRC	SEP 27 2011 1400	FED EX	
FEDEX		Brian Daniels	9/28/11 0915

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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A-6003-618 (REV 2)

OCTOBER 14, 2011

TestAmerica St. Louis

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-066 — D

COLLECTOR FM Hall CHPRC SL1137	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #49	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		**SAF NO.** F11-159
ICE CHEST NO. GWS-~~105~~ 244 RL 9-27-11	**FIELD LOGBOOK NO.** HNF-N-507 23. N/A	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 302676ES10
SHIPPED TO ~~Waste Sampling & Characterization~~ TASL mm 9/27/11	**OFFSITE PROPERTY NO.** ~~N/A~~ mm 9/27/11 ~~See PTR~~ LW 9/27/11 3192		**BILL OF LADING/AIR BILL NO.** ~~N/A~~ mm 9/27/11 ~~See PTR~~ LW 9/27/11 859546035449

PRICE CODE C01

DATA TURNAROUND ~~12 Days / 12 Days~~ mm 9/27/11 15 Day / 15 Day

AIR QUALITY ☐

METHOD OF SHIPMENT mm 9/27/11 ~~GOVERNMENT VEHICLE~~ Federal Express

ORIGINAL

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.~~ ☐☐ ~~** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.~~ mm 9/27/11

(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; ~~200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ mm 9/27/11

~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~ mm 9/27/11

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 Total Sr;~~ mm 9/27/11

Hg (Mercury) - 7471

A-6003-618 (REV 2)

OCTOBER 14, 2011

TestAmerica St. Louis

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-068 — D | PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC 54137	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days / 15 Days mw 9/27/11		
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #50	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil	SAF NO.: F11-159	AIR QUALITY: ☐
ICE CHEST NO.: GWS-246 ~~GWS-126~~ DWB-9-27-11	FIELD LOGBOOK NO.: HNF-N-507-23 . N/A	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: mw 9/27/11 ~~GOVERNMENT VEHICLE~~ Federal Express			ORIGINAL
SHIPPED TO: mw 9/27/11 ~~Waste Sampling & Characterization~~ TASL	OFFSITE PROPERTY NO.: mw 9/27/11 ~~N/A~~ ~~See PTR~~ DW 9/27/11 3192	BILL OF LADING/AIR BILL NO.: mw 9/27/11 ~~N/A~~ ~~See PTR~~ DW 9/27/11 859546035449	

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXH9	7	SOIL	SEP 14 2011	1012	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 14 2011 1450	[illegible]	SEP 14 2011 1450
M. Nelson	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1000	DON BROTHERTON / CHPRC	SEP 27 2011 1000
DON BROTHERTON / CHPRC	SEP 27 2011 1400	FED EX	
FEDEX		Brian Daniels	9/28/11 09:5

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

PRINTED ON 7/25/2011 — A-6003-618 (REV 2)

OCTOBER 14, 2011

TestAmerica St. Louis

SDG# SL1137

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-068 – D	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC SL1137	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: ~~12 Days / 12 Days~~ mm 9/27/11 15 Day/15 Day
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #50	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	ORIGINAL
ICE CHEST NO.: GWS - ~~106~~ 246 Rl 9-27-11	FIELD LOGBOOK NO.: HNF-N-507-23. N/A	ACTUAL SAMPLE DEPTH: 0 – 1'	COA: 302676ES10	METHOD OF SHIPMENT: mm 9/27/11 ~~GOVERNMENT VEHICLE~~ Federal Express	
SHIPPED TO: mm 9/27/11 ~~Waste Sampling & Characterization~~ TASL	OFFSITE PROPERTY NO.: mm 9/27/11 ~~N/A~~ ~~See PTR~~ LW 9/27/11	3192	BILL OF LADING/AIR BILL NO.: mm 9/27/11 ~~N/A~~ See PTR LW 9/27/11	859546035449	

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.☐☐** The 100-Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.~~ mm 9/27/11

(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; ~~200.8 HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ mm 9/27/11

~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~ mm 9/27/11

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium 89,90 - Total Sr;~~ mm 9/27/11

Hg (Mercury) - 7471

OCTOBER 14, 2011

TestAmerica St. Louis

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

SDG# SL1137

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-069 — D | PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC SL1137	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days / 15 Days mm 9/27/11		
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #51	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil	SAF NO.: F11-159	AIR QUALITY: ☐
ICE CHEST NO.: GWS 246 ~~GWS-106~~ Bw-B 9-27-11	FIELD LOGBOOK NO.: HNF-N-507 23 . N/A	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: mm 9/27/11 ~~GOVERNMENT VEHICLE~~ Federal Express	ORIGINAL		
SHIPPED TO: ~~Waste Sampling & Characterization~~ TASL mm 9/27/11	OFFSITE PROPERTY NO.: mm 9/27/11 ~~N/A~~ ~~See PTR~~ AW. 9/27/11 3192	BILL OF LADING/AIR BILL NO.: mm 9/27/11 ~~N/A~~ ~~See PTR~~ 859546035449 AW. 9/27/11	

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXJ0 8	SOIL	SEP 14 2011	1030	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 14 2011 1450	Gerald Berg	SEP 14 2011 1450
M. Nelson M. Neb 9/26/11	1315	L.D. Wall CHPRC L.D. Wall	1315 9/26/11
L.D. Wall CHPRC L.D. Wall	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1000	DON BROTHERTON / CHPRC	SEP 27 2011 1000
DON BROTHERTON / CHPRC	SEP 27 2011 1400	FED EX	
FEDEX		Brian Daniels	9/28/11 0915

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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A-6003-618 (REV 2)

TestAmerica St. Louis

OCTOBER 14, 2011

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-069 – D | PAGE 2 OF 2

COLLECTOR FM Hall CHPRC SL1137

COMPANY CONTACT LUKE, SN

TELEPHONE NO. 372-1667

PROJECT COORDINATOR LUKE, SN

PRICE CODE C01

DATA TURNAROUND ~~12 Days / 12 Days~~ 15 Days/15 Days mm 9/27/11

AIR QUALITY ☐

SAMPLING LOCATION 100-K-63 Grubbed Area Sample #51

PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO. F11-159

ICE CHEST NO. 246 RE GWS-~~106~~ 9-27-11

FIELD LOGBOOK NO. HNF-N-507-23 . N/A

ACTUAL SAMPLE DEPTH 0-1'

COA 302676ES10

METHOD OF SHIPMENT ~~GOVERNMENT VEHICLE~~ mm 9/27/11 Federal Express

ORIGINAL

SHIPPED TO ~~Waste Sampling & Characterization~~ TASL mm 9/27/11

OFFSITE PROPERTY NO. ~~N/A~~ mm 9/27/11 ~~See PTR~~ 3192 LW. 9/27/11

BILL OF LADING/AIR BILL NO. ~~N/A~~ mm 9/27/11 ~~See PTR~~ 859546035449 LW. 9/27/11

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20. ** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.~~ mm 9/27/11

(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; ~~200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ mm 9/27/11

~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~ mm 9/27/11

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;~~ mm 9/27/11

Hg (Mercury) - 7471

OCTOBER 14, 2011

TestAmerica St. Louis

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-073-D

COLLECTOR FM Hall CHPRC SL1137

COMPANY CONTACT LUKE, SN

TELEPHONE NO. 372-1667

PROJECT COORDINATOR LUKE, SN

PRICE CODE C01

DATA TURNAROUND ~~12 Days / 12 Days~~ 15 Days SAL 9/27/11

SAMPLING LOCATION 100-K-63 Grubbed Area Sample #55

PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO. F11-159

AIR QUALITY ☐

ICE CHEST NO. GWS-246

FIELD LOGBOOK NO. N/A

ACTUAL SAMPLE DEPTH SURFACE

COA 302676ES10

METHOD OF SHIPMENT ~~GOVERNMENT VEHICLE~~ Commercial Carrier SAL 9/27/11

ORIGINAL

SHIPPED TO SAL 9/27/11 ~~Waste Sampling & Characterization~~ TASL

OFFSITE PROPERTY NO. ~~N/A~~ SAL 9/27/11 ~~See PTR~~ 3192 LW 9/27/11

BILL OF LADING/AIR BILL NO. ~~N/A~~ SAL 9/27/11 ~~See PTR~~ 8595 4603 5449 LW 9/27/11

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXJ4 / 0	SOIL	SEP 07 2011	0940	✓	✓	✓

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 07 2011 1415	M. Nelson	SEP 07 2011 1415
		L.D. Wall CHPRC	9/26/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1000	KB Huise CHPRC	SEP 27 2011 1000
KB Huise CHPRC	SEP 27 2011 1400	FED EX	
FED EX		Brian Daniels	9/28/11 0915

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**

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-073 -1 | PAGE 2 OF 2

COLLECTOR: ~~FMHill~~ CHPRC SL1137

COMPANY CONTACT: LUKE, SN | TELEPHONE NO.: 372-1667 | PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01 | DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 DAYS

AIR QUALITY: ☐ | Sal 9/27/11

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #55

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil | SAF NO.: F11-159

ICE CHEST NO.: GWS-246

FIELD LOGBOOK NO.: N/A | ACTUAL SAMPLE DEPTH: SURFACE | COA: 302676ES10

METHOD OF SHIPMENT: ~~GOVERNMENT VEHICLE~~ Commercial Carrier | Sal 9/27/11 | **ORIGINAL**

SHIPPED TO: SAL 9/27/11 TASL ~~Waste Sampling & Characterization~~

OFFSITE PROPERTY NO.: ~~N/A~~ Sal 9/27/11 ~~See PTR~~ 3192 RW. 9/27/11

BILL OF LADING/AIR BILL NO.: ~~N/A~~ Sal 9/27/11 ~~See PTR~~ 8595 4603 5449 RW. 9/27/11

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; ~~200.8_HG - ICPMS {Mercury};~~ Chromium Hex - 7196;
~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;~~ Hg {Mercury} - 7471
9-27-11 SAL

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

OCTOBER 14, 2011

TestAmerica St. Louis

SDG# SL1137

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-074 ~ D | PAGE 1 OF 2

COLLECTOR	FM Hall CHPRC SL1137
SAMPLING LOCATION	100-K-63 Grubbed Area Sample #56
ICE CHEST NO.	6WS-~~023~~ 240 SWO 937-4
SHIPPED TO	Sal 9/27/11 ~~Waste Sampling & Characterization~~ TASL
COMPANY CONTACT	LUKE, SN
TELEPHONE NO.	372-1667
PROJECT DESIGNATION	100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil
FIELD LOGBOOK NO.	HNF-N-507-23. N/A
ACTUAL SAMPLE DEPTH	0 - 1'
OFFSITE PROPERTY NO.	~~N/A~~ Sal 9/27/11 ~~See PTR~~ LW. 9/27/11 3192
PROJECT COORDINATOR	LUKE, SN
SAF NO.	F11-159
COA	302676ES10
BILL OF LADING/AIR BILL NO.	~~N/A~~ Sal 9/27/11 ~~See PTR~~ LW. 9/27/11 Commercial Carrier 859546035449
PRICE CODE	C01
AIR QUALITY	☐
DATA TURNAROUND	~~12 Days / 12 Days~~ 15 Days 591 9/27/11
METHOD OF SHIPMENT	~~GOVERNMENT VEHICLE~~
	ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 9/26/11

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXJ5	SOIL	AUG 3 1 2011	0730	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 3 1 2011 / 1300	M01109SSU #1	AUG 3 1 2011 / 1300
M01109 #1 SSU	9-7-11 / 1230	FM Hall	9-7-11 / 1230
FM HALL	9-7-11 / 1415	M. Nelson M.Nels	9-7-11 / 1415
	9/26/11 / 1315	L.D. Wall L.D. Wall	9/26/11 / 1315
CHPRC L.D. Wall	SEP 2 6 2011 / 1400	SSU- 1	SEP 2 6 2011 / 1400
SSU- 1	SEP 2 7 2011 / 1400	CHPRC	SEP 2 7 2011 / 1400
CHPRC	SEP 2 7 2011 / 1400	FED EX	

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION	RECEIVED BY	Brian Daniels 9/28/11 09:5	TITLE / DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

OCTOBER 14, 2011

TestAmerica St. Louis

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-074 — D | PAGE 2 OF 2

COLLECTOR FM Hall CHPRC SL1137	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #56	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		**SAF NO.** F11-159
ICE CHEST NO. GWS ~~023~~ 246 DWS 9-27-11	**FIELD LOGBOOK NO.** HNF-N-507-23. N/A	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 302676ES10
SHIPPED TO SAL 9/27/11 ~~Waste Sampling & Characterization~~ TASL	**OFFSITE PROPERTY NO.** ~~N/A~~ Sal 9/27/11 ~~See PTR~~ 3192 DW 9/27/11		**BILL OF LADING/AIR BILL NO.** ~~N/A~~ Sal 9/27/11 ~~See PTR~~ 8595460354 49 DW 9/27/11

PRICE CODE C01 | **DATA TURNAROUND** ~~12 Days / 12 Days~~ 15 DAYS

AIR QUALITY ☐ Sal 9/27/11

METHOD OF SHIPMENT Sal 9/27/11 ~~GOVERNMENT VEHICLE~~ Commercial Carrier

ORIGINAL

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; ~~200.8 HG - ICPMS {Mercury};~~ Chromium Hex - 7196;
~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~ Hg {Mercury} - 7471
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ Strontium-89,90 -- ~~Total Sr~~;
SAL 9-27-11

SDG# SL1137

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-075 - Δ

COLLECTOR: FM Hall CHPRC SL1137

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: ~~12 Days / 12 Days~~ 9/27/11

AIR QUALITY: ☐

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #57

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

ICE CHEST NO.: GW3-246 ~~GW3-106~~ DWD 9-27-11

FIELD LOGBOOK NO.: HNF-N-507-23 N/A

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: 9/27/11 ~~GOVERNMENT VEHICLE~~ Federal Express

ORIGINAL

SHIPPED TO: ~~Waste Sampling & Characterization~~ TASL 9/27/11

OFFSITE PROPERTY NO.: 9/27/11 ~~N/A~~ ~~See PTR~~ 3192 DW 9/27/11

BILL OF LADING/AIR BILL NO.: 9/27/11 ~~N/A~~ ~~See PTR~~ 859546035449 DW 9/27/11

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXJ6 9	SOIL	SEP 14 2011	1000	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 14 2011 1450	Rebecca Perry	SEP 14 2011 1450
M. Nelson	9/26/11 1315	L.D. Wall	9/26/11 1315
L.D. Wall	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1000	DON BROTHERTON / CHPRC	SEP 27 2011 1000
DON BROTHERTON / CHPRC	SEP 27 2011 1400	FED EX	
FEDEX		Brian Daniels	9/28/11 0915

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

OCTOBER 14, 2011

TestAmerica St. Louis

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-075 – D

COLLECTOR FM Hall CHPRC SL1137

COMPANY CONTACT LUKE, SN

TELEPHONE NO. 372-1667

PROJECT COORDINATOR LUKE, SN

PRICE CODE C01

DATA TURNAROUND ~~12 Days / 12 Days~~ 15 Days / 15 Days

AIR QUALITY ☐

SAMPLING LOCATION 100-K-63 Grubbed Area Sample #57

PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO. F11-159

ICE CHEST NO. 246 RS Cows-106 9-27-11

FIELD LOGBOOK NO. HNF-N-507-23 . N/A

ACTUAL SAMPLE DEPTH 0-1'

COA 302676ES10

METHOD OF SHIPMENT ~~GOVERNMENT VEHICLE~~ Federal Express

ORIGINAL

SHIPPED TO ~~Waste Sampling & Characterization~~ TA82

OFFSITE PROPERTY NO. ~~N/A~~ ~~See PTR~~ 3192

BILL OF LADING/AIR BILL NO. ~~N/A~~ ~~See PTR~~ 859546035449

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.~~ ~~** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; ~~200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;~~

~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium 89,90 -- Total Sr;~~

Hg (Mercury) - 7471

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

TestAmerica St. Louis

OCTOBER 14, 2011

SDG# SL1137

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-076 — D PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC SL1137

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days / 15 Days

AIR QUALITY: ☐

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #58

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

ICE CHEST NO.: GWS-246 ~~GWS-006~~ DWS 9-22-11

FIELD LOGBOOK NO.: HNF-N-507-23

ACTUAL SAMPLE DEPTH: N/A

COA: 302676ES10

METHOD OF SHIPMENT: ~~GOVERNMENT VEHICLE~~ Federal Express

ORIGINAL

SHIPPED TO: ~~Waste Sampling & Characterization~~ TASL

OFFSITE PROPERTY NO.: ~~N/A~~ 3192 See PTR 20-9/27/11

BILL OF LADING/AIR BILL NO.: ~~N/A~~ See PTR 859546035449 AW. 9/27/11

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXJ7 1D	SOIL	SEP 14 2011	0830	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 14 2011 1450	M. Nelson	SEP 14 2011 1450
M. Nelson	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1000	DON BROTHERTON / CHPRC	SEP 27 2011 1000
DON BROTHERTON / CHPRC	SEP 27 2011 1400	FED EX	
FEDEX		Brian Daniels	9/28/11 0915

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

OCTOBER 14, 2011

TestAmerica St. Louis

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-076 – Δ

COLLECTOR
FM Hall CHPRC SL1137

COMPANY CONTACT
LUKE, SN

TELEPHONE NO.
372-1667

PROJECT COORDINATOR
LUKE, SN

PRICE CODE C01

DATA TURNAROUND
~~12 Days / 12 Days~~ mm 9/27/11
15 Days / 15 Days

AIR QUALITY ☐

SAMPLING LOCATION
100-K-63 Grubbed Area Sample #58

PROJECT DESIGNATION
100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.
F11-159

ICE CHEST NO.
246 R2
CoWS - 006
9-27-11

FIELD LOGBOOK NO.
HNF-N-507-23 - N/A

ACTUAL SAMPLE DEPTH
N/A

COA
302676ES10

METHOD OF SHIPMENT
mm 9/27/11
~~GOVERNMENT VEHICLE~~
Federal Express

ORIGINAL

SHIPPED TO
mm 9/27/11
~~Waste Sampling & Characterization~~ TASL

OFFSITE PROPERTY NO.
mm 9/27/11
~~N/A~~ ~~See PTR~~ 3192
AW. 9/27/11

BILL OF LADING/AIR BILL NO.
mm 9/27/11
~~N/A~~ ~~See PTR~~ 859546035 449
AW. 9/27/11

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.~~ mm 9/27/11

(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; ~~200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ mm 9/27/11

~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~ mm 9/27/11

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;~~ mm 9/27/11

Hg (Mercury) - 7471

A-6003-618 (REV 2)

OCTOBER 14, 2011

SDG# SL1137

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-~~076~~ 077-D PAGE 1 OF 2

COLLECTOR: F. Hall SL1137

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: ~~C01~~ 7C KJ 9/27/11

DATA TURNAROUND: KJ ~~12 Days / 12 Days~~ 15 Days / 15 days

AIR QUALITY: ☐

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #7

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

ICE CHEST NO.: GW3-~~007~~ 246 MA 9-22-11

FIELD LOGBOOK NO.: HNF-N-507-23-N/A

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: KJ 9/27/11 ~~GOVERNMENT VEHICLE~~ COMMERCIAL CARRIER

ORIGINAL

SHIPPED TO: KJ 9/27/11 ~~Waste Sampling & Characterization~~ TASL

OFFSITE PROPERTY NO.: KJ 9/27/11 3192

BILL OF LADING/AIR BILL NO.: ~~N/A~~ KJ 9/27/11 8595 46035449

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)

8/31/11 Mar

102 113057

SPECIAL HANDLING AND/OR STORAGE

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

KB 9/26/11

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
~~B2FXJ9~~ B2FXJ8	SOIL	8/30/11	0900	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
F. Hall	AUG 30 2011 1500	H. Nelson	AUG 30 2011 1500
K Bearzal	9/26/11 1315	L.D. Wall	9/26/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1000	DON BROTHERTON / CHPRC	SEP 27 2011 1000
DON BROTHERTON / CHPRC	SEP 27 2011 1400	FEDEX	SEP 27 2011
FEDEX		Brian Daniels	9/28/11 0915

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

* Please email copies of chain of custodies, Sample receipt Forms, and Final Reports to Marisol Avila (marisol_avila@rl.gov) and Heather Medley (Heather_A_Medley@rl.gov) WSCF Project Managers.

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

PRINTED ON 7/25/2011

A-6003-618 (05/

TestAmerica St. Louis

OCTOBER 14, 2011

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-~~078~~ 077-D PAGE 2 OF 2

COLLECTOR F. Hall 54137

COMPANY CONTACT LUKE, SN

TELEPHONE NO. 372-1667

PROJECT COORDINATOR LUKE, SN

PRICE CODE ~~C01~~ KGI 9/27/11

DATA TURNAROUND ~~12 Days / 12 Days~~ 15 Day / 15 Day

AIR QUALITY ☐

SAMPLING LOCATION 100-K-63 Grubbed Area Sample #7

PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO. F11-159

ICE CHEST NO. GWS - ~~007~~ 246 9-27-11

FIELD LOGBOOK NO. HNF-~~N-507~~-33 - N/A

ACTUAL SAMPLE DEPTH 0-11

COA 302676ES10

METHOD OF SHIPMENT KGI 9/27/11 ~~GOVERNMENT VEHICLE~~ COMMERCIAL CARRIER

ORIGINAL

SHIPPED TO KGI 9/27/11 ~~Waste Sampling & Characterization~~ TASL

OFFSITE PROPERTY NO. KGI ~~N/A~~ 9/27/11 3192

BILL OF LADING/AIR BILL NO. KGI ~~N/A~~ 9/27/11 8595 4603 5449

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

KGI 9/27/11

(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196~~; 7471_Hg {Mercury}

(2) ~~Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}~~;

(3) ~~Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium 89,90 -- Total Sr~~;

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-078 - D | PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC SL1137	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01 K.D. 9/27/11 7A	DATA TURNAROUND: 12 Days / ~~15 Days~~ 15 day K.D. 9/27/11		
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #7	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil	SAF NO.: F11-159	AIR QUALITY: ☐
ICE CHEST NO.: GWS-246 ~~GWS-007~~ 9-27-11	FIELD LOGBOOK NO.: HNF-N-507-23 - N/A	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: ~~GOVERNMENT VEHICLE~~ COMMERCIAL CARRIER K.D. 9/27/11	ORIGINAL		
SHIPPED TO: ~~Waste Sampling & Characterization~~ TASL K.D. 9/27/11	OFFSITE PROPERTY NO.: 3192 K.D. 9/27/11	BILL OF LADING/AIR BILL NO.: ~~N/A~~ 8595 4603 5449 K.D. 9/27/11	

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 9/26/11

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXJ9 2	SOIL	8/30/11	0916	✓	✓	✓

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 30 2011 1500	M. Nelson M. Nelson	AUG 30 2011 1500
K.D. Wall CHPRC	9/26/11 1315	L.D. Wall CHPRC K.D. Wall	9/26/11 1315
L.D. Wall CHPRC K.D. Wall	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1000	DON BROTHERTON / CHPRC	SEP 27 2011 1000
DON BROTHERTON / CHPRC	SEP 27 2011 1400	FEDEX	
FEDEX		B-1 Brian Davis	9/28/11 09:15

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

*Please email copies of chain of custodies, Sample receipt forms and Final Report to Marisol Avila (marisol_avila@rl.gov) and Heather Medley (Heather_A_Medley@rl.gov) WSLF Project Managers.

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

PRINTED ON: 7/25/2011

A-5002-518 (REV.)

OCTOBER 14, 2011

TestAmerica St. Louis

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-078 - D

PAGE 2 OF 2

COLLECTOR: FM Hall CHPRC SL1137	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #7	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-~~007~~ 246 9-27-11	FIELD LOGBOOK NO.: HNF-N-807-23 - N/A	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: ~~Waste Sampling & Characterization~~ TASL	OFFSITE PROPERTY NO.: ~~N/A~~ 3192		BILL OF LADING/AIR BILL NO.: ~~N/A~~ 8595 4603 5449

PRICE CODE: ~~001~~ 7C

AIR QUALITY: ☐

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Day/15day

METHOD OF SHIPMENT: ~~GOVERNMENT VEHICLE~~ COMMERCIAL CARRIER

ORIGINAL

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ 7471 {Mercury}
~~(2) Gamma Spectroscopy {Cesium 137, Cobalt 60, Europium 152, Europium 154, Europium 155};~~
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium 89,90 - Total Sr;~~

KJ 9/27/11

PRINTED ON 7/25/2011

A-6003-618 (REV. 2)

OCTOBER 14, 2011

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-081 — D

COLLECTOR: FM Hall CHPRC SL1137

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: ~~12 Days / 12 Days~~ Sal 9/27/11 15 Days

AIR QUALITY: ☐

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #59

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

ICE CHEST NO.: GWS-246 ~~GWS-007~~ Sal 9-27-11

FIELD LOGBOOK NO.: HNF-N-507-23. N/A

ACTUAL SAMPLE DEPTH: 0-1

COA: 302676ES10

METHOD OF SHIPMENT: Sal 9/27/11 ~~GOVERNMENT VEHICLE~~

ORIGINAL

SHIPPED TO: Sal 9/27/11 ~~Waste Sampling & Characterization~~ TASL

OFFSITE PROPERTY NO.: ~~N/A~~ ~~See PTP~~ Sal 9/27/11 LW 9/27/11 3192

BILL OF LADING/AIR BILL NO.: ~~N/A~~ ~~See PTP~~ 9/27/11 Sal LW 9/27/11 Commercial Carrier 859546035449

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2H560	2 SOIL	9/15/11	1116	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 15 2011 1450	TA Frazier	SEP 15 2011 1450
M. Nelson	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1000	DON BROTHERTON / CHPRC	SEP 27 2011 1000
DON BROTHERTON / CHPRC	SEP 27 2011 1400	FED EX	
FedEx		Brian Daniels	9/28/11 0915

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

PRINTED ON 8/29/2011

A-6003-618 (REV 2)

OCTOBER 14, 2011

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | F11-159-081-D | PAGE 2 OF 2

COLLECTOR FM Hall CHPRC SL1137	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #59	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		**SAF NO.** F11-159
ICE CHEST NO. GWS-246 ~~GWS-007~~ DWB 9-27-11	**FIELD LOGBOOK NO.** ~~HNF-N-507-23~~ N/A	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 302676ES10
SHIPPED TO Sal 9-27-11 TASL ~~Waste Sampling & Characterization~~	**OFFSITE PROPERTY NO.** ~~N/A~~ Sal 9/27/11 ~~See PTR~~ 3192 DW 9/27/11		**BILL OF LADING/AIR BILL NO.** ~~N/A~~ Sal 9/27/11 ~~See PTR~~ 859541603449 DW 9/27/11

PRICE CODE C01 | **DATA TURNAROUND** Sal 9/27/11 ~~12 Days / 12 Days~~ 15 Days | **AIR QUALITY** ☐ | **METHOD OF SHIPMENT** Sal 9/27/11 ~~GOVERNMENT VEHICLE~~ Commercial Carrier | **ORIGINAL**

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.

** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; ~~200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ Sal 9-27-11
(2) ~~Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}~~;
(3) ~~Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;~~
Hg {MERCURY} - 7471

OCTOBER 14, 2011

TestAmerica St. Louis

PRINTED ON 8/29/2011 | A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-083 -D

COLLECTOR: FM Hall CHPRC SL1137	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01 Sal 9/27/11	DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days		
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #61	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil	SAF NO.: F11-159	AIR QUALITY: ☐
ICE CHEST NO.: BWS-246 ~~BWS-007~~ DWB 9-27-11	FIELD LOGBOOK NO.: HNF-N-507-23. N/A	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: ~~GOVERNMENT VEHICLE~~ Sal 9/27/11 Commercial Carrier	ORIGINAL		
SHIPPED TO: Sal 9/27/11 TASL ~~Waste Sampling & Characterization~~	OFFSITE PROPERTY NO.: ~~N/A~~ See PTR Sal 9/27/11 JW, 9/27/11	3192	BILL OF LADING/AIR BILL NO.: ~~N/A~~ See PTR 8595 4603 5449 Sal 9/27/11 JW, 9/27/11

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	P	G/P
NO. OF CONTAINER(S)	1	1	
VOLUME	250mL	500mL	250mL
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			
B2H562	4 SOIL	9/15/11	1145	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 15 2011 1450	TA Frazier	SEP 15 2011 1450
M. Nelson	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1000	DON BROTHERTON / CHPRC	SEP 27 2011 1000
DON BROTHERTON / CHPRC	SEP 27 2011 1400	FED EX	
FED EX		Brian Daniels	9/28/11 0945

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

PRINTED ON 8/29/2011

A-6003-618 (REV 2)

OCTOBER 14, 2011

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-083-D

COLLECTOR: FM Hall CHPRC SL1137

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01 Sal 9/27/11

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days

AIR QUALITY: ☐

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #61

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

ICE CHEST NO.: GUS-246 ~~GUS-002~~ DW 09/27/11

FIELD LOGBOOK NO.: HNF-N-507-23 - N/A

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: Sal 9/27/11 ~~GOVERNMENT VEHICLE~~ Commercial Carrier

ORIGINAL

SHIPPED TO: 9/27/11 ~~Waste Sampling & Characterization~~ Sal TASL

OFFSITE PROPERTY NO.: ~~N/A~~ 9/27/11 Sal ~~See PTR~~ 3192 DW 9/27/11

BILL OF LADING/AIR BILL NO.: ~~N/A~~ Sal 9/27/11 ~~See PTR~~ 8 5954603 5449 DW 9/27/11

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.

** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; ~~200.8-HG - ICPMS {Mercury}; Chromium-Hex - 7196;~~ See 9/27/11

(2) ~~Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~

(3) Gross Alpha ~~{Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;~~

Hg {Mercury} - 7471

OCTOBER 14, 2011

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-079 → D | PAGE 1 OF 2

COLLECTOR FM Hall SL1137

SAMPLING LOCATION CHPRC

100-K-63 Grubbed Area Sample #8

ICE CHEST NO. 246 6WS-~~007~~ 9-27-11

SHIPPED TO ~~Waste Sampling & Characterization~~ TASL

COMPANY CONTACT LUKE, SN

TELEPHONE NO. 372-1667

PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

FIELD LOGBOOK NO. HNF-N-~~507~~-23 . N/A

OFFSITE PROPERTY NO. 3192

ACTUAL SAMPLE DEPTH 0-1'

PROJECT COORDINATOR LUKE, SN

SAF NO. F11-159

COA 302676ES10

BILL OF LADING/AIR BILL NO. 8595 4603 5449

PRICE CODE ~~C01~~ 2C

AIR QUALITY ☐

DATA TURNAROUND ~~12 Days / 12 Days~~ 15day/15day

METHOD OF SHIPMENT ~~GOVERNMENT VEHICLE~~ Commercial Carrier

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXK0	SOIL	8/30/11	0930	✓	✓	✓

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 30 2011 1500	M. Nelson Hired	AUG 30 2011 1500
Bearcat Team	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1000	BROTHERTON / CHPRC	SEP 27 2011 1000
BROTHERTON / CHPRC	SEP 27 2011 1400	FEDEX	
FEDEX		Brian Daniels	9/28/11 0915

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

* Please email copies of Chain of custodies, Sample Receipt Forms, and Final Report to Marisol Avila (Marisol_Avila@rl.gov) and Heather Medley (Heather_A_Medley@rl.gov) WSLF Project managers.

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

OCTOBER 14, 2011

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-079 -D

COLLECTOR FM Hall CHPRC SL1137

COMPANY CONTACT LUKE, SN

TELEPHONE NO. 372-1667

PROJECT COORDINATOR LUKE, SN

PRICE CODE ~~C01~~ KJL 9/27/11

DATA TURNAROUND ~~12 Days / 12 Days~~ 15day/15day

SAMPLING LOCATION 100-K-63 Grubbed Area Sample #8

PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO. F11-159

AIR QUALITY ☐

ICE CHEST NO. GWS-~~007~~ 246 9-27-11

FIELD LOGBOOK NO. HNF-N-507-23 - N/A

ACTUAL SAMPLE DEPTH 0-1'

COA 302676ES10

METHOD OF SHIPMENT KJL 9/27/11 ~~GOVERNMENT VEHICLE~~ Commercial Carrier

ORIGINAL

SHIPPED TO KJL 9/27/11 ~~Waste Sampling & Characterization~~ TASL

OFFSITE PROPERTY NO. KJL ~~N/A~~ 9/27/11 3192

BILL OF LADING/AIR BILL NO. KJL ~~N/A~~ 9/27/11 8595 4603 5449

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

KJL 9/27/11

(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG ICPMS {Mercury}; Chromium Hex 7196~~; 7471_Hg {Mercury}

(2) ~~Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}~~;

(3) ~~Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium 89,90 Total Sr~~;

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A-6003-618 (REV

OCTOBER 14, 2011

TestAmerica St. Louis

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-080 D PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC SL1137

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: ~~C01~~ 7C KJ 9/27/11

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15days/15days

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #9

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

AIR QUALITY: ☐

ICE CHEST NO.: 6WS ~~007~~ 246 9-27-11

FIELD LOGBOOK NO.: HNF-N-507-23. N/A

ACTUAL SAMPLE DEPTH: 0 - 1'

COA: 302676ES10

METHOD OF SHIPMENT: KJ 9/27/11 ~~GOVERNMENT VEHICLE~~ Commercial Carrier

ORIGINAL

SHIPPED TO: KJ 9/27/11 ~~Waste Sampling & Characterization~~ TASL

OFFSITE PROPERTY NO.: KJ ~~N/A~~ 9/27/11 3192

BILL OF LADING/AIR BILL NO.: KJ ~~N/A~~ 9/27/11 8595 4603 5449

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KJB 9/26/11

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXK1 4	SOIL	8/30/11	0942	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 30 2011 1500	M.Ne/SMHines	AUG 30 2011 1500
L.D. Wall CHPRC	9/26/11 1315	L.D. Wall	9/26/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1000	DON BROTHERTON / CHPRC	SEP 27 2011 1000
DON BROTHERTON / CHPRC	SEP 27 2011 1400	FEDEX	
FEDEX		Brian Daniels	9/28/11 0915

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

Please email copies of chain of custody, sample receipt form, and final report to Marisol Avila (marisol_avila@rl.gov) and Heather Medley (Heather_A_Medley@rl.gov) WSCF project managers

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

PRINTED ON 7/25/2011

A-6003-618 (REV.

TestAmerica St. Louis

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-080 -D | PAGE 2 OF 2

COLLECTOR
FM Hall SL1137
CHPRC

COMPANY CONTACT
LUKE, SN

TELEPHONE NO.
372-1667

PROJECT COORDINATOR
LUKE, SN

PRICE CODE ~~C01~~ 7C

DATA TURNAROUND
~~12 Days / 12 Days~~
15days/15days

AIR QUALITY ☐

SAMPLING LOCATION
100-K-63 Grubbed Area Sample #9

PROJECT DESIGNATION
100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.
F11-159

ICE CHEST NO.
GWS-~~007~~ 246 9-27-11

FIELD LOGBOOK NO.
HNF-N-507-23. N/A

ACTUAL SAMPLE DEPTH
0-1'

COA
302676ES10

METHOD OF SHIPMENT
KGI 9/27/11
~~GOVERNMENT VEHICLE~~
Commercial Carrier

ORIGINAL

SHIPPED TO
KGI 9/27/11
~~Waste Sampling & Characterization~~ TASL

OFFSITE PROPERTY NO.
KGI ~~N/A~~ 9/27/11
3192

BILL OF LADING/AIR BILL NO.
KGI ~~N/A~~ 9/27/11
8595 4603 5449

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

KGI 9/27/11

(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium-Hex - 7196~~; 7471_Hg {Mercury}

(2) ~~Gamma Spectroscopy {Cesium 137, Cobalt-60, Europium-152, Europium-154, Europium-155}~~;

(3) ~~Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 - Total Sr~~;

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

OCTOBER 14, 2011

TestAmerica St. Louis

Attachment 2
Narrative
WSCF113047

Introduction

Samples were received at the WSCF laboratory as referenced on the WSCF SAF Number Cross Reference table included in the final report. 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

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):

- Matrix Spike and Insoluble Matrix Spike recoveries are outside established laboratory limits. Affected sample results in this batch were "N" flagged.
- All other applicable QC controls are within the established limits.

Attachment 2
Narrative
WSCF113047

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):

- Manganese – Matrix Spike and/or Matrix Spike Duplicate recoveries are outside established laboratory limits. Affected sample results in this batch were "N" flagged.
- Mercury and Molybdenum - The LCS recovery was outside laboratory acceptance limits. Sample Issue Resolution Form SDR11-400 regarding the LCS failure is attached to this report.
- All other applicable QC controls are within the established limits.

Radiochemistry Comments

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

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:
  - Europium-152 – 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 applicable QC controls are within the established limits.
- Gross Alpha / Gross Beta:
  - Gross Beta – 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 applicable QC controls are within the established limits.
- Strontium-89/90:
  - The Blank is less than two times the RDL. "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 applicable QC controls are within the established limits.

Narrative

Attachment 2
Narrative
WSCF113047

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
WSCF113047

SAMPLE ISSUE RESOLUTION

SIR NUM	SDR11-400
REV NUM	0
DATE INITIATED	9/6/2011

SAMPLE EVENT INFORMATION

SAF NUM(S)	F11-057, F11-159
OPERABLE UNIT(S)	100-KR-2, 100-NR-2
PROJECT(S)	KW Floodplain, 100 Area RI/FS
SAMPLE EVENT TITLE(S)	100-K-63 KW Floodplain, 100 Area RI/FS
LABORATORY	Waste Sampling & Characterization

SAMPLING INFORMATION

NUMBER OF SAMPLES	9
SAMPLE NUMBERS	B2C7W7, B2C7W8, B2FXB4, B2FXC5, B2FXD6, B2FXF7, B2FXH8, B2FXJ2, B2FXJ3
SAMPLE MATRIX	SOIL
COLLECTION DATE	8/29/2011 - 9/1/2011
SDG NUM	WSCF113059, WSCF113078, WSCF113047

ISSUE BACKGROUND

CLASS	Laboratory Issue
TYPE	Quality Control Failure
DESCRIPTION	The 200.8 Mercury LCS was high at 130.7% with control limits of 69-124%. The MS (114%) and MSD (117%) were within the limits of 70-130%. The blank was non-detect. And The 200.8 Molybdenum LCS was high at 139.9% with control limits of 80-125%. The MS (107%) and MSD (112%) were within the limits of 70-130%. The blank was non-detect.

DISPOSITION

DESCRIPTION	Suggested disposition: Report the data and note LCS failures in the case narrative.
JUSTIFICATION	

Submitted by: Marisol Avila Date: 9/6/2011
Accepted by: Deb Alexander Date: 9/8/2011
Accepted by: Scott Luke Date: 9/8/2011

A-6003-640 (03/30) PAGE 1 of 1

4

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

F11-159-071 — PAGE 1 OF 2

COLLECTOR	F.M. Hall
COMPANY CONTACT	LUKE, SN
TELEPHONE NO.	372-1667
PROJECT COORDINATOR	LUKE, SN
PRICE CODE	C01
DATA TURNAROUND	12 Days / 12 Days
AIR QUALITY	☐
SAMPLING LOCATION	100-K-63 Grubbed Area Sample #53
PROJECT DESIGNATION	100-K-63 KW Floodplain Verification Sampling (Waste Area A1)- Soil
SAF NO.	F11-159
ICE CHEST NO.	GWS-007
FIELD LOGBOOK NO.	HNF-N-507-23
ACTUAL SAMPLE DEPTH	0-1'
COA	302676ES10
METHOD OF SHIPMENT	GOVERNMENT VEHICLE
ORIGINAL	
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)

113047

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool<4C	None	None
HOLDING TIME	6 Months	6 Months	6 Months
TYPE OF CONTAINER	G/P	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXJ2	SOIL	AUG 29 2011	1140	✓	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
F.M. Hall	AUG 29 2011 1450	[illegible]	AUG 29 2011 1455

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

PRINTED ON 7/25/2011 — A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-071	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #53	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A1)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: 6WS-007	FIELD LOGBOOK NO.: HNF-N-807-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

PRINTED ON 7/25/2011 A-6003-518 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-072

PAGE 1 OF 2

COLLECTOR: [illegible]

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: 12 Days / 12 Days

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #54

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A)- Soil

SAF NO.: F11-159-

AIR QUALITY: ☐

ICE CHEST NO.: GW3-007

FIELD LOGBOOK NO.: HNF-N-807-23-

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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=Vegetaton, W=Water, WI=Wipe, X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS: Contains Radioactive Material at concentrations that may or may not be regulated for transportetion 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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXJ3	2 SOIL	AUG 29 2011	0900	✓	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall [signature]	AUG 29 2011 1450	[signature]	AUG 29 2011 1455
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
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

PRINTED ON 7/25/2011

A 6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-072	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #54	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	ORIGINAL
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	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 402579ES20.□□** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

PRINTED ON 7/25/2011 A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-056 | PAGE 1 OF 2

COLLECTOR: FM Hall

SAMPLING LOCATION: CHPRC

100-K-63 Grubbed Area Sample #4

ICE CHEST NO.: GWS-007

SHIPPED TO: Waste Sampling & Characterization

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

FIELD LOGBOOK NO.: HNF-N-507-23

ACTUAL SAMPLE DEPTH: 0-1'

OFFSITE PROPERTY NO.: N/A

PROJECT COORDINATOR: LUKE, SN

SAF NO.: F11-159

COA: 302676ES10

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

PRICE CODE: C01

AIR QUALITY:

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

DATA TURNAROUND: 12 Days / 12 Days

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXF7 3	SOIL	AUG 29 2011	1140	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: AUG 29 2011 1455	RECEIVED BY/STORED IN: Bisoral FB	DATE/TIME: AUG 29 2011 1455
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-056	PAGE 2 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #4	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A)- Soil		SAF NO.: F11-159	AIR QUALITY: L	
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.□□** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

PRINTED ON 7/25/2011 A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-067 PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #5

ICE CHEST NO.: GWS-007

SHIPPED TO: Waste Sampling & Characterization

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A1)- Soil

FIELD LOGBOOK NO.: HNF-N-507-23.

ACTUAL SAMPLE DEPTH: 0-1'

OFFSITE PROPERTY NO.: N/A

PROJECT COORDINATOR: LUKE, SN

SAF NO.: F11-159

COA: 302676ES10

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

PRICE CODE: C01

AIR QUALITY:

DATA TURNAROUND: 12 Days / 12 Days

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXH8	4	SOIL	AUG 29 2011	1215	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 29 2011/1455	[illegible]	AUG 29 2011/1455

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-067	PAGE 2 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #5	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23.	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

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A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-023	PAGE 1 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #1	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A1)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-27	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXB4	5	SOIL	AUG 29 2011	1030	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: AUG 29 2011 / 1455	RECEIVED BY/STORED IN: [signature]	DATE/TIME: AUG 29 2011 / 1455
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-023	PAGE 2 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #1	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-807-22	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.□□** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

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Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F11-159-034 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	AIR QUALITY: ☐	DATA TURNAROUND: 12 Days / 12 Days	
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #2	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A1)- Soil	SAF NO.: F11-159	
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL		
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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXC5	SOIL	AUG 29 2011	1055	✓	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 29 2011 1455	[illegible]	AUG 29 2011 1455

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

PRINTED ON 7/25/2011 — A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-034	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #2	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A1)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: 6WS-007	FIELD LOGBOOK NO.: HNF-N-607-23	ACTUAL SAMPLE DEPTH: 0-1	COA: 3C2676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.□□** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

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Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-045

PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: 12 Days / 12 Days

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #3

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

AIR QUALITY: ☐

ICE CHEST NO.: GWS-007

FIELD LOGBOOK NO.: HNF-N-507-23.

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXD6 7	SOIL	AUG 29 2011	1115	✓	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 29 2011 1145		AUG 29 2011 1145

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-045	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #3	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A)- Soil		SAF NO.: F11 150	AIR QUALITY:	
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.□□** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

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Attachment 2
Narrative
WSCF113057

Introduction

Samples were received at the WSCF laboratory as referenced on the WSCF SAF Number Cross Reference table included in the final report. 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. Also attached is SDR11-411 regarding Mercury LCS failure.

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

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

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

Analytical Methodology for Requested Analyses

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

Inorganic Comments

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

- Batch QC 189366

- Matrix Spike and Insoluble Matrix Spike recoveries are outside established laboratory limits. Affected sample results in this batch were "N" flagged.
- All other applicable QC controls are within the established limits.

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

- Sample Issue Resolution Form SDR11-411 regarding Mercury LCS failure is attached to this report. The resolution for the Mercury LCS failure was to reprep and reanalyze the samples. However, due to WSCFs Stop Work due to Hood Restrictions, the samples were returned to the client for reanalysis at another laboratory. The Mercury results provided in this report are those that contained the LCS failed recovery.
- Mercury – The LCS recovery is outside established laboratory limits. Affected sample and QC results in this batch were flagged.
- Manganese – MS / MSD Relative Percent Difference (RPD) is outside established laboratory limits. The quality control report was flagged for RPD failure.
- Manganese – Matrix Spike recovery was outside established laboratory limits. Affected sample results in this batch were "N" flagged.
- All other applicable QC controls are within the established limits.

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 189022
    - Eruopium-152 – 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 applicable QC controls are within the established limits.
- Gross Alpha / Gross Beta:
  - Batch QC 189037

- Gross Alpha – The Blank is less than two times the RDL. "B" Flag not required.
- Gross Beta – 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 applicable QC controls are within the established limits.

- Strontium-89/90:
  - Batch QC 189039
    - The Blank is less than two times the RDL. "B" Flag not required.
    - All other applicable QC controls are within the established limits.

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

Narrative

Attachment 2
Narrative
WSCF113057

SAMPLE ISSUE RESOLUTION

SIR NUM	SDR11-411
REV NUM	0
DATE INITIATED	9/15/2011

SAMPLE EVENT INFORMATION

SAF NUM(S)	F11-159
OPERABLE UNIT(S)	100-KR-2
PROJECT(S)	KW Floodplain
SAMPLE EVENT TITLE(S)	100-K-63 KW Floodplain
LABORATORY	Waste Sampling & Characterization

SAMPLING INFORMATION

NUMBER OF SAMPLES	14
SAMPLE NUMBERS	B2FXB5, B2FXB6, B2FXB7, B2FXB8, B2FXB9, B2FXC0, B2FXC1, B2FXC2, B2FXC3, B2FXC4, B2FXJ8, B2FXJ9, B2FXK0, B2FXK1
SAMPLE MATRIX	SOIL
COLLECTION DATE	8/30/2011 - 8/30/2011
SDG NUM	WSCF113057

ISSUE BACKGROUND

CLASS	Laboratory Issue
TYPE	Quality Control Failure
DESCRIPTION	The 200.8 Mercury LCS was high at 173.3% with control limits of 85-115%. The MS (128%) and MSD (108.5%) were within the limits of 70-130%. The blank was non-detect. All sample results for Mercury were non-detect.

DISPOSITION

DESCRIPTION	Proposed Disposition: Report the mercury data and note the LCS QC failure in the case narrative.
JUSTIFICATION	Requested Disposition: Re-run the affected samples within the 28-day hold time and report results.

Submitted by: Marisol Avila Date: 9/15/2011
Accepted by: Jennifer Hammons Date: 9/15/2011

A-6003-640 (03/30) PAGE 1 of 1

4

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F11-159-~~078~~ 077 — PAGE 1 OF 2

COLLECTOR: F. Hall	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days	AIR QUALITY: ☐	
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #7	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil	SAF NO.: F11-159	
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23-	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL		
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)

8-31-11 Hall

102 113057

SPECIAL HANDLING AND/OR STORAGE

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

DB 8/31/11 Shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
~~B2FX39~~ B2FXJ8	SOIL	1	8/30/11	0960	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
F. Hall	AUG 30 2011 1500	H N Robinson	AUG 30 2011 1500

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

PRINTED ON 7/25/2011 — A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-~~078~~ 077	PAGE 2 OF 2
COLLECTOR: F. Hall	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #7	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: [ ]	
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-33	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.□□** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS (Mercury); Chromium Hex - 7196;~~ KB 9/26/11
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

PRINTED ON 7/25/2011 A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-078

PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days		
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #7	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
AIR QUALITY: ☐			
ICE CHEST NO.: GW3-007	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL		
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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 8/24/11 SHIPPED

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXJ9	SOIL	8/30/11	0916	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 30 2011 1500	M. Nelson M. Nelson	AUG 30 2011 1500

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-078	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #7	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A1)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS - 007	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0 - 1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - /196;~~ KB 9/26/11
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

PRINTED ON 7/25/2011 A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-079 PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #8

ICE CHEST NO.: 6WS-007

SHIPPED TO: Waste Sampling & Characterization

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A3)- Soil

FIELD LOGBOOK NO.: HNF-N-607-23.

ACTUAL SAMPLE DEPTH: 0-1'

OFFSITE PROPERTY NO.: N/A

PROJECT COORDINATOR: LUKE, SN

SAF NO.: F11-159

COA: 302676ES10

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

PRICE CODE: C01

AIR QUALITY: ☐

DATA TURNAROUND: 12 Days / 12 Days

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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
B2FXK0	SOIL	8/30/11	0930

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 30 2011 500	M. Nelson Hired	AUG 30 2011 500

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-079	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372 1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #8	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A3)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.□□** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

PRINTED ON 7/26/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-080

PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: 12 Days / 12 Days

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #9

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

AIR QUALITY: ☐

ICE CHEST NO.: 6WS-007

FIELD LOGBOOK NO.: HNF-N-507-23.

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXK1 4	SOIL	8/30/11	0942	✓	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 30 2011 1500	M.N. Rosenkranz	AUG 30 2011 1500

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-080	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #9	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ KB 9/26/11
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

PRINTED ON 7/25/2011 A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-024 | **PAGE 1 OF 2**

COLLECTOR: FM Hall, CHPRC

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: 12 Days / 12 Days

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #10

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

AIR QUALITY:

ICE CHEST NO.: GWS-007

FIELD LOGBOOK NO.: HNF-N-507-23.

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

VB 9/12/11 Shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXB5 5	SOIL	8/30/11	1009	✓	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 30 2011 1500	M. Nelson	AUG 30 2011 1500

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

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

F11-159-024 — PAGE 2 OF 2

COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #10	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01 — AIR QUALITY: ☐ — METHOD OF SHIPMENT: GOVERNMENT VEHICLE — DATA TURNAROUND: 12 Days / 12 Days — **ORIGINAL**

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}, 200.8 HG ICPMS {Mercury}; Chromium Hex 7196;~~ KB 9/26/11
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

PRINTED ON 7/25/2011 — N-6003-618 (REV 2)

Sample Receipt

Chain of Custody

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

F11-159-025 — PAGE 1 OF 2

COLLECTOR	FM Hall CHPRC
COMPANY CONTACT	LUKE, SN
TELEPHONE NO.	372-1667
PROJECT COORDINATOR	LUKE, SN
PRICE CODE	C01
AIR QUALITY	☐
DATA TURNAROUND	12 Days / 12 Days
SAMPLING LOCATION	100-K-63 Grubbed Area Sample #11
PROJECT DESIGNATION	100-K-63 KW Floodplain Verification Sampling (Waste Area A1)- Soil
SAF NO.	F11-159
ICE CHEST NO.	GWS-007
FIELD LOGBOOK NO.	HNF-N-507-23
ACTUAL SAMPLE DEPTH	0-1'
COA	302676ES10
METHOD OF SHIPMENT	GOVERNMENT VEHICLE
ORIGINAL	
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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 09/21/11 Shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXB6 6	SOIL	8/30/11	0950	✓	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 30 2011 1500	M. Nelson	AUG 30 2011 1500

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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Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-025	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #11	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-607-23.	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG -ICPMS {Mercury}; Chromium Hex - 7196;~~ KB 9/26/11

(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};

(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

PRINTED ON 7/25/2011 A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-026 PAGE 1 OF 2

COLLECTOR FM Hall CHPRC

COMPANY CONTACT LUKE, SN

TELEPHONE NO. 372-1667

PROJECT COORDINATOR LUKE, SN

PRICE CODE C01

DATA TURNAROUND 12 Days / 12 Days

AIR QUALITY

SAMPLING LOCATION 100-K-63 Grubbed Area Sample #12

PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area A0)- Soil

SAF NO. F11-159

ICE CHEST NO. GWS-007

FIELD LOGBOOK NO. HNF-N-807-23

ACTUAL SAMPLE DEPTH 0-1'

COA 302676ES10

METHOD OF SHIPMENT GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 9/29/11

Shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXB7	SOIL	8/30/11	1020	✓	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 30 2011 1500	M. Nelson M. Neal	AUG 30 2011 1500

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-026	PAGE 2 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #12	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11 159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}, 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ KB 9/26/11
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

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4-6003-618 (REV 7)

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F11-159-027 — PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days		
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #13	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
AIR QUALITY: ☐			
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL		
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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

VB 8/30/11 Shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXB8	SOIL	8/30/11	1031	✓	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 30 2011 1500	M Nelson M Nelson	AUG 30 2011 1500
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
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

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Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-027 PAGE 2 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #13	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23.	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01

AIR QUALITY: ☐

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

DATA TURNAROUND: 12 Days / 12 Days

ORIGINAL

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8 HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ KB 9/26/11
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

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

F11-159-028 | PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days		
AIR QUALITY: ☐			
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #14	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GW3-004	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL		
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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 8/30/11 Shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXB9 9	SOIL	8/30/11	1044	✓	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 30 2011 1500	M. Nelson	AUG 30 2011 1500

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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Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-028	PAGE 2 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #14	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GW3-004	FIELD LOGBOOK NO.: HNF-N-507-23.	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8-HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ KB 9/26/11

(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};

(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

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CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F11-159-029 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days		
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #15	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A)- Soil	SAF NO.: F11-159	AIR QUALITY: ☐
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL		
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, SF=Sediment, T=Tissue, V=Vegetation, W=Water, WI=Wipe, X=Other

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

SPECIAL HANDLING AND/OR STORAGE

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

Shipped 8/30/11 KB

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXC0 / 0	SOIL	8/30/11	1056	✓	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 30 2011 1500	M. Nelson	AUG 30 2011 1500

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

PRINTED ON 7/25/2011 — A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-029	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100 K 63 Grubbed Area Sample #15	PROJECT DESIGNATION: 100 K 63 KW Floodplain Verification Sampling (Waste Area A) - Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GW3 -007	FIELD LOGBOOK NO.: HNF-N-807-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ VB 9/26/11
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

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CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-1S9-030

PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: 12 Days / 12 Days

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #16

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

AIR QUALITY: ☐

ICE CHEST NO.: GWS-007

FIELD LOGBOOK NO.: HNF-N-507-23.

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

Shipped 8/30/11

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B2FXC1	SOIL	8/30/11	1109

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 30 2011 1500	M. Nelson M. Nelson	AUG 30 2011 1500

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

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

F11-159-030 — PAGE 2 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372 1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #16	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01

AIR QUALITY: ☐

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

DATA TURNAROUND: 12 Days / 12 Days

ORIGINAL

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ KB 9/26/11
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

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Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-031

PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: 12 Days / 12 Days

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #17

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A)- Soil

SAF NO.: F11-159

AIR QUALITY: ☐

ICE CHEST NO.: GWS-007

FIELD LOGBOOK NO.: HNF-N-507-23.

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 01/26/11 Shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXC2 / 2	SOIL	8/30/11	1120	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: AUG 30 2011 1500	RECEIVED BY/STORED IN: M. Nelson Miner	DATE/TIME: AUG 30 2011 1500
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
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

PRINTED ON 7/25/2011

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Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-031	PAGE 2 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #17	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ VB 9/26/11
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

PRINTED ON 7/25/2011 A-6003-618 (REV 2)

Tuesday, September 27, 2011 9:58:37 AM
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CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-032 PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: 12 Days / 12 Days

AIR QUALITY: ☐

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #18

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

ICE CHEST NO.: GWS-007

FIELD LOGBOOK NO.: HNF-N-507-

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

DB 9/28/11 Initialed

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B2FXC3 13	SOIL	8/30/11	1135

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 30 2011 1500	M. Nelson M. Nelson	AUG 30 2011 1500

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-032	PAGE 2 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #18	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.□□** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ KB 9/26/11
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F11-159-033 — PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days		
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #19	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
AIR QUALITY:			
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL		
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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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	[redacted]
B2FXC4 14	SOIL	8/30/11	1200	✓ ✓ ✓

Shipped 9/12/11

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
FM Hall CHPRC	AUG 30 2011 1500	M. NCISAM	AUG 30 2011 1500	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
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

PRINTED ON 7/25/2011 — A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-033	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K 63 Grubbed Area Sample #19	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A1)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	ORIGINAL
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23.	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	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 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8 HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ KB 9/26/11

(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};

(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

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A-6003-610 (REV 2)

Appendix 5

Data Validation Supporting Documentation

VALIDATION LEVEL:	A	B	C	D	E
PROJECT: KW Floodplain			DATA PACKAGE: VSR12-003		
VALIDATOR: Eyda Hergenreder		LAB: TestAmerica, WSCF		DATE: 12-27-2011	
			SDG: SL1137, WSCF113047, WSCF113057		
ANALYSES PERFORMED					
SW-846/ICP	SW-846/GFAA	SW-846/Hg X		EPA 200.8 X	**SW-846/6020** X

SAMPLES/MATRIX Soil samples

SDG SL1137: B2H561, B2FXJ1, B2H563, B2FXB5, B2FXB6, B2FXB7, B2FXB8, B2FXB9, B2FXC0, B2FXC1, B2FXC2, B2FXC3, B2FXC4, B2FXC6, B2FXC7, B2FXC8, B2FXC9, B2FXD0, B2FXD1, B2FXD2, B2FXD3, B2FXD4, B2FXD5, B2FXD7, B2FXD8, B2FXD9, B2FXF0, B2FXF1, B2FXF2, B2FXF3, B2FXF4, B2FXF5, B2FXF6, B2FXF8, B2FXF9, B2FXH0, B2FXH1, B2FXH2, B2FXH3, B2FXH4, B2FXH5, B2FXH6, B2FXH7, B2FXH9, B2FXJ0, B2FXJ4, B2FXJ5, B2FXJ6, B2FXJ7, B2FXJ8, B2FXJ9, B2H560, B2H562, B2FXK0, B2FXK1

SDG WSCF113047: B2FXJ2, B2FXJ3, B2FXF7, B2FXH8, B2FXB4, B2FXC5, B2FXD6

SDG WSCF113057: B2FXJ8, B2FXJ9, B2FXK0, B2FXK1, B2FXB5, B2FXB6, B2FXB7, B2FXB8, B2FXB9, B2FXC0, B2FXC1, B2FXC2, B2FXC3, B2FXC4,

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:

SL1137: batch 1272022: MB B 3.9 mg/kg; batch 1272023: MB Sn 0.14 mg/kg;
EB B2FXJ5: Ba 1.3 mg/kg; Co 0.063 mg/kg; Mn 3.1 mg/kg; Ni 0.18 mg/kg; Pb 0.22 mg/kg; Sn 0.16 mg/kg; Sr 0.43 mg/kg; U 0.069 mg/kg
EB B2FXJ7: Ba 0.22 mg/kg; Mn 0.33 mg/kg; Ni 0.18 mg/kg; Pb 0.11 mg/kg; Sn 0.13 mg/kg; U 0.034 mg/kg

WSCF113047: EB B2FXJ3: Mn 0.36 mg/kg; Ba 0.278 mg/kg; B 0.669 mg/kg; V 0.227 mg/kg; Sr 0.216 mg/kg

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 WSCF113047: MSD: Mn 139%
LCS: Hg 131%; Mo 140%

SDG WSCF113057: MS: Mn 190%;
LCS: Hg 173%

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:

SDG WSCF113057: MS/MSD RPD: Mn 58%

SDG SL1137: Samples B2FXJ4/B2FXD1 Pb 31% RPD

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:

SL1137: Hg analyzed >28 but <56 days: B2FXB5, B2FXB6, B2FXB7, B2FXB8, B2FXB9, B2FXC0, B2FXC1, B2FXC2, B2FXC3, B2FXC4, B2FXC6, B2FXC7, B2FXC8, B2FXC9, B2FXD0, B2FXD1, B2FXD2, B2FXD3, B2FXD4, B2FXD5, B2FXD7, B2FXD8, B2FXD9, B2FXF0, B2FXJ4, B2FXJ5, B2FXJ8, B2FXJ9, B2FXK0, B2FXK1,

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

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: SL1137 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: F1I290000-022 **Prep Batch #...:** 1272022						
Arsenic	ND	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMR8W1AE
		Dilution Factor: 1				
Barium	ND	2.0	mg/kg	SW846 6020	09/29-10/06/11	MMR8W1AF
		Dilution Factor: 1				
Beryllium	ND	0.10	mg/kg	SW846 6020	09/29-10/06/11	MMR8W1AG
		Dilution Factor: 1				
Boron	**3.9 B**	**10.0**	**mg/kg**	**SW846 6020**	**09/29-10/10/11**	**MMR8W1AH**
		Dilution Factor: 1				
Cadmium	ND	0.050	mg/kg	SW846 6020	09/29-10/06/11	MMR8W1AJ
		Dilution Factor: 1				
Chromium	ND	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMR8W1AL
		Dilution Factor: 1				
Cobalt	ND	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMR8W1AK
		Dilution Factor: 1				
Copper	ND	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMR8W1AM
		Dilution Factor: 1				
Lead	ND	0.30	mg/kg	SW846 6020	09/29-10/06/11	MMR8W1AR
		Dilution Factor: 1				
Manganese	ND	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMR8W1AN
		Dilution Factor: 1				
Molybdenum	ND	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMR8W1AP
		Dilution Factor: 1				
Nickel	ND	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMR8W1AQ
		Dilution Factor: 1				
Selenium	ND	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMR8W1AT
		Dilution Factor: 1				
Silver	ND	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMR8W1AD
		Dilution Factor: 1				
Strontium	ND	0.50	mg/kg	SW846 6020	09/29-10/06/11	MMR8W1AV
		Dilution Factor: 1				

(Continued on next page)

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: SL1137 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Tin	ND	0.20	mg/kg	SW846 6020	09/29-10/06/11	MMR8W1AU
		Dilution Factor: 1				
Uranium	ND	0.10	mg/kg	SW846 6020	09/29-10/06/11	MMR8W1AW
		Dilution Factor: 1				
Vanadium	ND	1.0	mg/kg	SW846 6020	09/29-10/06/11	MMR8W1AA
		Dilution Factor: 1				
Zinc	ND	5.0	mg/kg	SW846 6020	09/29-10/06/11	MMR8W1AC
		Dilution Factor: 1				

MB Lot-Sample #: F1I290000-023 **Prep Batch #...:** 1272023

Arsenic	ND	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMR811AD
		Dilution Factor: 1				
Barium	ND	2.0	mg/kg	SW846 6020	09/29-10/07/11	MMR811AE
		Dilution Factor: 1				
Beryllium	ND	0.10	mg/kg	SW846 6020	09/29-10/07/11	MMR811AF
		Dilution Factor: 1				
Boron	ND	10.0	mg/kg	SW846 6020	09/29-10/10/11	MMR811AG
		Dilution Factor: 1				
Cadmium	ND	0.050	mg/kg	SW846 6020	09/29-10/07/11	MMR811AH
		Dilution Factor: 1				
Chromium	ND	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMR811AK
		Dilution Factor: 1				
Cobalt	ND	0.20	mg/kg	SW846 6020	09/29-10/07/11	MMR811AJ
		Dilution Factor: 1				
Copper	ND	1.0	mg/kg	SW846 6020	09/29-10/10/11	MMR811AL
		Dilution Factor: 1				
Lead	ND	0.30	mg/kg	SW846 6020	09/29-10/07/11	MMR811AQ
		Dilution Factor: 1				
Manganese	ND	0.50	mg/kg	SW846 6020	09/29-10/07/11	MMR811AM
		Dilution Factor: 1				
Molybdenum	ND	0.50	mg/kg	SW846 6020	09/29-10/07/11	MMR811AN
		Dilution Factor: 1				

(Continued on next page)

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: SL1137 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Nickel	ND	0.50	mg/kg	SW846 6020	09/29-10/07/11	MMR811AP
		Dilution Factor: 1				
Selenium	ND	0.50	mg/kg	SW846 6020	09/29-10/07/11	MMR811AR
		Dilution Factor: 1				
Silver	ND	0.20	mg/kg	SW846 6020	09/29-10/07/11	MMR811AC
		Dilution Factor: 1				
Strontium	ND	0.50	mg/kg	SW846 6020	09/29-10/07/11	MMR811AU
		Dilution Factor: 1				
Tin	**0.14 B**	**0.20**	**mg/kg**	**SW846 6020**	**09/29-10/07/11**	**MMR811AT**
		Dilution Factor: 1				
Uranium	ND	0.10	mg/kg	SW846 6020	09/29-10/07/11	MMR811AV
		Dilution Factor: 1				
Vanadium	ND	1.0	mg/kg	SW846 6020	09/29-10/07/11	MMR811AW
		Dilution Factor: 1				
Zinc	ND	5.0	mg/kg	SW846 6020	09/29-10/07/11	MMR811AA
		Dilution Factor: 1				

MB Lot-Sample #: F1J050000-046 **Prep Batch #...:** 1278046

Arsenic	ND	1.0	mg/kg	SW846 6020	10/05-10/07/11	MM0J61AC
		Dilution Factor: 1				
Barium	ND	2.0	mg/kg	SW846 6020	10/05-10/07/11	MM0J61AD
		Dilution Factor: 1				
Beryllium	ND	0.10	mg/kg	SW846 6020	10/05-10/07/11	MM0J61AE
		Dilution Factor: 1				
Boron	ND	10.0	mg/kg	SW846 6020	10/05-10/07/11	MM0J61AF
		Dilution Factor: 1				
Cadmium	ND	0.050	mg/kg	SW846 6020	10/05-10/07/11	MM0J61AG
		Dilution Factor: 1				
Chromium	ND	1.0	mg/kg	SW846 6020	10/05-10/07/11	MM0J61AJ
		Dilution Factor: 1				
Cobalt	ND	0.20	mg/kg	SW846 6020	10/05-10/07/11	MM0J61AH
		Dilution Factor: 1				

(Continued on next page)

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: SL1137 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Copper	ND	1.0	mg/kg	SW846 6020	10/05-10/07/11	MM0J61AK
		Dilution Factor: 1				
Lead	ND	0.30	mg/kg	SW846 6020	10/05-10/07/11	MM0J61AP
		Dilution Factor: 1				
Manganese	ND	0.50	mg/kg	SW846 6020	10/05-10/07/11	MM0J61AL
		Dilution Factor: 1				
Molybdenum	ND	0.50	mg/kg	SW846 6020	10/05-10/07/11	MM0J61AM
		Dilution Factor: 1				
Nickel	ND	0.50	mg/kg	SW846 6020	10/05-10/07/11	MM0J61AN
		Dilution Factor: 1				
Selenium	ND	0.50	mg/kg	SW846 6020	10/05-10/07/11	MM0J61AQ
		Dilution Factor: 1				
Silver	ND	0.20	mg/kg	SW846 6020	10/05-10/07/11	MM0J61AA
		Dilution Factor: 1				
Strontium	ND	0.50	mg/kg	SW846 6020	10/05-10/07/11	MM0J61AT
		Dilution Factor: 1				
Tin	ND	0.20	mg/kg	SW846 6020	10/05-10/07/11	MM0J61AR
		Dilution Factor: 1				
Uranium	ND	0.10	mg/kg	SW846 6020	10/05-10/07/11	MM0J61AU
		Dilution Factor: 1				
Vanadium	ND	1.0	mg/kg	SW846 6020	10/05-10/07/11	MM0J61AV
		Dilution Factor: 1				
Zinc	ND	1.3	mg/kg	SW846 6020	10/05-10/07/11	MM0J61AW
		Dilution Factor: 1				

MB Lot-Sample #: F1J050000-047 **Prep Batch #...:** 1278047

Antimony	ND	0.50	mg/kg	SW846 6020	10/06-10/11/11	MM0J81AA
		Dilution Factor: 1				

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METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: SL1137 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: F1J050000-048 **Prep Batch #...:** 1278048						
Antimony	ND	0.50	mg/kg	SW846 6020	10/06-10/10/11	MM0KA1AA
		Dilution Factor: 1				
MB Lot-Sample #: F1J050000-049 **Prep Batch #...:** 1278049						
Antimony	ND	0.50	mg/kg	SW846 6020	10/06-10/10/11	MM0KD1AA
		Dilution Factor: 1				
MB Lot-Sample #: F1J090000-013 **Prep Batch #...:** 1282013						
Mercury	ND	0.033	mg/kg	SW846 7471A	10/09-10/10/11	MM27C1AA
		Dilution Factor: 1				
MB Lot-Sample #: F1J090000-014 **Prep Batch #...:** 1282014						
Mercury	ND	0.033	mg/kg	SW846 7471A	10/11-10/12/11	MM2931AA
		Dilution Factor: 1				
MB Lot-Sample #: F1J090000-015 **Prep Batch #...:** 1282015						
Mercury	ND	0.033	mg/kg	SW846 7471A	10/11/11	MM2961AA
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: SL1137 **Matrix.....:** SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: F1I290000-022 **Prep Batch #...:** 1272022							
Vanadium	110	107	mg/kg	97	SW846 6020	09/29-10/06/11	MMR8W1AX
			Dilution Factor: 2.5				
Zinc	299	319	mg/kg	107	SW846 6020	09/29-10/06/11	MMR8W1A0
			Dilution Factor: 2.5				
Silver	52.0	53.0	mg/kg	102	SW846 6020	09/29-10/06/11	MMR8W1A1
			Dilution Factor: 2.5				
Arsenic	109	113	mg/kg	104	SW846 6020	09/29-10/06/11	MMR8W1A2
			Dilution Factor: 2.5				
Barium	325	340	mg/kg	105	SW846 6020	09/29-10/06/11	MMR8W1A3
			Dilution Factor: 2.5				
Beryllium	92.0	92.5	mg/kg	100	SW846 6020	09/29-10/06/11	MMR8W1A4
			Dilution Factor: 2.5				
Boron	142	140	mg/kg	99	SW846 6020	09/29-10/10/11	MMR8W1A5
			Dilution Factor: 2.5				
Cadmium	110	114	mg/kg	104	SW846 6020	09/29-10/06/11	MMR8W1A6
			Dilution Factor: 2.5				
Cobalt	133	149	mg/kg	112	SW846 6020	09/29-10/06/11	MMR8W1A7
			Dilution Factor: 2.5				
Chromium	93.4	90.5	mg/kg	97	SW846 6020	09/29-10/06/11	MMR8W1A8
			Dilution Factor: 2.5				
Copper	74.7	75.7	mg/kg	101	SW846 6020	09/29-10/06/11	MMR8W1A9
			Dilution Factor: 2.5				
Manganese	443	487	mg/kg	110	SW846 6020	09/29-10/06/11	MMR8W1CA
			Dilution Factor: 2.5				
Molybdenum	82.5	90.2	mg/kg	109	SW846 6020	09/29-10/06/11	MMR8W1CC
			Dilution Factor: 2.5				
Nickel	109	117	mg/kg	107	SW846 6020	09/29-10/06/11	MMR8W1CD
			Dilution Factor: 2.5				

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LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: SL1137 **Matrix.....:** SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Lead	152	166	mg/kg	109	SW846 6020	09/29-10/06/11	MMR8W1CE
			Dilution Factor: 2.5				
Selenium	207	234	mg/kg	113	SW846 6020	09/29-10/06/11	MMR8W1CF
			Dilution Factor: 2.5				
Tin	135	135	mg/kg	100	SW846 6020	09/29-10/06/11	MMR8W1CG
			Dilution Factor: 2.5				
Strontium	111	120	mg/kg	108	SW846 6020	09/29-10/06/11	MMR8W1CH
			Dilution Factor: 2.5				
Uranium	100	105	mg/kg	105	SW846 6020	09/29-10/06/11	MMR8W1CJ
			Dilution Factor: 1				
LCS Lot-Sample#: F1I290000-023 **Prep Batch #...:** 1272023							
Zinc	299	333	mg/kg	112	SW846 6020	09/29-10/07/11	MMR811AX
			Dilution Factor: 2.5				
Silver	52.0	52.4	mg/kg	101	SW846 6020	09/29-10/07/11	MMR811A0
			Dilution Factor: 2.5				
Arsenic	109	115	mg/kg	106	SW846 6020	09/29-10/07/11	MMR811A1
			Dilution Factor: 2.5				
Barium	325	328	mg/kg	101	SW846 6020	09/29-10/07/11	MMR811A2
			Dilution Factor: 2.5				
Beryllium	92.0	88.0	mg/kg	96	SW846 6020	09/29-10/07/11	MMR811A3
			Dilution Factor: 2.5				
Boron	142	139	mg/kg	98	SW846 6020	09/29-10/10/11	MMR811A4
			Dilution Factor: 2.5				
Cadmium	110	115	mg/kg	105	SW846 6020	09/29-10/07/11	MMR811A5
			Dilution Factor: 2.5				
Cobalt	133	155	mg/kg	116	SW846 6020	09/29-10/07/11	MMR811A6
			Dilution Factor: 2.5				
Chromium	93.4	94.8	mg/kg	102	SW846 6020	09/29-10/07/11	MMR811A7
			Dilution Factor: 2.5				

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LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: SL1137 **Matrix.....:** SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Copper	74.7	71.4	mg/kg	96	SW846 6020	09/29-10/10/11	MMR811A8
			Dilution Factor: 2.5				
Manganese	443	517	mg/kg	117	SW846 6020	09/29-10/07/11	MMR811A9
			Dilution Factor: 2.5				
Molybdenum	82.5	95.6	mg/kg	116	SW846 6020	09/29-10/07/11	MMR811CA
			Dilution Factor: 2.5				
Nickel	109	123	mg/kg	113	SW846 6020	09/29-10/07/11	MMR811CC
			Dilution Factor: 2.5				
Lead	152	168	mg/kg	111	SW846 6020	09/29-10/07/11	MMR811CD
			Dilution Factor: 2.5				
Selenium	207	238	mg/kg	115	SW846 6020	09/29-10/07/11	MMR811CE
			Dilution Factor: 2.5				
Tin	135	137	mg/kg	101	SW846 6020	09/29-10/07/11	MMR811CF
			Dilution Factor: 2.5				
Strontium	111	122	mg/kg	110	SW846 6020	09/29-10/07/11	MMR811CG
			Dilution Factor: 2.5				
Uranium	100	108	mg/kg	108	SW846 6020	09/29-10/07/11	MMR811CH
			Dilution Factor: 1				
Vanadium	110	109	mg/kg	99	SW846 6020	09/29-10/07/11	MMR811CJ
			Dilution Factor: 2.5				

LCS Lot-Sample#: F1J050000-046 **Prep Batch #...:** 1278046

Silver	52.0	52.3	mg/kg	101	SW846 6020	10/05-10/07/11	MM0J61AX
			Dilution Factor: 2.5				
Arsenic	109	112	mg/kg	103	SW846 6020	10/05-10/07/11	MM0J61A0
			Dilution Factor: 2.5				
Barium	325	327	mg/kg	100	SW846 6020	10/05-10/07/11	MM0J61A1
			Dilution Factor: 2.5				
Beryllium	92.0	91.6	mg/kg	100	SW846 6020	10/05-10/07/11	MM0J61A2
			Dilution Factor: 2.5				

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LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: SL1137 **Matrix.....:** SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Boron	142	160	mg/kg	113	SW846 6020	10/05-10/07/11	MM0J61A3
			Dilution Factor: 2.5				
Cadmium	110	115	mg/kg	104	SW846 6020	10/05-10/07/11	MM0J61A4
			Dilution Factor: 2.5				
Cobalt	133	147	mg/kg	111	SW846 6020	10/05-10/07/11	MM0J61A5
			Dilution Factor: 2.5				
Chromium	93.4	93.0	mg/kg	100	SW846 6020	10/05-10/07/11	MM0J61A6
			Dilution Factor: 2.5				
Copper	74.7	74.2	mg/kg	99	SW846 6020	10/05-10/07/11	MM0J61A7
			Dilution Factor: 2.5				
Manganese	443	491	mg/kg	111	SW846 6020	10/05-10/07/11	MM0J61A8
			Dilution Factor: 2.5				
Molybdenum	82.5	93.2	mg/kg	113	SW846 6020	10/05-10/07/11	MM0J61A9
			Dilution Factor: 2.5				
Nickel	109	117	mg/kg	107	SW846 6020	10/05-10/07/11	MM0J61CA
			Dilution Factor: 2.5				
Lead	152	163	mg/kg	107	SW846 6020	10/05-10/07/11	MM0J61CC
			Dilution Factor: 2.5				
Selenium	207	232	mg/kg	112	SW846 6020	10/05-10/07/11	MM0J61CD
			Dilution Factor: 2.5				
Tin	135	133	mg/kg	98	SW846 6020	10/05-10/07/11	MM0J61CE
			Dilution Factor: 2.5				
Strontium	111	115	mg/kg	104	SW846 6020	10/05-10/07/11	MM0J61CF
			Dilution Factor: 2.5				
Uranium	100	106	mg/kg	106	SW846 6020	10/05-10/07/11	MM0J61CG
			Dilution Factor: 1				
Vanadium	110	110	mg/kg	100	SW846 6020	10/05-10/07/11	MM0J61CH
			Dilution Factor: 2.5				
Zinc	299	318	mg/kg	106	SW846 6020	10/05-10/07/11	MM0J61CJ
			Dilution Factor: 2.5				

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LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: SL1137 **Matrix.....:** SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: F1J050000-047 **Prep Batch #...:** 1278047							
Antimony	50.0	44.3	mg/kg	89	SW846 6020	10/06-10/11/11	MM0J81AC
			Dilution Factor: 1				
LCS Lot-Sample#: F1J050000-048 **Prep Batch #...:** 1278048							
Antimony	50.0	43.9	mg/kg	88	SW846 6020	10/06-10/10/11	MM0KA1AC
			Dilution Factor: 1				
LCS Lot-Sample#: F1J050000-049 **Prep Batch #...:** 1278049							
Antimony	50.0	43.7	mg/kg	87	SW846 6020	10/06-10/10/11	MM0KD1AC
			Dilution Factor: 1				
LCS Lot-Sample#: F1J090000-013 **Prep Batch #...:** 1282013							
Mercury	16.3	18.3	mg/kg	112	SW846 7471A	10/09-10/10/11	MM27C1AC
			Dilution Factor: 50				
LCS Lot-Sample#: F1J090000-014 **Prep Batch #...:** 1282014							
Mercury	16.3	15.8	mg/kg	97	SW846 7471A	10/11/11	MM2931AC
			Dilution Factor: 50				
LCS Lot-Sample#: F1J090000-015 **Prep Batch #...:** 1282015							
Mercury	16.3	15.6	mg/kg	96	SW846 7471A	10/11/11	MM2961AC
			Dilution Factor: 50				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: SL1137 **Matrix.....:** SOLID
Date Sampled...: 09/15/11 **Date Received..:** 09/28/11

MS Lot-Sample #: F1I280432-001 **Prep Batch #...:** 1272022
% Moisture.....: 0.96

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Arsenic									
	2.6	101	98.9	mg/kg	95		SW846 6020	09/29-10/06/11	MMRNA1CC
	2.6	101	98.1	mg/kg	95	0.86	SW846 6020	09/29-10/06/11	MMRNA1CD
			Dilution Factor: 1						
Barium									
	65.0	101	173	mg/kg	107		SW846 6020	09/29-10/06/11	MMRNA1CE
	65.0	101	169	mg/kg	103	1.9	SW846 6020	09/29-10/06/11	MMRNA1CF
			Dilution Factor: 1						
Beryllium									
	0.33	101	112	mg/kg	111		SW846 6020	09/29-10/06/11	MMRNA1CG
	0.33	101	113	mg/kg	112	0.61	SW846 6020	09/29-10/06/11	MMRNA1CH
			Dilution Factor: 1						
Boron									
	ND	101	100 D	mg/kg	94		SW846 6020	09/29-10/10/11	MMRNA1CJ
	ND	101	104 D	mg/kg	97	3.4	SW846 6020	09/29-10/10/11	MMRNA1CK
			Dilution Factor: 5						
Cadmium									
	0.16	101	98.7	mg/kg	98		SW846 6020	09/29-10/06/11	MMRNA1CL
	0.16	101	100	mg/kg	99	1.7	SW846 6020	09/29-10/06/11	MMRNA1CM
			Dilution Factor: 1						
Chromium									
	9.4	101	98.8	mg/kg	88		SW846 6020	09/29-10/06/11	MMRNA1CQ
	9.4	101	97.1	mg/kg	87	1.7	SW846 6020	09/29-10/06/11	MMRNA1CR
			Dilution Factor: 1						
Cobalt									
	8.4	101	103	mg/kg	94		SW846 6020	09/29-10/06/11	MMRNA1CN
	8.4	101	103	mg/kg	94	0.04	SW846 6020	09/29-10/06/11	MMRNA1CP
			Dilution Factor: 1						
Copper									
	15.9	101	110	mg/kg	93		SW846 6020	09/29-10/06/11	MMRNA1CT
	15.9	101	109	mg/kg	93	0.85	SW846 6020	09/29-10/06/11	MMRNA1CU
			Dilution Factor: 1						

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MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: SL1137 **Matrix.....:** SOLID
Date Sampled...: 09/15/11 **Date Received..:** 09/28/11

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Lead									
	7.4	101	108	mg/kg	100		SW846 6020	09/29-10/06/11	MMRNA1C3
	7.4	101	107	mg/kg	99	1.0	SW846 6020	09/29-10/06/11	MMRNA1C4
			Dilution Factor: 1						
Manganese									
	332	101	441	mg/kg	108		SW846 6020	09/29-10/06/11	MMRNA1CV
	332	101	425	mg/kg	92	3.9	SW846 6020	09/29-10/06/11	MMRNA1CW
			Dilution Factor: 1						
Molybdenum									
	0.39	101	94.3	mg/kg	93		SW846 6020	09/29-10/06/11	MMRNA1CX
	0.39	101	95.0	mg/kg	94	0.73	SW846 6020	09/29-10/06/11	MMRNA1C0
			Dilution Factor: 1						
Nickel									
	12.4	101	109	mg/kg	96		SW846 6020	09/29-10/06/11	MMRNA1C1
	12.4	101	108	mg/kg	95	0.80	SW846 6020	09/29-10/06/11	MMRNA1C2
			Dilution Factor: 1						
Selenium									
	1.3	101	98.4	mg/kg	96		SW846 6020	09/29-10/06/11	MMRNA1C5
	1.3	101	99.8	mg/kg	98	1.4	SW846 6020	09/29-10/06/11	MMRNA1C6
			Dilution Factor: 1						
Silver									
	0.045	10.1	9.77	mg/kg	96		SW846 6020	09/29-10/06/11	MMRNA1A9
	0.045	10.1	10.0	mg/kg	99	2.3	SW846 6020	09/29-10/06/11	MMRNA1CA
			Dilution Factor: 1						
Strontium									
	22.7	101	125	mg/kg	101		SW846 6020	09/29-10/06/11	MMRNA1C9
	22.7	101	126	mg/kg	102	1.2	SW846 6020	09/29-10/06/11	MMRNA1DA
			Dilution Factor: 1						
Tin									
	0.56	101	98.6	mg/kg	97		SW846 6020	09/29-10/06/11	MMRNA1C7
	0.56	101	98.1	mg/kg	97	0.53	SW846 6020	09/29-10/06/11	MMRNA1C8
			Dilution Factor: 1						
Uranium									
	0.60	101	104	mg/kg	103		SW846 6020	09/29-10/06/11	MMRNA1A1
	0.60	101	105	mg/kg	103	0.61	SW846 6020	09/29-10/06/11	MMRNA1A2
			Dilution Factor: 1						

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MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: SL1137 **Matrix.....:** SOLID
Date Sampled...: 09/15/11 **Date Received..:** 09/28/11

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Vanadium									
	48.8	101	134	mg/kg	84		SW846 6020	09/29-10/06/11	MMRNA1A3
	48.8	101	136	mg/kg	87	1.6	SW846 6020	09/29-10/06/11	MMRNA1A4
			Dilution Factor: 1						
Zinc									
	52.0	101	146	mg/kg	93		SW846 6020	09/29-10/06/11	MMRNA1A5
	52.0	101	149	mg/kg	96	1.9	SW846 6020	09/29-10/06/11	MMRNA1A6
			Dilution Factor: 1						

MS Lot-Sample #: F1I280432-001 **Prep Batch #...:** 1278047
% Moisture.....: 0.96

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Antimony									
	0.25	50.0	45.2	mg/kg	90		SW846 6020	10/06-10/11/11	MMRNA1DE
	0.25	50.0	43.3	mg/kg	86	4.5	SW846 6020	10/06-10/11/11	MMRNA1DF
			Dilution Factor: 1						

MS Lot-Sample #: F1I280432-001 **Prep Batch #...:** 1282013
% Moisture.....: 0.96

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Mercury									
	ND	0.168	0.167	mg/kg	99		SW846 7471A	10/09-10/10/11	MMRNA1A7
	ND	0.168	0.166	mg/kg	98	0.50	SW846 7471A	10/09-10/10/11	MMRNA1A8
			Dilution Factor: 1						

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Results and reporting limits have been adjusted for dry weight.

D Result was obtained from the analysis of a dilution.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: SL1137 **Matrix.....:** SOLID
Date Sampled...: 08/31/11 **Date Received..:** 09/28/11

MS Lot-Sample #: F1I280432-014 **Prep Batch #...:** 1278046
% Moisture.....: 1.3

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Arsenic									
	3.0	101	98.7	mg/kg	94		SW846 6020	10/05-10/07/11	MMRWF1A5
	3.0	101	97.9	mg/kg	94	0.77	SW846 6020	10/05-10/07/11	MMRWF1A6
			Dilution Factor: 1						
Barium									
	63.6	101	167	mg/kg	102		SW846 6020	10/05-10/07/11	MMRWF1A7
	63.6	101	166	mg/kg	101	0.76	SW846 6020	10/05-10/07/11	MMRWF1A8
			Dilution Factor: 1						
Beryllium									
	0.35	101	111	mg/kg	110		SW846 6020	10/05-10/07/11	MMRWF1A9
	0.35	101	109	mg/kg	108	1.8	SW846 6020	10/05-10/07/11	MMRWF1CA
			Dilution Factor: 1						
Boron									
	6.7	101	118	mg/kg	109		SW846 6020	10/05-10/07/11	MMRWF1CC
	6.7	101	118	mg/kg	110	0.16	SW846 6020	10/05-10/07/11	MMRWF1CD
			Dilution Factor: 1						
Cadmium									
	0.32	101	99.8	mg/kg	98		SW846 6020	10/05-10/07/11	MMRWF1CE
	0.32	101	98.5	mg/kg	97	1.3	SW846 6020	10/05-10/07/11	MMRWF1CF
			Dilution Factor: 1						
Chromium									
	13.4	101	101	mg/kg	86		SW846 6020	10/05-10/07/11	MMRWF1CJ
	13.4	101	99.3	mg/kg	85	1.5	SW846 6020	10/05-10/07/11	MMRWF1CK
			Dilution Factor: 1						
Cobalt									
	7.8	101	105	mg/kg	96		SW846 6020	10/05-10/07/11	MMRWF1CG
	7.8	101	103	mg/kg	94	2.0	SW846 6020	10/05-10/07/11	MMRWF1CH
			Dilution Factor: 1						
Copper									
	21.1	101	118	mg/kg	96		SW846 6020	10/05-10/07/11	MMRWF1CL
	21.1	101	113	mg/kg	90	4.6	SW846 6020	10/05-10/07/11	MMRWF1CM
			Dilution Factor: 1						

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: SL1137 **Matrix.....:** SOLID
Date Sampled...: 08/31/11 **Date Received..:** 09/28/11

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Lead									
	15.8	101	113	mg/kg	96		SW846 6020	10/05-10/07/11	MMRWF1CV
	15.8	101	113	mg/kg	96	0.41	SW846 6020	10/05-10/07/11	MMRWF1CW
			Dilution Factor: 1						
Manganese									
	322	101	446	mg/kg	123		SW846 6020	10/05-10/07/11	MMRWF1CN
	322	101	444	mg/kg	120	0.57	SW846 6020	10/05-10/07/11	MMRWF1CP
			Dilution Factor: 1						
Molybdenum									
	0.52	101	96.2	mg/kg	94		SW846 6020	10/05-10/07/11	MMRWF1CQ
	0.52	101	95.0	mg/kg	93	1.2	SW846 6020	10/05-10/07/11	MMRWF1CR
			Dilution Factor: 1						
Nickel									
	15.2	101	115	mg/kg	98		SW846 6020	10/05-10/07/11	MMRWF1CT
	15.2	101	113	mg/kg	96	2.0	SW846 6020	10/05-10/07/11	MMRWF1CU
			Dilution Factor: 1						
Selenium									
	1.1	101	97.5	mg/kg	95		SW846 6020	10/05-10/07/11	MMRWF1CX
	1.1	101	97.6	mg/kg	95	0.11	SW846 6020	10/05-10/07/11	MMRWF1C0
			Dilution Factor: 1						
Silver									
	0.062	10.1	9.75	mg/kg	96		SW846 6020	10/05-10/07/11	MMRWF1A3
	0.062	10.1	9.65	mg/kg	95	0.99	SW846 6020	10/05-10/07/11	MMRWF1A4
			Dilution Factor: 1						
Strontium									
	28.3	101	132	mg/kg	102		SW846 6020	10/05-10/07/11	MMRWF1C3
	28.3	101	129	mg/kg	100	2.1	SW846 6020	10/05-10/07/11	MMRWF1C4
			Dilution Factor: 1						
Tin									
	0.62	101	94.6	mg/kg	93		SW846 6020	10/05-10/07/11	MMRWF1C1
	0.62	101	95.7	mg/kg	94	1.2	SW846 6020	10/05-10/07/11	MMRWF1C2
			Dilution Factor: 1						
Uranium									
	0.44	101	107	mg/kg	105		SW846 6020	10/05-10/07/11	MMRWF1C5
	0.44	101	103	mg/kg	102	3.0	SW846 6020	10/05-10/07/11	MMRWF1C6
			Dilution Factor: 1						

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: SL1137 **Matrix.....:** SOLID
Date Sampled...: 08/31/11 **Date Received..:** 09/28/11

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Vanadium									
	46.9	101	132	mg/kg	84		SW846 6020	10/05-10/07/11	MMRWF1C7
	46.9	101	131	mg/kg	83	0.97	SW846 6020	10/05-10/07/11	MMRWF1C8
			Dilution Factor: 1						
Zinc									
	73.9	101	169	mg/kg	94		SW846 6020	10/05-10/07/11	MMRWF1C9
	73.9	101	166	mg/kg	91	2.0	SW846 6020	10/05-10/07/11	MMRWF1DA
			Dilution Factor: 1						

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: SL1137 **Matrix.....:** SOLID
Date Sampled...: 09/13/11 **Date Received..:** 09/28/11

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: F1I280432-031 **Prep Batch #...:** 1278048									
								% Moisture.....: 1.0	
Antimony									
	0.21	50.0	42.7	mg/kg	85		SW846 6020	10/06-10/11/11	MMRW41A2
	0.21	50.0	43.2	mg/kg	86	1.1	SW846 6020	10/06-10/11/11	MMRW41A3

Dilution Factor: 1

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: SL1137 **Matrix.....:** SOLID
Date Sampled...: 09/13/11 **Date Received..:** 09/28/11

MS Lot-Sample #: F1I280432-032 **Prep Batch #...:** 1272023
% Moisture.....: 1.0

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Arsenic									
	2.3	101	96.3	mg/kg	93		SW846 6020	09/29-10/07/11	MMRW61A9
	2.3	101	96.5	mg/kg	93	0.23	SW846 6020	09/29-10/07/11	MMRW61CA
			Dilution Factor: 1						
Barium									
	74.5	101	158	mg/kg	83		SW846 6020	09/29-10/07/11	MMRW61CC
	74.5	101	162	mg/kg	87	2.6	SW846 6020	09/29-10/07/11	MMRW61CD
			Dilution Factor: 1						
Beryllium									
	0.38	101	108	mg/kg	107		SW846 6020	09/29-10/07/11	MMRW61CE
	0.38	101	109	mg/kg	107	0.62	SW846 6020	09/29-10/07/11	MMRW61CF
			Dilution Factor: 1						
Boron									
	ND	101	91.2 D	mg/kg	90		SW846 6020	09/29-10/10/11	MMRW61CG
	ND	101	92.6 D	mg/kg	92	1.6	SW846 6020	09/29-10/10/11	MMRW61CH
			Dilution Factor: 5						
Cadmium									
	0.14	101	98.4	mg/kg	97		SW846 6020	09/29-10/07/11	MMRW61CJ
	0.14	101	97.5	mg/kg	96	0.90	SW846 6020	09/29-10/07/11	MMRW61CK
			Dilution Factor: 1						
Chromium									
	9.0	101	96.4	mg/kg	86		SW846 6020	09/29-10/07/11	MMRW61CN
	9.0	101	98.8	mg/kg	89	2.5	SW846 6020	09/29-10/07/11	MMRW61CP
			Dilution Factor: 1						
Cobalt									
	11.0	101	105	mg/kg	93		SW846 6020	09/29-10/07/11	MMRW61CL
	11.0	101	106	mg/kg	94	0.92	SW846 6020	09/29-10/07/11	MMRW61CM
			Dilution Factor: 1						
Copper									
	22.3	101	125 D	mg/kg	101		SW846 6020	09/29-10/10/11	MMRW61CQ
	22.3	101	125 D	mg/kg	102	0.24	SW846 6020	09/29-10/10/11	MMRW61CR
			Dilution Factor: 5						

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MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: SL1137 **Matrix.....:** SOLID
Date Sampled...: 09/13/11 **Date Received..:** 09/28/11

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Lead									
	6.6	101	105	mg/kg	98		SW846 6020	09/29-10/07/11	MMRW61C1
	6.6	101	108	mg/kg	100	2.2	SW846 6020	09/29-10/07/11	MMRW61C2
			Dilution Factor: 1						
Manganese									
	432	101	485 N	mg/kg	52		SW846 6020	09/29-10/07/11	MMRW61CT
	432	101	480 N	mg/kg	48	0.96	SW846 6020	09/29-10/07/11	MMRW61CU
			Dilution Factor: 1						
Molybdenum									
	0.46	101	96.7	mg/kg	95		SW846 6020	09/29-10/07/11	MMRW61CV
	0.46	101	95.1	mg/kg	94	1.7	SW846 6020	09/29-10/07/11	MMRW61CW
			Dilution Factor: 1						
Nickel									
	12.5	101	109	mg/kg	95		SW846 6020	09/29-10/07/11	MMRW61CX
	12.5	101	110	mg/kg	97	1.4	SW846 6020	09/29-10/07/11	MMRW61C0
			Dilution Factor: 1						
Selenium									
	1.6	101	94.3	mg/kg	92		SW846 6020	09/29-10/07/11	MMRW61C3
	1.6	101	95.4	mg/kg	93	1.1	SW846 6020	09/29-10/07/11	MMRW61C4
			Dilution Factor: 1						
Silver									
	0.054	10.1	9.74	mg/kg	96		SW846 6020	09/29-10/07/11	MMRW61A7
	0.054	10.1	9.64	mg/kg	95	1.0	SW846 6020	09/29-10/07/11	MMRW61A8
			Dilution Factor: 1						
Strontium									
	28.5	101	127	mg/kg	98		SW846 6020	09/29-10/07/11	MMRW61C7
	28.5	101	132	mg/kg	103	3.9	SW846 6020	09/29-10/07/11	MMRW61C8
			Dilution Factor: 1						
Tin									
	0.73	101	95.6	mg/kg	94		SW846 6020	09/29-10/07/11	MMRW61C5
	0.73	101	97.1	mg/kg	95	1.5	SW846 6020	09/29-10/07/11	MMRW61C6
			Dilution Factor: 1						
Uranium									
	0.48	101	106	mg/kg	104		SW846 6020	09/29-10/07/11	MMRW61C9
	0.48	101	108	mg/kg	106	1.9	SW846 6020	09/29-10/07/11	MMRW61DA
			Dilution Factor: 1						

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MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: SL1137 **Matrix.....:** SOLID
Date Sampled...: 09/13/11 **Date Received..:** 09/28/11

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Vanadium									
	60.3	101	144	mg/kg	83		SW846 6020	09/29-10/07/11	MMRW61A1
	60.3	101	146	mg/kg	84	0.91	SW846 6020	09/29-10/07/11	MMRW61A2
			Dilution Factor: 1						
Zinc									
	57.3	101	152	mg/kg	93		SW846 6020	09/29-10/07/11	MMRW61A3
	57.3	101	151	mg/kg	92	0.72	SW846 6020	09/29-10/07/11	MMRW61A4
			Dilution Factor: 1						

MS Lot-Sample #: F1I280432-032 **Prep Batch #...:** 1282014
% Moisture.....: 1.0

Mercury									
	ND	0.168	0.192	mg/kg	114		SW846 7471A	10/11/11	MMRW61A5
	ND	0.168	0.177	mg/kg	105	8.2	SW846 7471A	10/11/11	MMRW61A6
			Dilution Factor: 1						

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Results and reporting limits have been adjusted for dry weight.

D Result was obtained from the analysis of a dilution.

N Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: SL1137 **Matrix.....:** SOLID
Date Sampled...: 09/15/11 **Date Received..:** 09/28/11

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: F1I280432-053 **Prep Batch #...:** 1278049									
								% Moisture.....: 1.1	
Antimony									
	0.21	50.0	42.2	mg/kg	84		SW846 6020	10/06-10/10/11	MMRX31DD
	0.21	50.0	42.2	mg/kg	84	0.10	SW846 6020	10/06-10/10/11	MMRX31DE
			Dilution Factor: 1						
MS Lot-Sample #: F1I280432-053 **Prep Batch #...:** 1282015									
								% Moisture.....: 1.1	
Mercury									
	ND	0.169	0.180	mg/kg	107		SW846 7471A	10/11/11	MMRX31A5
	ND	0.169	0.174	mg/kg	103	3.8	SW846 7471A	10/11/11	MMRX31A6
			Dilution Factor: 1						

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Results and reporting limits have been adjusted for dry weight.

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF113047

QC Batch 189169 **Test** ICP-2008 MS All possible metal
Associated Samples 113047001, 113047002, 113047003, 113047004, 113047005, 113047006, 113047007

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
LCS			**QC Sample #64115**							
Manganese	7439-96-5		310	mg/kg	108.2	75 - 121				09/04/11
Nickel	7440-02-0		69.4	mg/kg	117.4	74 - 122				09/04/11
Silver	7440-22-4		37.0	mg/kg	107.4	83 - 127				09/04/11
Beryllium	7440-41-7		73.1	mg/kg	117.2	77 - 120				09/04/11
Cadmium	7440-43-9		77.8	mg/kg	125.9	76 - 129				09/04/11
Chromium	7440-47-3		77.4	mg/kg	108.6	68 - 119				09/04/11
Cobalt	7440-48-4		116	mg/kg	112.9	77 - 122				09/04/11
Copper	7440-50-8		90.5	mg/kg	111.5	67 - 120				09/04/11
Vanadium	7440-62-2		64.1	mg/kg	108.2	67 - 122				09/04/11
Zinc	7440-66-6		146	mg/kg	103.4	73 - 131				09/04/11
Lead	7439-92-1		106	mg/kg	114.3	79 - 124				09/04/11
Mercury	7439-97-6		4.93	mg/kg	130.7	69 - 124			X	09/04/11
Molybdenum	7439-98-7		59.6	mg/kg	139.9	80 - 125			X	09/04/11
Strontium	7440-24-6		78.4	mg/kg	108.3	78 - 119				09/04/11
Tin	7440-31-5		119	mg/kg	111.6	84 - 130				09/04/11
Uranium	7440-61-1		417	mg/kg	104.4	86 - 113				09/04/11
Arsenic	7440-38-2		104	mg/kg	112.1	79 - 125				09/04/11
Selenium	7782-49-2		103	mg/kg	114.8	82 - 133				09/04/11

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF113047

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
MS			**QC Sample #64116**							
			Original	**113047001**						
Manganese	7439-96-5	368	117	mg/kg	118.2	70 - 130				09/04/11
Nickel	7440-02-0	13.1	99.0	mg/kg	99.9	70 - 130				09/04/11
Silver	7440-22-4	<0.10	102	mg/kg	102.8	70 - 130				09/04/11
Beryllium	7440-41-7	0.322	109	mg/kg	109.9	70 - 130				09/04/11
Cadmium	7440-43-9	0.274	105	mg/kg	105.6	70 - 130				09/04/11
Chromium	7440-47-3	10.5	105	mg/kg	105.6	70 - 130				09/04/11
Cobalt	7440-48-4	8.79	98.6	mg/kg	99.5	70 - 130				09/04/11
Copper	7440-50-8	18.9	97.0	mg/kg	97.9	70 - 130				09/04/11
Vanadium	7440-62-2	57.8	99.5	mg/kg	100.5	70 - 130				09/04/11
Zinc	7440-66-6	64.8	96.9	mg/kg	97.8	70 - 130				09/04/11
Lead	7439-92-1	11.1	107	mg/kg	107.8	70 - 130				09/04/11
Mercury	7439-97-6	<0.051	2.26	mg/kg	114	70 - 130				09/04/11
Molybdenum	7439-98-7	0.407	106	mg/kg	107.2	70 - 130				09/04/11
Strontium	7440-24-6	29.4	109	mg/kg	110.1	70 - 130				09/04/11
Tin	7440-31-5	0.545	104	mg/kg	104.7	70 - 130				09/04/11
Uranium	7440-61-1	0.512	107	mg/kg	107.8	70 - 130				09/04/11
Arsenic	7440-38-2	3.20	106	mg/kg	107.4	70 - 130				09/04/11
Selenium	7782-49-2	1.26	105	mg/kg	106.3	70 - 130				09/04/11
MSD			**QC Sample #64117**							
			Original	**113047001**					**Paired**	**64116**
Manganese	7439-96-5	368	138	mg/kg	139	70 - 130	16.20	30	N	09/04/11
Nickel	7440-02-0	13.1	101	mg/kg	102.1	70 - 130	2.20	30		09/04/11
Silver	7440-22-4	<0.10	106	mg/kg	106.8	70 - 130	3.80	30		09/04/11

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF113047

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Beryllium	7440-41-7	0.322	112	mg/kg	113	70 - 130	2.80	30		09/04/11
Cadmium	7440-43-9	0.274	109	mg/kg	110.3	70 - 130	4.40	30		09/04/11
Chromium	7440-47-3	10.5	104	mg/kg	105.2	70 - 130	0.40	30		09/04/11
Cobalt	7440-48-4	8.79	101	mg/kg	101.6	70 - 130	2.10	30		09/04/11
Copper	7440-50-8	18.9	99.1	mg/kg	100.1	70 - 130	2.20	30		09/04/11
Vanadium	7440-62-2	57.8	109	mg/kg	109.8	70 - 130	8.80	30		09/04/11
Zinc	7440-66-6	64.8	101	mg/kg	101.8	70 - 130	4.00	30		09/04/11
Lead	7439-92-1	11.1	111	mg/kg	112	70 - 130	3.80	30		09/04/11
Mercury	7439-97-6	<0.051	2.32	mg/kg	117	70 - 130	2.60	30		09/04/11
Molybdenum	7439-98-7	0.407	111	mg/kg	111.8	70 - 130	4.20	30		09/04/11
Strontium	7440-24-6	29.4	119	mg/kg	120.7	70 - 130	9.20	30		09/04/11
Tin	7440-31-5	0.545	109	mg/kg	110.2	70 - 130	5.10	30		09/04/11
Uranium	7440-61-1	0.512	111	mg/kg	111.9	70 - 130	3.70	30		09/04/11
Arsenic	7440-38-2	3.20	111	mg/kg	112.1	70 - 130	4.30	30		09/04/11
Selenium	7782-49-2	1.26	109	mg/kg	110	70 - 130	3.40	30		09/04/11

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF113047

QC Batch 189169 **Test** ICP-2008 MS All possible metal
Associated Samples 113047001, 113047002, 113047003, 113047004, 113047005, 113047006, 113047007

Analyte	CAS #	Original Found	QC Found	Units	% Recov Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #64114**						
Manganese	7439-96-5		<0.10	ug/L				U	09/04/11
Nickel	7440-02-0		<0.20	ug/L				U	09/04/11
Silver	7440-22-4		<0.050	ug/L				U	09/04/11
Antimony	7440-36-0		<0.050	ug/L				U	09/04/11
Barium	7440-39-3		<0.20	ug/L				U	09/04/11
Boron	7440-42-8		<0.50	ug/L				U	09/04/11
Beryllium	7440-41-7		<0.050	ug/L				U	09/04/11
Cadmium	7440-43-9		<0.050	ug/L				U	09/04/11
Chromium	7440-47-3		<0.10	ug/L				U	09/04/11
Cobalt	7440-48-4		<0.10	ug/L				U	09/04/11
Copper	7440-50-8		<0.10	ug/L				U	09/04/11
Vanadium	7440-62-2		<0.20	ug/L				U	09/04/11
Zinc	7440-66-6		<0.80	ug/L				U	09/04/11
Lead	7439-92-1		<0.10	ug/L				U	09/04/11
Mercury	7439-97-6		<0.030	ug/L				U	09/04/11
Molybdenum	7439-98-7		<0.10	ug/L				U	09/04/11
Strontium	7440-24-6		<0.10	ug/L				U	09/04/11
Tin	7440-31-5		<0.10	ug/L				U	09/04/11
Uranium	7440-61-1		<0.10	ug/L				U	09/04/11

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF113047

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Arsenic	7440-38-2		<0.40	ug/L					U	09/04/11
Selenium	7782-49-2		<0.30	ug/L					U	09/04/11
LCS			**QC Sample #64115**							
Antimony	7440-36-0		176	mg/kg	144	62 - 205				09/04/11
Barium	7440-39-3		178	mg/kg	105	78 - 118				09/04/11
Boron	7440-42-8		127	mg/kg	119.9	64 - 136				09/04/11
MS			**QC Sample #64116**							
			Original 113047001							
Antimony	7440-36-0	<0.30	97.0	mg/kg	97.9	70 - 130				09/04/11
Barium	7440-39-3	64.9	108	mg/kg	109.2	70 - 130				09/04/11
Boron	7440-42-8	2.75	103	mg/kg	104.4	70 - 130				09/04/11
MSD			**QC Sample #64117**							
			Original 113047001					**Paired**	**64116**	
Antimony	7440-36-0	<0.30	100	mg/kg	101	70 - 130	3.10	30		09/04/11
Barium	7440-39-3	64.9	120	mg/kg	121.3	70 - 130	10.50	30		09/04/11
Boron	7440-42-8	2.75	105	mg/kg	106.3	70 - 130	1.80	30		09/04/11

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF113057

QC Batch 189167 **Test** ICP-2008 MS All possible metal
Associated Samples 113057001, 113057002, 113057003, 113057004, 113057005, 113057006, 113057007, 113057008, 113057009, 113057010, 113057011, 113057012, 113057013, 113057014

Analyte	CAS #	Original Found	QC Found	Units	% Recov Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #64103**						
Manganese	7439-96-5		<0.10	ug/L				U	09/04/11
Nickel	7440-02-0		<0.20	ug/L				U	09/04/11
Silver	7440-22-4		<0.050	ug/L				U	09/04/11
Antimony	7440-36-0		<0.050	ug/L				U	09/04/11
Barium	7440-39-3		<0.20	ug/L				U	09/04/11
Beryllium	7440-41-7		<0.050	ug/L				U	09/04/11
Boron	7440-42-8		<0.50	ug/L				U	09/04/11
Cadmium	7440-43-9		<0.050	ug/L				U	09/04/11
Chromium	7440-47-3		<0.10	ug/L				U	09/04/11
Cobalt	7440-48-4		<0.10	ug/L				U	09/04/11
Copper	7440-50-8		<0.10	ug/L				U	09/04/11
Vanadium	7440-62-2		<0.20	ug/L				U	09/04/11
Zinc	7440-66-6		<0.80	ug/L				U	09/04/11
Lead	7439-92-1		<0.10	ug/L				U	09/04/11
Mercury	7439-97-6		<0.030	ug/L				UX	09/04/11
Molybdenum	7439-98-7		<0.10	ug/L				U	09/04/11
Strontium	7440-24-6		<0.10	ug/L				U	09/04/11
Tin	7440-31-5		<0.10	ug/L				U	09/04/11

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF113057

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Uranium	7440-61-1		<0.10	ug/L					U	09/04/11
Arsenic	7440-38-2		<0.40	ug/L					U	09/04/11
Selenium	7782-49-2		<0.30	ug/L					U	09/04/11
LCS			**QC Sample #64104**							
Manganese	7439-96-5		311	mg/kg	108.7	75 - 121				09/04/11
Nickel	7440-02-0		62.7	mg/kg	106.1	74 - 122				09/04/11
Silver	7440-22-4		36.7	mg/kg	106.8	83 - 127				09/04/11
Antimony	7440-36-0		158	mg/kg	129.2	62 - 205				09/04/11
Barium	7440-39-3		177	mg/kg	104.6	78 - 118				09/04/11
Boron	7440-42-8		114	mg/kg	107.8	64 - 136				09/04/11
Beryllium	7440-41-7		65.5	mg/kg	104.9	77 - 120				09/04/11
Cadmium	7440-43-9		68.3	mg/kg	110.4	76 - 129				09/04/11
Chromium	7440-47-3		74.1	mg/kg	103.9	68 - 119				09/04/11
Cobalt	7440-48-4		111	mg/kg	107.8	77 - 122				09/04/11
Copper	7440-50-8		82.9	mg/kg	102.1	67 - 120				09/04/11
Vanadium	7440-62-2		61.5	mg/kg	104	67 - 122				09/04/11
Zinc	7440-66-6		146	mg/kg	103.7	73 - 131				09/04/11
Lead	7439-92-1		102	mg/kg	109.9	79 - 124				09/04/11
Mercury	7439-97-6		6.53	mg/kg	173.3	69 - 124			X	09/04/11
Molybdenum	7439-98-7		50.7	mg/kg	119	80 - 125				09/04/11
Strontium	7440-24-6		72.7	mg/kg	100.3	78 - 119				09/04/11
Tin	7440-31-5		121	mg/kg	112.9	84 - 130				09/04/11
Uranium	7440-61-1		404	mg/kg	101	86 - 113				09/04/11
Arsenic	7440-38-2		103	mg/kg	111	79 - 125				09/04/11

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF113057

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Selenium	7782-49-2		97.8	mg/kg	109.2	82 - 133				09/04/11
MS			**QC Sample #64105**							
			Original 113057001							
Manganese	7439-96-5	369	184	mg/kg	190	70 - 130			N	09/04/11
Nickel	7440-02-0	11.4	105	mg/kg	108.1	70 - 130				09/04/11
Silver	7440-22-4	<0.096	107	mg/kg	111	70 - 130				09/04/11
Antimony	7440-36-0	<0.29	93.8	mg/kg	97	70 - 130				09/04/11
Barium	7440-39-3	63.8	121	mg/kg	125	70 - 130				09/04/11
Boron	7440-42-8	2.52	98.4	mg/kg	101.7	70 - 130				09/04/11
Beryllium	7440-41-7	0.320	104	mg/kg	107.4	70 - 130				09/04/11
Cadmium	7440-43-9	0.121	109	mg/kg	112.4	70 - 130				09/04/11
Chromium	7440-47-3	8.75	109	mg/kg	113	70 - 130				09/04/11
Cobalt	7440-48-4	8.94	105	mg/kg	108.8	70 - 130				09/04/11
Copper	7440-50-8	17.0	103	mg/kg	106.7	70 - 130				09/04/11
Vanadium	7440-62-2	56.6	117	mg/kg	121	70 - 130				09/04/11
Zinc	7440-66-6	51.0	107	mg/kg	110.3	70 - 130				09/04/11
Lead	7439-92-1	7.33	112	mg/kg	115.5	70 - 130				09/04/11
Mercury	7439-97-6	<0.048	2.48	mg/kg	128	70 - 130			X	09/04/11
Molybdenum	7439-98-7	0.416	112	mg/kg	115.4	70 - 130				09/04/11
Strontium	7440-24-6	25.7	115	mg/kg	118.7	70 - 130				09/04/11
Tin	7440-31-5	0.513	108	mg/kg	112.1	70 - 130				09/04/11
Uranium	7440-61-1	0.444	113	mg/kg	116.3	70 - 130				09/04/11
Arsenic	7440-38-2	2.91	110	mg/kg	113.8	70 - 130				09/04/11
Selenium	7782-49-2	1.37	109	mg/kg	112.2	70 - 130				09/04/11

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF113057

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
MSD			**QC Sample #64106**								
			Original	**113057001**					**Paired**	**64105**	
Manganese	7439-96-5	369	99.8	mg/kg	104.3	70 - 130	58.20	30	*	X	09/04/11
Nickel	7440-02-0	11.4	89.1	mg/kg	93.1	70 - 130	14.90	30			09/04/11
Silver	7440-22-4	<0.096	94.0	mg/kg	98.2	70 - 130	12.20	30			09/04/11
Antimony	7440-36-0	<0.29	83.3	mg/kg	87	70 - 130	10.90	30			09/04/11
Barium	7440-39-3	63.8	101	mg/kg	105.8	70 - 130	16.60	30			09/04/11
Boron	7440-42-8	2.52	85.9	mg/kg	89.8	70 - 130	12.40	30			09/04/11
Beryllium	7440-41-7	0.320	91.5	mg/kg	95.6	70 - 130	11.60	30			09/04/11
Cadmium	7440-43-9	0.121	95.4	mg/kg	99.6	70 - 130	12.10	30			09/04/11
Chromium	7440-47-3	8.75	89.9	mg/kg	93.9	70 - 130	18.50	30			09/04/11
Cobalt	7440-48-4	8.94	89.5	mg/kg	93.5	70 - 130	15.10	30			09/04/11
Copper	7440-50-8	17.0	87.0	mg/kg	90.8	70 - 130	16.10	30			09/04/11
Vanadium	7440-62-2	56.6	93.7	mg/kg	97.8	70 - 130	21.20	30			09/04/11
Zinc	7440-66-6	51.0	85.6	mg/kg	89.4	70 - 130	20.90	30			09/04/11
Lead	7439-92-1	7.33	95.8	mg/kg	100.1	70 - 130	14.30	30			09/04/11
Mercury	7439-97-6	<0.048	2.08	mg/kg	108.5	70 - 130	16.50	30		X	09/04/11
Molybdenum	7439-98-7	0.416	98.4	mg/kg	102.8	70 - 130	11.50	30			09/04/11
Strontium	7440-24-6	25.7	98.8	mg/kg	103.2	70 - 130	14.00	30			09/04/11
Tin	7440-31-5	0.513	95.3	mg/kg	99.6	70 - 130	11.80	30			09/04/11
Uranium	7440-61-1	0.444	97.5	mg/kg	101.8	70 - 130	13.30	30			09/04/11
Arsenic	7440-38-2	2.91	96.2	mg/kg	100.5	70 - 130	12.40	30			09/04/11
Selenium	7782-49-2	1.37	95.2	mg/kg	99.4	70 - 130	12.10	30			09/04/11

Date: 04 November 2011
To: CH2M Hill (technical representative)
From: Analytical Quality Associates, Inc.
Project: KW Floodplain
Subject: General Chemistry - Sample Data Groups (SDGs) WSCF113047, WSCF113057, WSCF113116, W06240, W06241 and W06242

INTRODUCTION

This memorandum presents the results of data validation for SDGs WSCF113047, WSCF113057 and WSCF113116 prepared by WSCF Analytical Laboratories and SDGs W06240, W06241 and W06242 prepared by TestAmerica Laboratories, Inc. 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
B2FXJ2	08/29/11	Soil	C	7196A (Cr VI)
B2FXJ3	08/29/11	Soil	C	7196A (Cr VI)
B2FXF7	08/29/11	Soil	C	7196A (Cr VI)
B2FXH8	08/29/11	Soil	C	7196A (Cr VI)
B2FXB4	08/29/11	Soil	C	7196A (Cr VI)
B2FXC5	08/29/11	Soil	C	7196A (Cr VI)
B2FXD6	08/29/11	Soil	C	7196A (Cr VI)
B2FXJ8	08/30/11	Soil	C	7196A (Cr VI)
B2FXJ9	08/30/11	Soil	C	7196A (Cr VI)
B2FXK0	08/30/11	Soil	C	7196A (Cr VI)
B2FXK1	08/30/11	Soil	C	7196A (Cr VI)
B2FXB5	08/30/11	Soil	C	7196A (Cr VI)
B2FXB6	08/30/11	Soil	C	7196A (Cr VI)
B2FXB7	08/30/11	Soil	C	7196A (Cr VI)
B2FXB8	08/30/11	Soil	C	7196A (Cr VI)
B2FXB9	08/30/11	Soil	C	7196A (Cr VI)
B2FXC0	08/30/11	Soil	C	7196A (Cr VI)
B2FXC1	08/30/11	Soil	C	7196A (Cr VI)
B2FXC2	08/30/11	Soil	C	7196A (Cr VI)
B2FXC3	08/30/11	Soil	C	7196A (Cr VI)
B2FXC4	08/30/11	Soil	C	7196A (Cr VI)
B2FXD0	08/31/11	Soil	C	7196A (Cr VI)
B2FXD1	09/07/11	Soil	C	7196A (Cr VI)
B2FXD2	09/07/11	Soil	C	7196A (Cr VI)
B2FXD3	09/07/11	Soil	C	7196A (Cr VI)
B2FXD4	09/07/11	Soil	C	7196A (Cr VI)
B2FXC6	08/31/11	Soil	C	7196A (Cr VI)
B2FXC7	08/31/11	Soil	C	7196A (Cr VI)
B2FXC8	08/31/11	Soil	C	7196A (Cr VI)
B2FXC9	08/31/11	Soil	C	7196A (Cr VI)

B2FXJ4	09/07/11	Soil	C	7196A (Cr VI)
B2FXJ5	08/31/11	Soil	C	7196A (Cr VI)
B2FXJ1	09/15/11	Soil	C	7196A (Cr VI)
B2H560	09/15/11	Soil	C	7196A (Cr VI)
B2H561	09/15/11	Soil	C	7196A (Cr VI)
B2H562	09/15/11	Soil	C	7196A (Cr VI)
B2H563	09/15/11	Soil	C	7196A (Cr VI)
B2FXF1	09/13/11	Soil	C	7196A (Cr VI)
B2FXF2	09/13/11	Soil	C	7196A (Cr VI)
B2FXF3	09/13/11	Soil	C	7196A (Cr VI)
B2FXF4	09/13/11	Soil	C	7196A (Cr VI)
B2FXF5	09/13/11	Soil	C	7196A (Cr VI)
B2FXF6	09/13/11	Soil	C	7196A (Cr VI)
B2FXF8	09/13/11	Soil	C	7196A (Cr VI)
B2FXF9	09/13/11	Soil	C	7196A (Cr VI)
B2FXH0	09/13/11	Soil	C	7196A (Cr VI)
B2FXH1	09/13/11	Soil	C	7196A (Cr VI)
B2FXH2	09/14/11	Soil	C	7196A (Cr VI)
B2FXH3	09/14/11	Soil	C	7196A (Cr VI)
B2FXH4	09/14/11	Soil	C	7196A (Cr VI)
B2FXH5	09/14/11	Soil	C	7196A (Cr VI)
B2FXH6	09/14/11	Soil	C	7196A (Cr VI)
B2FXH7	09/14/11	Soil	C	7196A (Cr VI)
B2FXH9	09/14/11	Soil	C	7196A (Cr VI)
B2FXJ0	09/14/11	Soil	C	7196A (Cr VI)
B2FXJ6	09/14/11	Soil	C	7196A (Cr VI)
B2FXJ7	09/14/11	Soil	C	7196A (Cr VI)
B2FXC6	08/31/11	Soil	C	7196A (Cr VI)
B2FXC7	08/31/11	Soil	C	7196A (Cr VI)
B2FXC8	08/31/11	Soil	C	7196A (Cr VI)
B2FXC9	08/31/11	Soil	C	7196A (Cr VI)
B2FXD0	08/31/11	Soil	C	7196A (Cr VI)
B2FXD1	09/07/11	Soil	C	7196A (Cr VI)
B2FXD2	09/07/11	Soil	C	7196A (Cr VI)
B2FXD3	09/07/11	Soil	C	7196A (Cr VI)
B2FXD4	09/07/11	Soil	C	7196A (Cr VI)
B2FXD5	09/12/11	Soil	C	7196A (Cr VI)
B2FXD7	09/12/11	Soil	C	7196A (Cr VI)
B2FXD8	09/12/11	Soil	C	7196A (Cr VI)
B2FXD9	09/12/11	Soil	C	7196A (Cr VI)
B2FXF0	09/12/11	Soil	C	7196A (Cr VI)
B2FXJ4	09/07/11	Soil	C	7196A (Cr VI)
B2FXJ5	08/31/11	Soil	C	7196A (Cr VI)

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 holding time requirements for chromium(VI) are extraction within 30 days of sample collection and analysis within 24 hours of extraction. Sample preservation requires chilling to 4 degrees Celsius.

The samples were extracted and 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.

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.

- **Accuracy**

Accuracy is evaluated by reviewing matrix spike sample results and laboratory control sample results. According to the SAP, the matrix spike sample accuracy limit is 70% to 130% and the laboratory control sample accuracy limit is specified by the DV procedure.

Matrix Spike Sample (MS)

All MS recoveries were acceptable with the following exceptions.

For SDG WSCF113047, the MS recovery for hexavalent chromium was < the lower acceptance limit. All hexavalent chromium 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.

For SDG WSCF113057, batch 189366, the MS recovery for hexavalent chromium was < the lower acceptance limit. All associated 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.

For SDG W06241, the MS recovery for hexavalent chromium was < the lower acceptance limit. All sample results that were detects should be qualified as estimates and flagged "J" and all non-detects sample results should be qualified as estimates and flagged "UJ." See the table in Appendix 2 for a listing of all affected sample results.

Laboratory Control Samples (LCSs)

All LCS recoveries were acceptable.

- **Precision**

Precision is evaluated by reviewing 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%. When duplicate RPDs exceed the limits and have associated results <5X the reporting limits with difference <2X the required detection limits no precision infraction occurred

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 were below the CRDLs.

- **Completeness**

SDGs WSCF113047, WSCF113057, WSCF113116, W06240, W06241 and W06242 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 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.

For SDG W06242, the collection date for samples B2FXD1, B2FXD2, B2FXD3, B2FXD4, B2FXD5, B2FXD7, B2FXD8, B2FXD9, B2FXF0, B2FXJ4 were incorrect.

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: WSCF113047, WSCF113057, WSCF113116, W06240, W06241, W06242	Reviewer: AQA	Project: KW Floodplain	Page 1 of 1
Analyte(s)	**Qualifier**	**Samples Affected**	**Reason**
Cr(VI)	UJ	B2FXJ2, B2FXJ3, B2FXF7, B2FXH8, B2FXB4, B2FXC5, B2FXD6, B2FXJ8, B2FXJ9, B2FXK0, B2FXK1, B2FXB5, B2FXB6, B2FXB7, B2FXB8, B2FXB9, B2FXC0, B2FXC1, B2FXC2, B2FXC3, B2FXF1, B2FXF2, B2FXF6, B2FXH0, B2FXH1, B2FXH2, B2FXH3, B2FXH4, B2FXH5, B2FXH6, B2FXH9, B2FXJ0, B2FXJ7	Low matrix spike recovery
Cr(VI)	J	B2FXF3, B2FXF4, B2FXF5, B2FXF8, B2FXF9, B2FXH7, B2FXJ6	Low matrix spike recovery

Comments: None

Appendix 3

Annotated Laboratory Reports

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113047

Sample # 113047001
SAF# F11-159
Sample ID B2FXJ2

Matrix SOIL
Sampled 08/29/11
Received 08/29/11

Test Performed	CAS #	Method	RQ		Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep											**09/06/11**
Cr(VI)											
Hexavalent chromium	18540-29-9	LA-265-403	UDN	UJ	<0.48		ug/g	5	0.48	2.4	09/07/11
ICPMS Prep											**09/02/11**
ICP-MS											
Manganese	7439-96-5	LA-505-412	N		368		mg/kg	1	0.10	1.0	09/04/11
Nickel	7440-02-0	LA-505-412			13.1		mg/kg	1	0.20	2.0	09/04/11
Silver	7440-22-4	LA-505-412	U		<0.10		mg/kg	1	0.10	1.0	09/04/11
Antimony	7440-36-0	LA-505-412	U		<0.30		mg/kg	1	0.30	3.0	09/04/11
Barium	7440-39-3	LA-505-412			64.9		mg/kg	1	0.20	2.0	09/04/11
Beryllium	7440-41-7	LA-505-412	B		0.322		mg/kg	1	0.10	0.51	09/04/11
Boron	7440-42-8	LA-505-412	B		2.75		mg/kg	1	0.51	5.1	09/04/11
Cadmium	7440-43-9	LA-505-412	B		0.274		mg/kg	1	0.10	1.0	09/04/11
Chromium	7440-47-3	LA-505-412			10.5		mg/kg	1	0.51	5.1	09/04/11
Cobalt	7440-48-4	LA-505-412			8.79		mg/kg	1	0.10	0.51	09/04/11
Copper	7440-50-8	LA-505-412			18.9		mg/kg	1	0.10	1.0	09/04/11
Vanadium	7440-62-2	LA-505-412			57.8		mg/kg	1	0.20	2.0	09/04/11
Zinc	7440-66-6	LA-505-412			64.8		mg/kg	1	0.81	5.1	09/04/11
Lead	7439-92-1	LA-505-412			11.1		mg/kg	1	0.10	1.0	09/04/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113047

Sample # 113047002
SAF# F11-159
Sample ID B2FXJ3

Matrix SOIL
Sampled 08/29/11
Received 08/29/11

Test Performed	CAS #	Method	RQ		Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep											**09/06/11**
Cr(VI)											
Hexavalent chromium	18540-29-9	LA-265-403	UN	UJ	<0.096		ug/g	1	0.096	0.48	09/07/11
ICPMS Prep											**09/02/11**
ICP-MS											
Manganese	7439-96-5	LA-505-412	BN		0.360		mg/kg	1	0.10	1.0	09/04/11
Nickel	7440-02-0	LA-505-412	U		<0.20		mg/kg	1	0.20	2.0	09/04/11
Silver	7440-22-4	LA-505-412	U		<0.10		mg/kg	1	0.10	1.0	09/04/11
Antimony	7440-36-0	LA-505-412	U		<0.30		mg/kg	1	0.30	3.0	09/04/11
Barium	7440-39-3	LA-505-412	B		0.278		mg/kg	1	0.20	2.0	09/04/11
Beryllium	7440-41-7	LA-505-412	U		<0.10		mg/kg	1	0.10	0.50	09/04/11
Boron	7440-42-8	LA-505-412	B		0.669		mg/kg	1	0.50	5.0	09/04/11
Cadmium	7440-43-9	LA-505-412	U		<0.10		mg/kg	1	0.10	1.0	09/04/11
Chromium	7440-47-3	LA-505-412	U		<0.50		mg/kg	1	0.50	5.0	09/04/11
Cobalt	7440-48-4	LA-505-412	U		<0.10		mg/kg	1	0.10	0.50	09/04/11
Copper	7440-50-8	LA-505-412	U		<0.10		mg/kg	1	0.10	1.0	09/04/11
Vanadium	7440-62-2	LA-505-412	B		0.227		mg/kg	1	0.20	2.0	09/04/11
Zinc	7440-66-6	LA-505-412	U		<0.80		mg/kg	1	0.80	5.0	09/04/11
Lead	7439-92-1	LA-505-412	U		<0.10		mg/kg	1	0.10	1.0	09/04/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113047

Sample # 113047003
SAF# F11-159
Sample ID B2FXF7

Matrix SOIL
Sampled 08/29/11
Received 08/29/11

Test Performed	CAS #	Method	RQ		Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep											**09/06/11**
Cr(VI)											
Hexavalent chromium	18540-29-9	LA-265-403	UDN	UJ	<0.51		ug/g	5	0.51	2.6	09/07/11
ICPMS Prep											**09/02/11**
ICP-MS											
Manganese	7439-96-5	LA-505-412	N		349		mg/kg	1	0.10	1.0	09/04/11
Nickel	7440-02-0	LA-505-412			12.6		mg/kg	1	0.20	2.0	09/04/11
Silver	7440-22-4	LA-505-412	U		<0.10		mg/kg	1	0.10	1.0	09/04/11
Antimony	7440-36-0	LA-505-412	U		<0.30		mg/kg	1	0.30	3.0	09/04/11
Barium	7440-39-3	LA-505-412			62.3		mg/kg	1	0.20	2.0	09/04/11
Beryllium	7440-41-7	LA-505-412	B		0.306		mg/kg	1	0.10	0.50	09/04/11
Boron	7440-42-8	LA-505-412	B		2.55		mg/kg	1	0.50	5.0	09/04/11
Cadmium	7440-43-9	LA-505-412	B		0.221		mg/kg	1	0.10	1.0	09/04/11
Chromium	7440-47-3	LA-505-412			9.54		mg/kg	1	0.50	5.0	09/04/11
Cobalt	7440-48-4	LA-505-412			8.61		mg/kg	1	0.10	0.50	09/04/11
Copper	7440-50-8	LA-505-412			17.9		mg/kg	1	0.10	1.0	09/04/11
Vanadium	7440-62-2	LA-505-412			57.0		mg/kg	1	0.20	2.0	09/04/11
Zinc	7440-66-6	LA-505-412			61.7		mg/kg	1	0.80	5.0	09/04/11
Lead	7439-92-1	LA-505-412			9.63		mg/kg	1	0.10	1.0	09/04/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113047

Sample # 113047004
SAF# F11-159
Sample ID B2FXH8

Matrix SOIL
Sampled 08/29/11
Received 08/29/11

Test Performed	CAS #	Method	RQ		Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep											**09/06/11**
Cr(VI)											
Hexavalent chromium	18540-29-9	LA-265-403	UDN	UJ	<0.48		ug/g	5	0.48	2.4	09/07/11
ICPMS Prep											**09/02/11**
ICP-MS											
Manganese	7439-96-5	LA-505-412	N		345		mg/kg	1	0.093	0.93	09/04/11
Nickel	7440-02-0	LA-505-412			11.6		mg/kg	1	0.19	1.9	09/04/11
Silver	7440-22-4	LA-505-412	U		<0.093		mg/kg	1	0.093	0.93	09/04/11
Antimony	7440-36-0	LA-505-412	U		<0.28		mg/kg	1	0.28	2.8	09/04/11
Barium	7440-39-3	LA-505-412			65.6		mg/kg	1	0.19	1.9	09/04/11
Beryllium	7440-41-7	LA-505-412	B		0.358		mg/kg	1	0.093	0.46	09/04/11
Boron	7440-42-8	LA-505-412	B		2.29		mg/kg	1	0.46	4.6	09/04/11
Cadmium	7440-43-9	LA-505-412	B		0.156		mg/kg	1	0.093	0.93	09/04/11
Chromium	7440-47-3	LA-505-412			10.6		mg/kg	1	0.46	4.6	09/04/11
Cobalt	7440-48-4	LA-505-412			8.38		mg/kg	1	0.093	0.46	09/04/11
Copper	7440-50-8	LA-505-412			16.7		mg/kg	1	0.093	0.93	09/04/11
Vanadium	7440-62-2	LA-505-412			54.9		mg/kg	1	0.19	1.9	09/04/11
Zinc	7440-66-6	LA-505-412			54.2		mg/kg	1	0.74	4.6	09/04/11
Lead	7439-92-1	LA-505-412			8.27		mg/kg	1	0.093	0.93	09/04/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113047

Sample # 113047005
SAF# F11-159
Sample ID B2FXB4

Matrix SOIL
Sampled 08/29/11
Received 08/29/11

Test Performed	CAS #	Method	RQ		Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep											**09/06/11**
Cr(VI)											
Hexavalent chromium	18540-29-9	LA-265-403	UDN	UJ	<0.45		ug/g	5	0.45	2.3	09/07/11
ICPMS Prep											**09/02/11**
ICP-MS											
Manganese	7439-96-5	LA-505-412	N		282		mg/kg	1	0.095	0.95	09/04/11
Nickel	7440-02-0	LA-505-412			12.6		mg/kg	1	0.19	1.9	09/04/11
Silver	7440-22-4	LA-505-412	U		<0.095		mg/kg	1	0.095	0.95	09/04/11
Antimony	7440-36-0	LA-505-412	U		<0.28		mg/kg	1	0.28	2.8	09/04/11
Barium	7440-39-3	LA-505-412			63.3		mg/kg	1	0.19	1.9	09/04/11
Beryllium	7440-41-7	LA-505-412	B		0.269		mg/kg	1	0.095	0.47	09/04/11
Boron	7440-42-8	LA-505-412	B		1.11		mg/kg	1	0.47	4.7	09/04/11
Cadmium	7440-43-9	LA-505-412	B		0.234		mg/kg	1	0.095	0.95	09/04/11
Chromium	7440-47-3	LA-505-412			12.3		mg/kg	1	0.47	4.7	09/04/11
Cobalt	7440-48-4	LA-505-412			6.12		mg/kg	1	0.095	0.47	09/04/11
Copper	7440-50-8	LA-505-412			15.6		mg/kg	1	0.095	0.95	09/04/11
Vanadium	7440-62-2	LA-505-412			36.3		mg/kg	1	0.19	1.9	09/04/11
Zinc	7440-66-6	LA-505-412			70.4		mg/kg	1	0.76	4.7	09/04/11
Lead	7439-92-1	LA-505-412			11.7		mg/kg	1	0.095	0.95	09/04/11

MDL = Minimum Detection
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DF = Dilution Factor
+ - Indicates more than nine qualifier

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113047

Sample # 113047006
SAF# F11-159
Sample ID B2FXC5

Matrix SOIL
Sampled 08/29/11
Received 08/29/11

Test Performed	CAS #	Method	RQ		Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep											**09/06/11**
Cr(VI)											
Hexavalent chromium	18540-29-9	LA-265-403	UDN	UJ	<0.49		ug/g	5	0.49	2.5	09/07/11
ICPMS Prep											**09/02/11**
ICP-MS											
Manganese	7439-96-5	LA-505-412	N		300		mg/kg	1	0.096	0.96	09/04/11
Nickel	7440-02-0	LA-505-412			13.1		mg/kg	1	0.19	1.9	09/04/11
Silver	7440-22-4	LA-505-412	U		<0.096		mg/kg	1	0.096	0.96	09/04/11
Antimony	7440-36-0	LA-505-412	U		<0.29		mg/kg	1	0.29	2.9	09/04/11
Barium	7440-39-3	LA-505-412			62.5		mg/kg	1	0.19	1.9	09/04/11
Beryllium	7440-41-7	LA-505-412	B		0.305		mg/kg	1	0.096	0.48	09/04/11
Boron	7440-42-8	LA-505-412	B		1.41		mg/kg	1	0.48	4.8	09/04/11
Cadmium	7440-43-9	LA-505-412	B		0.190		mg/kg	1	0.096	0.96	09/04/11
Chromium	7440-47-3	LA-505-412			12.4		mg/kg	1	0.48	4.8	09/04/11
Cobalt	7440-48-4	LA-505-412			6.72		mg/kg	1	0.096	0.48	09/04/11
Copper	7440-50-8	LA-505-412			14.7		mg/kg	1	0.096	0.96	09/04/11
Vanadium	7440-62-2	LA-505-412			37.6		mg/kg	1	0.19	1.9	09/04/11
Zinc	7440-66-6	LA-505-412			51.7		mg/kg	1	0.77	4.8	09/04/11
Lead	7439-92-1	LA-505-412			7.74		mg/kg	1	0.096	0.96	09/04/11

MDL = Minimum Detection
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DF = Dilution Factor
+ - Indicates more than nine qualifier

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113047

Sample # 113047007
SAF# F11-159
Sample ID B2FXD6

Matrix SOIL
Sampled 08/29/11
Received 08/29/11

Test Performed	CAS #	Method	RQ		Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep											**09/06/11**
Cr(VI)											
Hexavalent chromium	18540-29-9	LA-265-403	UDN	UJ	<0.50		ug/g	5	0.50	2.5	09/07/11
ICPMS Prep											**09/02/11**
ICP-MS											
Manganese	7439-96-5	LA-505-412	N		316		mg/kg	1	0.098	0.98	09/04/11
Nickel	7440-02-0	LA-505-412			12.5		mg/kg	1	0.20	2.0	09/04/11
Silver	7440-22-4	LA-505-412	U		<0.098		mg/kg	1	0.098	0.98	09/04/11
Antimony	7440-36-0	LA-505-412	U		<0.29		mg/kg	1	0.29	2.9	09/04/11
Barium	7440-39-3	LA-505-412			67.4		mg/kg	1	0.20	2.0	09/04/11
Beryllium	7440-41-7	LA-505-412	B		0.348		mg/kg	1	0.098	0.49	09/04/11
Boron	7440-42-8	LA-505-412	B		2.16		mg/kg	1	0.49	4.9	09/04/11
Cadmium	7440-43-9	LA-505-412	B		0.243		mg/kg	1	0.098	0.98	09/04/11
Chromium	7440-47-3	LA-505-412			10.2		mg/kg	1	0.49	4.9	09/04/11
Cobalt	7440-48-4	LA-505-412			7.42		mg/kg	1	0.098	0.49	09/04/11
Copper	7440-50-8	LA-505-412			15.8		mg/kg	1	0.098	0.98	09/04/11
Vanadium	7440-62-2	LA-505-412			46.1		mg/kg	1	0.20	2.0	09/04/11
Zinc	7440-66-6	LA-505-412			57.6		mg/kg	1	0.78	4.9	09/04/11
Lead	7439-92-1	LA-505-412			10.2		mg/kg	1	0.098	0.98	09/04/11

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)

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113057

Sample # 113057001
SAF# F11-159
Sample ID B2FXJ8

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed	CAS #	Method	RQ		Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep											**09/06/11**
Cr(VI)											
Hexavalent chromium	18540-29-9	LA-265-403	UDN	UJ	<0.47		ug/g	5	0.47	2.4	09/07/11
ICPMS Prep											**09/02/11**
ICP-MS											
Manganese	7439-96-5	LA-505-412	N		369		mg/kg	1	0.096	0.96	09/04/11
Nickel	7440-02-0	LA-505-412			11.4		mg/kg	1	0.19	1.9	09/04/11
Silver	7440-22-4	LA-505-412	U		<0.096		mg/kg	1	0.096	0.96	09/04/11
Antimony	7440-36-0	LA-505-412	U		<0.29		mg/kg	1	0.29	2.9	09/04/11
Barium	7440-39-3	LA-505-412			63.8		mg/kg	1	0.19	1.9	09/04/11
Beryllium	7440-41-7	LA-505-412	B		0.320		mg/kg	1	0.096	0.48	09/04/11
Boron	7440-42-8	LA-505-412	B		2.52		mg/kg	1	0.48	4.8	09/04/11
Cadmium	7440-43-9	LA-505-412	B		0.121		mg/kg	1	0.096	0.96	09/04/11
Chromium	7440-47-3	LA-505-412			8.75		mg/kg	1	0.48	4.8	09/04/11
Cobalt	7440-48-4	LA-505-412			8.94		mg/kg	1	0.096	0.48	09/04/11
Copper	7440-50-8	LA-505-412			17.0		mg/kg	1	0.096	0.96	09/04/11
Vanadium	7440-62-2	LA-505-412			56.6		mg/kg	1	0.19	1.9	09/04/11
Zinc	7440-66-6	LA-505-412			51.0		mg/kg	1	0.77	4.8	09/04/11
Lead	7439-92-1	LA-505-412			7.33		mg/kg	1	0.096	0.96	09/04/11

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)

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113057

Sample # 113057002
SAF# F11-159
Sample ID B2FXJ9

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed	CAS #	Method	RQ		Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep											**09/06/11**
Cr(VI)											
Hexavalent chromium	18540-29-9	LA-265-403	UDN	UJ	<0.48		ug/g	5	0.48	2.4	09/07/11
ICPMS Prep											**09/02/11**
ICP-MS											
Manganese	7439-96-5	LA-505-412	N		354		mg/kg	1	0.10	1.0	09/04/11
Nickel	7440-02-0	LA-505-412			14.5		mg/kg	1	0.20	2.0	09/04/11
Silver	7440-22-4	LA-505-412	U		<0.10		mg/kg	1	0.10	1.0	09/04/11
Antimony	7440-36-0	LA-505-412	U		<0.30		mg/kg	1	0.30	3.0	09/04/11
Barium	7440-39-3	LA-505-412			69.0		mg/kg	1	0.20	2.0	09/04/11
Beryllium	7440-41-7	LA-505-412	B		0.332		mg/kg	1	0.10	0.51	09/04/11
Boron	7440-42-8	LA-505-412	B		2.17		mg/kg	1	0.51	5.1	09/04/11
Cadmium	7440-43-9	LA-505-412	B		0.124		mg/kg	1	0.10	1.0	09/04/11
Chromium	7440-47-3	LA-505-412			9.70		mg/kg	1	0.51	5.1	09/04/11
Cobalt	7440-48-4	LA-505-412			9.09		mg/kg	1	0.10	0.51	09/04/11
Copper	7440-50-8	LA-505-412			18.3		mg/kg	1	0.10	1.0	09/04/11
Vanadium	7440-62-2	LA-505-412			60.5		mg/kg	1	0.20	2.0	09/04/11
Zinc	7440-66-6	LA-505-412			54.4		mg/kg	1	0.81	5.1	09/04/11
Lead	7439-92-1	LA-505-412			7.64		mg/kg	1	0.10	1.0	09/04/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113057

Sample # 113057003
SAF# F11-159
Sample ID B2FXK0

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed	CAS #	Method	RQ		Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep											**09/06/11**
Cr(VI)											
Hexavalent chromium	18540-29-9	LA-265-403	UDN	UJ	<0.46		ug/g	5	0.46	2.3	09/07/11
ICPMS Prep											**09/02/11**
ICP-MS											
Manganese	7439-96-5	LA-505-412	N		403		mg/kg	1	0.10	1.0	09/04/11
Nickel	7440-02-0	LA-505-412			12.9		mg/kg	1	0.20	2.0	09/04/11
Silver	7440-22-4	LA-505-412	U		<0.10		mg/kg	1	0.10	1.0	09/04/11
Antimony	7440-36-0	LA-505-412	U		<0.30		mg/kg	1	0.30	3.0	09/04/11
Barium	7440-39-3	LA-505-412			76.6		mg/kg	1	0.20	2.0	09/04/11
Beryllium	7440-41-7	LA-505-412	B		0.398		mg/kg	1	0.10	0.50	09/04/11
Boron	7440-42-8	LA-505-412	B		2.28		mg/kg	1	0.50	5.0	09/04/11
Cadmium	7440-43-9	LA-505-412	B		0.117		mg/kg	1	0.10	1.0	09/04/11
Chromium	7440-47-3	LA-505-412			10.6		mg/kg	1	0.50	5.0	09/04/11
Cobalt	7440-48-4	LA-505-412			9.60		mg/kg	1	0.10	0.50	09/04/11
Copper	7440-50-8	LA-505-412			18.9		mg/kg	1	0.10	1.0	09/04/11
Vanadium	7440-62-2	LA-505-412			59.0		mg/kg	1	0.20	2.0	09/04/11
Zinc	7440-66-6	LA-505-412			53.5		mg/kg	1	0.80	5.0	09/04/11
Lead	7439-92-1	LA-505-412			8.07		mg/kg	1	0.10	1.0	09/04/11

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)

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113057

Sample # 113057004
SAF# F11-159
Sample ID B2FXK1

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep										**09/06/11**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UDN UJ	<0.50		ug/g	5	0.50	2.5	09/07/11
ICPMS Prep										**09/02/11**
ICP-MS										
Manganese	7439-96-5	LA-505-412	N	396		mg/kg	1	0.10	1.0	09/04/11
Nickel	7440-02-0	LA-505-412		13.3		mg/kg	1	0.20	2.0	09/04/11
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/04/11
Antimony	7440-36-0	LA-505-412	U	<0.30		mg/kg	1	0.30	3.0	09/04/11
Barium	7440-39-3	LA-505-412		76.0		mg/kg	1	0.20	2.0	09/04/11
Beryllium	7440-41-7	LA-505-412	B	0.317		mg/kg	1	0.10	0.50	09/04/11
Boron	7440-42-8	LA-505-412	B	2.07		mg/kg	1	0.50	5.0	09/04/11
Cadmium	7440-43-9	LA-505-412	B	0.186		mg/kg	1	0.10	1.0	09/04/11
Chromium	7440-47-3	LA-505-412		16.3		mg/kg	1	0.50	5.0	09/04/11
Cobalt	7440-48-4	LA-505-412		9.96		mg/kg	1	0.10	0.50	09/04/11
Copper	7440-50-8	LA-505-412		19.0		mg/kg	1	0.10	1.0	09/04/11
Vanadium	7440-62-2	LA-505-412		61.0		mg/kg	1	0.20	2.0	09/04/11
Zinc	7440-66-6	LA-505-412		57.5		mg/kg	1	0.80	5.0	09/04/11
Lead	7439-92-1	LA-505-412		12.9		mg/kg	1	0.10	1.0	09/04/11

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)

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113057

Sample # 113057005
SAF# F11-159
Sample ID B2FXB5

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep										**09/06/11**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UDN UJ	<0.50		ug/g	5	0.50	2.5	09/07/11
ICPMS Prep										**09/02/11**
ICP-MS										
Manganese	7439-96-5	LA-505-412	N	355		mg/kg	1	0.098	0.98	09/04/11
Nickel	7440-02-0	LA-505-412		11.9		mg/kg	1	0.20	2.0	09/04/11
Silver	7440-22-4	LA-505-412	U	<0.098		mg/kg	1	0.098	0.98	09/04/11
Antimony	7440-36-0	LA-505-412	U	<0.29		mg/kg	1	0.29	2.9	09/04/11
Barium	7440-39-3	LA-505-412		63.7		mg/kg	1	0.20	2.0	09/04/11
Beryllium	7440-41-7	LA-505-412	B	0.322		mg/kg	1	0.098	0.49	09/04/11
Boron	7440-42-8	LA-505-412	B	3.08		mg/kg	1	0.49	4.9	09/04/11
Cadmium	7440-43-9	LA-505-412	B	0.229		mg/kg	1	0.098	0.98	09/04/11
Chromium	7440-47-3	LA-505-412		8.72		mg/kg	1	0.49	4.9	09/04/11
Cobalt	7440-48-4	LA-505-412		9.07		mg/kg	1	0.098	0.49	09/04/11
Copper	7440-50-8	LA-505-412		18.8		mg/kg	1	0.098	0.98	09/04/11
Vanadium	7440-62-2	LA-505-412		61.9		mg/kg	1	0.20	2.0	09/04/11
Zinc	7440-66-6	LA-505-412		58.5		mg/kg	1	0.78	4.9	09/04/11
Lead	7439-92-1	LA-505-412		8.13		mg/kg	1	0.098	0.98	09/04/11

MDL = Minimum Detection
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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)

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113057

Sample # 113057006
SAF# F11-159
Sample ID B2FXB6

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed	CAS #	Method	RQ		Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep											**09/06/11**
Cr(VI)											
Hexavalent chromium	18540-29-9	LA-265-403	UDN	UJ	<0.51		ug/g	5	0.51	2.6	09/07/11
ICPMS Prep											**09/02/11**
ICP-MS											
Manganese	7439-96-5	LA-505-412	N		382		mg/kg	1	0.094	0.94	09/04/11
Nickel	7440-02-0	LA-505-412			12.0		mg/kg	1	0.19	1.9	09/04/11
Silver	7440-22-4	LA-505-412	U		<0.094		mg/kg	1	0.094	0.94	09/04/11
Antimony	7440-36-0	LA-505-412	U		<0.28		mg/kg	1	0.28	2.8	09/04/11
Barium	7440-39-3	LA-505-412			76.3		mg/kg	1	0.19	1.9	09/04/11
Beryllium	7440-41-7	LA-505-412	B		0.381		mg/kg	1	0.094	0.47	09/04/11
Boron	7440-42-8	LA-505-412	B		3.48		mg/kg	1	0.47	4.7	09/04/11
Cadmium	7440-43-9	LA-505-412	B		0.181		mg/kg	1	0.094	0.94	09/04/11
Chromium	7440-47-3	LA-505-412			11.0		mg/kg	1	0.47	4.7	09/04/11
Cobalt	7440-48-4	LA-505-412			8.61		mg/kg	1	0.094	0.47	09/04/11
Copper	7440-50-8	LA-505-412			16.8		mg/kg	1	0.094	0.94	09/04/11
Vanadium	7440-62-2	LA-505-412			55.9		mg/kg	1	0.19	1.9	09/04/11
Zinc	7440-66-6	LA-505-412			50.9		mg/kg	1	0.75	4.7	09/04/11
Lead	7439-92-1	LA-505-412			8.48		mg/kg	1	0.094	0.94	09/04/11

MDL = Minimum Detection
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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)

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113057

Sample # 113057007
SAF# F11-159
Sample ID B2FXB7

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed	CAS #	Method	RQ		Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep											**09/06/11**
Cr(VI)											
Hexavalent chromium	18540-29-9	LA-265-403	UDN	UJ	<0.48		ug/g	5	0.48	2.4	09/07/11
ICPMS Prep											**09/02/11**
ICP-MS											
Manganese	7439-96-5	LA-505-412	N		379		mg/kg	1	0.096	0.96	09/04/11
Nickel	7440-02-0	LA-505-412			13.4		mg/kg	1	0.19	1.9	09/04/11
Silver	7440-22-4	LA-505-412	U		<0.096		mg/kg	1	0.096	0.96	09/04/11
Antimony	7440-36-0	LA-505-412	U		<0.29		mg/kg	1	0.29	2.9	09/04/11
Barium	7440-39-3	LA-505-412			70.8		mg/kg	1	0.19	1.9	09/04/11
Beryllium	7440-41-7	LA-505-412	B		0.346		mg/kg	1	0.096	0.48	09/04/11
Boron	7440-42-8	LA-505-412	B		2.36		mg/kg	1	0.48	4.8	09/04/11
Cadmium	7440-43-9	LA-505-412	B		0.150		mg/kg	1	0.096	0.96	09/04/11
Chromium	7440-47-3	LA-505-412			12.5		mg/kg	1	0.48	4.8	09/04/11
Cobalt	7440-48-4	LA-505-412			9.73		mg/kg	1	0.096	0.48	09/04/11
Copper	7440-50-8	LA-505-412			18.8		mg/kg	1	0.096	0.96	09/04/11
Vanadium	7440-62-2	LA-505-412			61.5		mg/kg	1	0.19	1.9	09/04/11
Zinc	7440-66-6	LA-505-412			58.1		mg/kg	1	0.77	4.8	09/04/11
Lead	7439-92-1	LA-505-412			8.85		mg/kg	1	0.096	0.96	09/04/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113057

Sample # 113057008
SAF# F11-159
Sample ID B2FXB8

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed	CAS #	Method	RQ		Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep											**09/06/11**
Cr(VI)											
Hexavalent chromium	18540-29-9	LA-265-403	UDN	UJ	<0.51		ug/g	5	0.51	2.5	09/07/11
ICPMS Prep											**09/02/11**
ICP-MS											
Manganese	7439-96-5	LA-505-412	N		388		mg/kg	1	0.099	0.99	09/04/11
Nickel	7440-02-0	LA-505-412			13.4		mg/kg	1	0.20	2.0	09/04/11
Silver	7440-22-4	LA-505-412	U		<0.099		mg/kg	1	0.099	0.99	09/04/11
Antimony	7440-36-0	LA-505-412	U		<0.30		mg/kg	1	0.30	3.0	09/04/11
Barium	7440-39-3	LA-505-412			71.2		mg/kg	1	0.20	2.0	09/04/11
Beryllium	7440-41-7	LA-505-412	B		0.391		mg/kg	1	0.099	0.49	09/04/11
Boron	7440-42-8	LA-505-412	B		2.48		mg/kg	1	0.49	4.9	09/04/11
Cadmium	7440-43-9	LA-505-412	B		0.183		mg/kg	1	0.099	0.99	09/04/11
Chromium	7440-47-3	LA-505-412			12.1		mg/kg	1	0.49	4.9	09/04/11
Cobalt	7440-48-4	LA-505-412			10.0		mg/kg	1	0.099	0.49	09/04/11
Copper	7440-50-8	LA-505-412			18.9		mg/kg	1	0.099	0.99	09/04/11
Vanadium	7440-62-2	LA-505-412			64.1		mg/kg	1	0.20	2.0	09/04/11
Zinc	7440-66-6	LA-505-412			59.7		mg/kg	1	0.79	4.9	09/04/11
Lead	7439-92-1	LA-505-412			8.48		mg/kg	1	0.099	0.99	09/04/11

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)

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113057

Sample # 113057009
SAF# F11-159
Sample ID B2FXB9

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed	CAS #	Method	RQ		Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep											**09/06/11**
Cr(VI)											
Hexavalent chromium	18540-29-9	LA-265-403	UDN	UJ	<0.52		ug/g	5	0.52	2.6	09/07/11
ICPMS Prep											**09/02/11**
ICP-MS											
Manganese	7439-96-5	LA-505-412	N		384		mg/kg	1	0.097	0.97	09/04/11
Nickel	7440-02-0	LA-505-412			13.4		mg/kg	1	0.19	1.9	09/04/11
Silver	7440-22-4	LA-505-412	U		<0.097		mg/kg	1	0.097	0.97	09/04/11
Antimony	7440-36-0	LA-505-412	U		<0.29		mg/kg	1	0.29	2.9	09/04/11
Barium	7440-39-3	LA-505-412			72.3		mg/kg	1	0.19	1.9	09/04/11
Beryllium	7440-41-7	LA-505-412	B		0.426		mg/kg	1	0.097	0.49	09/04/11
Boron	7440-42-8	LA-505-412	B		2.40		mg/kg	1	0.49	4.9	09/04/11
Cadmium	7440-43-9	LA-505-412	B		0.188		mg/kg	1	0.097	0.97	09/04/11
Chromium	7440-47-3	LA-505-412			11.3		mg/kg	1	0.49	4.9	09/04/11
Cobalt	7440-48-4	LA-505-412			9.65		mg/kg	1	0.097	0.49	09/04/11
Copper	7440-50-8	LA-505-412			18.6		mg/kg	1	0.097	0.97	09/04/11
Vanadium	7440-62-2	LA-505-412			62.8		mg/kg	1	0.19	1.9	09/04/11
Zinc	7440-66-6	LA-505-412			60.6		mg/kg	1	0.78	4.9	09/04/11
Lead	7439-92-1	LA-505-412			9.25		mg/kg	1	0.097	0.97	09/04/11

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)

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113057

Sample # 113057010
SAF# F11-159
Sample ID B2FXC0

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep										**09/06/11**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UDN UJ	<0.48		ug/g	5	0.48	2.4	09/07/11
ICPMS Prep										**09/02/11**
ICP-MS										
Manganese	7439-96-5	LA-505-412	N	348		mg/kg	1	0.10	1.0	09/04/11
Nickel	7440-02-0	LA-505-412		12.0		mg/kg	1	0.20	2.0	09/04/11
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/04/11
Antimony	7440-36-0	LA-505-412	U	<0.30		mg/kg	1	0.30	3.0	09/04/11
Barium	7440-39-3	LA-505-412		64.1		mg/kg	1	0.20	2.0	09/04/11
Beryllium	7440-41-7	LA-505-412	B	0.322		mg/kg	1	0.10	0.50	09/04/11
Boron	7440-42-8	LA-505-412	B	2.06		mg/kg	1	0.50	5.0	09/04/11
Cadmium	7440-43-9	LA-505-412	B	0.102		mg/kg	1	0.10	1.0	09/04/11
Chromium	7440-47-3	LA-505-412		8.96		mg/kg	1	0.50	5.0	09/04/11
Cobalt	7440-48-4	LA-505-412		9.01		mg/kg	1	0.10	0.50	09/04/11
Copper	7440-50-8	LA-505-412		17.4		mg/kg	1	0.10	1.0	09/04/11
Vanadium	7440-62-2	LA-505-412		59.2		mg/kg	1	0.20	2.0	09/04/11
Zinc	7440-66-6	LA-505-412		52.4		mg/kg	1	0.80	5.0	09/04/11
Lead	7439-92-1	LA-505-412		7.05		mg/kg	1	0.10	1.0	09/04/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113057

Sample # 113057011
SAF# F11-159
Sample ID B2FXC1

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed	CAS #	Method	RQ		Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep											**09/06/11**
Cr(VI)											
Hexavalent chromium	18540-29-9	LA-265-403	UDN	UJ	<0.49		ug/g	5	0.49	2.4	09/07/11
ICPMS Prep											**09/02/11**
ICP-MS											
Manganese	7439-96-5	LA-505-412	N		346		mg/kg	1	0.10	1.0	09/04/11
Nickel	7440-02-0	LA-505-412			12.8		mg/kg	1	0.20	2.0	09/04/11
Silver	7440-22-4	LA-505-412	U		<0.10		mg/kg	1	0.10	1.0	09/04/11
Antimony	7440-36-0	LA-505-412	U		<0.30		mg/kg	1	0.30	3.0	09/04/11
Barium	7440-39-3	LA-505-412			70.7		mg/kg	1	0.20	2.0	09/04/11
Beryllium	7440-41-7	LA-505-412	B		0.295		mg/kg	1	0.10	0.50	09/04/11
Boron	7440-42-8	LA-505-412	B		2.28		mg/kg	1	0.50	5.0	09/04/11
Cadmium	7440-43-9	LA-505-412	B		0.132		mg/kg	1	0.10	1.0	09/04/11
Chromium	7440-47-3	LA-505-412			11.6		mg/kg	1	0.50	5.0	09/04/11
Cobalt	7440-48-4	LA-505-412			8.73		mg/kg	1	0.10	0.50	09/04/11
Copper	7440-50-8	LA-505-412			18.4		mg/kg	1	0.10	1.0	09/04/11
Vanadium	7440-62-2	LA-505-412			57.9		mg/kg	1	0.20	2.0	09/04/11
Zinc	7440-66-6	LA-505-412			55.8		mg/kg	1	0.80	5.0	09/04/11
Lead	7439-92-1	LA-505-412			9.29		mg/kg	1	0.10	1.0	09/04/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113057

Sample # 113057012
SAF# F11-159
Sample ID B2FXC2

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed	CAS #	Method	RQ		Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep											**09/06/11**
Cr(VI)											
Hexavalent chromium	18540-29-9	LA-265-403	UDN	UJ	<0.50		ug/g	5	0.50	2.5	09/07/11
ICPMS Prep											**09/02/11**
ICP-MS											
Manganese	7439-96-5	LA-505-412	N		365		mg/kg	1	0.10	1.0	09/04/11
Nickel	7440-02-0	LA-505-412			12.0		mg/kg	1	0.20	2.0	09/04/11
Silver	7440-22-4	LA-505-412	U		<0.10		mg/kg	1	0.10	1.0	09/04/11
Antimony	7440-36-0	LA-505-412	U		<0.30		mg/kg	1	0.30	3.0	09/04/11
Barium	7440-39-3	LA-505-412			69.7		mg/kg	1	0.20	2.0	09/04/11
Beryllium	7440-41-7	LA-505-412	B		0.329		mg/kg	1	0.10	0.51	09/04/11
Boron	7440-42-8	LA-505-412	B		2.07		mg/kg	1	0.51	5.1	09/04/11
Cadmium	7440-43-9	LA-505-412	B		0.205		mg/kg	1	0.10	1.0	09/04/11
Chromium	7440-47-3	LA-505-412			11.1		mg/kg	1	0.51	5.1	09/04/11
Cobalt	7440-48-4	LA-505-412			9.58		mg/kg	1	0.10	0.51	09/04/11
Copper	7440-50-8	LA-505-412			18.1		mg/kg	1	0.10	1.0	09/04/11
Vanadium	7440-62-2	LA-505-412			58.9		mg/kg	1	0.20	2.0	09/04/11
Zinc	7440-66-6	LA-505-412			62.4		mg/kg	1	0.81	5.1	09/04/11
Lead	7439-92-1	LA-505-412			9.15		mg/kg	1	0.10	1.0	09/04/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113057

Sample # 113057013
SAF# F11-159
Sample ID B2FXC3

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed	CAS #	Method	RQ		Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep											**09/06/11**
Cr(VI)											
Hexavalent chromium	18540-29-9	LA-265-403	UDN	UJ	<0.49		ug/g	5	0.49	2.5	09/07/11
ICPMS Prep											**09/02/11**
ICP-MS											
Manganese	7439-96-5	LA-505-412	N		379		mg/kg	1	0.096	0.96	09/04/11
Nickel	7440-02-0	LA-505-412			13.3		mg/kg	1	0.19	1.9	09/04/11
Silver	7440-22-4	LA-505-412	U		<0.096		mg/kg	1	0.096	0.96	09/04/11
Antimony	7440-36-0	LA-505-412	U		<0.29		mg/kg	1	0.29	2.9	09/04/11
Barium	7440-39-3	LA-505-412			68.6		mg/kg	1	0.19	1.9	09/04/11
Beryllium	7440-41-7	LA-505-412	B		0.405		mg/kg	1	0.096	0.48	09/04/11
Boron	7440-42-8	LA-505-412	B		1.92		mg/kg	1	0.48	4.8	09/04/11
Cadmium	7440-43-9	LA-505-412	B		0.314		mg/kg	1	0.096	0.96	09/04/11
Chromium	7440-47-3	LA-505-412			10.1		mg/kg	1	0.48	4.8	09/04/11
Cobalt	7440-48-4	LA-505-412			8.94		mg/kg	1	0.096	0.48	09/04/11
Copper	7440-50-8	LA-505-412			22.7		mg/kg	1	0.096	0.96	09/04/11
Vanadium	7440-62-2	LA-505-412			59.9		mg/kg	1	0.19	1.9	09/04/11
Zinc	7440-66-6	LA-505-412			73.3		mg/kg	1	0.77	4.8	09/04/11
Lead	7439-92-1	LA-505-412			13.1		mg/kg	1	0.096	0.96	09/04/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113057

Sample # 113057014
SAF# F11-159
Sample ID B2FXC4

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep										**09/08/11**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UD	<0.50		ug/g	5	0.50	2.5	09/08/11
ICPMS Prep										**09/02/11**
ICP-MS										
Manganese	7439-96-5	LA-505-412	N	362		mg/kg	1	0.10	1.0	09/04/11
Nickel	7440-02-0	LA-505-412		14.6		mg/kg	1	0.21	2.1	09/04/11
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	09/04/11
Antimony	7440-36-0	LA-505-412	U	<0.31		mg/kg	1	0.31	3.1	09/04/11
Barium	7440-39-3	LA-505-412		76.5		mg/kg	1	0.21	2.1	09/04/11
Beryllium	7440-41-7	LA-505-412	B	0.396		mg/kg	1	0.10	0.51	09/04/11
Boron	7440-42-8	LA-505-412	B	3.04		mg/kg	1	0.51	5.1	09/04/11
Cadmium	7440-43-9	LA-505-412	B	0.171		mg/kg	1	0.10	1.0	09/04/11
Chromium	7440-47-3	LA-505-412		17.6		mg/kg	1	0.51	5.1	09/04/11
Cobalt	7440-48-4	LA-505-412		8.49		mg/kg	1	0.10	0.51	09/04/11
Copper	7440-50-8	LA-505-412		17.4		mg/kg	1	0.10	1.0	09/04/11
Vanadium	7440-62-2	LA-505-412		50.4		mg/kg	1	0.21	2.1	09/04/11
Zinc	7440-66-6	LA-505-412		58.0		mg/kg	1	0.82	5.1	09/04/11
Lead	7439-92-1	LA-505-412		9.90		mg/kg	1	0.10	1.0	09/04/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113116

Sample # 113116001
SAF# F11-159
Sample ID B2FXD0

Matrix SOIL
Sampled 08/31/11
Received 09/07/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep										**09/08/11**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.098		ug/g	1	0.098	0.49	09/08/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113116

Sample # 113116002
SAF# F11-159
Sample ID B2FXD1

Matrix SOIL
Sampled 09/07/11
Received 09/07/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep										**09/08/11**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.51	09/08/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113116

Sample # 113116003
SAF# F11-159
Sample ID B2FXD2

Matrix SOIL
Sampled 09/07/11
Received 09/07/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep										**09/08/11**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.50	09/08/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113116

Sample # 113116004
SAF# F11-159
Sample ID B2FXD3

Matrix SOIL
Sampled 09/07/11
Received 09/07/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep										**09/08/11**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.52	09/08/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113116

Sample # 113116005
SAF# F11-159
Sample ID B2FXD4

Matrix SOIL
Sampled 09/07/11
Received 09/07/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep										**09/08/11**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.50		ug/g	5	0.50	2.5	09/08/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113116

Sample # 113116006
SAF# F11-159
Sample ID B2FXC6

Matrix SOIL
Sampled 08/31/11
Received 09/07/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep										**09/08/11**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.52	09/08/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113116

Sample # 113116007
SAF# F11-159
Sample ID B2FXC7

Matrix SOIL
Sampled 08/31/11
Received 09/07/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep										**09/08/11**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.091		ug/g	1	0.091	0.45	09/08/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113116

Sample # 113116008
SAF# F11-159
Sample ID B2FXC8

Matrix SOIL
Sampled 08/31/11
Received 09/07/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep										**09/08/11**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.095		ug/g	1	0.095	0.47	09/08/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113116

Sample # 113116009
SAF# F11-159
Sample ID B2FXC9

Matrix SOIL
Sampled 08/31/11
Received 09/07/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep										**09/08/11**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.094		ug/g	1	0.094	0.47	09/08/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113116

Sample # 113116010
SAF# F11-159
Sample ID B2FXJ4

Matrix SOIL
Sampled 09/07/11
Received 09/07/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep										**09/08/11**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.51	09/08/11

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

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF113116

Sample # 113116011
SAF# F11-159
Sample ID B2FXJ5

Matrix SOIL
Sampled 08/31/11
Received 09/07/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep										**09/08/11**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.51	09/08/11

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)

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06240	**Collection Date:**	9/15/2011 10:45:00 AM
Lot-Sample No.:	J1I270475-1	**Report No. :**	48753	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXJ1	**COC No. :**	F11-159-084	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC | MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271051	7196_CR6			**Work Order:**	MMQ9K1AA		**Report DB ID:**	9MMQ9K10				
HEXCHROME	***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*(1.)*	9/28/11 05:25 p		2.5007	
							1.55E-01	*N/A*			g	
Batch: 1271144	9310_ALPHABETA_GPC			**Work Order:**	MMQ9K1AD		**Report DB ID:**	9MMQ9K10				
ALPHA	***8.02E+00***		4.4E+00	7.2E+00	6.06E+00	pCi/g	100%	*(1.3)*	10/11/11 06:43 a		0.0505	GPC10C
						2.51E+00	1.00E+01	*(2.2)*			g	
Batch: 1271145	9310_ALPHABETA_GPC			**Work Order:**	MMQ9K1AE		**Report DB ID:**	9MMQ9K10				
BETA	***2.39E+01***		4.1E+00	6.6E+00	4.87E+00	pCi/g	100%	*(4.9)*	10/6/11 03:30 p		0.2009	GPC28D
						2.26E+00	1.50E+01	*(7.3)*			g	
Batch: 1271147	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMQ9K1AC		**Report DB ID:**	9MMQ9K10				
STRONTIUM	***1.25E-01***	U	8.5E-02	9.1E-02	1.68E-01	pCi/g	54%	*0.75*	10/8/11 07:56 a		6.01	GPC32B
						7.80E-02		*(2.8)*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06240	**Collection Date:**	9/15/2011 11:16:00 AM
Lot-Sample No.:	J1I270475-4	**Report No. :**	48753	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2H560	**COC No. :**	F11-159-084	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271051	7196_CR6			**Work Order:**	MMQ9J1AA		**Report DB ID:**	9MMQ9J10				
HEXCHROME	***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*(1.)*	9/28/11 05:25 p		2.5066	
							1.55E-01	*N/A*			g	
Batch: 1271144	9310_ALPHABETA_GPC			**Work Order:**	MMQ9J1AD		**Report DB ID:**	9MMQ9J10				
ALPHA	***8.95E+00***		4.4E+00	7.8E+00	5.42E+00	pCi/g	100%	*(1.7)*	10/11/11 06:43 a		0.0506	GPC10B
						2.17E+00	1.00E+01	*(2.3)*			g	
Batch: 1271145	9310_ALPHABETA_GPC			**Work Order:**	MMQ9J1AE		**Report DB ID:**	9MMQ9J10				
BETA	***2.77E+01***		4.2E+00	7.4E+00	4.64E+00	pCi/g	100%	*(6.)*	10/6/11 03:30 p		0.2008	GPC28C
						2.15E+00	1.50E+01	*(7.5)*			g	
Batch: 1271147	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMQ9J1AC		**Report DB ID:**	9MMQ9J10				
STRONTIUM	***9.65E-02***	U	8.2E-02	8.6E-02	1.68E-01	pCi/g	53%	*0.57*	10/8/11 07:56 a		6.04	GPC31D
						7.79E-02		*(2.3)*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06240	**Collection Date:**	9/15/2011 11:35:00 AM
Lot-Sample No.:	J1I270475-3	**Report No. :**	48753	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2H561	**COC No. :**	F11-159-084	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271051	7196_CR6			**Work Order:**	MMQ9F1AA		**Report DB ID:**	9MMQ9F10				
HEXCHROME	***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*(1.)*	9/28/11 05:25 p		2.5068	
							1.55E-01	*N/A*			g	
Batch: 1271144	9310_ALPHABETA_GPC			**Work Order:**	MMQ9F1AD		**Report DB ID:**	9MMQ9F10				
ALPHA	***9.16E+00***		4.2E+00	7.8E+00	4.45E+00	pCi/g	100%	*(2.1)*	10/11/11 06:43 a		0.0505	GPC10A
						1.70E+00	1.00E+01	*(2.4)*			g	
Batch: 1271145	9310_ALPHABETA_GPC			**Work Order:**	MMQ9F1AE		**Report DB ID:**	9MMQ9F10				
BETA	***2.70E+01***		4.2E+00	7.2E+00	4.66E+00	pCi/g	100%	*(5.8)*	10/6/11 03:30 p		0.2007	GPC28B
						2.16E+00	1.50E+01	*(7.5)*			g	
Batch: 1271147	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMQ9F1AC		**Report DB ID:**	9MMQ9F10				
STRONTIUM	***1.13E-01***	U	8.4E-02	8.9E-02	1.70E-01	pCi/g	54%	*0.66*	10/8/11 07:56 a		6.01	GPC31A
						7.90E-02		*(2.5)*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06240	**Collection Date:**	9/15/2011 11:45:00 AM
Lot-Sample No.:	J1I270475-2	**Report No. :**	48753	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2H562	**COC No. :**	F11-159-084	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271051	7196_CR6			**Work Order:**	MMQ9C1AA		**Report DB ID:**	9MMQ9C10				
HEXCHROME	***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*(1.)*	9/28/11 05:25 p		2.505	
							1.55E-01	*N/A*			g	
Batch: 1271144	9310_ALPHABETA_GPC			**Work Order:**	MMQ9C1AD		**Report DB ID:**	9MMQ9C10				
ALPHA	***4.89E+00***	U	3.6E+00	5.1E+00	6.12E+00	pCi/g	100%	*0.8*	10/10/11 11:58 p		0.0504	GPC10C
						2.55E+00	1.00E+01	*(1.9)*			g	
Batch: 1271145	9310_ALPHABETA_GPC			**Work Order:**	MMQ9C1AE		**Report DB ID:**	9MMQ9C10				
BETA	***2.72E+01***		4.2E+00	7.1E+00	4.81E+00	pCi/g	100%	*(5.7)*	10/6/11 03:30 p		0.2006	GPC27B
						2.24E+00	1.50E+01	*(7.6)*			g	
Batch: 1271147	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMQ9C1AC		**Report DB ID:**	9MMQ9C10				
STRONTIUM	***2.52E-02***	U	7.5E-02	7.5E-02	1.71E-01	pCi/g	54%	*0.15*	10/8/11 07:56 a		6.03	GPC28D
						7.93E-02		*0.67*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06240	**Collection Date:**	9/15/2011 12:00:00 PM
Lot-Sample No.:	J1I270475-1	**Report No. :**	48753	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2H563	**COC No. :**	F11-159-084	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271051	7196_CR6			**Work Order:**	MMQ891AA		**Report DB ID:**	9MMQ8910				
HEXCHROME	***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*(1.)*	9/28/11 05:25 p		2.5016	
							1.55E-01	*N/A*			g	
Batch: 1271144	9310_ALPHABETA_GPC			**Work Order:**	MMQ891AF		**Report DB ID:**	9MMQ8910				
ALPHA	***6.47E+00***		3.4E+00	5.7E+00	3.86E+00	pCi/g	100%	*(1.7)*	10/10/11 11:58 p		0.0507	GPC10A
						1.40E+00	1.00E+01	*(2.2)*			g	
Batch: 1271145	9310_ALPHABETA_GPC			**Work Order:**	MMQ891AG		**Report DB ID:**	9MMQ8910				
BETA	***3.10E+01***		4.4E+00	7.9E+00	4.63E+00	pCi/g	100%	*(6.7)*	10/6/11 03:30 p		0.2002	GPC27A
						2.15E+00	1.50E+01	*(7.8)*			g	
Batch: 1271147	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMQ891AE		**Report DB ID:**	9MMQ8910				
STRONTIUM	***7.99E-02***	U	8.4E-02	8.6E-02	1.78E-01	pCi/g	53%	*0.45*	10/8/11 07:56 a		6.03	GPC28C
						8.28E-02		*(1.9)*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06241	**Collection Date:**	9/13/2011 9:27:00 AM
Lot-Sample No.:	J1I270478-8	**Report No. :**	48754	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXF1	**COC No. :**	F11-159-051-	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271138	9310_ALPHABETA_GPC			**Work Order:**	MMRAF1AD		**Report DB ID:**	9MMRAF10				
ALPHA	***3.37E+00***	U	3.3E+00	3.4E+00	6.13E+00	pCi/g	100%	*0.55*	10/10/11 09:14 a		0.0501	GPC10C
						2.55E+00	1.00E+01	*(2.)*			g	
Batch: 1271139	9310_ALPHABETA_GPC			**Work Order:**	MMRAF1AE		**Report DB ID:**	9MMRAF10				
BETA	***2.50E+01***		4.1E+00	5.2E+00	5.00E+00	pCi/g	100%	*(5.)*	10/5/11 09:06 p		0.2001	GPC27B
						2.33E+00	1.50E+01	*(9.7)*			g	
Batch: 1271140	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRAF1AC		**Report DB ID:**	9MMRAF10				
STRONTIUM	***5.13E-02***	U	7.9E-02	8.0E-02	1.73E-01	pCi/g	55%	*0.3*	10/8/11 06:51 a		6.04	GPC28C
						8.06E-02		*(1.3)*			g	
Batch: 1277058	7196_CR6			**Work Order:**	MMRAF1AA		**Report DB ID:**	9MMRAF10				
HEXCHROME	UJ ***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*(1.)*	10/6/11 09:00 a		2.5253	
							1.55E-01	*N/A*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06241	**Collection Date:**	9/13/2011 9:40:00 AM
Lot-Sample No.:	J1I270478-9	**Report No. :**	48754	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXF2	**COC No. :**	F11-159-051-	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271138	9310_ALPHABETA_GPC			**Work Order:**	MMRAK1AD		**Report DB ID:**	9MMRAK10				
ALPHA	***6.50E+00***		4.0E+00	4.2E+00	6.01E+00	pCi/g	100%	*(1.1)*	10/10/11 09:14 a		0.05	GPC10D
						2.48E+00	1.00E+01	*(3.1)*			g	
Batch: 1271139	9310_ALPHABETA_GPC			**Work Order:**	MMRAK1AE		**Report DB ID:**	9MMRAK10				
BETA	***2.19E+01***		3.9E+00	4.8E+00	4.98E+00	pCi/g	100%	*(4.4)*	10/5/11 09:06 p		0.2002	GPC27C
						2.33E+00	1.50E+01	*(9.2)*			g	
Batch: 1271140	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRAK1AC		**Report DB ID:**	9MMRAK10				
STRONTIUM	***8.84E-02***	U	7.8E-02	8.1E-02	1.61E-01	pCi/g	59%	*0.55*	10/8/11 06:51 a		6.02	GPC28D
						7.48E-02		*(2.2)*			g	
Batch: 1277058	7196_CR6			**Work Order:**	MMRAK1AA		**Report DB ID:**	9MMRAK10				
HEXCHROME	UJ ***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*(1.)*	10/6/11 09:00 a		2.5175	
							1.55E-01	*N/A*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06241	**Collection Date:**	9/13/2011 9:51:00 AM
Lot-Sample No.:	J1I270478-6	**Report No. :**	48754	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXF3	**COC No. :**	F11-159-052-	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271138	9310_ALPHABETA_GPC			**Work Order:**	MMQ981AD		**Report DB ID:**	9MMQ9810				
ALPHA	***1.35E+01***		4.8E+00	5.5E+00	3.86E+00	pCi/g	100%	*(3.5)*	10/10/11 09:14 a		0.0506	GPC10A
						1.40E+00	1.00E+01	*(4.9)*			g	
Batch: 1271139	9310_ALPHABETA_GPC			**Work Order:**	MMQ981AE		**Report DB ID:**	9MMQ9810				
BETA	***2.33E+01***		4.0E+00	5.0E+00	4.93E+00	pCi/g	100%	*(4.7)*	10/5/11 09:06 p		0.2003	GPC26C
						2.29E+00	1.50E+01	*(9.3)*			g	
Batch: 1271140	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMQ981AC		**Report DB ID:**	9MMQ9810				
STRONTIUM	***1.08E-02***	U	7.7E-02	7.7E-02	1.80E-01	pCi/g	56%	*0.06*	10/8/11 06:51 a		6.01	GPC27C
						8.40E-02		*0.28*			g	
Batch: 1277058	7196_CR6			**Work Order:**	MMQ981AA		**Report DB ID:**	9MMQ9810				
HEXCHROME	J ***2.01E-01***			0.0E+00	1.55E-01	mg/kg	N/A	*(1.3)*	10/6/11 09:00 a		2.5235	
							1.55E-01	*N/A*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06241	**Collection Date:**	9/13/2011 10:12:00 AM
Lot-Sample No.:	J1I270478-7	**Report No. :**	48754	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXF4	**COC No. :**	F11-159-053-	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271138	9310_ALPHABETA_GPC			**Work Order:**	MMRAA1AD		**Report DB ID:**	9MMRAA10				
ALPHA	***1.14E+01***		4.5E+00	5.0E+00	3.82E+00	pCi/g	100%	*(3.)*	10/10/11 09:14 a		0.0509	GPC10B
						1.37E+00	1.00E+01	*(4.5)*			g	
Batch: 1271139	9310_ALPHABETA_GPC			**Work Order:**	MMRAA1AE		**Report DB ID:**	9MMRAA10				
BETA	***2.48E+01***		4.0E+00	5.1E+00	4.76E+00	pCi/g	100%	*(5.2)*	10/5/11 09:06 p		0.2001	GPC27A
						2.21E+00	1.50E+01	*(9.7)*			g	
Batch: 1271140	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRAA1AC		**Report DB ID:**	9MMRAA10				
STRONTIUM	***2.73E-01***		9.7E-02	1.2E-01	1.64E-01	pCi/g	58%	*(1.7)*	10/8/11 06:51 a		6.02	GPC28B
						7.62E-02		*(4.6)*			g	
Batch: 1277058	7196_CR6			**Work Order:**	MMRAA1AA		**Report DB ID:**	9MMRAA10				
HEXCHROME	***3.79E-01***	J		0.0E+00	1.55E-01	mg/kg	N/A	*(2.4)*	10/6/11 09:00 a		2.5078	
							1.55E-01	*N/A*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06241	**Collection Date:**	9/13/2011 10:35:00 AM
Lot-Sample No.:	J1I270478-5	**Report No. :**	48754	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXF5	**COC No. :**	F11-159-054-	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC | MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271138	9310_ALPHABETA_GPC			**Work Order:**	MMQ941AD		**Report DB ID:**	9MMQ9410				
ALPHA	***6.09E+00***		3.9E+00	4.1E+00	5.99E+00	pCi/g	100%	*(1.)*	10/10/11 07:14 a		0.0507	GPC10D
						2.47E+00	1.00E+01	*(3.)*			g	
Batch: 1271139	9310_ALPHABETA_GPC			**Work Order:**	MMQ941AE		**Report DB ID:**	9MMQ9410				
BETA	***2.29E+01***		4.0E+00	4.9E+00	5.03E+00	pCi/g	100%	*(4.5)*	10/5/11 09:06 p		0.2007	GPC26B
						2.35E+00	1.50E+01	*(9.4)*			g	
Batch: 1271140	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMQ941AC		**Report DB ID:**	9MMQ9410				
STRONTIUM	***4.28E-02***	U	8.7E-02	8.8E-02	1.96E-01	pCi/g	46%	*0.22*	10/8/11 06:51 a		6.02	GPC27B
						9.14E-02		*0.97*			g	
Batch: 1277058	7196_CR6			**Work Order:**	MMQ941AA		**Report DB ID:**	9MMQ9410				
HEXCHROME	J ***3.13E-01***			0.0E+00	1.55E-01	mg/kg	N/A	*(2.)*	10/6/11 09:00 a		2.5043	
							1.55E-01	*N/A*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06241	**Collection Date:**	9/13/2011 10:54:00 AM
Lot-Sample No.:	J1I270478-4	**Report No. :**	48754	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXF6	**COC No. :**	F11-159-055-	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271138	9310_ALPHABETA_GPC			**Work Order:**	MMQ911AD		**Report DB ID:**	9MMQ9110				
ALPHA	***7.97E+00***		4.2E+00	4.5E+00	6.14E+00	pCi/g	100%	*(1.3)*	10/10/11 07:14 a		0.05	GPC10C
						2.55E+00	1.00E+01	*(3.5)*			g	
Batch: 1271139	9310_ALPHABETA_GPC			**Work Order:**	MMQ911AE		**Report DB ID:**	9MMQ9110				
BETA	***2.39E+01***		4.1E+00	5.1E+00	5.28E+00	pCi/g	100%	*(4.5)*	10/5/11 09:06 p		0.2	GPC26A
						2.48E+00	1.50E+01	*(9.5)*			g	
Batch: 1271140	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMQ911AC		**Report DB ID:**	9MMQ9110				
STRONTIUM	***8.40E-02***	U	7.1E-02	7.4E-02	1.46E-01	pCi/g	58%	*0.58*	10/8/11 06:51 a		6.03	GPC27A
						6.72E-02		*(2.3)*			g	
Batch: 1277058	7196_CR6			**Work Order:**	MMQ911AA		**Report DB ID:**	9MMQ9110				
HEXCHROME UJ	***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*(1.)*	10/6/11 09:00 a		2.5034	
							1.55E-01	*N/A*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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EH
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FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06241	**Collection Date:**	9/13/2011 11:09:00 AM
Lot-Sample No.:	J1I270478-3	**Report No. :**	48754	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXF8	**COC No. :**	F11-159-057	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271138	9310_ALPHABETA_GPC			**Work Order:**	MMQ9X1AD		**Report DB ID:**	9MMQ9X10				
ALPHA	***1.19E+01***		4.5E+00	5.1E+00	3.82E+00	pCi/g	100%	*(3.1)*	10/10/11 07:14 a		0.0505	GPC10B
						1.37E+00	1.00E+01	*(4.6)*			g	
Batch: 1271139	9310_ALPHABETA_GPC			**Work Order:**	MMQ9X1AE		**Report DB ID:**	9MMQ9X10				
BETA	***2.84E+01***		4.4E+00	5.7E+00	5.17E+00	pCi/g	100%	*(5.5)*	10/5/11 08:40 p		0.2007	GPC32D
						2.42E+00	1.50E+01	*(9.9)*			g	
Batch: 1271140	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMQ9X1AC		**Report DB ID:**	9MMQ9X10				
STRONTIUM	***3.72E-02***	U	6.6E-02	6.6E-02	1.46E-01	pCi/g	59%	*0.26*	10/8/11 06:51 a		6.01	GPC26C
						6.74E-02		*(1.1)*			g	
Batch: 1277058	7196_CR6			**Work Order:**	MMQ9X1AA		**Report DB ID:**	9MMQ9X10				
HEXCHROME	J ***1.85E-01***			0.0E+00	1.55E-01	mg/kg	N/A	*(1.2)*	10/6/11 09:00 a		2.5069	
							1.55E-01	*N/A*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06241	**Collection Date:**	9/13/2011 11:26:00 AM
Lot-Sample No.:	J1I270478-1	**Report No. :**	48754	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXF9	**COC No. :**	F11-159-058-	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271138	9310_ALPHABETA_GPC			**Work Order:**	MMQ9P1AD		**Report DB ID:**	9MMQ9P10				
ALPHA	***6.57E+00***		3.7E+00	3.9E+00	4.54E+00	pCi/g	100%	*(1.4)*	10/5/11 02:36 p		0.0506	GPC10B
						1.73E+00	1.00E+01	*(3.3)*			g	
Batch: 1271139	9310_ALPHABETA_GPC			**Work Order:**	MMQ9P1AE		**Report DB ID:**	9MMQ9P10				
BETA	***3.01E+01***		4.4E+00	5.9E+00	4.84E+00	pCi/g	100%	*(6.2)*	10/5/11 08:40 p		0.2007	GPC32A
						2.25E+00	1.50E+01	*(10.2)*			g	
Batch: 1271140	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMQ9P1AC		**Report DB ID:**	9MMQ9P10				
STRONTIUM	***5.63E-02***	U	8.4E-02	8.5E-02	1.84E-01	pCi/g	53%	*0.31*	10/8/11 06:51 a		6.01	GPC26A
						8.61E-02		*(1.3)*			g	
Batch: 1277058	7196_CR6			**Work Order:**	MMQ9P1AA		**Report DB ID:**	9MMQ9P10				
HEXCHROME	J ***3.58E-01***			0.0E+00	1.55E-01	mg/kg	N/A	*(2.3)*	10/6/11 09:00 a		2.5034	
							1.55E-01	*N/A*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06241	**Collection Date:**	9/13/2011 11:50:00 AM
Lot-Sample No.:	J1I270478-2	**Report No. :**	48754	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXH0	**COC No. :**	F11-159-059-	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271138	9310_ALPHABETA_GPC			**Work Order:**	MMQ9R1AD		**Report DB ID:**	9MMQ9R10				
ALPHA	***4.52E+00***		3.0E+00	3.1E+00	3.86E+00	pCi/g	100%	*(1.2)*	10/10/11 07:14 a		0.0506	GPC10A
						1.40E+00	1.00E+01	*(2.9)*			g	
Batch: 1271139	9310_ALPHABETA_GPC			**Work Order:**	MMQ9R1AE		**Report DB ID:**	9MMQ9R10				
BETA	***2.77E+01***		4.1E+00	5.6E+00	4.35E+00	pCi/g	100%	*(6.4)*	10/5/11 08:40 p		0.2006	GPC32C
						2.01E+00	1.50E+01	*(9.9)*			g	
Batch: 1271140	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMQ9R1AC		**Report DB ID:**	9MMQ9R10				
STRONTIUM	***1.25E-01***	U	8.3E-02	8.9E-02	1.64E-01	pCi/g	57%	*0.76*	10/8/11 06:51 a		6.01	GPC26B
						7.66E-02		*(2.8)*			g	
Batch: 1277058	7196_CR6			**Work Order:**	MMQ9R1AA		**Report DB ID:**	9MMQ9R10				
HEXCHROME	UJ ***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*(1.)*	10/6/11 09:00 a		2.5087	
							1.55E-01	*N/A*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

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EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06241	**Collection Date:**	9/13/2011 12:19:00 PM
Lot-Sample No.:	J1I270478-19	**Report No. :**	48754	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXH1	**COC No. :**	F11-159-060-	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271138	9310_ALPHABETA_GPC			**Work Order:**	MMRCC1AD		**Report DB ID:**	9MMRCC10				
ALPHA	***1.15E+01***		4.5E+00	5.0E+00	3.82E+00	pCi/g	100%	*(3.)*	10/10/11 09:59 p		0.0506	GPC10B
						1.37E+00	1.00E+01	*(4.5)*			g	
Batch: 1271139	9310_ALPHABETA_GPC			**Work Order:**	MMRCC1AE		**Report DB ID:**	9MMRCC10				
BETA	***2.43E+01***		4.0E+00	5.0E+00	4.81E+00	pCi/g	100%	*(5.)*	10/6/11 02:08 p		0.2004	GPC27B
						2.24E+00	1.50E+01	*(9.7)*			g	
Batch: 1271140	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRCC1AC		**Report DB ID:**	9MMRCC10				
STRONTIUM	***7.07E-02***	U	7.3E-02	7.5E-02	1.53E-01	pCi/g	54%	*0.46*	10/8/11 07:56 a		6.02	GPC27A
						7.04E-02		*(1.9)*			g	
Batch: 1277058	7196_CR6			**Work Order:**	MMRCC1AA		**Report DB ID:**	9MMRCC10				
HEXCHROME	UJ ***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*(1.)*	10/6/11 09:00 a		2.5091	
							1.55E-01	*N/A*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

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11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06241	**Collection Date:**	9/14/2011 8:54:00 AM
Lot-Sample No.:	J1I270478-16	**Report No. :**	48754	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXH2	**COC No. :**	F11-159-061-	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271138	9310_ALPHABETA_GPC			**Work Order:**	MMRA81AD		**Report DB ID:**	9MMRA810				
ALPHA	***2.60E+00***	U	3.1E+00	3.2E+00	6.14E+00	pCi/g	100%	*0.42*	10/10/11 04:22 p		0.05	GPC10C
						2.55E+00	1.00E+01	*(1.6)*			g	
Batch: 1271139	9310_ALPHABETA_GPC			**Work Order:**	MMRA81AE		**Report DB ID:**	9MMRA810				
BETA	***2.86E+01***		4.2E+00	5.7E+00	4.36E+00	pCi/g	100%	*(6.6)*	10/5/11 09:34 p		0.2001	GPC32C
						2.01E+00	1.50E+01	*(10.)*			g	
Batch: 1271140	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRA81AC		**Report DB ID:**	9MMRA810				
STRONTIUM	***7.59E-02***	U	7.9E-02	8.1E-02	1.67E-01	pCi/g	55%	*0.45*	10/8/11 07:56 a		6.01	GPC26B
						7.77E-02		*(1.9)*			g	
Batch: 1277058	7196_CR6			**Work Order:**	MMRA81AA		**Report DB ID:**	9MMRA810				
HEXCHROME	UJ ***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*(1.)*	10/6/11 09:00 a		2.5105	
							1.55E-01	*N/A*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

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EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06241	**Collection Date:**	9/14/2011 9:10:00 AM
Lot-Sample No.:	J1I270478-17	**Report No. :**	48754	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXH3	**COC No. :**	F11-159-062-	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271138	9310_ALPHABETA_GPC			**Work Order:**	MMRA91AD		**Report DB ID:**	9MMRA910				
ALPHA	***5.32E+00***	U	3.7E+00	3.9E+00	6.01E+00	pCi/g	100%	*0.89*	10/10/11 04:22 p		0.0501	GPC10D
						2.48E+00	1.00E+01	*(2.8)*			g	
Batch: 1271139	9310_ALPHABETA_GPC			**Work Order:**	MMRA91AE		**Report DB ID:**	9MMRA910				
BETA	***2.72E+01***		4.3E+00	5.6E+00	5.18E+00	pCi/g	100%	*(5.3)*	10/5/11 09:34 p		0.2004	GPC32D
						2.42E+00	1.50E+01	*(9.8)*			g	
Batch: 1271140	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRA91AC		**Report DB ID:**	9MMRA910				
STRONTIUM	***8.62E-02***	U	7.4E-02	7.7E-02	1.52E-01	pCi/g	55%	*0.57*	10/8/11 07:56 a		6.04	GPC26C
						7.02E-02		*(2.2)*			g	
Batch: 1277058	7196_CR6			**Work Order:**	MMRA91AA		**Report DB ID:**	9MMRA910				
HEXCHROME	UJ ***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*(1.)*	10/6/11 09:00 a		2.5379	
							1.55E-01	*N/A*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06241	**Collection Date:**	9/14/2011 9:20:00 AM
Lot-Sample No.:	J1I270478-18	**Report No. :**	48754	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXH4	**COC No. :**	F11-159-063-	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271138	9310_ALPHABETA_GPC			**Work Order:**	MMRCA1AD		**Report DB ID:**	9MMRCA10				
ALPHA	***4.91E+00***		3.1E+00	3.2E+00	3.86E+00	pCi/g	100%	*(1.3)*	10/10/11 09:59 p		0.0508	GPC10A
						1.40E+00	1.00E+01	*(3.)*			g	
Batch: 1271139	9310_ALPHABETA_GPC			**Work Order:**	MMRCA1AE		**Report DB ID:**	9MMRCA10				
BETA	***3.01E+01***		4.3E+00	5.7E+00	4.63E+00	pCi/g	100%	*(6.5)*	10/6/11 02:08 p		0.2004	GPC27A
						2.15E+00	1.50E+01	*(10.5)*			g	
Batch: 1271140	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRCA1AC		**Report DB ID:**	9MMRCA10				
STRONTIUM	***1.12E-01***	U	8.3E-02	8.8E-02	1.67E-01	pCi/g	52%	*0.67*	10/8/11 07:56 a		6.02	GPC26D
						7.74E-02		*(2.5)*			g	
Batch: 1277058	7196_CR6			**Work Order:**	MMRCA1AA		**Report DB ID:**	9MMRCA10				
HEXCHROME	UJ ***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*(1.)*	10/6/11 09:00 a		2.5165	
							1.55E-01	*N/A*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

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11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06241	**Collection Date:**	9/14/2011 9:35:00 AM
Lot-Sample No.:	J1I270478-20	**Report No. :**	48754	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXH5	**COC No. :**	F11-159-064-	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271138	9310_ALPHABETA_GPC			**Work Order:**	MMRCD1AD		**Report DB ID:**	9MMRCD10				
ALPHA	***1.10E+01***		4.8E+00	5.3E+00	6.13E+00	pCi/g	100%	*(1.8)*	10/10/11 09:59 p		0.0503	GPC10C
						2.55E+00	1.00E+01	*(4.2)*			g	
Batch: 1271139	9310_ALPHABETA_GPC			**Work Order:**	MMRCD1AE		**Report DB ID:**	9MMRCD10				
BETA	***2.58E+01***		4.1E+00	5.2E+00	4.95E+00	pCi/g	100%	*(5.2)*	10/6/11 02:08 p		0.2002	GPC27C
						2.31E+00	1.50E+01	*(9.9)*			g	
Batch: 1271140	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRCD1AC		**Report DB ID:**	9MMRCD10				
STRONTIUM	***1.09E-01***	U	7.5E-02	8.1E-02	1.51E-01	pCi/g	62%	*0.73*	10/8/11 07:56 a		6.04	GPC27B
						7.02E-02		*(2.7)*			g	
Batch: 1277058	7196_CR6			**Work Order:**	MMRCD1AA		**Report DB ID:**	9MMRCD10				
HEXCHROME	UJ ***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*(1.)*	10/6/11 09:00 a		2.5033	
							1.55E-01	*N/A*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06241	**Collection Date:**	9/14/2011 9:42:00 AM
Lot-Sample No.:	J1I270478-12	**Report No. :**	48754	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXH6	**COC No. :**	F11-159-065-	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271138	9310_ALPHABETA_GPC			**Work Order:**	MMRA41AD		**Report DB ID:**	9MMRA410				
ALPHA	***7.57E+00***		4.2E+00	4.4E+00	6.12E+00	pCi/g	100%	*(1.2)*	10/10/11 11:10 a		0.0504	GPC10C
						2.55E+00	1.00E+01	*(3.4)*			g	
Batch: 1271139	9310_ALPHABETA_GPC			**Work Order:**	MMRA41AE		**Report DB ID:**	9MMRA410				
BETA	***2.26E+01***		3.9E+00	4.9E+00	4.80E+00	pCi/g	100%	*(4.7)*	10/5/11 09:25 p		0.2003	GPC28B
						2.23E+00	1.50E+01	*(9.2)*			g	
Batch: 1271140	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRA41AC		**Report DB ID:**	9MMRA410				
STRONTIUM	***3.83E-02***	U	6.9E-02	6.9E-02	1.53E-01	pCi/g	60%	*0.25*	10/8/11 06:51 a		6.03	GPC31D
						7.08E-02		*(1.1)*			g	
Batch: 1277058	7196_CR6			**Work Order:**	MMRA41AA		**Report DB ID:**	9MMRA410				
HEXCHROME	UJ ***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*(1.)*	10/6/11 09:00 a		2.5222	
							1.55E-01	*N/A*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06241	**Collection Date:**	9/14/2011 10:00:00 AM
Lot-Sample No.:	J1I270478-13	**Report No. :**	48754	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXH7	**COC No. :**	F11-159-066-	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271138	9310_ALPHABETA_GPC			**Work Order:**	MMRA51AD		**Report DB ID:**	9MMRA510				
ALPHA	***8.07E+00***		4.3E+00	4.6E+00	6.01E+00	pCi/g	100%	*(1.3)*	10/10/11 11:10 a		0.05	GPC10D
						2.48E+00	1.00E+01	*(3.5)*			g	
Batch: 1271139	9310_ALPHABETA_GPC			**Work Order:**	MMRA51AE		**Report DB ID:**	9MMRA510				
BETA	***2.84E+01***		4.3E+00	5.7E+00	4.86E+00	pCi/g	100%	*(5.8)*	10/5/11 09:25 p		0.2003	GPC28C
						2.26E+00	1.50E+01	*(9.9)*			g	
Batch: 1271140	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRA51AC		**Report DB ID:**	9MMRA510				
STRONTIUM	***4.78E-02***	U	7.9E-02	8.0E-02	1.75E-01	pCi/g	52%	*0.27*	10/8/11 06:51 a		6.03	GPC32B
						8.11E-02		*(1.2)*			g	
Batch: 1277058	7196_CR6			**Work Order:**	MMRA51AA		**Report DB ID:**	9MMRA510				
HEXCHROME	***2.02E-01***	J		0.0E+00	1.55E-01	mg/kg	N/A	*(1.3)*	10/6/11 09:00 a		2.517	
							1.55E-01	*N/A*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06241	**Collection Date:**	9/14/2011 10:12:00 AM
Lot-Sample No.:	J1I270478-14	**Report No. :**	48754	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXH9	**COC No. :**	F11-159-068-	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC | MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271138	9310_ALPHABETA_GPC			**Work Order:**	MMRA61AD		**Report DB ID:**	9MMRA610				
ALPHA	***4.91E+00***		3.1E+00	3.2E+00	3.86E+00	pCi/g	100%	*(1.3)*	10/10/11 04:22 p		0.0506	GPC10A
						1.40E+00	1.00E+01	*(3.)*			g	
Batch: 1271139	9310_ALPHABETA_GPC			**Work Order:**	MMRA61AE		**Report DB ID:**	9MMRA610				
BETA	***2.57E+01***		4.2E+00	5.4E+00	4.97E+00	pCi/g	100%	*(5.2)*	10/5/11 09:25 p		0.2007	GPC28D
						2.31E+00	1.50E+01	*(9.6)*			g	
Batch: 1271140	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRA61AC		**Report DB ID:**	9MMRA610				
STRONTIUM	***-2.48E-02***	U	6.0E-02	6.1E-02	1.52E-01	pCi/g	59%	*-0.16*	10/8/11 06:51 a		6.04	GPC32C
						7.07E-02		*-0.82*			g	
Batch: 1277058	7196_CR6			**Work Order:**	MMRA61AA		**Report DB ID:**	9MMRA610				
HEXCHROME	UJ ***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*(1.)*	10/6/11 09:00 a		2.5046	
							1.55E-01	*N/A*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06241	**Collection Date:**	9/14/2011 10:30:00 AM
Lot-Sample No.:	J1I270478-15	**Report No. :**	48754	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXJ0	**COC No. :**	F11-159-069-	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271138	9310_ALPHABETA_GPC			**Work Order:**	MMRA71AD		**Report DB ID:**	9MMRA710				
ALPHA	***1.75E+01***		5.4E+00	6.5E+00	3.83E+00	pCi/g	100%	*(4.6)*	10/10/11 04:22 p		0.0501	GPC10B
						1.38E+00	1.00E+01	*(5.4)*			g	
Batch: 1271139	9310_ALPHABETA_GPC			**Work Order:**	MMRA71AE		**Report DB ID:**	9MMRA710				
BETA	***2.53E+01***		4.1E+00	5.3E+00	4.85E+00	pCi/g	100%	*(5.2)*	10/5/11 09:34 p		0.2005	GPC32A
						2.25E+00	1.50E+01	*(9.6)*			g	
Batch: 1271140	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRA71AC		**Report DB ID:**	9MMRA710				
STRONTIUM	***1.47E-01***	U	8.9E-02	9.7E-02	1.75E-01	pCi/g	56%	*0.84*	10/8/11 07:56 a		6.03	GPC26A
						8.16E-02		*(3.)*			g	
Batch: 1277058	7196_CR6			**Work Order:**	MMRA71AA		**Report DB ID:**	9MMRA710				
HEXCHROME UJ	***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*(1.)*	10/6/11 09:00 a		2.5267	
							1.55E-01	*N/A*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06241	**Collection Date:**	9/14/2011 10:00:00 AM
Lot-Sample No.:	J1I270478-10	**Report No. :**	48754	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXJ6	**COC No. :**	F11-159-075-	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271138	9310_ALPHABETA_GPC			**Work Order:**	MMRAV1AD		**Report DB ID:**	9MMRAV10				
ALPHA	***5.70E+00***		3.3E+00	3.5E+00	3.87E+00	pCi/g	100%	*(1.5)*	10/10/11 11:10 a		0.0503	GPC10A
						1.41E+00	1.00E+01	*(3.3)*			g	
Batch: 1271139	9310_ALPHABETA_GPC			**Work Order:**	MMRAV1AE		**Report DB ID:**	9MMRAV10				
BETA	***2.84E+01***		4.2E+00	5.5E+00	4.73E+00	pCi/g	100%	*(6.)*	10/5/11 09:24 p		0.2001	GPC31C
						2.20E+00	1.50E+01	*(10.2)*			g	
Batch: 1271140	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRAV1AC		**Report DB ID:**	9MMRAV10				
STRONTIUM	***1.57E-01***	U	8.5E-02	9.4E-02	1.61E-01	pCi/g	58%	*0.98*	10/8/11 06:51 a		6.01	GPC31A
						7.46E-02		*(3.3)*			g	
Batch: 1277058	7196_CR6			**Work Order:**	MMRAV1AA		**Report DB ID:**	9MMRAV10				
HEXCHROME	J ***3.32E-01***			0.0E+00	1.55E-01	mg/kg	N/A	*(2.1)*	10/6/11 09:00 a		2.5291	
							1.55E-01	*N/A*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06241	**Collection Date:**	9/14/2011 8:30:00 AM
Lot-Sample No.:	J1I270478-11	**Report No. :**	48754	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXJ7	**COC No. :**	F11-159-076-	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271138	9310_ALPHABETA_GPC			**Work Order:**	MMRA01AD		**Report DB ID:**	9MMRA010				
ALPHA	***6.68E+00***		3.5E+00	3.8E+00	3.82E+00	pCi/g	100%	*(1.7)*	10/10/11 11:10 a		0.0509	GPC10B
						1.37E+00	1.00E+01	*(3.5)*			g	
Batch: 1271139	9310_ALPHABETA_GPC			**Work Order:**	MMRA01AE		**Report DB ID:**	9MMRA010				
BETA	***8.78E+00***		2.9E+00	3.1E+00	4.66E+00	pCi/g	100%	*(1.9)*	10/5/11 09:24 p		0.2005	GPC31D
						2.16E+00	1.50E+01	*(5.7)*			g	
Batch: 1271140	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRA01AC		**Report DB ID:**	9MMRA010				
STRONTIUM	***4.54E-02***	U	4.9E-02	5.1E-02	1.04E-01	pCi/g	90%	*0.44*	10/8/11 06:51 a		6.03	GPC31B
						4.82E-02		*(1.8)*			g	
Batch: 1277058	7196_CR6			**Work Order:**	MMRA01AA		**Report DB ID:**	9MMRA010				
HEXCHROME	UJ ***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*(1.)*	10/6/11 09:00 a		2.5141	
							1.55E-01	*N/A*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06242	**Collection Date:**	8/31/2011 9:30:00 AM
Lot-Sample No.:	J1I270481-6	**Report No. :**	48755	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXC6	**COC No. :**	F11-159-074	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271112	7196_CR6			**Work Order:**	MMRCL1AA		**Report DB ID:**	9MMRCL10				
HEXCHROME	***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*(1.)*	9/29/11 11:00 a		2.5022	
							1.55E-01	*N/A*			g	
Batch: 1271148	9310_ALPHABETA_GPC			**Work Order:**	MMRCL1AC		**Report DB ID:**	9MMRCL10				
ALPHA	***7.60E+00***		4.2E+00	6.9E+00	5.68E+00	pCi/g	100%	*(1.3)*	10/11/11 01:19 p		0.0506	GPC10D
						2.31E+00	1.00E+01	*(2.2)*			g	
Batch: 1271149	9310_ALPHABETA_GPC			**Work Order:**	MMRCL1AF		**Report DB ID:**	9MMRCL10				
BETA	***2.49E+01***		4.1E+00	6.7E+00	4.72E+00	pCi/g	100%	*(5.3)*	10/6/11 04:56 p		0.2009	GPC26C
						2.19E+00	1.50E+01	*(7.4)*			g	
Batch: 1271156	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRCL1AE		**Report DB ID:**	9MMRCL10				
STRONTIUM	***1.21E-01***	U	1.1E-01	1.2E-01	2.33E-01	pCi/g	45%	*0.52*	10/10/11 08:38 p		6.02	GPC27C
						1.09E-01		*(2.1)*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06242	**Collection Date:**	8/31/2011 9:50:00 AM
Lot-Sample No.:	J1I270481-5	**Report No. :**	48755	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXC7	**COC No. :**	F11-159-036-	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271112	7196_CR6			**Work Order:**	MMRCK1AA		**Report DB ID:**	9MMRCK10				
HEXCHROME	***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*(1.)*	9/29/11 11:00 a		2.5018	
							1.55E-01	*N/A*			g	
Batch: 1271148	9310_ALPHABETA_GPC			**Work Order:**	MMRCK1AC		**Report DB ID:**	9MMRCK10				
ALPHA	***8.47E+00***		4.5E+00	7.6E+00	6.11E+00	pCi/g	100%	*(1.4)*	10/11/11 01:19 p		0.0501	GPC10C
						2.53E+00	1.00E+01	*(2.2)*			g	
Batch: 1271149	9310_ALPHABETA_GPC			**Work Order:**	MMRCK1AF		**Report DB ID:**	9MMRCK10				
BETA	***2.46E+01***		4.0E+00	6.6E+00	4.74E+00	pCi/g	100%	*(5.2)*	10/6/11 04:56 p		0.2003	GPC26B
						2.20E+00	1.50E+01	*(7.5)*			g	
Batch: 1271156	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRCK1AE		**Report DB ID:**	9MMRCK10				
STRONTIUM	***8.94E-04***	U	7.3E-02	7.3E-02	1.73E-01	pCi/g	60%	*0.01*	10/10/11 08:38 p		6.02	GPC27B
						8.05E-02		*0.02*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06242	**Collection Date:**	8/31/2011 10:10:00 AM
Lot-Sample No.:	J1I270481-4	**Report No. :**	48755	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXC8	**COC No. :**	F11-159-074	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271112	7196_CR6			**Work Order:**	MMRCJ1AA		**Report DB ID:**	9MMRCJ10				
HEXCHROME	***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*(1.)*	9/29/11 11:00 a		2.5024	
							1.55E-01	*N/A*			g	
Batch: 1271148	9310_ALPHABETA_GPC			**Work Order:**	MMRCJ1AC		**Report DB ID:**	9MMRCJ10				
ALPHA	***9.45E+00***		4.5E+00	8.2E+00	5.47E+00	pCi/g	100%	*(1.7)*	10/11/11 01:19 p		0.05	GPC10B
						2.19E+00	1.00E+01	*(2.3)*			g	
Batch: 1271149	9310_ALPHABETA_GPC			**Work Order:**	MMRCJ1AF		**Report DB ID:**	9MMRCJ10				
BETA	***2.95E+01***		4.4E+00	7.6E+00	5.10E+00	pCi/g	100%	*(5.8)*	10/6/11 04:56 p		0.2002	GPC26A
						2.39E+00	1.50E+01	*(7.7)*			g	
Batch: 1271156	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRCJ1AE		**Report DB ID:**	9MMRCJ10				
STRONTIUM	***1.21E-01***	U	8.5E-02	9.1E-02	1.70E-01	pCi/g	61%	*0.71*	10/10/11 08:38 p		6.01	GPC27A
						7.89E-02		*(2.7)*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06242	**Collection Date:**	8/31/2011 10:30:00 AM
Lot-Sample No.:	J1I270481-3	**Report No. :**	48755	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXC9	**COC No. :**	F11-159-074	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271112	7196_CR6			**Work Order:**	MMRCH1AA		**Report DB ID:**	9MMRCH10				
HEXCHROME	***2.09E-01***			0.0E+00	1.55E-01	mg/kg	N/A	*(1.4)*	9/29/11 11:00 a		2.5098	
							1.55E-01	*N/A*			g	
Batch: 1271148	9310_ALPHABETA_GPC			**Work Order:**	MMRCH1AC		**Report DB ID:**	9MMRCH10				
ALPHA	***5.22E+00***		3.3E+00	5.0E+00	4.41E+00	pCi/g	100%	*(1.2)*	10/11/11 01:19 p		0.0506	GPC10A
						1.68E+00	1.00E+01	*(2.1)*			g	
Batch: 1271149	9310_ALPHABETA_GPC			**Work Order:**	MMRCH1AF		**Report DB ID:**	9MMRCH10				
BETA	***2.58E+01***		4.2E+00	7.0E+00	5.13E+00	pCi/g	100%	*(5.)*	10/6/11 03:54 p		0.2008	GPC32D
						2.40E+00	1.50E+01	*(7.4)*			g	
Batch: 1271156	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRCH1AE		**Report DB ID:**	9MMRCH10				
STRONTIUM	***6.63E-02***	U	8.1E-02	8.3E-02	1.75E-01	pCi/g	58%	*0.38*	10/10/11 08:37 p		6.03	GPC26C
						8.12E-02		*(1.6)*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06242	**Collection Date:**	8/31/2011 10:56:00 AM
Lot-Sample No.:	J1I270481-11	**Report No. :**	48755	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXD0	**COC No. :**	F11-159-074	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271112	7196_CR6			**Work Order:**	MMRC11AA		**Report DB ID:**	9MMRC110				
HEXCHROME	***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*(1.)*	9/29/11 11:00 a		2.5026	
							1.55E-01	*N/A*			g	
Batch: 1271148	9310_ALPHABETA_GPC			**Work Order:**	MMRC11AC		**Report DB ID:**	9MMRC110				
ALPHA	***4.84E+00***		3.3E+00	4.8E+00	4.41E+00	pCi/g	100%	*(1.1)*	10/11/11 05:22 p		0.0505	GPC10A
						1.68E+00	1.00E+01	*(2.)*			g	
Batch: 1271149	9310_ALPHABETA_GPC			**Work Order:**	MMRC11AF		**Report DB ID:**	9MMRC110				
BETA	***2.53E+01***		4.1E+00	6.8E+00	4.67E+00	pCi/g	100%	*(5.4)*	10/6/11 04:56 p		0.2003	GPC28B
						2.16E+00	1.50E+01	*(7.4)*			g	
Batch: 1271156	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRC11AE		**Report DB ID:**	9MMRC110				
STRONTIUM	***1.13E-01***	U	9.3E-02	9.8E-02	1.91E-01	pCi/g	53%	*0.59*	10/10/11 09:30 p		6.0	GPC26C
						8.86E-02		*(2.3)*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06242	**Collection Date:**	~~8/31/2011~~ 09/07/2011 9:30:00 AM
Lot-Sample No.:	J1I270481-10	**Report No. :**	48755	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXD1	**COC No. :**	F11-159-074	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271112	7196_CR6			**Work Order:**	MMRCX1AA		**Report DB ID:**	9MMRCX10				
HEXCHROME	***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*(1.)*	9/29/11 11:00 a		2.5013	
							1.55E-01	*N/A*			g	
Batch: 1271148	9310_ALPHABETA_GPC			**Work Order:**	MMRCX1AC		**Report DB ID:**	9MMRCX10				
ALPHA	***6.51E+00***		4.0E+00	6.2E+00	5.74E+00	pCi/g	100%	*(1.1)*	10/11/11 03:16 p		0.0501	GPC10D
						2.34E+00	1.00E+01	*(2.1)*			g	
Batch: 1271149	9310_ALPHABETA_GPC			**Work Order:**	MMRCX1AF		**Report DB ID:**	9MMRCX10				
BETA	***1.98E+01***		3.8E+00	5.6E+00	4.96E+00	pCi/g	100%	*(4.)*	10/6/11 04:56 p		0.2	GPC27C
						2.31E+00	1.50E+01	*(7.)*			g	
Batch: 1271156	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRCX1AE		**Report DB ID:**	9MMRCX10				
STRONTIUM	***1.07E-01***	U	8.4E-02	8.9E-02	1.72E-01	pCi/g	60%	*0.62*	10/10/11 09:30 p		6.03	GPC26B
						8.02E-02		*(2.4)*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06242	**Collection Date:**	~~8/31/2011~~ 09/07/2011 9:40:00 AM
Lot-Sample No.:	J1I270481-9	**Report No. :**	48755	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXD2	**COC No. :**	F11-159-074	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271112	7196_CR6			**Work Order:**	MMRCQ1AA		**Report DB ID:**	9MMRCQ10				
HEXCHROME	***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*(1.)*	9/29/11 11:00 a		2.5063	
							1.55E-01	*N/A*			g	
Batch: 1271148	9310_ALPHABETA_GPC			**Work Order:**	MMRCQ1AC		**Report DB ID:**	9MMRCQ10				
ALPHA	***6.12E+00***		4.1E+00	6.0E+00	6.07E+00	pCi/g	100%	*(1.)*	10/11/11 03:16 p		0.0504	GPC10C
						2.52E+00	1.00E+01	*(2.1)*			g	
Batch: 1271149	9310_ALPHABETA_GPC			**Work Order:**	MMRCQ1AF		**Report DB ID:**	9MMRCQ10				
BETA	***2.36E+01***		4.0E+00	6.4E+00	4.80E+00	pCi/g	100%	*(4.9)*	10/6/11 04:56 p		0.2008	GPC27B
						2.24E+00	1.50E+01	*(7.4)*			g	
Batch: 1271156	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRCQ1AE		**Report DB ID:**	9MMRCQ10				
STRONTIUM	***7.91E-02***	U	7.6E-02	7.9E-02	1.60E-01	pCi/g	67%	*0.49*	10/10/11 08:37 p		6.0	GPC28D
						7.42E-02		*(2.)*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06242	**Collection Date:**	~~8/31/2011~~ 09/07/2011 10:14:00 AM
Lot-Sample No.:	J1I270481-8	**Report No. :**	48755	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXD3	**COC No. :**	F11-159-074	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271112	7196_CR6			**Work Order:**	MMRCN1AA		**Report DB ID:**	9MMRCN10				
HEXCHROME	***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*(1.)*	9/29/11 11:00 a		2.5048	
							1.55E-01	*N/A*			g	
Batch: 1271148	9310_ALPHABETA_GPC			**Work Order:**	MMRCN1AC		**Report DB ID:**	9MMRCN10				
ALPHA	***7.00E+00***		4.1E+00	6.5E+00	5.45E+00	pCi/g	100%	*(1.3)*	10/11/11 03:16 p		0.0501	GPC10B
						2.18E+00	1.00E+01	*(2.2)*			g	
Batch: 1271149	9310_ALPHABETA_GPC			**Work Order:**	MMRCN1AF		**Report DB ID:**	9MMRCN10				
BETA	***2.26E+01***		3.9E+00	6.2E+00	4.63E+00	pCi/g	100%	*(4.9)*	10/6/11 04:56 p		0.2003	GPC27A
						2.15E+00	1.50E+01	*(7.3)*			g	
Batch: 1271156	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRCN1AE		**Report DB ID:**	9MMRCN10				
STRONTIUM	***1.15E-01***	U	8.3E-02	8.8E-02	1.66E-01	pCi/g	62%	*0.69*	10/10/11 08:37 p		6.04	GPC28C
						7.70E-02		*(2.6)*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06242	**Collection Date:**	~~8/31/2011~~ 09/07/2011 10:24:00 AM
Lot-Sample No.:	J1I270481-7	**Report No. :**	48755	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXD4	**COC No. :**	F11-159-074	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271112	7196_CR6			**Work Order:**	MMRCL1AA		**Report DB ID:**	9MMRCM10				
HEXCHROME	***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*(1.)*	9/29/11 11:00 a		2.5071	
							1.55E-01	*N/A*			g	
Batch: 1271148	9310_ALPHABETA_GPC			**Work Order:**	MMRCM1AC		**Report DB ID:**	9MMRCM10				
ALPHA	***5.74E+00***		3.5E+00	5.4E+00	4.51E+00	pCi/g	100%	*(1.3)*	10/11/11 03:16 p		0.05	GPC10A
						1.72E+00	1.00E+01	*(2.1)*			g	
Batch: 1271149	9310_ALPHABETA_GPC			**Work Order:**	MMRCM1AF		**Report DB ID:**	9MMRCM10				
BETA	***2.50E+01***		4.0E+00	6.7E+00	4.49E+00	pCi/g	100%	*(5.6)*	10/6/11 04:56 p		0.2005	GPC26D
						2.08E+00	1.50E+01	*(7.5)*			g	
Batch: 1271156	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRCM1AE		**Report DB ID:**	9MMRCM10				
STRONTIUM	***1.41E-01***	U	8.3E-02	9.1E-02	1.61E-01	pCi/g	67%	*0.88*	10/10/11 08:37 p		6.01	GPC28B
						7.48E-02		*(3.1)*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06242	**Collection Date:**	~~8/31/2011~~ 09/12/2011 9:40:00 AM
Lot-Sample No.:	J1I270481-15	**Report No. :**	48755	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXD5	**COC No. :**	F11-159-074	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271112	7196_CR6			**Work Order:**	MMRC51AA		**Report DB ID:**	9MMRC510				
HEXCHROME	***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*(1.)*	9/29/11 11:00 a		2.5014	
							1.55E-01	*N/A*			g	
Batch: 1271148	9310_ALPHABETA_GPC			**Work Order:**	MMRC51AC		**Report DB ID:**	9MMRC510				
ALPHA	***3.71E+00***	U	3.0E+00	4.0E+00	4.45E+00	pCi/g	100%	*0.83*	10/11/11 07:20 p		0.0502	GPC10A
						1.70E+00	1.00E+01	*(1.8)*			g	
Batch: 1271149	9310_ALPHABETA_GPC			**Work Order:**	MMRC51AF		**Report DB ID:**	9MMRC510				
BETA	***2.30E+01***		3.9E+00	6.2E+00	4.58E+00	pCi/g	100%	*(5.)*	10/6/11 04:56 p		0.2004	GPC31C
						2.12E+00	1.50E+01	*(7.4)*			g	
Batch: 1271156	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRC51AE		**Report DB ID:**	9MMRC510				
STRONTIUM	***1.07E-01***	U	8.2E-02	8.7E-02	1.67E-01	pCi/g	66%	*0.64*	10/10/11 09:30 p		6.01	GPC27C
						7.77E-02		*(2.5)*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06242	**Collection Date:**	~~8/31/2011~~ 09/12/2011 10:10:00 AM
Lot-Sample No.:	J1I270481-14	**Report No. :**	48755	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXD7	**COC No. :**	F11-159-074	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271112	7196_CR6			**Work Order:**	MMRC41AA		**Report DB ID:**	9MMRC410				
HEXCHROME	***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*(1.)*	9/29/11 11:00 a		2.5049	
							1.55E-01	*N/A*			g	
Batch: 1271148	9310_ALPHABETA_GPC			**Work Order:**	MMRC41AC		**Report DB ID:**	9MMRC410				
ALPHA	***7.23E+00***		4.2E+00	6.7E+00	5.70E+00	pCi/g	100%	*(1.3)*	10/11/11 05:22 p		0.0503	GPC10D
						2.32E+00	1.00E+01	*(2.2)*			g	
Batch: 1271149	9310_ALPHABETA_GPC			**Work Order:**	MMRC41AF		**Report DB ID:**	9MMRC410				
BETA	***2.39E+01***		3.9E+00	6.4E+00	4.33E+00	pCi/g	100%	*(5.5)*	10/6/11 04:56 p		0.201	GPC31B
						2.00E+00	1.50E+01	*(7.5)*			g	
Batch: 1271156	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRC41AE		**Report DB ID:**	9MMRC410				
STRONTIUM	***5.65E-02***	U	7.6E-02	7.7E-02	1.66E-01	pCi/g	63%	*0.34*	10/10/11 09:30 p		6.02	GPC27B
						7.70E-02		*(1.5)*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06242	**Collection Date:**	~~8/31/2011~~ 09/12/2011 10:40:00 AM
Lot-Sample No.:	J1I270481-13	**Report No. :**	48755	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXD8	**COC No. :**	F11-159-074	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271112	7196_CR6			**Work Order:**	MMRC31AA		**Report DB ID:**	9MMRC310				
HEXCHROME	***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*(1.)*	9/29/11 11:00 a		2.5045	
							1.55E-01	*N/A*			g	
Batch: 1271148	9310_ALPHABETA_GPC			**Work Order:**	MMRC31AC		**Report DB ID:**	9MMRC310				
ALPHA	***5.74E+00***	U	4.0E+00	5.7E+00	6.07E+00	pCi/g	100%	*0.95*	10/11/11 05:22 p		0.0505	GPC10C
						2.52E+00	1.00E+01	*(2.)*			g	
Batch: 1271149	9310_ALPHABETA_GPC			**Work Order:**	MMRC31AF		**Report DB ID:**	9MMRC310				
BETA	***2.42E+01***		4.1E+00	6.6E+00	4.88E+00	pCi/g	100%	*(4.9)*	10/6/11 04:56 p		0.2001	GPC28D
						2.27E+00	1.50E+01	*(7.3)*			g	
Batch: 1271156	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRC31AE		**Report DB ID:**	9MMRC310				
STRONTIUM	***4.41E-02***	U	6.9E-02	7.0E-02	1.53E-01	pCi/g	67%	*0.29*	10/10/11 09:30 p		6.03	GPC27A
						7.11E-02		*(1.3)*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	SDG:	W06242	Collection Date:	~~8/31/2011~~ 09/12/2011 11:07:00 AM
Lot-Sample No.:	J1I270481-2	Report No. :	48755	Received Date:	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXD9	COC No. :	F11-159-074	Matrix:	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC | MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271112	7196_CR6			Work Order:	MMRC21AA		Report DB ID: 9MMRC210					
HEXCHROME	***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*(1.)*	9/29/11 11:00 a		2.5015	
							1.55E-01	*N/A*			g	
Batch: 1271148	9310_ALPHABETA_GPC			Work Order:	MMRC21AC		Report DB ID: 9MMRC210					
ALPHA	***6.13E+00***		3.9E+00	5.8E+00	5.39E+00	pCi/g	100%	*(1.1)*	10/11/11 05:22 p		0.0505	GPC10B
						2.16E+00	1.00E+01	*(2.1)*			g	
Batch: 1271149	9310_ALPHABETA_GPC			Work Order:	MMRC21AF		Report DB ID: 9MMRC210					
BETA	***2.80E+01***		4.2E+00	7.4E+00	4.64E+00	pCi/g	100%	*(6.)*	10/6/11 04:56 p		0.2006	GPC28C
						2.15E+00	1.50E+01	*(7.6)*			g	
Batch: 1271156	SRTOT_SEP_PRECIP_GPC			Work Order:	MMRC21AE		Report DB ID: 9MMRC210					
STRONTIUM	***9.17E-02***	U	7.5E-02	7.9E-02	1.52E-01	pCi/g	64%	*0.6*	10/10/11 09:30 p		6.02	GPC26D
						7.05E-02		*(2.3)*			g	

No. of Results: 4 Comments:

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06242	**Collection Date:**	~~8/31/2011~~ 09/12/2011 11:49:00 AM
Lot-Sample No.:	J1I270481-16	**Report No. :**	48755	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXF0	**COC No. :**	F11-159-074	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271112	7196_CR6			**Work Order:**	MMRC61AA		**Report DB ID:**	9MMRC610				
HEXCHROME	***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*(1.)*	9/29/11 11:00 a		2.503	
							1.55E-01	*N/A*			g	
Batch: 1271148	9310_ALPHABETA_GPC			**Work Order:**	MMRC61AC		**Report DB ID:**	9MMRC610				
ALPHA	***6.58E+00***		4.0E+00	6.2E+00	5.43E+00	pCi/g	100%	*(1.2)*	10/11/11 07:20 p		0.0503	GPC10B
						2.17E+00	1.00E+01	*(2.1)*			g	
Batch: 1271149	9310_ALPHABETA_GPC			**Work Order:**	MMRC61AF		**Report DB ID:**	9MMRC610				
BETA	***2.55E+01***		4.0E+00	6.8E+00	4.55E+00	pCi/g	100%	*(5.6)*	10/6/11 04:56 p		0.2005	GPC31D
						2.11E+00	1.50E+01	*(7.5)*			g	
Batch: 1271156	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRC61AE		**Report DB ID:**	9MMRC610				
STRONTIUM	***4.05E-02***	U	8.3E-02	8.3E-02	1.86E-01	pCi/g	56%	*0.22*	10/10/11 09:30 p		6.0	GPC28B
						8.63E-02		*0.97*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	SDG:	W06242	Collection Date:	~~8/31/2011~~ 09/07/2011 9:50:00 AM
Lot-Sample No.:	J1I270481-2	Report No. :	48755	Received Date:	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXJ4	COC No. :	F11-159-074	Matrix:	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271112	7196_CR6			Work Order:	MMRCG1AA		Report DB ID: 9MMRCG10					
HEXCHROME	***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*(1.)*	9/29/11 11:00 a		2.5025	
							1.55E-01	*N/A*			g	
Batch: 1271148	9310_ALPHABETA_GPC			Work Order:	MMRCG1AC		Report DB ID: 9MMRCG10					
ALPHA	***3.71E+00***	U	3.4E+00	4.3E+00	5.68E+00	pCi/g	100%	*0.65*	10/11/11 10:55 a		0.0505	GPC10D
						2.31E+00	1.00E+01	*(1.7)*			g	
Batch: 1271149	9310_ALPHABETA_GPC			Work Order:	MMRCG1AF		Report DB ID: 9MMRCG10					
BETA	***1.80E+01***		3.6E+00	5.3E+00	4.70E+00	pCi/g	100%	*(3.8)*	10/6/11 03:54 p		0.2004	GPC32B
						2.18E+00	1.50E+01	*(6.8)*			g	
Batch: 1271156	SRTOT_SEP_PRECIP_GPC			Work Order:	MMRCG1AE		Report DB ID: 9MMRCG10					
STRONTIUM	***6.36E-02***	U	8.6E-02	8.8E-02	1.88E-01	pCi/g	55%	*0.34*	10/10/11 08:37 p		6.02	GPC26B
						8.74E-02		*(1.4)*			g	

No. of Results: 4 Comments:

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06242	**Collection Date:**	8/31/2011 7:30:00 AM
Lot-Sample No.:	J1I270481-1	**Report No. :**	48755	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXJ5	**COC No. :**	F11-159-074	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC | MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271112	7196_CR6			**Work Order:**	MMRCE1AA		**Report DB ID:**	9MMRCE10				
HEXCHROME	***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*(1.)*	9/29/11 11:00 a		2.5065	
							1.55E-01	*N/A*			g	
Batch: 1271148	9310_ALPHABETA_GPC			**Work Order:**	MMRCE1AC		**Report DB ID:**	9MMRCE10				
ALPHA	***2.95E+00***	U	3.1E+00	3.8E+00	5.35E+00	pCi/g	100%	*0.55*	10/11/11 10:55 a		0.0508	GPC10B
						2.14E+00	1.00E+01	*(1.6)*			g	
Batch: 1271149	9310_ALPHABETA_GPC			**Work Order:**	MMRCE1AF		**Report DB ID:**	9MMRCE10				
BETA	***1.44E+01***		3.4E+00	4.6E+00	4.82E+00	pCi/g	100%	*(3.)*	10/6/11 03:54 p		0.2002	GPC32A
						2.24E+00	1.50E+01	*(6.3)*			g	
Batch: 1271156	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRCE1AE		**Report DB ID:**	9MMRCE10				
STRONTIUM	***7.95E-02***	U	6.9E-02	7.2E-02	1.44E-01	pCi/g	86%	*0.55*	10/10/11 08:37 p		6.01	GPC26A
						6.74E-02		*(2.2)*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

Appendix 4

Laboratory Narrative and Chain-of-Custody Documentation

Attachment 2
Narrative
WSCF113047

Introduction

Samples were received at the WSCF laboratory as referenced on the WSCF SAF Number Cross Reference table included in the final report. 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

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):

- Matrix Spike and Insoluble Matrix Spike recoveries are outside established laboratory limits. Affected sample results in this batch were "N" flagged.
- All other applicable QC controls are within the established limits.

Attachment 2
Narrative
WSCF113047

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):

- Manganese – Matrix Spike and/or Matrix Spike Duplicate recoveries are outside established laboratory limits. Affected sample results in this batch were "N" flagged.
- Mercury and Molybdenum - The LCS recovery was outside laboratory acceptance limits. Sample Issue Resolution Form SDR11-400 regarding the LCS failure is attached to this report.
- All other applicable QC controls are within the established limits.

Radiochemistry Comments

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

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:
  - Europium-152 – 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 applicable QC controls are within the established limits.
- Gross Alpha / Gross Beta:
  - Gross Beta – 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 applicable QC controls are within the established limits.
- Strontium-89/90:
  - The Blank is less than two times the RDL. "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 applicable QC controls are within the established limits.

Narrative

Attachment 2
Narrative
WSCF113047

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
WSCF113047

SAMPLE ISSUE RESOLUTION

SIR NUM	SDR11-400
REV NUM	0
DATE INITIATED	9/6/2011

SAMPLE EVENT INFORMATION

SAF NUM(S)	F11-057, F11-159
OPERABLE UNIT(S)	100-KR-2, 100-NR-2
PROJECT(S)	KW Floodplain, 100 Area RI/FS
SAMPLE EVENT TITLE(S)	100-K-63 KW Floodplain, 100 Area RI/FS
LABORATORY	Waste Sampling & Characterization

SAMPLING INFORMATION

NUMBER OF SAMPLES	9
SAMPLE NUMBERS	B2C7W7, B2C7W8, B2FXB4, B2FXC5, B2FXD6, B2FXF7, B2FXH8, B2FXJ2, B2FXJ3
SAMPLE MATRIX	SOIL
COLLECTION DATE	8/29/2011 - 9/1/2011
SDG NUM	WSCF113059, WSCF113078, WSCF113047

ISSUE BACKGROUND

CLASS	Laboratory Issue
TYPE	Quality Control Failure
DESCRIPTION	The 200.8 Mercury LCS was high at 130.7% with control limits of 69-124%. The MS (114%) and MSD (117%) were within the limits of 70-130%. The blank was non-detect. And The 200.8 Molybdenum LCS was high at 139.9% with control limits of 80-125%. The MS (107%) and MSD (112%) were within the limits of 70-130%. The blank was non-detect.

DISPOSITION

DESCRIPTION	Suggested disposition: Report the data and note LCS failures in the case narrative.
JUSTIFICATION	

Submitted by: Marisol Avila Date: 9/6/2011
Accepted by: Deb Alexander Date: 9/8/2011
Accepted by: Scott Luke Date: 9/8/2011

A-6003-640 (03/30) PAGE 1 of 1

4

Sample Receipt

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F11-159-071	PAGE 1 OF 2
COLLECTOR: F.M. Hall	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #53	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A1)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	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: 11 Days / 12 Days
				ORIGINAL

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)

113047

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool<4C	None	None
HOLDING TIME	6 Months	6 Months	6 Months
TYPE OF CONTAINER	G/P	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXJ2	SOIL	AUG 29 2011	1140	✓	✓	✓

SPECIAL INSTRUCTIONS: SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: F.M. Hall	DATE/TIME: AUG 29 2011 1450	RECEIVED BY/STORED IN: [illegible]	DATE/TIME: AUG 29 2011 1455
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-071	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #53	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A1)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: 6WS-007	FIELD LOGBOOK NO.: HNF-N-807-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

PRINTED ON 7/25/2011 A-6003-518 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-072

PAGE 1 OF 2

COLLECTOR: [illegible]

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: 12 Days / 12 Days

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #54

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159-

AIR QUALITY: ☐

ICE CHEST NO.: GW3-007

FIELD LOGBOOK NO.: HNF-N-807-23-

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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=Vegetaton, W=Water, WI=Wipe, X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS: Contains Radioactive Material at concentrations that may or may not be regulated for transportetion 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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXJ3	2 SOIL	AUG 29 2011	0900	✓	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall [signature]	AUG 29 2011 1450	[signature]	AUG 29 2011 1455
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
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

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A 6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-072	PAGE 2 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #54	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	ORIGINAL
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	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 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

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Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-056 | PAGE 1 OF 2

COLLECTOR: FM Hall

SAMPLING LOCATION: CHPRC

100-K-63 Grubbed Area Sample #4

ICE CHEST NO.: GWS-007

SHIPPED TO: Waste Sampling & Characterization

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

FIELD LOGBOOK NO.: HNF-N-507-23

ACTUAL SAMPLE DEPTH: 0-1'

OFFSITE PROPERTY NO.: N/A

PROJECT COORDINATOR: LUKE, SN

SAF NO.: F11-159

COA: 302676ES10

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

PRICE CODE: C01

AIR QUALITY:

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

DATA TURNAROUND: 12 Days / 12 Days

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXF7 3	SOIL	AUG 29 2011	1140	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: AUG 29 2011 1455	RECEIVED BY/STORED IN: Bisoral Fly	DATE/TIME: AUG 29 2011 1455
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-056	PAGE 2 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #4	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A)- Soil		SAF NO.: F11-159	AIR QUALITY: L	
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.□□** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

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Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-067 PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #5

ICE CHEST NO.: GWS-007

SHIPPED TO: Waste Sampling & Characterization

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A1)- Soil

FIELD LOGBOOK NO.: HNF-N-507-23

ACTUAL SAMPLE DEPTH: 0-1'

OFFSITE PROPERTY NO.: N/A

PROJECT COORDINATOR: LUKE, SN

SAF NO.: F11-159

COA: 302676ES10

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

PRICE CODE: C01

AIR QUALITY:

DATA TURNAROUND: 12 Days / 12 Days

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXH8 4	SOIL	AUG 29 2011	1215	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 29 2011 1455	[illegible]	AUG 29 2011 1455

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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Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-067	PAGE 2 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #5	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23.	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

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Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-023	PAGE 1 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #1	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A1)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-27	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXB4	5	SOIL	AUG 29 2011	1030	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: AUG 29 2011 / 1455	RECEIVED BY/STORED IN: [signature]	DATE/TIME: AUG 29 2011 / 1455
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-023	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #1	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-807-22	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.□□** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

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Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F11-159-034 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	AIR QUALITY: ☐	DATA TURNAROUND: 12 Days / 12 Days	
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #2	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A1)- Soil	SAF NO.: F11-159	
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL		
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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXC5	SOIL	AUG 29 2011	1055	✓	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 29 2011 1455	[illegible]	AUG 29 2011 1455

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

PRINTED ON 7/25/2011 — A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-034	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #2	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A1)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: 6WS-007	FIELD LOGBOOK NO.: HNF-N-607-23	ACTUAL SAMPLE DEPTH: 0-1	COA: 3C2676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.□□** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

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Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-045

PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: 12 Days / 12 Days

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #3

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

AIR QUALITY: ☐

ICE CHEST NO.: GWS-007

FIELD LOGBOOK NO.: HNF-N-507-23.

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXD6 7	SOIL	AUG 29 2011	1115	✓	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 29 2011 1145	[illegible]	AUG 29 2011 1145

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

PRINTED ON 7/25/2011

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Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-045	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #3	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A)- Soil		SAF NO.: F11 150	AIR QUALITY:	
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.□□** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

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Attachment 2
Narrative
WSCF113057

Introduction

Samples were received at the WSCF laboratory as referenced on the WSCF SAF Number Cross Reference table included in the final report. 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. Also attached is SDR11-411 regarding Mercury LCS failure.

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

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

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

Analytical Methodology for Requested Analyses

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

Inorganic Comments

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

- Batch QC 189366

- Matrix Spike and Insoluble Matrix Spike recoveries are outside established laboratory limits. Affected sample results in this batch were "N" flagged.
- All other applicable QC controls are within the established limits.

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

- Sample Issue Resolution Form SDR11-411 regarding Mercury LCS failure is attached to this report. The resolution for the Mercury LCS failure was to reprep and reanalyze the samples. However, due to WSCFs Stop Work due to Hood Restrictions, the samples were returned to the client for reanalysis at another laboratory. The Mercury results provided in this report are those that contained the LCS failed recovery.
- Mercury – The LCS recovery is outside established laboratory limits. Affected sample and QC results in this batch were flagged.
- Manganese – MS / MSD Relative Percent Difference (RPD) is outside established laboratory limits. The quality control report was flagged for RPD failure.
- Manganese – Matrix Spike recovery was outside established laboratory limits. Affected sample results in this batch were "N" flagged.
- All other applicable QC controls are within the established limits.

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 189022
    - Eruopium-152 – 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 applicable QC controls are within the established limits.
- Gross Alpha / Gross Beta:
  - Batch QC 189037

Attachment 2
Narrative
WSCF113057

- Gross Alpha – The Blank is less than two times the RDL. "B" Flag not required.
- Gross Beta – 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 applicable QC controls are within the established limits.

- Strontium-89/90:
  - Batch QC 189039
    - The Blank is less than two times the RDL. "B" Flag not required.
    - All other applicable QC controls are within the established limits.

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

Narrative

Attachment 2
Narrative
WSCF113057

SAMPLE ISSUE RESOLUTION

SIR NUM	SDR11-411
REV NUM	0
DATE INITIATED	9/15/2011

SAMPLE EVENT INFORMATION

SAF NUM(S)	F11-159
OPERABLE UNIT(S)	100-KR-2
PROJECT(S)	KW Floodplain
SAMPLE EVENT TITLE(S)	100-K-63 KW Floodplain
LABORATORY	Waste Sampling & Characterization

SAMPLING INFORMATION

NUMBER OF SAMPLES	14
SAMPLE NUMBERS	B2FXB5, B2FXB6, B2FXB7, B2FXB8, B2FXB9, B2FXC0, B2FXC1, B2FXC2, B2FXC3, B2FXC4, B2FXJ8, B2FXJ9, B2FXK0, B2FXK1
SAMPLE MATRIX	SOIL
COLLECTION DATE	8/30/2011 - 8/30/2011
SDG NUM	WSCF113057

ISSUE BACKGROUND

CLASS	Laboratory Issue
TYPE	Quality Control Failure
DESCRIPTION	The 200.8 Mercury LCS was high at 173.3% with control limits of 85-115%. The MS (128%) and MSD (108.5%) were within the limits of 70-130%. The blank was non-detect. All sample results for Mercury were non-detect.

DISPOSITION

DESCRIPTION	Proposed Disposition: Report the mercury data and note the LCS QC failure in the case narrative.
JUSTIFICATION	Requested Disposition: Re-run the affected samples within the 28-day hold time and report results.

Submitted by: Marisol Avila Date: 9/15/2011
Accepted by: Jennifer Hammons Date: 9/15/2011

A-6003-640 (03/30) PAGE 1 of 1

4

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F11-159-~~078~~ 077 — PAGE 1 OF 2

COLLECTOR: F. Hall	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days	AIR QUALITY: ☐	SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #7
PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil	SAF NO.: F11-159	ICE CHEST NO.: GW3-007	FIELD LOGBOOK NO.: HNF-N-507-23-
ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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)

8-31-11 Kler

TOP 113057

SPECIAL HANDLING AND/OR STORAGE

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

DB 8/31/11 Shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
~~B2FX39~~ B2FXJ8	SOIL	1	8/30/11	0960	✓	✓ ✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
F. Hall	AUG 30 2011 1500	H N Robinson	AUG 30 2011 1500

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

PRINTED ON 7/25/2011 — A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-~~078~~ 077	PAGE 2 OF 2
COLLECTOR: F. Hall	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #7	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: [ ]	
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-33	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.□□** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS (Mercury); Chromium Hex - 7196;~~ KB 9/26/11
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

PRINTED ON 7/25/2011 A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F11-159-078	PAGE 1 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01
				DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #7	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐
ICE CHEST NO.: GW3-007	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE
				ORIGINAL
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	None	None
		HOLDING TIME	6 Months	6 Months	6 Months
		TYPE OF CONTAINER	G/P	P	G/P
		NO. OF CONTAINER(S)	1	1	1
		VOLUME	250mL	500mL	250mL
	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

KB 8/24/11 SHIPPED

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXJ9	SOIL	8/30/11	0916	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: AUG 30 2011 1500	RECEIVED BY/STORED IN: M. Nelson	DATE/TIME: AUG 30 2011 1500	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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-078	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #7	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A1)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS - 007	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0 - 1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - /196;~~ KB 9/26/11
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

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Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-079 PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #8

ICE CHEST NO.: 6WS-007

SHIPPED TO: Waste Sampling & Characterization

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A3)- Soil

FIELD LOGBOOK NO.: HNF-N-607-23.

ACTUAL SAMPLE DEPTH: 0-1'

OFFSITE PROPERTY NO.: N/A

PROJECT COORDINATOR: LUKE, SN

SAF NO.: F11-159

COA: 302676ES10

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

PRICE CODE: C01

AIR QUALITY: ☐

DATA TURNAROUND: 12 Days / 12 Days

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXK0	SOIL	8/30/11	0930	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 30 2011 500	M. Nelson Hines	AUG 30 2011 500

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

PRINTED ON 7/25/2011

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Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-079	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372 1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #8	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A3)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.□□** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

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Tuesday, September 27, 2011 9:58:37 AM
Page 8 of 30

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-080

PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: 12 Days / 12 Days

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #9

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

AIR QUALITY: ☐

ICE CHEST NO.: 6WS-007

FIELD LOGBOOK NO.: HNF-N-507-23.

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 8/26/11 Shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXK1 4	SOIL	8/30/11	0942	✓	✓	✓

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 30 2011 1500	M.Ne/SN/K.Ne	AUG 30 2011 1500

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-080	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #9	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20. ☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ KB 9/26/11
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

PRINTED ON 7/25/2011 A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-024

PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: 12 Days / 12 Days

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #10

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

AIR QUALITY:

ICE CHEST NO.: GWS-007

FIELD LOGBOOK NO.: HNF-N-507-23.

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

VB 9/12/11 Shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXB5 5	SOIL	8/30/11	1009	✓	✓	✓

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 30 2011 1500	M. Nelson	AUG 30 2011 1500

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

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

F11-159-024 — PAGE 2 OF 2

COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #10	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01 — AIR QUALITY: ☐ — DATA TURNAROUND: 12 Days / 12 Days — METHOD OF SHIPMENT: GOVERNMENT VEHICLE — **ORIGINAL**

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}, 200.8 HG ICPMS {Mercury}; Chromium Hex 7196;~~ KB 9/26/11
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

PRINTED ON 7/25/2011 — N-6003-618 (REV 2)

Sample Receipt

Chain of Custody

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

F11-159-025 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

AIR QUALITY: ☐

DATA TURNAROUND: 12 Days / 12 Days

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #11

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A1)- Soil

SAF NO.: F11-159

ICE CHEST NO.: GWS-007

FIELD LOGBOOK NO.: HNF-N-507-23

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 08/21/11 Shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXB6 6	SOIL	8/30/11	0950	✓	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 30 2011 1500	M. Nelson	AUG 30 2011 1500

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

PRINTED ON 7/25/2011

A-6003-619 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-025	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #11	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-607-23.	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG_ICPMS {Mercury}; Chromium Hex - 7196;~~ KB 9/26/11

(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};

(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

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A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-026 PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: 12 Days / 12 Days

AIR QUALITY: ☐

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #12

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

ICE CHEST NO.: GWS-007

FIELD LOGBOOK NO.: HNF-N-807-23

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 9/29/11

Shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXB7	SOIL	8/30/11	1020	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 30 2011 1500	M. Nelson M. Neal	AUG 30 2011 1500

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-026

PAGE 2 OF 2

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #12	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		**SAF NO.** F11 159
ICE CHEST NO. GWS-007	**FIELD LOGBOOK NO.** HNF-N-507-23	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 302676ES10
SHIPPED TO Waste Sampling & Characterization	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

PRICE CODE C01

AIR QUALITY ☐

METHOD OF SHIPMENT GOVERNMENT VEHICLE

DATA TURNAROUND 12 Days / 12 Days

ORIGINAL

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}, 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ KB 9/26/11
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

PRINTED ON 7/25/2011

4-6003-618 (REV 7)

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F11-159-027 — PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days		
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #13	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
AIR QUALITY: ☐			
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL		
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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

VB 8/30/11 Shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXB8	SOIL	8/30/11	1031	✓	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 30 2011 1500	M Nelson M Nelson	AUG 30 2011 1500
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
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

PRINTED ON 7/25/2011 — A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-027

PAGE 2 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #13	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23.	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01

AIR QUALITY: ☐

DATA TURNAROUND: 12 Days / 12 Days

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8 HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ KB 9/26/11

(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};

(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

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A-6003-618 (REV 2)

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

F11-159-028 | PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days		
AIR QUALITY: ☐			
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #14	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GW3-004	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL		
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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 8/30/11 Shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXB9 9	SOIL	8/30/11	1044	✓	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 30 2011 1500	M. Nelson	AUG 30 2011 1500

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

PRINTED ON 7/25/2011 — A-6003-010 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-028	PAGE 2 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #14	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GW3-004	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8-HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ KB 9/26/11

(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};

(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

PRINTED ON 7/25/2011

A 6003-618 (REV 2)

Tuesday, September 27, 2011 9:58:37 AM

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Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-029

PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: 12 Days / 12 Days

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #15

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A)- Soil

SAF NO.: F11-159

AIR QUALITY: ☐

ICE CHEST NO.: GWS-007

FIELD LOGBOOK NO.: HNF-N-507-23

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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, SF=Sediment, T=Tissue, V=Vegetation, W=Water, WI=Wipe, X=Other

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

SPECIAL HANDLING AND/OR STORAGE

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

KB 9/26/11

Shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXC0 / 0	SOIL	8/30/11	1056	✓	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 30 2011 1500	M. Nelson	AUG 30 2011 1500

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-029	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100 K 63 Grubbed Area Sample #15	PROJECT DESIGNATION: 100 K 63 KW Floodplain Verification Sampling (Waste Area A) - Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GW3 -007	FIELD LOGBOOK NO.: HNF-N-807-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.□□** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ VB 9/26/11
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

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A-6003-618 (REV 2)

Tuesday, September 27, 2011 9:58:37 AM
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Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-1S9-030

PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: 12 Days / 12 Days

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #16

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

AIR QUALITY: ☐

ICE CHEST NO.: GWS-007

FIELD LOGBOOK NO.: HNF-N-507-23.

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

Shipped 8/30/11

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B2FXC1	SOIL	8/30/11	1109

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 30 2011 1500	M. Nelson M. Nelson	AUG 30 2011 1500

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

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

F11-159-030 — PAGE 2 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372 1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #16	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01

AIR QUALITY: ☐

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

DATA TURNAROUND: 12 Days / 12 Days

ORIGINAL

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ KB 9/26/11
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

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A-6003-618 (REV 2)

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Page 24 of 30

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-031 | PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: LUKE, SN | TELEPHONE NO.: 372-1667 | PROJECT COORDINATOR: LUKE, SN | PRICE CODE: C01 | DATA TURNAROUND: 12 Days / 12 Days

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #17 | PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A)- Soil | SAF NO.: F11-159 | AIR QUALITY: ☐

ICE CHEST NO.: GWS-007 | FIELD LOGBOOK NO.: HNF-N-507-23. | ACTUAL SAMPLE DEPTH: 0-1' | COA: 302676ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 08/30/11 Shipped

SAMPLE NO.		MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXC2	12	SOIL	8/30/11	1120	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 30 2011 1500	M. Nelson Miner	AUG 30 2011 1500

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F11-159-031** | **PAGE 2 OF 2**

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #17	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		**SAF NO.** F11-159
ICE CHEST NO. GWS-007	**FIELD LOGBOOK NO.** HNF-N-507-23.	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 302676ES10
SHIPPED TO Waste Sampling & Characterization	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

PRICE CODE C01 | **AIR QUALITY** ☐ | **DATA TURNAROUND** 12 Days / 12 Days | **METHOD OF SHIPMENT** GOVERNMENT VEHICLE | **ORIGINAL**

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ VB 9/26/11
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

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Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-032 PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: 12 Days / 12 Days

AIR QUALITY: ☐

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #18

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

ICE CHEST NO.: GWS-007

FIELD LOGBOOK NO.: HNF-N-507-

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

DB 8/30/11

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B2FXC3 13	SOIL	8/30/11	1135

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 30 2011 1500	M. Nelson M. Nelson	AUG 30 2011 1500

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-032	PAGE 2 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #18	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.□□** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ KB 9/26/11
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F11-159-033 — PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days	AIR QUALITY: L	SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #19
PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil	SAF NO.: F11-159	ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23
ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

Shipped 9/12/11

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	[redacted]		
B2FXC4 14	SOIL	8/30/11	1200	✓	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 30 2011 1500	M. NCISAM	AUG 30 2011 1500

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

PRINTED ON 7/25/2011 — A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-033	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K 63 Grubbed Area Sample #19	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A1)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	ORIGINAL
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23.	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	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 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8 HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ KB 9/26/11

(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};

(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

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A-6003-610 (REV 2)

Attachment 2
Narrative
WSCF113116

Introduction

Samples were received at the WSCF laboratory as referenced on the WSCF SAF Number Cross Reference table included in the final report. 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

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):

- All applicable QC controls are within the established limits.

Attachment 2
Narrative
WSCF113116

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):

- Gamma Energy Analysis:
    - All applicable QC controls are within the established limits.

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

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-039 | PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: 12 Days / 12 Days

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #24

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

AIR QUALITY: ☐

ICE CHEST NO.: GWS-023

FIELD LOGBOOK NO.: HNF-N-507-23.

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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)

113116

SPECIAL HANDLING AND/OR STORAGE

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

KB 01/20/11 shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXD0	SOIL	8/31/11	1056	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall	AUG 31 2011/1300	MO1109SSU #1	AUG 31 2011/1300
MO1109 SSU #1	9-7-11 1230	FM Hall	9-7-11 1230
FM Hall	9-7-11 1415	M. Nelson M. Nelson	9-7-11 1415

SPECIAL INSTRUCTIONS: SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F11-159-039 — PAGE 2 OF 2

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #24	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		**SAF NO.** F11-159
ICE CHEST NO. GWS - 023	**FIELD LOGBOOK NO.** HNF-N-507-23	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 302676ES10
SHIPPED TO Waste Sampling & Characterization	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

PRICE CODE C01 — **AIR QUALITY** ☐ — **DATA TURNAROUND** 12 Days / 12 Days — **METHOD OF SHIPMENT** GOVERNMENT VEHICLE — **ORIGINAL**

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG_ICPMS {Mercury}; Chromium Hex - 7196;~~ KB 9/26/11

(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium 89,90 -- Total Sr;~~ KB 9/26/11

PRINTED ON 7/25/2011 — A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-040	PAGE 1 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #25	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.	FIELD LOGBOOK NO.	ACTUAL SAMPLE DEPTH: SURFACE	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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
B2FXD1	SOIL	SEP 07 2011	0830

Shipped 07/20/11 KB

Shipped 07/20/11 KB

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: FM Hall, CHPRC	DATE/TIME: SEP 07 2011 1415	RECEIVED BY/STORED IN: M. Nelson	DATE/TIME: SEP 07 2011 1415	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-040	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #25	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.	FIELD LOGBOOK NO.	ACTUAL SAMPLE DEPTH: SURFACE	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ KB 9/26/11

(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 - Total Sr;~~ KB 9/26/11

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-041

PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: 12 Days / 12 Days

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #26

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A1)- Soil

SAF NO.: F11-159

AIR QUALITY: ☐

ICE CHEST NO.:

FIELD LOGBOOK NO.:

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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	GP
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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
B2FXD2 3	SOIL	SEP 07 2011	0940

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 07 2011 1415	M. Nelson	SEP 07 2011 1415

SPECIAL INSTRUCTIONS: SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION: RECEIVED BY | TITLE | DATE/TIME

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

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

F11-159-041 — PAGE 2 OF 2

COLLECTOR: FM Hall	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: CHPRC 100-K-63 Grubbed Area Sample #26	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.	FIELD LOGBOOK NO.	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01

AIR QUALITY: ☐

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

DATA TURNAROUND: 12 Days / 12 Days

ORIGINAL

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ KB 9/26/11

(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};

~~(3) Gross Alpha {Gross alpha}, Gross beta {Gross beta}, Strontium 89,90 - Total Sr,~~ KB 9/26/11

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Page 8 of 24

Sample Receipt

Chain of Custody

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

F11-159-042 — PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days	AIR QUALITY: ☐	
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #27	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A)- Soil	SAF NO.: F11-159	
ICE CHEST NO.	FIELD LOGBOOK NO.	ACTUAL SAMPLE DEPTH: SURFACE	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL		
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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 01/26/11 shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXD3 4	SOIL	SEP 07 2011	1014	✓	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 07 2011 1445	M. Nelson	SEP 07 2011 1415

SPECIAL INSTRUCTIONS: SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

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

PRINTED ON 7/25/2011 — A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-042	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #27	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.	FIELD LOGBOOK NO.	ACTUAL SAMPLE DEPTH: SURFACE	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ KB 9/26/11

(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium 89,90 - Total Sr;~~ KB 9/26/11

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A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-043	PAGE 1 OF 2
COLLECTOR: FM Hall	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: CHPRC 100-K-63 Grubbed Area Sample #28	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A1)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.	FIELD LOGBOOK NO.	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXD4	SOIL	SEP 07 2011	1624	✓	✓	✓

UB 01/20/11 Shipped

UB 01/20/11 Shipped

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 07 2011 1415	RECEIVED BY/STORED IN: M. Nelsonkness	DATE/TIME: SEP 07 2011 1415	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-043	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT LUKE, SN	TELEPHONE NO. 372-1667	PROJECT COORDINATOR LUKE, SN	PRICE CODE C01	DATA TURNAROUND 12 Days / 12 Days
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #28	PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area A)- Soil		SAF NO. F11-159	AIR QUALITY ☐	
ICE CHEST NO.	FIELD LOGBOOK NO.	ACTUAL SAMPLE DEPTH 0-1'	COA 302676ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8-HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ VB 9/26/11
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
~~(3) Gross Alpha {Gross alpha}, Gross Beta {Gross beta}, Strontium-89,90 - Total Sr;~~ VB 9/26/11

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A-5003-518 (REV 2)

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F11-159-035 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days		
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #20	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A1)- Soil	SAF NO.: F11-159	AIR QUALITY: ☐
ICE CHEST NO.: GWS-023	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL		
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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 9/20/11 Shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXC6	SOIL	8/31/11	0930	✓	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 3 1 2011 / 1300	M01109SSU #1	AUG 3 1 2011 / 1300
M01109 SSU #1	9-7-11 1230	FM HALL	9-7-11 1230
FM HALL	9-7-11 1415	M. Nelson M.Nelson	9-7-11 1415

SPECIAL INSTRUCTIONS: SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

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

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CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-035	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #20	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	12 Days / 12 Days
ICE CHEST NO.: GWS-023	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ KB 9/26/11

(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 - Total Sr;~~ KB 9/26/11

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F11-159-036 — PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	AIR QUALITY: ☐	DATA TURNAROUND: 12 Days / 12 Days	
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #21	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A1)- Soil	SAF NO.: F11-159	
ICE CHEST NO.: GWS-023	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL		
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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 9/26/11 Shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXC7	SOIL	8/31/11	0950	✓	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall, CHPRC	AUG 31 2011 / 1300	M01109SSU #1	AUG 31 2011 / 1300
M01109 SSU #1	9-7-11 / 2330	FM Hall	9-7-11 / 2330
FM Hall	9-7-11 / 1415	M. Nelson	9-7-11 / 1415

SPECIAL INSTRUCTIONS: SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

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

PRINTED ON 7/25/2011 — A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F11-159-036	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01 / DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #21	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐
ICE CHEST NO.: GWS-023	FIELD LOGBOOK NO.: HNF-~~N-507~~-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE / ORIGINAL
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 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}, 260.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ KB 9/26/11

(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;~~ KB 9/26/11

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CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F11-159-037 — PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	AIR QUALITY: ☐	DATA TURNAROUND: 12 Days / 12 Days	
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #22	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A)- Soil	SAF NO.: F11-159	
ICE CHEST NO.: GWS-023	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 30267GES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL		
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 KB	P	G/P KB
NO. OF CONTAINER(S)	1 8/26/11	1	1 8/26/11
VOLUME	250mL Shipped	500mL	250mL Shipped
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			
B2FXC8	SOIL	8/31/11	1010	✓	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall	AUG 31 2011 / 1300	M01109SSU #1	AUG 31 2011 / 1300
M01109 SSU #1	9-7-11 / 230	FM Hall	9-7-11 / 230
FM Hall	9-7-11 / HIS	M. Nelson M. Nelson	9-7-11 / HIS

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

PRINTED ON 7/25/2011 — A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

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

F11-159-037 — PAGE 2 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #22	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A1)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-023	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01
AIR QUALITY: ☐
METHOD OF SHIPMENT: GOVERNMENT VEHICLE
DATA TURNAROUND: 12 Days / 12 Days
ORIGINAL

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8 HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ KB 9/26/11
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 - Total Sr~~; KB 9/26/11

PRINTED ON 7/25/2011 — A-6003-618 (REV 2)

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CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F11-159-038 — PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days	AIR QUALITY: ☐	SAF NO.: F11-159
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #23	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		
ICE CHEST NO.: GWS-023	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL		
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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250ml	500mL	250ml
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 9/12/11 Shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	[redacted]		
B2FXC9	SOIL	8/31/11	1030	✓	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall, CHPRC	AUG 31 2011 / 1300	M01109550 #1	AUG 31 2011 / 1300
M01109554 #1	9-7-11 1230	FM HALL	9-7-11 1230
FM HALL	9-7-11 1415	M. Nelson M. Nelson	1415 7-7-11

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

PRINTED ON 7/25/2011 — A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-038 | PAGE 2 OF 2

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #23	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area A1)- Soil		**SAF NO.** F11-159
ICE CHEST NO. GWS-023	**FIELD LOGBOOK NO.** HNF-N-507-23	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 302676ES10
SHIPPED TO Waste Sampling & Characterization	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

PRICE CODE C01 | **AIR QUALITY** ☐ | **DATA TURNAROUND** 12 Days / 12 Days | **METHOD OF SHIPMENT** GOVERNMENT VEHICLE | **ORIGINAL**

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ KB 9/26/11

(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium 89,90 - Total Sr;~~ KB 9/26/11

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Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F11-159-073 — PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days	AIR QUALITY: ☐	SAF NO.: F11-159
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #55	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		
ICE CHEST NO.	FIELD LOGBOOK NO.	ACTUAL SAMPLE DEPTH: SURFACE	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL		
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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 9/26/11 shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B2FXJ4 10	SOIL	SEP 07 2011	0940

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall, CHPRC	SEP 07 2011 1415	M. Nelson	SEP 07 2011 1415

SPECIAL INSTRUCTIONS: SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

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

PRINTED ON 7/25/2011 — A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-073	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100 K 63 Grubbed Area Sample #55	PROJECT DESIGNATION: 100 K 63 KW Floodplain Verification Sampling (Waste Area AJ) Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.	FIELD LOGBOOK NO.	ACTUAL SAMPLE DEPTH: SURFACE	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKT 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ KB 9/26/11

(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 - Total Sr;~~ KB 9/26/11

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Sample Receipt

Chain of Custody

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

F11-159-074 — PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: 12 Days / 12 Days

AIR QUALITY: ☐

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #56

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

ICE CHEST NO.: 6WS-023

FIELD LOGBOOK NO.: HNF-N-507-23

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250ml	500ml	250ml
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 9/20/11 Shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXJ5	SOIL	AUG 31 2011	0730	✓	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall	AUG 31 2011 / 1300	M01109SSU#1	AUG 31 2011 / 1300
M01109#1 SSU	9-7-11 / 1230	FM Hall	9-7-11 / 1230
FM Hall	9-7-11 / 1415	M. Nelson	9-7-11 / 1415

SPECIAL INSTRUCTIONS: SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION — RECEIVED BY — TITLE — DATE/TIME

FINAL SAMPLE DISPOSITION — DISPOSAL METHOD — DISPOSED BY — DATE/TIME

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-074	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #56	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY:	ORIGINAL
ICE CHEST NO.: GWS-023	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	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 4025/9ES20.CLI** 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, Berylliu~~m, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}, ~~200.8_HG - ICPMS (Mercury); Chromium Hex - 7196;~~ KB 9/26/11
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
~~(3) Gross Alpha - {Gross alpha}, Gross Beta - {Gross beta}; Strontium-89,90 - Total Sr;~~ 9/26/11

PRINTED ON 7/25/2011

A-6003-518 (REV 2)

Tuesday, September 27, 2011 10:12:33 AM
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TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Certificate of Analysis

TestAmerica Laboratories, Inc.

CH2M Hill Plateau Remediation Company
P.O. Box 1600
Mail Stop – R3-60
Richland, WA 99352

October 12, 2011

Attention: Scot Fitzgerald

SAF Number	:	F11-159
Date SDG Closed	:	September 27, 2011
Number of Samples	:	Five (5)
Sample Type	:	Soil
SDG Number	:	W06240
Data Deliverable	:	15 Day Summary

CASE NARRATIVE

I. Introduction

On September 27, 2011 five soil samples were received at TestAmerica (TARL). Upon receipt, the samples were assigned the following laboratory ID numbers to correspond with the CH2M specific ID:

CH2M ID#	TARL ID#	MATRIX	DATE OF RECEIPT
B2H563	MMQ89	SOIL	9/27/11
B2H562	MMQ9C	SOIL	9/27/11
B2H561	MMQ9F	SOIL	9/27/11
B2H560	MMQ9J	SOIL	9/27/11
B2FXJ1	MMQ9K	SOIL	9/27/11

II. Sample Receipt

The samples were received in good condition and no anomalies were noted during check-in.

On September 28, 2011 TestAmerica received instructions (via phone call) to analyze all the samples in this SDG for alpha, beta, total strontium and hexavalent chromium even though the COCs only request hexavalent chromium. TARL received an SIR on October 11, 2011. TARL accepted the proposed resolution included in the SIR (CHPRC Tracking Number: SDR12-014) on October 11, 2011.

III. Analytical Results/Methodology

The analytical results for this report are presented by laboratory sample ID. Each set of data includes sample identification information, analytical results and the appropriate associated statistical errors.

The requested analyses were:

Gas Proportional Counting
Gross Alpha by method RL-GPC-001
Gross Beta by method RL-GPC-001
Strontium-90 by method RL-GPC-003
Chemical Analysis
Hexavalent Chromium by EPA method 7196A

IV. Quality Control

The analytical results for each analysis performed includes a minimum of one laboratory control sample (LCS), one method (reagent) blank, and one duplicate sample analysis. Any exceptions have been noted in the "Comments" section.

QC and sample results are reported in the same units.

V. Comments

Gas Proportional Counting
Gross Alpha by method RL-GPC-001:
The LCS, batch blank, samples and sample duplicate (B2H563) results are within contractual requirements.

Gross Beta by method RL-GPC-001:
The LCS, batch blank, samples and sample duplicate (B2H562) results are within contractual requirements.

Strontium-90 by method RL-GPC-003:
The LCS, batch blank, samples and sample duplicate (B2H561) results are within contractual requirements.

Chemical Analysis
Hexavalent Chromium by EPA method 7196A
The LCS, batch blank, samples, sample duplicate (B2H563) and sample matrix spike (B2H563) results are within contractual requirements.

CH2M Hill Plateau Remediation Company
October 12, 2011

I certify that this Certificate of Analysis 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 hard copy data package has been authorized by the Laboratory Manager, or a designee as verified by the following signature.

Reviewed and approved:

Sandra Seger
Project Manager

SAMPLE ISSUE RESOLUTION

SIR NUM	SDR12-014
REV NUM	0
DATE INITIATED	10/11/2011

SAMPLE EVENT INFORMATION

SAF NUM(S)	F11-159
OPERABLE UNIT(S)	100-KR-2
PROJECT(S)	KW Floodplain
SAMPLE EVENT TITLE(S)	100-K-63 KW Floodplain
LABORATORY	TestAmerica Incorporated, Richland

SAMPLING INFORMATION

NUMBER OF SAMPLES	5
SAMPLE NUMBERS	B2FXJ1, B2H560, B2H561, B2H562, B2H563
SAMPLE MATRIX	SOIL
COLLECTION DATE	9/15/2011 - 9/15/2011
SDG NUM	W06240

ISSUE BACKGROUND

CLASS	General Laboratory Direction
TYPE	Addition of Analysis
DESCRIPTION	Hexavalent chromium was the only analysis requested on the COCs of samples diverted to TestAmerica Richland. The CHPRC customer is requesting the addition of total alpha, total beta, and total strontium analyses for the listed samples. Steve Trent of CHPRC made original customer request by telephone on 9/28/2011.

DISPOSITION

DESCRIPTION	Proposed Disposition: Add the additional requested analyses for the listed samples.
JUSTIFICATION	Accepted Disposition: Accept proposed disposition.

Submitted by:	Steve Trent / CHPRC	Date: 10/11/2011
Accepted by:	Sandra Seger / TARL	Date: 10/11/2011

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-084 – B

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #62	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01

AIR QUALITY: ☐

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days/15 Days

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	~~SEE ITEM (3) IN SPECIAL INSTRUCTIONS~~

SDG#W06240
LOT#J11270475
~~Report: 11/07/11~~ Due 10/12/11
SKS 9/28/11

Chromium Hex-7196

SAMPLE NO.		MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2H563	5	SOIL	9/13/11	1200	✓	✓	✓

J11270475

CHAIN OF POSSESSION	DATE/TIME	SIGN/ PRINT NAMES	DATE/TIME
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	SEP 15 2011 1450	RECEIVED BY/STORED IN: TA Frazier	SEP 15 2011 1450
RELINQUISHED BY/REMOVED FROM: M. Nelson	9/26/11 1315	RECEIVED BY/STORED IN: L.D. Wall CHPRC	9/26/11 1315
RELINQUISHED BY/REMOVED FROM: L.D. Wall CHPRC	SEP 26 2011 1400	RECEIVED BY/STORED IN: SSU-1	SEP 26 2011 1400
RELINQUISHED BY/REMOVED FROM: SSU-1	9-27-11 1015	RECEIVED BY/STORED IN: CE Hall	9-27-11 1015
RELINQUISHED BY/REMOVED FROM: CE Hall	9-27-11 1415	RECEIVED BY/STORED IN: J. Beck	9-27-11 1415
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

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

PRINTED ON 9/28/2011

4-6003-618 (REV 7)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-084 – B

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days / 15 Days

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #62

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

AIR QUALITY: ☐

ICE CHEST NO.: GWS-007

FIELD LOGBOOK NO.: ~~HNF-N-507-~~ 23

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL

OFFSITE PROPERTY NO.: N/A

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

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.~~

~~** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury};~~ Chromium Hex - 7196;

~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium 89,90 -- Total Sr;~~

SDG W46240

PRINTED ON 8/29/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-083 – B

COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days / 15 Days		
AIR QUALITY: ☐	SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #61	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil	SAF NO.: F11-159
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL		
SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL	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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2H562	4 SOIL	9/15/11	1145	✓	✓	✓

SDGW06240

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall, CHPRC	DATE/TIME: SEP 15 2011 1450	RECEIVED BY/STORED IN: TARL	DATE/TIME: SEP 15 2011 1450
RELINQUISHED BY/REMOVED FROM: M. Nelson, CHPRC	DATE/TIME: 9/26/11 1315	RECEIVED BY/STORED IN: L.D. Wall, CHPRC	DATE/TIME: 9/26/11 1315
RELINQUISHED BY/REMOVED FROM: L.D. Wall, CHPRC	DATE/TIME: SEP 26 2011 1400	RECEIVED BY/STORED IN: SSU-1	DATE/TIME: SEP 26 2011 1400
RELINQUISHED BY/REMOVED FROM: SSU-1	DATE/TIME: 9-27-11 1015	RECEIVED BY/STORED IN: C. Hutton	DATE/TIME: 9-27-11 1015
RELINQUISHED BY/REMOVED FROM: C. Hutton	DATE/TIME: 9-27-11 1415	RECEIVED BY/STORED IN: J. Beck, TARL	DATE/TIME: 9-27-11 1415
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

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

PRINTED ON 8/30/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-083 – B

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days/15 Days ORIGINAL
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #61	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.~~

~~** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8-HG - ICPMS {Mercury};~~ Chromium Hex - 7196;

~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 - Total Sr;~~

SDG W06240

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-082 -B

COLLECTOR FM Hall

SAMPLING LOCATION CHPRC

100-K-63 Grubbed Area Sample #60

ICE CHEST NO. GWS-007

SHIPPED TO ~~Waste Sampling & Characterization~~ TARL 9/27/11

COMPANY CONTACT LUKE, SN

TELEPHONE NO. 372-1667

PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

FIELD LOGBOOK NO. HNF-N-507-23.

ACTUAL SAMPLE DEPTH 0-1'

OFFSITE PROPERTY NO. N/A

PROJECT COORDINATOR LUKE, SN

SAF NO. F11-159

COA 302676ES10

BILL OF LADING/AIR BILL NO. N/A

PRICE CODE C01

AIR QUALITY ☐

METHOD OF SHIPMENT GOVERNMENT VEHICLE

DATA TURNAROUND ~~12 Days / 12 Days~~ 9/27/11 15 Days/15 Days

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2H561	3	SOIL	MMQ9F	9/15/11	1135	✓	✓

SDGW06240

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 15 2011 1450	TA Brazier	SEP 15 2011 1450
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
M. Nelson	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
SSU-1	9-27-11 1015	C Fulton	9-27-11 1015
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
C Fulton	9-27-11 1415	J. Bock TARL	1415 9-27-11
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	

PRINTED ON 9/28/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-082 — B

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN	**PRICE CODE** C01	**DATA TURNAROUND** ~~12 Days / 12 Days~~ mm 9/27/11 15 Days/15 Days
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #60	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		**SAF NO.** F11-159	**AIR QUALITY** ☐	**ORIGINAL**
ICE CHEST NO. CWS-007	**FIELD LOGBOOK NO.** HNF-N-507-23.	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 302676ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO mm ~~Waste Sampling & Characterization~~ 9/27/11 TARL	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.~~ mm 9/27/11

~~** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.~~ mm 9/27/11

~~(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic,~~ mm 9/27/11

mm 9/27/11 ~~Beryllium, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8-HG- ICPMS {Mercury};~~ Chromium Hex - 7196;

~~(2) Gamma Spectroscopy {Cesium 137, Cobalt 60, Europium 152, Europium 154, Europium 155};~~ mm 9/27/11

~~(3) Gross Alpha- {Gross alpha}; Gross Beta- {Gross beta}; Strontium 89,90 - Total Sr;~~ mm 9/27/11

WO 6240

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-081 – B

COLLECTOR FM Hall CHPRC

SAMPLING LOCATION 100-K-63 Grubbed Area Sample #59

ICE CHEST NO. GWS-007

SHIPPED TO ~~Waste Sampling & Characterization~~ TARL

COMPANY CONTACT LUKE, SN

TELEPHONE NO. 372-1667

PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

FIELD LOGBOOK NO. HNF-N-507-23.

ACTUAL SAMPLE DEPTH 0-1

OFFSITE PROPERTY NO. N/A

PROJECT COORDINATOR LUKE, SN

SAF NO. F11-159

COA 302676ES10

BILL OF LADING/AIR BILL NO. N/A

PRICE CODE C01

AIR QUALITY ☐

METHOD OF SHIPMENT GOVERNMENT VEHICLE

DATA TURNAROUND ~~12 Days / 12 Days~~ 15 Days/15 Days

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2H560	2	SOIL	MMQ9J	9/15/11	1116	✓	✓ ✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 15 2011 1450	TA Frazier	SEP 15 2011 1450
M. Nelson	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	9-27-11 1015	C Fulton	9-27-11 1015
C Fulton	9-27-11 1415	J Beck TARL	9-27-11 1415

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

WO 6240

LABORATORY SECTION RECEIVED BY | TITLE | DATE/TIME

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

PRINTED ON 8/29/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-081 – B

COLLECTOR	FM Hall CHPRC	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE C01
		LUKE, SN	372-1667	LUKE, SN	DATA TURNAROUND
SAMPLING LOCATION		PROJECT DESIGNATION		SAF NO.	AIR QUALITY ☐
100-K-63 Grubbed Area Sample #59		100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		F11-159	~~12 Days / 12 Days~~ 15 Days/15 Days mm 9/22/11
ICE CHEST NO.	GWS-007	FIELD LOGBOOK NO. HNF-N-507-23	ACTUAL SAMPLE DEPTH 0-1'	COA 302676ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE
					ORIGINAL
SHIPPED TO		OFFSITE PROPERTY NO.		BILL OF LADING/AIR BILL NO.	
mm 9/22/11 ~~Waste Sampling & Characterization~~ TARL		N/A		N/A	

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.~~ mm 9/22/11

~~** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.~~ mm 9/22/11

mm 9/22/11 ~~(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury};~~ Chromium Hex - 7196; mm 9/22/11

~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~ mm 9/22/11

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium 89,90 - Total Sr,~~ mm 9/22/11

WD6240

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-070 – B | PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #52	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GW3-007	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01 | AIR QUALITY: ☐ | DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days/15 Days 9/27/11 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | ORIGINAL

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)

113205

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool~4C	None	None
HOLDING TIME	6 Months	6 Months	6 Months
TYPE OF CONTAINER	G/P	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXJ1	SOIL	9/15/11	1045	✓	✓	

WQ6240

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 15 2011 1450	TA Filazien	SEP 15 2011 1450
M. Nelson Hunter	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	9-27-11 1015	C Fulton	9-27-11 1015
C Fulton	9-27-11 1415	J. Bock TARL	9-27-11 1415

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

Please email copies of chain of custody, Sample receipt form, and final report to Marisol Avila (marisol_avila@rl.gov) and Heather Medley (Heather_A_Medley@rl.gov) WSCF Project Manager

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

PRINTED ON 7/25/2011 | A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-070 – B

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days/15 Days ORIGINAL
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #52	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-~~N-507~~-23.	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury};~~ Chromium Hex - 7196;

~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;~~

W06240

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Certificate of Analysis

TestAmerica Laboratories, Inc.

CH2M Hill Plateau Remediation Company
P.O. Box 1600
Mail Stop – R3-60
Richland, WA 99352

October 12, 2011

Attention: Scot Fitzgerald

SAF Number	:	F11-159
Date SDG Closed	:	September 27, 2011
Number of Samples	:	Twenty (20)
Sample Type	:	Soil
SDG Number	:	W06241
Data Deliverable	:	15 Day Summary

CASE NARRATIVE

I. Introduction

On September 27, 2011 twenty soil samples were received at TestAmerica (TARL). Upon receipt, the samples were assigned the following laboratory ID numbers to correspond with the CH2M specific ID:

CH2M ID#	TARL ID#	MATRIX	DATE OF RECEIPT
B2FXF9	MMQ9P	SOIL	9/27/11
B2FXH0	MMQ9R	SOIL	9/27/11
B2FXF8	MMQ9X	SOIL	9/27/11
B2FXF6	MMQ91	SOIL	9/27/11
B2FXF5	MMQ94	SOIL	9/27/11
B2FXF3	MMQ98	SOIL	9/27/11
B2FXF4	MMRAA	SOIL	9/27/11
B2FXF1	MMRAF	SOIL	9/27/11
B2FXF2	MMRAK	SOIL	9/27/11
B2FXJ6	MMRAV	SOIL	9/27/11
B2FXJ7	MMRA0	SOIL	9/27/11
B2FXH6	MMRA4	SOIL	9/27/11
B2FXH7	MMRA5	SOIL	9/27/11
B2FXH9	MMRA6	SOIL	9/27/11

B2FXJ0	MMRA7	SOIL	9/27/11
B2FXH2	MMRA8	SOIL	9/27/11
B2FXH3	MMRA9	SOIL	9/27/11
B2FXH4	MMRCA	SOIL	9/27/11
B2FXH1	MMRCC	SOIL	9/27/11
B2FXH5	MMRCD	SOIL	9/27/11

II. Sample Receipt

The samples were received in good condition and no anomalies were noted during check-in.

On September 28, 2011 TestAmerica received instructions (via phone call) to analyze all the samples in this SDG for alpha, beta, total strontium and hexavalent chromium even though the COCs only request hexavalent chromium. TARL received an SIR on October 11, 2011. TARL accepted the proposed resolution included in the SIR (CHPRC Tracking Number: SDR12-015) on October 11, 2011.

III. Analytical Results/Methodology

The analytical results for this report are presented by laboratory sample ID. Each set of data includes sample identification information, analytical results and the appropriate associated statistical errors.

The requested analyses were:

Gas Proportional Counting
Gross Alpha by method RL-GPC-001
Gross Beta by method RL-GPC-001
Strontium-90 by method RL-GPC-003
Chemical Analysis
Hexavalent Chromium by EPA method 7196A

IV. Quality Control

The analytical results for each analysis performed includes a minimum of one laboratory control sample (LCS), one method (reagent) blank, and one duplicate sample analysis. Any exceptions have been noted in the "Comments" section.

QC and sample results are reported in the same units.

CH2M Hill Plateau Remediation Company
October 12, 2011

V. Comments

Gas Proportional Counting

Gross Alpha by method RL-GPC-001:
The LCS, batch blank, samples and sample duplicate (B2FXF9) results are within contractual requirements.

Gross Beta by method RL-GPC-001:
The LCS, batch blank, samples and sample duplicate (B2FXH0) results are within contractual requirements.

Strontium-90 by method RL-GPC-003:
The LCS, batch blank, samples and sample duplicate (B2FXF8) results are within contractual requirements.

Chemical Analysis

Hexavalent Chromium by EPA method 7196A
The matrix spike recovered low at 48.4%. The post digestive matrix spike recovered at 90.4% and the LCS recovered at 95.4%. Suspect a reducing capacity / matrix interference in the sample but not enough to reduce the insoluble PbCr04. The insoluble PbCr04 is at 96.3%. The sample and duplicate are not within limits due to insufficient volume to choose homogeneous mixture. Except as noted, the LCS, batch blank, samples, sample duplicate (B2FXF9) and sample matrix spike (B2FXF9) results are within contractual requirements.

I certify that this Certificate of Analysis 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 hard copy data package has been authorized by the Laboratory Manager, or a designee as verified by the following signature.

Reviewed and approved:

Sandra Seger
Project Manager

SAMPLE ISSUE RESOLUTION

SIR NUM	SDR12-015
REV NUM	0
DATE INITIATED	10/11/2011

SAMPLE EVENT INFORMATION

SAF NUM(S)	F11-159
OPERABLE UNIT(S)	100-KR-2
PROJECT(S)	KW Floodplain
SAMPLE EVENT TITLE(S)	100-K-63 KW Floodplain
LABORATORY	TestAmerica Incorporated, Richland

SAMPLING INFORMATION

NUMBER OF SAMPLES	20
SAMPLE NUMBERS	B2FXF1, B2FXF2, B2FXF3, B2FXF4, B2FXF5, B2FXF6, B2FXF8, B2FXF9, B2FXH0, B2FXH1, B2FXH2, B2FXH3, B2FXH4, B2FXH5, B2FXH6, B2FXH7, B2FXH9, B2FXJ0, B2FXJ6, B2FXJ7
SAMPLE MATRIX	SOIL
COLLECTION DATE	9/13/2011 - 9/14/2011
SDG NUM	W06241

ISSUE BACKGROUND

CLASS	General Laboratory Direction
TYPE	Addition of Analysis
DESCRIPTION	Hexavalent chromium was the only analysis requested on the COCs of samples diverted to TestAmerica Richland. The CHPRC customer is requesting the addition of total alpha, total beta, and total strontium analyses for the listed samples. Steve Trent of CHPRC made original customer request by telephone on 9/28/2011.

DISPOSITION

DESCRIPTION	Proposed Disposition: Add the additional requested analyses for the listed samples.
JUSTIFICATION	Accepted Disposition: Accept proposed disposition.

Submitted by:	Steve Trent / CHPRC	Date: 10/11/2011
Accepted by:	Sandra Seger / TARL	Date: 10/11/2011

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-058 – B | PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	AIR QUALITY: ☐	DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days/15 Days	
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #41	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil	SAF NO.: F11-159	
ICE CHEST NO.: GWS-107	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL		
SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL	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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXF9 8	SOIL MMQ9P	SEP 13 2011	1126			

SDG# W06241
LOT# J11270478
~~Report: 11/7/11~~ Due 10/12/11
SKS 9/28/11

J11270478

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 13 2011 1450	RECEIVED BY/STORED IN: TARL	DATE/TIME: SEP 13 2011 1450	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM:	DATE/TIME: 9/26/11 1315	RECEIVED BY/STORED IN: L.D. Wall CHPRC	DATE/TIME: 1315 9/26/11	
RELINQUISHED BY/REMOVED FROM: L.D. Wall CHPRC	DATE/TIME: SEP 26 2011 1400	RECEIVED BY/STORED IN: SSU-1	DATE/TIME: SEP 26 2011 1400	
RELINQUISHED BY/REMOVED FROM: SSU-1	DATE/TIME: 9-27-11 1015	RECEIVED BY/STORED IN:	DATE/TIME: 9-27-11 1015	
RELINQUISHED BY/REMOVED FROM:	DATE/TIME: 9-27-11 1415	RECEIVED BY/STORED IN: TARL	DATE/TIME: 9-27-11 1415	
RELINQUISHED BY/REMOVED FROM:	DATE/TIME:	RECEIVED BY/STORED IN:	DATE/TIME:	
RELINQUISHED BY/REMOVED FROM:	DATE/TIME:	RECEIVED BY/STORED IN:	DATE/TIME:	

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-058 — B	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: ~~12 Days / 12 Days~~ MVW 9/27/11 15 Days/15 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #41	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	ORIGINAL
ICE CHEST NO.: GWS-107	FIELD LOGBOOK NO.: ~~HNF-N-507-23~~	ACTUAL SAMPLE DEPTH: G-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: MVW 9/27/11 ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

SPECIAL INSTRUCTIONS

MVW 9/27/11 ~~** The CACN for WSCF Analytical is 402579ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.~~
MVW 9/27/11 ~~(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic,~~
MVW 9/27/11 ~~Beryllium, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury};~~ Chromium Hex - 7196;
MVW 9/27/11 ~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155},~~
MVW 9/27/11 ~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;~~

WQ6241

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A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-059 – B | PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #42

ICE CHEST NO.: GLS-107

SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL (MWM 9/27/11)

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

FIELD LOGBOOK NO.: HNF-N-507-23

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

OFFSITE PROPERTY NO.: N/A

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

PRICE CODE: C01

AIR QUALITY: ☐

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days / 15 Days (MWM 9/27/11)

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

SDG #W06241
LOT #J1I270178

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

CF 9/26/11 KB 9/26/11

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXH0 9	SOIL MMQ9R	SEP 13 2011	1150	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 13 2011 1450	TARFRAZIER	SEP 13 2011 1450
P.B. Carroll / Drum	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	9-27-11 1015	C.F. Hanson	9-27-11 1015
C.F. Hanson	9-27-11 1415	J. Rock / TARL	9-27-11 1415

SPECIAL INSTRUCTIONS: SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION: RECEIVED BY | TITLE | DATE/TIME

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

PRINTED ON: 7/25/2011

A-6003-618 (05/12)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-059 - B	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: ~~12 Days / 12 Days~~ MVM 9/27/11 15 Days/15 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #42	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	ORIGINAL
ICE CHEST NO.: GW3-107	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: MVM 9/27/11 ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.~~ ~~** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.~~ MVM 9/27/11

MVM 9/27/11 ~~(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury};~~ Chromium Hex - 7196; MVM 9/27/11

~~(2) Gamma Spectroscopy {Cesium 137, Cobalt 60, Europium 152, Europium 154, Europium 155};~~ MVM 9/27/11

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium 89,90 - Total Sr;~~ MVM 9/27/11

WO6241

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A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-057 – B

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #40	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-107	FIELD LOGBOOK NO.: HNF-N-507-23.	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL (MMM 9/27/11)	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01

AIR QUALITY: ☐

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days / 15 Days (MMM 9/27/11)

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SDG# WX6211
REC'D 9/27/11
LOT# JII270478

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXF8 7	SOIL MMQ9X	SEP 13 2011	1109	–	–	–

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 13 2011 1450	[illegible]	SEP 13 2011 1450
[illegible]	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	9-27-11 1015	[illegible]	9-27-11 1015
[illegible]	9-27-11 1415	J. Beck TARL	9-27-11 1415

SPECIAL INSTRUCTIONS: SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

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

PRINTED ON 7/25/2011

A-6003-618 (REV. 3)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-057 – B	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: ~~12 Days / 12 Days~~ MVM 9/27/11 15 Days/15 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #40	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-107	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
SHIPPED TO: MVM 9/27/11 ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.~~ ☐☐ ~~** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.~~ MVM 9/27/11

MVM 9/27/11 ~~(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS (Mercury);~~ Chromium Hex - 7196; MVM 9/27/11

~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~ MVM 9/27/11

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium 89,90 - Total Sr;~~ MVM 9/27/11

W06241

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-055 – B

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	AIR QUALITY: ☐	DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days / 15 Days	
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #39	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil	SAF NO.: F11-159	
ICE CHEST NO.: GWS-107	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL		
SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL	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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SDG# W06241
LOT# JII270478

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXF6	SOIL	SEP 13 2011	1054	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall	SEP 13 2011 1450	TA Frazier	SEP 13 2011 1450
	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	9-27-11 1015		9-27-11 1015
	9-27-11 1415	J. Fach TALC	9-27-11 1415

SPECIAL INSTRUCTIONS: SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-055 – B	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: ~~12 Days / 12 Days~~ MVM 9/27/11
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #39	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GW3-107	FIELD LOGBOOK NO.: HNF-~~N-507~~-23.	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
SHIPPED TO: MVM 9/27/11 ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.~~ MVM 9/27/11

MVM 9/27/11 ~~(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury};~~ Chromium Hex - 7196; MVM 9/27/11

~~(2) Gamma Spectroscopy {Cesium 137, Cobalt 60, Europium 152, Europium 154, Europium 155};~~ MVM 9/27/11

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium 89,90 - Total Sr;~~ MVM 9/27/11

W06241

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-054 – B

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #38	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-107	FIELD LOGBOOK NO.: HNF-N-507-23.	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01

AIR QUALITY: ☐

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days/15 Days

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXF5 5	SOIL	SEP 13 2011	1035	✓	✓	✓

SDG# W06241
LOT # JII270478

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall	SEP 13 2011 1450	TARL	SEP 13 2011 1450
	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	9-27-11 1015		9-27-11 1015
	9-27-11 1415	J. Bock TARL	9-27-11 1415

SPECIAL INSTRUCTIONS: SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-054 - B	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: ~~12 Days / 12 Days~~ MVM 9/27/11 15 Days/15 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #38	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	ORIGINAL
ICE CHEST NO.: GWS-107	FIELD LOGBOOK NO.: HNF-N-607-23	ACTUAL SAMPLE DEPTH: G-1	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: MVM 9/27/11 ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.~~ MVM 9/27/11

MVM 9/27/11 ~~(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium); 200.8_HG - ICPMS (Mercury);~~ Chromium Hex - 7196; MVM 9/27/11

~~(2) Gamma Spectroscopy (Cesium 137, Cobalt 60, Europium 152, Europium 154, Europium 155);~~ MVM 9/27/11

~~(3) Gross Alpha (Gross alpha); Gross Beta (Gross beta); Strontium 89,90 - Total Sr;~~ MVM 9/27/11

WO6241

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-052 – B

COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #36	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-107	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL (MMM 9/27/11)	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01

AIR QUALITY: ☐

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days/15 Days (MMM 9/27/11)

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

SDG# W06241
LOT# JII270478

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXF3 3	SOIL MMQ98	SEP 13 2011	0951	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall	SEP 13 2011 1450	Barrell Bream	SEP 13 2011 1450
Barrell Bream	9/26/11 1315	L.D. Wall, CHPRC	9/26/11 1315
L.D. Wall, CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	9-27-11 1015	Clifton	9-27-11 1015
Clifton	9-27-11 1415	J Sock	9-27-11 1415

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

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

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-052 – B	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT LUKE, SN	TELEPHONE NO. 372-1667	PROJECT COORDINATOR LUKE, SN	PRICE CODE C01	DATA TURNAROUND ~~12 Days / 12 Days~~ MVM 9/27/11 15 Days/15 Days ORIGINAL
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #36	PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO. F11-159	AIR QUALITY ☐	
ICE CHEST NO. CWS-107	FIELD LOGBOOK NO. HNF-N-507-23	ACTUAL SAMPLE DEPTH 0-1'	COA 302676ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	
SHIPPED TO MVM 9/27/11 ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A		

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.~~ ~~** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.~~ MVM 9/27/11

MVM 9/27/11 ~~(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury};~~ Chromium Hex - 7196; MVM 9/27/11

~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~ MVM 9/27/11

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium 89,90 - Total Sr;~~ MVM 9/27/11

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A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-053 –B

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #37	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-107	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: G-1'	COA: 302676ES10
SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL (MMM 9/27/11)	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01

AIR QUALITY: ☐

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days/15 Days (MMM 9/27/11)

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SDG #W06241
LOT # JI270478

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B2FXF4 4	SOIL MMRAA	SEP 13 2011	1012

VB 9/26/11

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall	SEP 13 2011 1450	V Bearcal-Hbm	SEP 13 2011 1400
V Bearcal-Hbm	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	9-27-11 1015	CFulton	9-27-11 1015
CFulton	9-27-11 1415	S Beck TARL	9-27-11 1415

SPECIAL INSTRUCTIONS: SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-053 – B

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #37	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-107	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL MVM 9/27/11	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01

AIR QUALITY: ☐

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days/15 Days MVM 9/27/11

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.~~ MVM 9/27/11

~~(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury};~~ Chromium Hex - 7196; MVM 9/27/11 MVM 9/27/11

~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~ MVM 9/27/11

~~(3) Gross Alpha - {Gross alpha}; Gross Beta - {Gross beta}; Strontium 89,90 - Total Sr;~~ MVM 9/27/11

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A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-050 – B

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	AIR QUALITY: ☐	DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days / 15 Days	
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #34	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil	SAF NO.: F11-159	
ICE CHEST NO.: GWS-107	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL		
SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL	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)

113177

SPECIAL HANDLING AND/OR STORAGE

SDG #W06241
LOT# J1I270178

PRESERVATION	Cool~4C	None	None
HOLDING TIME	6 Months	6 Months	6 Months
TYPE OF CONTAINER	G/P	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXF1	SOIL MMRAF	SEP 13 2011	0927	✓	✓	✓

CHAIN OF POSSESSION	DATE/TIME	SIGN/ PRINT NAMES	DATE/TIME
RELINQUISHED BY/REMOVED FROM: FM Hall	SEP 13 2011 1450	RECEIVED BY/STORED IN:	SEP 13 2011 1400
RELINQUISHED BY/REMOVED FROM: CHPRC	9/26/11 1315	RECEIVED BY/STORED IN: L.D. Wall CHPRC	9/26/11 1315
RELINQUISHED BY/REMOVED FROM: L.D. Wall	SEP 26 2011 1400	RECEIVED BY/STORED IN: SSU- 1	SEP 26 2011 1400
RELINQUISHED BY/REMOVED FROM: SSU- 1	9-27-11 1015	RECEIVED BY/STORED IN:	9-27-11 1015
RELINQUISHED BY/REMOVED FROM:	9-27-11 1415	RECEIVED BY/STORED IN: TARL	9-27-11 1415
RELINQUISHED BY/REMOVED FROM:	DATE/TIME	RECEIVED BY/STORED IN:	DATE/TIME
RELINQUISHED BY/REMOVED FROM:	DATE/TIME	RECEIVED BY/STORED IN:	DATE/TIME

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

Please email copies of chain of custody, Sample receipt form, and Final report to Marisol Avila (marisol_avila@rl.gov) and Heather Medley (Heather_A_Medley@rl.gov) W&F project managers

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

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-050 – B	PAGE 2 OF 2
COLLECTOR	COMPANY CONTACT LUKE, SN	TELEPHONE NO. 372-1667	PROJECT COORDINATOR LUKE, SN	PRICE CODE C01	DATA TURNAROUND
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #34	PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO. F11-159	AIR QUALITY ☐	~~12 Days / 12 Days~~ MUM 9/27/11 15 Days / 15 Days
ICE CHEST NO. GWS-107	FIELD LOGBOOK NO. HNF-N-507-23	ACTUAL SAMPLE DEPTH 0-1'	COA 302676ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	ORIGINAL
SHIPPED TO MUM 9/27/11 ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A		

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.~~ ~~** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.~~ MUM 9/27/11

~~(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic,~~ MUM 9/27/11
~~Beryllium, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury};~~ Chromium Hex - 7196;
MUM 9/27/11
~~(2) Gamma Spectroscopy {Cesium 137, Cobalt 60, Europium 152, Europium 154, Europium 155};~~ MUM 9/27/11
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;~~ MUM 9/27/11

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A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-051 -B | PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days / 15 Days

AIR QUALITY: ☐

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #35

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

ICE CHEST NO.: GWS-107

FIELD LOGBOOK NO.: HNF-N-507-23

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL

OFFSITE PROPERTY NO.: N/A

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

SDG # W06241
LOT # JI270478

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXF2	2 SOIL	SEP 13 2011	0940	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 13 2011 1400		SEP 13 2011 1400
	9/26/11 1315	L.D. Wall CHPRC	1315 9/26/11
L.D. Wall CHPRC	SEP 26 2011 1400	SSU- 1	SEP 26 2011 1400
SSU- 1	9-27-11 1015		9-27-11 1015
	9-27-11 1415	TARL	9-27-11 1415

SPECIAL INSTRUCTIONS: SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION: RECEIVED BY | TITLE | DATE/TIME

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

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-051 – B

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #35	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		**SAF NO.** F11-159
ICE CHEST NO. GWS-107	**FIELD LOGBOOK NO.** HNF-N-607-23	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 302676ES10
SHIPPED TO ~~Waste Sampling & Characterization~~ TARL mmm 9/27/14	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

PRICE CODE C01

AIR QUALITY ☐

METHOD OF SHIPMENT GOVERNMENT VEHICLE

DATA TURNAROUND ~~12 Days / 12 Days~~ mmm 9/27/14 15 Days/15 Days

ORIGINAL

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.~~ mmm 9/27/14

mmm 9/27/14 ~~(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury};~~ Chromium Hex - 7196; mmm 9/27/14

~~(2) Gamma Spectroscopy {Cesium-137, Cobalt 60, Europium-152, Europium-154, Europium-155};~~ mmm 9/27/14

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ Strontium-89,90 -- Total Sr; mmm 9/27/14

W06241

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A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-075 – B

COLLECTOR: FM Hall CHPRC

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #57

ICE CHEST NO.: GWS-106

SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

FIELD LOGBOOK NO.: HNF-N-507-23

ACTUAL SAMPLE DEPTH: 0-1'

OFFSITE PROPERTY NO.: N/A

PROJECT COORDINATOR: LUKE, SN

SAF NO.: F11-159

COA: 302676ES10

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

PRICE CODE: C01

AIR QUALITY: ☐

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days / 15 Days

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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
B2FXJ6 9	SOIL MMRAV	SEP 14 2011	1000

SDG# W06241
LOT# JI270478
Report:

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall	SEP 14 2011 1450		SEP 14 2011 1450
M. Nelson	9/26/11 1315	L.D. Wall	9/26/11 1315
L.D. Wall	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 26 2011 9-27-11 1015	C Fulton	9-27-11 1015
C Fulton	9-27-11 1415	J. Bach TARL	9-27-11 1415

SPECIAL INSTRUCTIONS: SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-075 – B

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #57	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-106	FIELD LOGBOOK NO.: HNF ~~N-507~~-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL (mm 9/27/11)	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01

AIR QUALITY: ☐

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days/15 Days (mm 9/27/11)

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.~~ ~~** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.~~ mm 9/27/11

~~(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury};~~ Chromium Hex - 7196; (mm 9/27/11) mm 9/27/11

~~(2) Gamma Spectroscopy {Cesium 137, Cobalt 60, Europium 152, Europium 154, Europium 155};~~ mm 9/27/11

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ Strontium-89,90 -- Total Sr; mm 9/27/11

W06241

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A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-076 -B PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01			DATA TURNAROUND: ~~13 Days / 12 Days~~ 15 Days/15 Days
AIR QUALITY: ☐			
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #58	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-006	FIELD LOGBOOK NO.: ~~HNF-N-507-23~~	ACTUAL SAMPLE DEPTH: N/A	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE			ORIGINAL
SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

SDG# W06241
LOT# JII270178

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXJ7 ID	SOIL MMRAO	SEP 14 2011	0830	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 14 2011 1450	M. Nelson M. Nelson	SEP 14 2011 1450
M. Nelson M. Nelson	9/26/11 1315	L.D. Wall CHPRC L.D. Wall	1315 9/26/11
L.D. Wall L.D. Wall	SEP 26 2011 1400	SSU- 1	SEP 26 2011 1400
SSU- 1	9-27-11 1015	CFulton	9-27-11 1015
CFulton	9-27-11 1415	J Stack TARL	9-27-11 1415

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-076 – B

COLLECTOR
FM Hall
CHPRC

COMPANY CONTACT
LUKE, SN

TELEPHONE NO.
372-1667

PROJECT COORDINATOR
LUKE, SN

PRICE CODE C01

DATA TURNAROUND
~~12 Days / 12 Days~~ mm 9/27/11
15 Days/15 Days
ORIGINAL

SAMPLING LOCATION
100-K-63 Grubbed Area Sample #58

PROJECT DESIGNATION
100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.
F11-159

AIR QUALITY ☐

ICE CHEST NO.
GWS-006

FIELD LOGBOOK NO.
HNF-N-507-23

ACTUAL SAMPLE DEPTH
N/A

COA
302676ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
mm 9/27/11 ~~Waste Sampling & Characterization~~ TARL

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.~~ mm 9/27/11

mm 9/27/11 ~~(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic,~~ mm 9/27/11 ~~Beryllium, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury};~~ Chromium Hex - 7196;

~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium 154, Europium 155};~~ mm 9/27/11

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross Beta}; Strontium-89,90 -- Total Sr;~~ mm 9/27/11

W06241

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-065 -B

COLLECTOR: FM Hall ~~CHPRC~~

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #48

ICE CHEST NO.: GWS-106

SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

FIELD LOGBOOK NO.: HNF-N-507-23

ACTUAL SAMPLE DEPTH: 0-1'

OFFSITE PROPERTY NO.: N/A

PROJECT COORDINATOR: LUKE, SN

SAF NO.: F11-159

COA: 302676ES10

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

PRICE CODE: C01

AIR QUALITY: ☐

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days / 15 Days

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

SDG # W06241
LOT # JJI270478

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXH6 5	SOIL MMRAU	SEP 14 2011	0942	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall ~~CHPRC~~	SEP 14 2011 1450	M. Nelson	SEP 14 2011 1450
M. Nelson	9/20/11 1315	L.D. Wall ~~CHPRC~~	9/20/11 1315
L.D. Wall ~~CHPRC~~	SEP 26 2011 1400	SSU- I	SEP 26 2011 1400
SSU- I	9-27-11 1015	C.F. Hon	9-27-11 1015
C.F. Hon	9-27-11 1415	J. Sack / Tech Tech	9-27-11 1415
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

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

PRINTED ON 7/25/2011

A-6002-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-065 – B

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #48	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		**SAF NO.** F11-159
ICE CHEST NO. GWS-106	**FIELD LOGBOOK NO.** HNF-~~N-507-23~~	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 302676ES10
SHIPPED TO ~~Waste Sampling & Characterization~~ TARL	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

PRICE CODE C01

AIR QUALITY ☐

DATA TURNAROUND ~~12 Days / 12 Days~~ 15 Days/15 Days

METHOD OF SHIPMENT GOVERNMENT VEHICLE

ORIGINAL

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG ICPMS {Mercury};~~ Chromium Hex - 7196;

~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 + Total Sr;~~

W06241

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-066 -B

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #49	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		**SAF NO.** F11-159
ICE CHEST NO. GWS-106	**FIELD LOGBOOK NO.** HNF-~~N-507~~-23.	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 302676ES10
SHIPPED TO ~~Waste Sampling & Characterization~~ TARL	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

PRICE CODE C01

AIR QUALITY ☐

DATA TURNAROUND ~~12 Days / 12 Days~~ 15 Days/15 Days

METHOD OF SHIPMENT GOVERNMENT VEHICLE

ORIGINAL

SDG# W06241
LOT# ~~JI#~~ JI270478 LV 9/27/11

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXH7 L0	SOIL MMRA5	SEP 14 2011	1000	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall	SEP 14 2011 1450	M. Nelson	SEP 14 2011 1450
M. Nelson	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	9-27-11 1015	C.E. Hon	9-27-11 1015
C.E. Hon	9-27-11 1415	J. Stock / Stock TARL	9-27-11 1415

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

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

PRINTED ON 7/25/2011

A-5003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-066 – B	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT LUKE, SN	TELEPHONE NO. 372-1667	PROJECT COORDINATOR LUKE, SN	PRICE CODE C01	DATA TURNAROUND ~~12 Days / 12 Days~~ 15 Days / 15 Days 9/27/11
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #49	PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO. F11-159	AIR QUALITY ☐	ORIGINAL
ICE CHEST NO. GWS-106	FIELD LOGBOOK NO. HNF-~~N-507~~-23	ACTUAL SAMPLE DEPTH 0-1'	COA 302676ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	
SHIPPED TO 9/27/11 ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A		

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.~~ ☐☐ ~~** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.~~ 9/27/11
9/27/11 ~~(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury};~~ Chromium Hex - 7196; 9/27/11
~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~ 9/27/11
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;~~ 9/27/11

WO 06241

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | F11-159-068 – B | PAGE 1 OF 2

COLLECTOR FM Hall ~~CHPRC~~	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #50	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		**SAF NO.** F11-159
ICE CHEST NO. GWS-106	**FIELD LOGBOOK NO.** HNF-N-507-23	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 302676ES10
SHIPPED TO ~~Waste Sampling & Characterization~~ TARL	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

PRICE CODE C01 | **AIR QUALITY** ☐ | **DATA TURNAROUND** ~~12 Days / 12 Days~~ 15 Days / 15 Days | **METHOD OF SHIPMENT** GOVERNMENT VEHICLE | **ORIGINAL**

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SDG # W06211
LOT # JJ270478

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXH9 7	SOIL MMRAL	SEP 14 2011	1012	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall ~~CHPRC~~	SEP 14 2011 1450		SEP 14 2011 1450
M. Nelson	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	9-27-11 1015		9-27-11 1015
	9-27-11 1415		9-27-11 1415

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

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

PRINTED ON 7/25/2011 | A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-068 – B

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #50	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-106	FIELD LOGBOOK NO.: HNF-~~N-507~~-23.	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL (mm 9/22/11)	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01

AIR QUALITY: ☐

DATA TURNAROUND: ~~12 Days / 12 Days~~ (mm 9/27) 15 Days / 15 Days

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.~~ mm 9/22/11

~~(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic,~~ mm 9/27/11 ~~Beryllium, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8 HG - ICPMS {Mercury};~~ Chromium Hex - 7196; (mm 9/22/11)

~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~ mm 9/27/11

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium 89,90 - Total Sr;~~ mm 9/27/11

WQ6241

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-069 – B | PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #51	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-106	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL (mm 7/26/11)	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01 | AIR QUALITY: ☐ | DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days / 15 Days (mm 7/26/11) | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SDG# W06241
LOT# J1I270178

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXJ0 8	SOIL MMRA7	SEP 14 2011	1030	✓	—	—

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall, CHPRC	SEP 14 2011 1450	K Bergeron	SEP 14 2011 1450
H Nelson	9/26/11 1315	L.D. Wall, CHPRC	9/26/11 1315
L.D. Wall	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	9-27-11 1015	CFulton	9-27-11 1015
CFulton	9-27-11 1415	J Sack TARL	9-27-11 1415

SPECIAL INSTRUCTIONS: SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-069 – B	PAGE 2 OF 2
COLLECTOR FM Hall ~~CHPRC~~	COMPANY CONTACT LUKE, SN	TELEPHONE NO. 372-1667	PROJECT COORDINATOR LUKE, SN	PRICE CODE C01	DATA TURNAROUND ~~12 Days / 12 Days~~ mm 9/27/11 15 Days / 15 Days
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #51	PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO. F11-159	AIR QUALITY ☐	
ICE CHEST NO. GWS-106	FIELD LOGBOOK NO. HNF-N-507-23	ACTUAL SAMPLE DEPTH 0-1'	COA 302676ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	ORIGINAL
SHIPPED TO mm 9/27/11 ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A		

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.~~ mm 9/27/11

~~(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic,~~ mm 9/27/11

mm 9/27/11 ~~Beryllium, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury};~~ Chromium Hex - 7196;

~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~ mm 9/27/11

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 - Total Sr;~~ mm 9/27/11

WO 6241

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-061-B

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #44	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-106	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL (mmm 9/22/11)	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01

AIR QUALITY: ☐

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days/15 Days (mmm 9/22/11)

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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)

113192

SPECIAL HANDLING AND/OR STORAGE

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

SDG # LD6241
LOT # JII270478

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXH2	SOIL MMRA8	SEP 14 2011	0854	✓	✓ (9/22/11)	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall	SEP 14 2011 1450	M. Nelson	SEP 14 2011 1450
	9/22/11 1315	L.D. Wall CHPRC	9/22/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	9-23-11 1015	C Fulton	9-23-11 1015
C Fulton	9-23-11 1415	J Beck TARL	9-23-11 1415

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

Please email copies of chain of custodies, Sample receipt form, and final report to Marisol Avila (Marisol_Avila@rlsgov) and Heather Medley (Heather_A_Medley@rlsgov)

WSCF project managers

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-061 – B	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT LUKE, SN	TELEPHONE NO. 372-1667	PROJECT COORDINATOR LUKE, SN	PRICE CODE C01	DATA TURNAROUND ~~12 Days / 12 Days~~ 9/27/11 15 Days/15 Days **ORIGINAL**
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #44	PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO. F11-159	AIR QUALITY ☐	
ICE CHEST NO. GWS-106	FIELD LOGBOOK NO. HNF-N-507-23	ACTUAL SAMPLE DEPTH 0-1'	COA 302676ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	
SHIPPED TO ~~Waste Sampling & Characterization~~ TARL 9/27/11	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A		

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.~~ ☐☐ ~~** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.~~ 9/27/11

~~(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury};~~ 9/27/11 Chromium Hex - 7196;

~~(2) Gamma Spectroscopy {Cesium 137, Cobalt 60, Europium 152, Europium 154, Europium 155};~~ 9/27/11

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium 89,90 - Total Sr;~~ 9/27/11

W06241

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-062 – B

COLLECTOR: FM Hall ~~CHPRC~~	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #45	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-106	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL 9/27/11	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01

AIR QUALITY: ☐

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days/15 Days 9/27/11

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SDG# W062411
LOT# JII270478

SAMPLE NO.		MATRIX*	SAMPLE DATE	SAMPLE TIME	[redacted]
B2FXH3	2	SOIL MMRAG	SEP 14 2011	0910	

9/26/11

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall	SEP 14 2011 1450	M. Nelson M. Nelson	SEP 14 2011 1450
L.D. Wall CHPRC	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU- 1	SEP 26 2011 1400
SSU- 1	9-27-11 1015	C.F. Hon	9-27-11 1015
C.F. Hon	9-27-11 1415	J. Tack	9-27-11 1415

SPECIAL INSTRUCTIONS: SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-062 – B

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #45	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-106	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL (mm 9/27/11)	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01

AIR QUALITY: ☐

DATA TURNAROUND: ~~12 Days / 12 Days~~ (mm 9/27/11) 15 Days / 15 Days

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.~~ mm 9/27/11

~~(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}, 200.8_HG - ICPMS {Mercury};~~ Chromium Hex - 7196; (mm 9/27/11) mm 9/27/11

~~(2) Gamma Spectroscopy {Cesium 137, Cobalt-60, Europium-152, Europium 154, Europium-155};~~ mm 9/27/11

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium 89,90 -- Total Sr;~~ mm 9/27/11

WO6241

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-063 – B

COLLECTOR: FM Hall ~~CHPRC~~

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #46

ICE CHEST NO.: GWS-106

SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

FIELD LOGBOOK NO.: HNF-N-507-23

ACTUAL SAMPLE DEPTH: 0-1'

OFFSITE PROPERTY NO.: N/A

PROJECT COORDINATOR: LUKE, SN

SAF NO.: F11-159

COA: 302676ES10

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

PRICE CODE: C01

AIR QUALITY: ☐

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days/15 Days

ORIGINAL

LOT # W06241
SDG # JJI270478

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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
B2FXH4 3	SOIL MMRCA	SEP 14 2011	0920

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall ~~CHPRC~~	SEP 14 2011 1450	M. Nelson	SEP 14 2011 1450
M. Nelson	9/26/11 1315	L.D. Wall ~~CHPRC~~	9/26/11 1315
L.D. Wall ~~CHPRC~~	SEP 26 2011 1400	SSU- 1	SEP 26 2011 1400
SSU- 1	9-27-11 1015	C Fulton	9-27-11 1015
C Fulton	9-27-11 1415	S. Beck / Beck TARL	9-27-11 1415

SPECIAL INSTRUCTIONS: SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION: RECEIVED BY | TITLE | DATE/TIME

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-063 — B

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: ~~12 Days / 12 Days~~ mmm 9/27/11 15 Days/15 Days

ORIGINAL

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #46

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

AIR QUALITY: ☐

ICE CHEST NO.: GWS-106

FIELD LOGBOOK NO.: HNF ~~N-507~~-23

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

SHIPPED TO: mmm 9/27/11 ~~Waste Sampling & Characterization~~ TARL

OFFSITE PROPERTY NO.: N/A

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

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.~~ mmm 9/27/11

mmm 9/27/11 ~~(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add on) {Arsenic,~~ mmm 9/27/11 ~~Beryllium, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8 HG - ICPMS {Mercury};~~ Chromium Hex - 7196;

~~(2) Gamma Spectroscopy {Cesium 137, Cobalt 60, Europium 152, Europium 154, Europium 155};~~ mmm 9/27/11

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium 89,90 -- Total Sr;~~ mmm 9/27/11

W06241

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-060 - B

COLLECTOR: FM Hall CHPRC

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #43

ICE CHEST NO.: GWS-107

SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL

MVM 9/27/11

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

FIELD LOGBOOK NO.: HNF-N-507-23

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

OFFSITE PROPERTY NO.: N/A

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

PRICE CODE: C01

AIR QUALITY: ☐

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days/15 Days MVM 9/27/11

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

LOT# W06241
SDG# JJI270478

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXH1	10	SOIL ~~MMQ9R~~ MMRCC LV 9/27/11	SEP 13 2011	1219	✓	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 13 2011 1450	TAFrazier	SEP 13 2011 1450
Rebecca Brown	9/26/11 1315	L.D. Wall CHPRC	1315 9/26/11
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	9-27-11 1015	C Fulton	9-27-11 1015
C Fulton	9-27-11 1415	J. Lock TARL	9-27-11 1415

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

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

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-060 – B	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT LUKE, SN	TELEPHONE NO. 372-1667	PROJECT COORDINATOR LUKE, SN	PRICE CODE C01	DATA TURNAROUND
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #43	PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO. F11-159	AIR QUALITY ☐	~~12 Days / 12 Days~~ MVM 9/27/11 15 Days / 15 Days
ICE CHEST NO. GWS – 107	FIELD LOGBOOK NO. HNF-N-507-23.	ACTUAL SAMPLE DEPTH 0 – 1'	COA 302676ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	ORIGINAL
SHIPPED TO MVM 9/27/11 ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A		

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.~~ ~~** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.~~ MVM 9/27/11

MVM 9/27/11 ~~(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury};~~ Chromium Hex - 7196; MVM 9/27/11

~~(2) Gamma Spectroscopy {Cesium 137, Cobalt-60, Europium 152, Europium 154, Europium 155};~~ MVM 9/27/11

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 – Total Sr;~~ MVM 9/27/11

WQ6241

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-064 – B

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #47	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		**SAF NO.** F11-159
ICE CHEST NO. GWS-106	**FIELD LOGBOOK NO.** ~~HNF-N-507~~ 23	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 302676ES10
SHIPPED TO ~~Waste Sampling & Characterization~~ TARL	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

PRICE CODE C01

AIR QUALITY ☐

DATA TURNAROUND ~~12 Days / 12 Days~~ 15 Days/15 Days 9/22/11

METHOD OF SHIPMENT GOVERNMENT VEHICLE

ORIGINAL

SDG# WD6241
LOT# JJI270478

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXH5	4	SOIL MMRCD	SEP 14 2011	0935	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 14 2011 1450	M. Nelson	SEP 14 2011 1450
M. Nelson	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall	SEP 26 2011 1402	SSU-1	SEP 26 2011 1402
SSU-1	9-27-11 1015	C Fulton	9-27-11 1015
C Fulton	9-27-11 1415	J Bock	9-27-11 1415

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

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

PRINTED ON 7/25/2011

4-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-064 – B

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #47	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		**SAF NO.** F11-159
ICE CHEST NO. GWS-106	**FIELD LOGBOOK NO.** HNF-N-507-23.	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 302676ES10
SHIPPED TO ~~Waste Sampling & Characterization~~ TARL	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

PRICE CODE C01

AIR QUALITY ☐

METHOD OF SHIPMENT GOVERNMENT VEHICLE

DATA TURNAROUND ~~12 Days / 12 Days~~ 15 Days/15 Days

ORIGINAL

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8 HG - ICPMS {Mercury};~~ Chromium Hex - 7196; ~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~ ~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;~~

WO6241

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Certificate of Analysis

TestAmerica Laboratories, Inc.

CH2M Hill Plateau Remediation Company
P.O. Box 1600
Mail Stop – R3-60
Richland, WA 99352

October 12, 2011

Attention: Scot Fitzgerald

SAF Number	:	F11-159
Date SDG Closed	:	September 27, 2011
Number of Samples	:	Sixteen (16)
Sample Type	:	Soil
SDG Number	:	W06242
Data Deliverable	:	15 Day Summary

CASE NARRATIVE

I. Introduction

On September 27, 2011 sixteen soil samples were received at TestAmerica (TARL). Upon receipt, the samples were assigned the following laboratory ID numbers to correspond with the CH2M specific ID:

CH2M ID#	TARL ID#	MATRIX	DATE OF RECEIPT
B2FXJ5	MMRCE	SOIL	9/27/11
B2FXJ4	MMRCG	SOIL	9/27/11
B2FXC9	MMRCH	SOIL	9/27/11
B2FXC8	MMRCJ	SOIL	9/27/11
B2FXC7	MMRCK	SOIL	9/27/11
B2FXC6	MMRCL	SOIL	9/27/11
B2FXD4	MMRCM	SOIL	9/27/11
B2FXD3	MMRCN	SOIL	9/27/11
B2FXD2	MMRCQ	SOIL	9/27/11
B2FXD1	MMRCX	SOIL	9/27/11
B2FXD0	MMRC1	SOIL	9/27/11
B2FXD9	MMRC2	SOIL	9/27/11
B2FXD8	MMRC3	SOIL	9/27/11

B2FXD7	MMRC4	SOIL	9/27/11
B2FXD5	MMRC5	SOIL	9/27/11
B2FXF0	MMRC6	SOIL	9/27/11

II. Sample Receipt

The samples were received in good condition and no anomalies were noted during check-in.

On September 28, 2011 TestAmerica received instructions (via phone call) to analyze all the samples in this SDG for alpha, beta, total strontium and hexavalent chromium even though the COCs only request hexavalent chromium. TARL received an SIR on October 11, 2011. TARL accepted the proposed resolution included in the SIR (CHPRC Tracking Number: SDR12-016) on October 11, 2011.

III. Analytical Results/Methodology

The analytical results for this report are presented by laboratory sample ID. Each set of data includes sample identification information, analytical results and the appropriate associated statistical errors.

The requested analyses were:

Gas Proportional Counting
Gross Alpha by method RL-GPC-001
Gross Beta by method RL-GPC-001
Strontium-90 by method RL-GPC-003
Chemical Analysis
Hexavalent Chromium by EPA method 7196A

IV. Quality Control

The analytical results for each analysis performed includes a minimum of one laboratory control sample (LCS), one method (reagent) blank, and one duplicate sample analysis. Any exceptions have been noted in the "Comments" section.

QC and sample results are reported in the same units.

CH2M Hill Plateau Remediation Company
October 12, 2011

V. Comments

Gas Proportional Counting

Gross Alpha by method RL-GPC-001:
The LCS, batch blank, samples and sample duplicate (B2FXJ5) results are within contractual requirements.

Gross Beta by method RL-GPC-001:
The LCS, batch blank, samples and sample duplicate (B2FXJ4) results are within contractual requirements..

Strontium-90 by method RL-GPC-003:
The LCS, batch blank, samples and sample duplicate (B2FXC9) results are within contractual requirements.

Chemical Analysis

Hexavalent Chromium by EPA method 7196A
The LCS, batch blank, samples, sample duplicate (B2FXJ5) and sample matrix spike (B2FXJ5) results are within contractual requirements.

I certify that this Certificate of Analysis 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 hard copy data package has been authorized by the Laboratory Manager, or a designee as verified by the following signature.

Reviewed and approved:

Sandra Seger
Project Manager

SAMPLE ISSUE RESOLUTION

SIR NUM	SDR12-016
REV NUM	0
DATE INITIATED	10/11/2011

SAMPLE EVENT INFORMATION

SAF NUM(S)	F11-159
OPERABLE UNIT(S)	100-KR-2
PROJECT(S)	KW Floodplain
SAMPLE EVENT TITLE(S)	100-K-63 KW Floodplain
LABORATORY	TestAmerica Incorporated, Richland

SAMPLING INFORMATION

NUMBER OF SAMPLES	16
SAMPLE NUMBERS	B2FXC6, B2FXC7, B2FXC8, B2FXC9, B2FXD0, B2FXD1, B2FXD2, B2FXD3, B2FXD4, B2FXD5, B2FXD7, B2FXD8, B2FXD9, B2FXF0, B2FXJ4, B2FXJ5
SAMPLE MATRIX	SOIL
COLLECTION DATE	8/31/2011 - 9/12/2011
SDG NUM	W06242

ISSUE BACKGROUND

CLASS	General Laboratory Direction
TYPE	Addition of Analysis
DESCRIPTION	Hexavalent chromium was the only analysis requested on the COCs of samples diverted to TestAmerica Richland. The CHPRC customer is requesting the addition of total alpha, total beta, and total strontium analyses for the listed samples. Steve Trent of CHPRC made original customer request by telephone on 9/28/2011.

DISPOSITION

DESCRIPTION	Proposed Disposition: Add the additional requested analyses for the listed samples.
JUSTIFICATION	Accepted Disposition: Accept proposed disposition.

Submitted by:	Steve Trent / CHPRC	Date: 10/11/2011
Accepted by:	Sandra Seger / TARL	Date: 10/11/2011

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-074-B | PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: Sal 9/27/11 ~~12 Days / 12 Days~~ 15 Days

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #56

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

AIR QUALITY: ☐

ICE CHEST NO.: 6WS-023

FIELD LOGBOOK NO.: HNF-N-507-23. N/A

ACTUAL SAMPLE DEPTH: 0 – 1'

COA: 302676ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

SHIPPED TO: Sal 9/27/11 ~~Waste Sampling & Characterization~~ TARL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 9/26/11

MG 9-27-11

SDG# W06242
LOT# J1I270481
~~Report: 11/7/11~~ Due 10/12/11
SKS 9/28/11

J11270481

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXJ5 //	SOIL MMRCE	AUG 3 1 2011	0730	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 3 1 2011 / 1300	M01109SSU #1	AUG 3 1 2011 / 1300
M01109 #1 SSU	9-7-11 1230	FM Hall	9-7-11 1230
FM Hall	9-7-11 1415	M. Nelson Mnels	9-7-11 1415
	9/26/11 1315	L.D. Wall	9/26/11 1315
CHPRC L.D. Wall	SEP 2 6 2011 1400	SSU- 1	SEP 2 6 2011 1400
SSU- 1	SEP 2 7 2011 1000	L.D. Wall CHPRC	SEP 2 7 2011 1000
L.D. Wall CHPRC	SEP 2 7 2011 1415	J. Beck TARL	SEP 2 7 2011 1415

LABORATORY SECTION: RECEIVED BY | TITLE | DATE/TIME

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

SPECIAL INSTRUCTIONS: SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-074 — B

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #56	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-023	FIELD LOGBOOK NO.: HNF-~~N-507~~-23. N/A	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: Sal 9/27/11 ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01

AIR QUALITY: ☐

DATA TURNAROUND: Sal 9/27/11 ~~12 Days / 12 Days~~ 15 Days

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

SPECIAL INSTRUCTIONS

** ~~The CACN for WSCF Analytical is 402579ES20.~~ ☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8-HG - ICPMS {Mercury}~~; Chromium Hex - 7196; Sal 9/27/11

(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};

(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

W06042

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-073-B | PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days (Sal 9/27/11)

AIR QUALITY: ☐

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #55

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

ICE CHEST NO.: N/A

FIELD LOGBOOK NO.: N/A

ACTUAL SAMPLE DEPTH: SURFACE

COA: 302676ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

SHIPPED TO: Sal 9/27/11 ~~Waste Sampling & Characterization~~ TARL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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
B2FXJ4 / 0	SOIL MMRCG	SEP 07 2011	0940

W06042

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall, CHPRC	SEP 07 2011 1415	M. Nelson	SEP 07 2011 1415
		L.D. Wall, CHPRC	9/26/11 1315
L.D. Wall, CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1000	L.D. Wall, CHPRC	SEP 27 2011 1000
L.D. Wall, CHPRC	SEP 27 2011 1415	J. Sauk / Sal TARL	SEP 27 2011 1415

SPECIAL INSTRUCTIONS: SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION: RECEIVED BY | TITLE | DATE/TIME

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-073 - B	PAGE 2 OF 2
COLLECTOR ~~FM Hall~~ ~~CHPRC~~	COMPANY CONTACT LUKE, SN	TELEPHONE NO. 372-1667	PROJECT COORDINATOR LUKE, SN	PRICE CODE C01	DATA TURNAROUND
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #55	PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO. F11-159	AIR QUALITY ☐ Sal 9/27/11	~~12 Days / 12 Days~~ 15 Days
ICE CHEST NO. N/A	FIELD LOGBOOK NO. N/A	ACTUAL SAMPLE DEPTH SURFACE	COA 302676ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	ORIGINAL
SHIPPED TO Sal 9/27/11 TARL ~~Waste Sampling & Characterization~~	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A		

SPECIAL INSTRUCTIONS

** ~~The CACN for WSCF Analytical is 402579ES20.~~ ☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}~~; Chromium Hex - 7196; Sal 9/27/11

(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};

(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

WO6042

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-038 -B | PAGE 1 OF 2

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN
PRICE CODE C01	**DATA TURNAROUND** Sal 9/27/11 ~~12 Days / 12 Days~~ 15 Days		
AIR QUALITY ☐			
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #23	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil	**SAF NO.** F11-159	
ICE CHEST NO. GWS-023	**FIELD LOGBOOK NO.** ~~HNF-N-507~~ 23. N/A	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 302676ES10
METHOD OF SHIPMENT GOVERNMENT VEHICLE			
SHIPPED TO Sal 9/27/11 ~~Waste Sampling & Characterization~~ TARL	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

9-27-11 9/26/11

WU6042

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXC9	SOIL MMRCH	8/31/11	1030	✓	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 3 1 2011 1300	M01109SSU #1	AUG 3 1 2011 1300
M01109 SSU #1	9-7-11 1230	FM HALL	9-7-11 1230
FM HALL	9-7-11 1415	M. Nelson	9-7-11 1415
L.D. Wall CHPRC	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
CHPRC	SEP 2 6 2011 1400	SSU-1	SEP 2 6 2011 1400
SSU-1	SEP 2 7 2011 1000	L.D. Wall CHPRC	SEP 2 7 2011 1000
L.D. Wall CHPRC	SEP 2 7 2011 1415	J. Bock TARL	SEP 2 7 2011 1415

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-038 -B	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01 Sal 9/27/11	DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #23	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS - 023	FIELD LOGBOOK NO.: HNF-~~N-507-~~23 ~~N/A~~	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
SHIPPED TO: Sal 9-27-11 ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

SPECIAL INSTRUCTIONS

** ~~The CACN for WSCF Analytical is 402579ES20.~~ ☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. Sal 9/27/11

(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}~~; Chromium Hex - 7196;

(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};

(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

W06042

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-037 - B | PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days	AIR QUALITY: ☐ Sal 9/27/11	
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #22	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-023	FIELD LOGBOOK NO.: HNF-N-607-23 . N/A	ACTUAL SAMPLE DEPTH: 0 - 1'	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL		
SHIPPED TO: Sal 9/27/11 ~~Waste Sampling & Characterization~~ TARL	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 KB 9/26/11	6 Months
TYPE OF CONTAINER	G/P	G	G/P
NO. OF CONTAINER(S)	1 KB 9-27-11	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SDG#
LOT#

WQ6042

SAMPLE NO.		MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXC8	8	SOIL MNRCJ	8/31/11	1010	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall ~~CHPRC~~	AUG 3 1 2011 / 1300	M01109SSU #1	AUG 3 1 2011 / 1300
M01109 SSU #1	9-7-11 1230	FM HALL	9-7-11 1230
FM HALL	9-7-11 1415	M.Nelson M.Nels	9-7-11 1415
Bream	9/26/11 1315	L.D. Wall CHPRC L.D. Wall	9/26/11 1315
CHPRC L.D. Wall	SEP 2 6 2011 1400	SSU-1	SEP 2 6 2011 1400
SSU-1	SEP 2 7 2011 1000	L.D. Wall CHPRC L.D. Wall	SEP 2 7 2011 1000
L.D. Wall CHPRC L.D. Wall	SEP 2 7 2011 1415	Jack Jack THALE	SEP 2 7 2011 1415

LABORATORY SECTION: RECEIVED BY | TITLE | DATE/TIME

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

SPECIAL INSTRUCTIONS: SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-037-B	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT LUKE, SN	TELEPHONE NO. 372-1667	PROJECT COORDINATOR LUKE, SN	PRICE CODE C01	DATA TURNAROUND ~~12 Days / 12 Days~~ 15 Days
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #22	PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO. F11-159	AIR QUALITY ☐ Sal 9/27/11	
ICE CHEST NO. GWS-023	FIELD LOGBOOK NO. ~~HNF-N-507-~~23 . ~~N/A~~	ACTUAL SAMPLE DEPTH 0-1'	COA 302676ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	ORIGINAL
SHIPPED TO Sal 9/27/11 ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A		

SPECIAL INSTRUCTIONS

** ~~The CACN for WSCF Analytical is 402579ES20.~~ ☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury};~~ Chromium Hex - 7196; Sal 9/27/11

(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};

(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

WQ6042

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | F11-159-036-B | PAGE 1 OF 2

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #21	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		**SAF NO.** F11-159
ICE CHEST NO. GWS-023	**FIELD LOGBOOK NO.** HNF-N-507-23-N/A	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 302676ES10
SHIPPED TO Sal 9/27/11 ~~Waste Sampling & Characterization~~ TARC	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

PRICE CODE C01 **DATA TURNAROUND** Sal 9/27/11 ~~12 Days / 12 Days~~ 15 Days

AIR QUALITY ☐

METHOD OF SHIPMENT GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

9-27-11 9/27/11

WQ6042

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXC7	SOIL	8/31/11	0950	✓	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 31 2011 / 1300	MO1109SSU #1	AUG 31 2011 / 1300
MO1109 SSU #1	9-7-11 / 2300	FM HALL	9-7-11 / 2300
FM HALL	9-7-11 / 1415	M. Nelson	9-7-11 / 1415
	9/22/11 / 1315	L.D. Wall CHPRC	9/22/11 / 1315
L.D. Wall CHPRC	SEP 26 2011 / 1400	SSU-1	SEP 26 2011 / 1400
SSU-1	SEP 27 2011 / 1000	L.D. Wall CHPRC	SEP 27 2011 / 1000
L.D. Wall CHPRC	SEP 27 2011 / 1415	TARC	SEP 27 2011 / 1415

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
Please email copies of chain of custody, Sample Receipt Form, and final report to Marisol Avila (Marisol_Avila@rl.gov) and Heather Medley (Heather_A_Medley@rl.gov) WSCF project mangers

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

PRINTED ON 7/25/2011 | 6-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-036-B	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01 Sal 9/27/11	DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #21	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	ORIGINAL
ICE CHEST NO.: GWS-023	FIELD LOGBOOK NO.: HNF-N-507-~~23~~ - N/A	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: Sal 9/27/11 ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

SPECIAL INSTRUCTIONS

** ~~The CACN for WSCF Analytical is 402579ES20.~~ ☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. Sal 9/27/11

(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8 HG - ICPMS {Mercury}~~; Chromium Hex - 7196;

(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};

(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

W06042

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-035 - B | PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #20	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A3)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-023	FIELD LOGBOOK NO.: HNF-N-507-23 - N/A	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: Sal 9/27/11 ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01 Sal 9/27/11 | DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days

AIR QUALITY: ☐

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

LOT # 9-27-11 9/26/11

Report # WQ6042

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXC6 6	SOIL MMRCL	8/31/11	0930	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 31 2011 / 1300	M01109SSU #1	AUG 31 2011 / 1300
M01109 SSU #1	9-7-11 1230	FM HALL	9-7-11 1230
FM HALL	9-7-11 1415	M. Nelson M.Nelson	9-7-11 1415
[illegible]	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1000	CHPRC	SEP 27 2011 1000
L.D. Wall CHPRC	SEP 27 2011 1415	J. Book TARL	SEP 27 2011 1415

LABORATORY SECTION: RECEIVED BY | TITLE | DATE/TIME

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

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

Please email copies of chain of custody, sample receipt form, and final report to Marisol Avila (Marisol_Avila@rl.gov) and Heather Medley (Heather_A_Medley@rl.gov) WSCF project managers

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-035 -B	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #20	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐ Sal 9/27/11	
ICE CHEST NO.: GWS-023	FIELD LOGBOOK NO.: HNF-N-507-23 - N/A	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
SHIPPED TO: Sal 9/27/11 ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

SPECIAL INSTRUCTIONS

** ~~The CACN for WSCF Analytical is 402579ES20.~~ ☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. Sal 9/27/11

(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8-HG - ICPMS {Mercury}~~; Chromium Hex - 7196;

(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};

(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

WO6042

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-043 - B | PAGE 1 OF 2

COLLECTOR: FM Hall	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: CHPRC 100-K-63 Grubbed Area Sample #28	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.	FIELD LOGBOOK NO.: N/A	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: Sal 9/27/11 ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01 Sal 9/27/11 | AIR QUALITY: ☐ | DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SDG#
LOT#

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXD4	SOIL	SEP 07 2011	1624			

WQ6042

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 07 2011 1415	M. Nelson CHPRC	SEP 07 2011 1415
Rebecca Hearn 9/26/11	1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	L.D. Wall SSU-1	SEP 26 2011 1400
L.D. Wall SSU-1	SEP 27 2011 1000	L.D. Wall CHPRC	SEP 27 2011 1000
L.D. Wall CHPRC	SEP 27 2011 1415	J. Bock TARL	SEP 27 2011 1415

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

Please email copies of chain of custody, sample receipt form, and final report to Marisol Arila (marisol_arila@rl.gov) and Heather Medley (heather_d_medley@rl.gov) WSLF project managers

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-043 - B	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT LUKE, SN	TELEPHONE NO. 372-1667	PROJECT COORDINATOR LUKE, SN	PRICE CODE C01	DATA TURNAROUND
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #28	PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO. F11-159	AIR QUALITY ☐ Sal 9/27/11 ~~12 Days / 12 Days~~	15 Days
ICE CHEST NO. N/A	FIELD LOGBOOK NO. N/A	ACTUAL SAMPLE DEPTH 0-1'	COA 302676ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	ORIGINAL
SHIPPED TO Sal 9/27/11 ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A		

SPECIAL INSTRUCTIONS

** ~~The CACN for WSCF Analytical is 402579ES20.~~ ☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. Sal 9/27/11

(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium};~~ 200.8_HG - ICPMS ~~{Mercury};~~ Chromium Hex - 7196;

(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};

(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

W06042

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-042 - B | PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #27	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: N/A	FIELD LOGBOOK NO.: N/A	ACTUAL SAMPLE DEPTH: SURFACE	COA: 302676ES10
SHIPPED TO: Sal 9/27/11 TARL ~~Waste Sampling & Characterization~~	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01 Sal 9/27/11 | DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days

AIR QUALITY: ☐ | METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXD3	SOIL	SEP 07 2011	1014	✓	✓	✓

9/27/11 9/26/11

W06042

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall, CHPRC	SEP 07 2011 1415	M. Nelson M. Nelson	SEP 07 2011 1415
Vincent Brown	9/26/11 1315	L.D. Wall, CHPRC	9/26/11 1315
L.D. Wall, CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1000	L.D. Wall, CHPRC	SEP 27 2011 1000
L.D. Wall, CHPRC	SEP 27 2011 1415	Stock	SEP 27 2011 1415
		TARL	

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

Please email copies of chain of custody, sample receipt form, and final report to Marisol Avila (Marisol_Avila@rl.gov) and Heather Medley (Heather_A_Medley@rl.gov) WSCF project managers.

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

PRINTED ON 7/25/2011 A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-042 - B	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT LUKE, SN	TELEPHONE NO. 372-1667	PROJECT COORDINATOR LUKE, SN	PRICE CODE C01	DATA TURNAROUND
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #27	PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO. F11-159	AIR QUALITY ☐ Sal 9/27/11 ~~12 Days / 12 Days~~ 15 Days	
ICE CHEST NO. N/A	FIELD LOGBOOK NO. N/A	ACTUAL SAMPLE DEPTH SURFACE	COA 302676ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	ORIGINAL
SHIPPED TO Sal 9/27/11 TARL ~~Waste Sampling & Characterization~~	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A		

SPECIAL INSTRUCTIONS

** ~~The CACN for WSCF Analytical is 402579ES20.~~ ☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}~~; Chromium Hex - 7196; Sal 9/27/11

(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};

(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

W46042

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F11-159-041 - B — PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #26	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: N/A	FIELD LOGBOOK NO.: N/A	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: 9/27/11 SAL ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01 — AIR QUALITY: ☐ Sal 9/27/11 — DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days — METHOD OF SHIPMENT: GOVERNMENT VEHICLE — **ORIGINAL**

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

9/27/11 9/27/11

SDG#
LOT#

WO#6042

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B2FXD2 3	SOIL MMRLQ	SEP 07 2011	0940

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall, CHPRC	SEP 07 2011 1415	M. Nelson	SEP 07 2011 1415
	9/27/11 1315	L.D. Wall, CHPRC	9/27/11 1315
L.D. Wall, CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1000	L.D. Wall, CHPRC	SEP 27 2011 1000
L.D. Wall, CHPRC	SEP 27 2011 1415	J Stock & Stock TARL	SEP 27 2011 1415

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

Please email copies of chain of custody, Sample Receipt Form, and final report to marisol avila (marisol_avila@rl.gov) and Heather Medley (Heather_A_Medley@rl.gov)

WSLF project managers

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

PRINTED ON: 7/25/2011 — A-6002-618 (REV. 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-041-B	PAGE 2 OF 2
COLLECTOR FM Hall	COMPANY CONTACT LUKE, SN	TELEPHONE NO. 372-1667	PROJECT COORDINATOR LUKE, SN	PRICE CODE C01 Sal 9/27/11	DATA TURNAROUND ~~12 Days / 12 Days~~ 15 Days
SAMPLING LOCATION CHPRC 100-K-63 Grubbed Area Sample #26	PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO. F11-159	AIR QUALITY ☐	
ICE CHEST NO. N/A	FIELD LOGBOOK NO. N/A	ACTUAL SAMPLE DEPTH 0-1'	COA 302676ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	**ORIGINAL**
SHIPPED TO Sal 9/27/11 TARL ~~Waste Sampling & Characterization~~	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A		

SPECIAL INSTRUCTIONS

** ~~The CACN for WSCF Analytical is 402579ES20.~~ ** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8 HG - ICPMS {Mercury};~~ Chromium Hex - 7196;

(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};

(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

Sal 9/27/11

WD6042

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-040 -B | PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC

COMPANY CONTACT: LUKE, SN | TELEPHONE NO.: 372-1667 | PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01 | DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days

AIR QUALITY: ☐ Sal 9/27/11

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #25

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil | SAF NO.: F11-159

ICE CHEST NO.: N/A | FIELD LOGBOOK NO.: N/A | ACTUAL SAMPLE DEPTH: SURFACE | COA: 302676ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

SHIPPED TO: Sal 9/27/11 ~~Waste Sampling & Characterization~~ TARL | 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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXD1	SOIL	SEP 07 2011	0930	✓	✓	✓

9-27-11 9/26/11

WO 6042

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 07 2011 1415	RECEIVED BY/STORED IN: M. Nelson	DATE/TIME: SEP 07 2011 1415
RELINQUISHED BY/REMOVED FROM: L.D. Wall CHPRC	DATE/TIME: 9/26/11 1315	RECEIVED BY/STORED IN: L.D. Wall CHPRC	DATE/TIME: 9/26/11 1315
RELINQUISHED BY/REMOVED FROM: L.D. Wall CHPRC	DATE/TIME: SEP 26 2011 1400	RECEIVED BY/STORED IN: SSU-1	DATE/TIME: SEP 26 2011 1400
RELINQUISHED BY/REMOVED FROM: SSU-1	DATE/TIME: SEP 27 2011 1000	RECEIVED BY/STORED IN: L.D. Wall CHPRC	DATE/TIME: SEP 27 2011 1000
RELINQUISHED BY/REMOVED FROM: L.D. Wall CHPRC	DATE/TIME: SEP 27 2011 1415	RECEIVED BY/STORED IN: J. Bock TARL	DATE/TIME: SEP 27 2011 1415
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

Please email copies of chain of custody, sample receipt form, and Final report to Marisol Anila (Marisol_Anila@rl.gov) and Heather Medley (Heather_A_Medley@rl.gov) ~~WCF~~ WSLF Project Managers

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

PRINTED ON 7/25/2011 | A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-040 -B

COLLECTOR FM Hall CHPRC

COMPANY CONTACT LUKE, SN

TELEPHONE NO. 372-1667

PROJECT COORDINATOR LUKE, SN

PRICE CODE C01 Sal 9/27/11

DATA TURNAROUND ~~12 Days / 12 Days~~ 15 Days

AIR QUALITY ☐

SAMPLING LOCATION 100-K-63 Grubbed Area Sample #25

PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO. F11-159

ICE CHEST NO. N/A

FIELD LOGBOOK NO. N/A

ACTUAL SAMPLE DEPTH SURFACE

COA 302676ES10

METHOD OF SHIPMENT GOVERNMENT VEHICLE

ORIGINAL

SHIPPED TO Sal 9/27/11 TARL ~~Waste Sampling & Characterization~~

OFFSITE PROPERTY NO. N/A

BILL OF LADING/AIR BILL NO. N/A

SPECIAL INSTRUCTIONS

** ~~The CACN for WSCF Analytical is 402579ES20.~~ ☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury};~~ Chromium Hex - 7196; Sal 9/27/11

(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};

(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

W06042

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-039 - B | PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #24	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-023	FIELD LOGBOOK NO.: ~~HNF-N-507-23~~ N/A	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: Sat 9/27/11 TARL ~~Waste Sampling & Characterization~~	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01 Sal 9/27/11 | AIR QUALITY: ☐ | DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | ORIGINAL

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)

13116

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool~4C	None	None
HOLDING TIME	6 Months	6 Months	6 Months
TYPE OF CONTAINER	G/P	P VB 9/26/11	G/P
NO. OF CONTAINER(S)	1 9-27-11	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SDG#
LOT#

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXD0	SOIL	8/31/11	1056	✓	✓	✓

WD6042

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 3 1 2011 1300	M01109 SSU #1	AUG 3 1 2011 1300
M01109 SSU #1	9-7-11 1230	FM Hall	9-7-11 1230
FM Hall	9-7-11 1415	M. Nelson	9-7-11 1415
	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
CHPRC	SEP 2 6 2011 1400	SSU-1	SEP 2 6 2011 1400
SSU-1	SEP 2 7 2011 1000	L.D. Wall CHPRC	SEP 2 7 2011 1000
L.D. Wall CHPRC	SEP 2 7 2011 1415	TARL	SEP 2 7 2011

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

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

* Please email chain of custodies, Sample receipt Forms, and Final report to Marisol Avila (marisol_Avila@rl.gov) and Heather Medley (Heather_A_Medley@rl.gov), WSCF Project managers

PRINTED ON 7/25/2011 | A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-039 - B	PAGE 2 OF 2
COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE C01 Sal	DATA TURNAROUND
FM Hall	LUKE, SN	372-1667	LUKE, SN	AIR QUALITY ☐ 9/27/11	~~12 Days / 12 Days~~ 15 Days
SAMPLING LOCATION CHPRC	PROJECT DESIGNATION		SAF NO.		
100-K-63 Grubbed Area Sample #24	100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		F11-159		
ICE CHEST NO. GWS - 023	FIELD LOGBOOK NO. HNF-N-507-23. N/A	ACTUAL SAMPLE DEPTH 0 - 1'	COA 302676ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	ORIGINAL
SHIPPED TO Sal 9/27/11 TARL ~~Waste Sampling & Characterization~~	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A		

SPECIAL INSTRUCTIONS

** ~~The CACN for WSCF Analytical is 402579ES20.~~ ☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury};~~ Chromium Hex - 7196; Sal 9/27/11
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

WQ6042

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A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-048 PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days

AIR QUALITY: ☐

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #32

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

ICE CHEST NO.: ~~GWS-001~~ ~~HNF-N-507~~ N/A

FIELD LOGBOOK NO.: HNF-N-507-23 - N/A

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SDG# WD6042
LOT#

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXD9 5	SOIL MMRL2	SEP 12 2011	1107	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 12 2011 1450	JA Brazier	SEP 12 2011 1450
		L.D. Wall CHPRC	9/26/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1000	L.D. Wall CHPRC	SEP 27 2011 1000
L.D. Wall CHPRC	SEP 27 2011 1415	J. Stock TARL	SEP 27 2011 1415

SPECIAL INSTRUCTIONS: SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION: RECEIVED BY | TITLE | DATE/TIME

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

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-048-B

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #32	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		**SAF NO.** F11-159
ICE CHEST NO. GW5-001	**FIELD LOGBOOK NO.** HNF-N-507-23	**ACTUAL SAMPLE DEPTH** 0 - 1'	**COA** 302676ES10
SHIPPED TO ~~Waste Sampling & Characterization~~ TARL	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

PRICE CODE C01 Sal 9/27/11 **DATA TURNAROUND** ~~12 Days / 12 Days~~ 15 Days

AIR QUALITY ☐

METHOD OF SHIPMENT GOVERNMENT VEHICLE

ORIGINAL

SPECIAL INSTRUCTIONS

** ~~The CACN for WSCF Analytical is 402579ES20.~~ ☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}~~; Chromium Hex - 7196;

(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};

(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

Sal 9/27/11

W46042

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-047-B

COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01 Sol 9/27/11	DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days		
AIR QUALITY: ☐			
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #31	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil	SAF NO.: F11-159	
ICE CHEST NO.: ~~GWS-001~~ LW. 9/27/11	FIELD LOGBOOK NO.: HNF-N-507-23. N/A	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL		
SHIPPED TO: Sol 9/27/11 ~~Waste Sampling & Characterization~~ TARL	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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SDG# W46042
LOT#

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXD8 4	SOIL MMRL3	SEP 12 2011	1040	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall	SEP 12 2011 1450	TA Frazier	SEP 12 2011 1450
CHPRC	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1000	L.D. Wall CHPRC	SEP 27 2011 1000
L.D. Wall CHPRC	SEP 27 2011 1415	J. Beck TARL	SEP 27 2011 1415
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

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

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-047-B PAGE 2 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #31	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GW.9/27/11 GW8-001	FIELD LOGBOOK NO.: HNF-N-507-23. N/A	ACTUAL SAMPLE DEPTH: 0 - 1'	COA: 302676ES10
SHIPPED TO: Sal 9/27/11 ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01 Sal 9/27/11

AIR QUALITY: ☐

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

SPECIAL INSTRUCTIONS

** ~~The CACN for WSCF Analytical is 402579ES20.~~ ☐☐** 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~~, Boron, Lead, ~~Molybdenum, Selenium, Strontium, Tin, Uranium~~}; 200.8_HG - ~~ICPMS {Mercury}~~; Chromium Hex - 7196; Sal 9/27/11

(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};

(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

W46042

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-046 - B	PAGE 1 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01 Sal 9/27/11	DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #30	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: ~~GWS-001~~ LW. 9/27/11	FIELD LOGBOOK NO.: HNF-N-507-23. N/A	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
SHIPPED TO: Sal 9/27/11 ~~Waste Sampling & Characterization~~ TARL	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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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	[redacted]		
B2FXD7 3	SOIL MMRCY	SEP 12 2011	1010	✓	✓	✓

W46042

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
FM Hall	SEP 12 2011 1450	TA Pratzer	SEP 12 2011 1450	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
Bearcal Horan	9/26/11 1315	L.D. Wall CHPRC	1315 9/26/11	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
SSU-1	SEP 27 2011 1000	L.D. Wall CHPRC	SEP 27 2011 1000	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
L.D. Wall	SEP 27 2011 1415	J. Bock TARL	1415 SEP 27 2011	
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	

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-046-B

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN
PRICE CODE C01	**DATA TURNAROUND** ~~12 Days / 12 Days~~ 15 Days		
AIR QUALITY ☐ Sal 9/27/11			
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #30	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil	**SAF NO.** F11-159	
ICE CHEST NO. ~~GWS-001~~ LW. 9/27/11	**FIELD LOGBOOK NO.** HNF-N-507-23 ~~-N/A~~	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 302676ES10
METHOD OF SHIPMENT GOVERNMENT VEHICLE	**ORIGINAL**		
SHIPPED TO ~~Waste Sampling & Characterization~~ Sal 9/27/11 TARL	**OFFSITE PROPERTY NO.** N/A	**BILL OF LADING/AIR BILL NO.** N/A	

SPECIAL INSTRUCTIONS

** ~~The CACN for WSCF Analytical is 402579ES20.~~ ☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8 HG - ICPMS {Mercury};~~ Chromium Hex - 7196;

(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};

(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

WUD6042

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-044 B

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: Sal 9/27/11 ~~12 Days / 12 Days~~ 15 Days

AIR QUALITY: ☐

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #29

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

ICE CHEST NO.: LW 9/27/11 GWS-001

FIELD LOGBOOK NO.: HNF-N-507-23-N/A

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

SHIPPED TO: Sal 9/27/11 ~~Waste Sampling & Characterization~~ TARL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

9/27/11 9/26/11

W# 6042

SAMPLE NO.		MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXD5	2	SOIL	SEP 12 2011	0940	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 12 2011 1450	TA Frazier	SEP 12 2011 1450
L.D. Wall CHPRC	9/26/11 1315	L.D. Wall CHPRC	1315 9/26/11
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1000	L.D. Wall CHPRC	SEP 27 2011 1000
L.D. Wall CHPRC	SEP 27 2011 1415	J. Bock TARL	1415 SEP 27 2011

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

PRINTED ON 7/25/2011

A-6003-618 (REV 7)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-044-B	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT LUKE, SN	TELEPHONE NO. 372-1667	PROJECT COORDINATOR LUKE, SN	PRICE CODE C01 Sal 9/27/11	DATA TURNAROUND ~~12 Days / 12 Days~~ 15 Days
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #29	PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO. F11-159	AIR QUALITY ☐	
ICE CHEST NO. LW: 9/27/11 GW3-001	FIELD LOGBOOK NO. HNF-N-507-23 . N/A	ACTUAL SAMPLE DEPTH 0-1'	COA 302676ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	ORIGINAL
SHIPPED TO Sal 9/27/11 ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A		

SPECIAL INSTRUCTIONS

** ~~The CACN for WSCF Analytical is 402579ES20.~~☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury};~~ Chromium Hex - 7196;

(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};

(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

WQ6042

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-049 ~ B

COLLECTOR: FM Hall, CHPRC

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #33

ICE CHEST NO.: LW 9/27/11 ~~GWS-001~~

SHIPPED TO: Sal 9/27/11 ~~Waste Sampling & Characterization~~ TARL

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

FIELD LOGBOOK NO.: HNF-N-507-23. N/A

ACTUAL SAMPLE DEPTH: 0 - 1'

OFFSITE PROPERTY NO.: N/A

PROJECT COORDINATOR: LUKE, SN

SAF NO.: F11-159

COA: 302676ES10

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

PRICE CODE: C01 Sal 9/27/11

AIR QUALITY: ☐

DATA TURNAROUND: ~~12 Days~~ / 12 ~~Days~~ 15 Days

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

SDG # W46042
LOT #

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)

113156

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool~4C	None	None
HOLDING TIME	6 Months	6 Months	6 Months
TYPE OF CONTAINER	G/P	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXF0	SOIL ~~MMRC4~~ MMRC6 SKS 10/11/11	SEP 12 2011	1149	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall, CHPRC	SEP 12 2011 1450	TA Pinazin	SEP 12 2011 1450
Bearcat Broom	9/26/11 1315	L.D. Wall, CHPRC	9/26/11 1315
L.D. Wall, CHPRC	SEP 26 2011 1100	SSU-1	SEP 26 2011 1100 9/26/11
SSU-1	SEP 27 2011 1000	L.D. Wall, CHPRC	SEP 27 2011 1000
L.D. Wall, CHPRC	SEP 27 2011 1415	J. Bock, TARL	SEP 27 2011 1415
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

* Please email copies of chain of custodies, Sample receipt Forms, and Final Report to Marisol Avila (marisol_Avila@rl.gov) and Heather Medley (Heather_A_Medley@rl.gov) WSCF Project Managers

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-049-B	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01 Sal 9/27/11	DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #33	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: ~~KW.9/27/11~~ C6U5-001	FIELD LOGBOOK NO.: HNF-~~N-507~~-23.	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
SHIPPED TO: Sal 9/27/11 ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

SPECIAL INSTRUCTIONS

** ~~The CACN for WSCF Analytical is 402579ES20.~~ ☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury};~~ Chromium Hex - 7196;

(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};

(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

Sal 9/27/11

W#6042

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Appendix 5

Data Validation Supporting Documentation

VALIDATION LEVEL:	A	B	C	D	E
PROJECT: KW Floodplain			DATA PACKAGE: VSR12-003		
VALIDATOR: Eyda Hergenreder		LAB: WSCF, TestAmerica		DATE: 11-04-2011	
			SDG: WSCF113047, WSCF113057, WSCF113116, W06240, W06241, W06242		
ANALYSES PERFORMED					
Anions/IC	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 samples

SDG WSCF113047: B2FXJ2, B2FXJ3, B2FXF7, B2FXH8, B2FXB4, B2FXC5, B2FXD6
SDG WSCF113057: B2FXJ8, B2FXJ9, B2FXK0, B2FXK1, B2FXB5, B2FXB6, B2FXB7, B2FXB8, B2FXB9, B2FXC0, B2FXC1, B2FXC2, B2FXC3, B2FXC4
SDG WSCF113116: B2FXD0, B2FXD1, B2FXD2, B2FXD3, B2FXD4, B2FXC6, B2FXC7, B2FXC8, B2FXC9, B2FXJ4, B2FXJ5
SDG W06240: B2FXJ1, B2H560, B2H561, B2H562, B2H563
SDG W06241: B2FXF1, B2FXF2, B2FXF3, B2FXF4, B2FXF5, B2FXF6, B2FXF8, B2FXF9, B2FXH0, B2FXH1, B2FXH2, B2FXH3, B2FXH4, B2FXH5, B2FXH6, B2FXH7, B2FXH9, B2FXJ0, B2FXJ6, B2FXJ7
SDG W06242: B2FXC6, B2FXC7, B2FXC8, B2FXC9, B2FXD0,B2FXD1,B2FXD2, B2FXD3, B2FXD4, B2FXD5, B2FXD7, B2FXD8, B2FXD9, B2FXF0, B2FXJ4, B2FXJ5

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:

WSCF113047: Cr+6 MS 16%
WSCF113057 (batch 189366): Cr +6 MS 16%
W06241: Cr+6 MS 48%

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: None

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

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF113047

QC Batch 189366 **Test** Hexavalent chromium
Associated Samples 113047001, 113047002, 113047003, 113047004, 113047005, 113047006, 113047007

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #64438**							
Hexavalent chromium	18540-29-9		<0.092	ug/g					U	09/07/11
LCS			**QC Sample #64439**							
Hexavalent chromium	18540-29-9		4.06	ug/g	100.7	80 - 120				09/07/11
DUP			**QC Sample #64440**							
			Original 113047001							
Hexavalent chromium	18540-29-9	<0.48	<0.49	ug/g			22.20	30	UD	09/07/11
MS			**QC Sample #64441**							
			Original 113047001							
Hexavalent chromium	18540-29-9	<0.48	0.659	ug/g	16.3	75 - 125			BDN	09/07/11
PSTSPK			**QC Sample #64442**							
Hexavalent chromium	18540-29-9		0.0442	ug/g	88.4	85 - 115				09/07/11
IMS			**QC Sample #64443**							
			Original 113047001							
Hexavalent chromium	18540-29-9	<0.48	0.778	ug/g	0.2	75 - 125			BDN	09/07/11

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF113057

QC Batch 189366 **Test** Hexavalent chromium
Associated Samples 113057001, 113057002, 113057003, 113057004, 113057005, 113057006, 113057007, 113057008, 113057009, 113057010, 113057011, 113057012, 113057013

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #64438**							
Hexavalent chromium	18540-29-9		<0.092	ug/g					U	09/07/11
LCS			**QC Sample #64439**							
Hexavalent chromium	18540-29-9		4.06	ug/g	100.7	80 - 120				09/07/11
DUP			**QC Sample #64440**							
			Original 113047001							
Hexavalent chromium	18540-29-9		<0.49	ug/g			22.20	30	UD	09/07/11
MS			**QC Sample #64441**							
			Original 113047001							
Hexavalent chromium	18540-29-9		0.659	ug/g	16.3	75 - 125			BDN	09/07/11
PSTSPK			**QC Sample #64442**							
Hexavalent chromium	18540-29-9		0.0442	ug/g	88.4	85 - 115				09/07/11
IMS			**QC Sample #64443**							
			Original 113047001							
Hexavalent chromium	18540-29-9		0.778	ug/g	0.2	75 - 125			BDN	09/07/11

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF113057

QC Batch 189396
Associated Samples 113057014

Test Hexavalent chromium

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
BLANK			**QC Sample #64503**								
Hexavalent chromium	18540-29-9		<0.096	ug/g						U	09/08/11
LCS			**QC Sample #64504**								
Hexavalent chromium	18540-29-9		3.78	ug/g	98.8	80 - 120					09/08/11
DUP			**QC Sample #64505**								
			Original 113060001								
Hexavalent chromium	18540-29-9		<0.092	ug/g			168.30	30	*	U	09/08/11
MS			**QC Sample #64506**								
			Original 113060001								
Hexavalent chromium	18540-29-9		4.00	ug/g	100.5	75 - 125					09/08/11
PSTSPK			**QC Sample #64507**								
Hexavalent chromium	18540-29-9		0.0482	ug/g	96.4	85 - 115					09/08/11
IMS			**QC Sample #64508**								
			Original 113060001								
Hexavalent chromium	18540-29-9		335	ug/g	106.5	75 - 125					09/08/11

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF113116

QC Batch 189396 **Test** Hexavalent chromium
Associated Samples 113116001, 113116002, 113116003, 113116004, 113116005, 113116006, 113116007, 113116008, 113116009, 113116010, 113116011

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
BLANK			**QC Sample #64503**								
Hexavalent chromium	18540-29-9		<0.096	ug/g						U	09/08/11
LCS			**QC Sample #64504**								
Hexavalent chromium	18540-29-9		3.78	ug/g	98.8	80 - 120					09/08/11
DUP			**QC Sample #64505**								
			Original 113060001								
Hexavalent chromium	18540-29-9		<0.092	ug/g			168.30	30	*	U	09/08/11
MS			**QC Sample #64506**								
			Original 113060001								
Hexavalent chromium	18540-29-9		4.00	ug/g	100.5	75 - 125					09/08/11
PSTSPK			**QC Sample #64507**								
Hexavalent chromium	18540-29-9		0.0482	ug/g	96.4	85 - 115					09/08/11
IMS			**QC Sample #64508**								
			Original 113060001								
Hexavalent chromium	18540-29-9		335	ug/g	106.5	75 - 125					09/08/11

FORM II

Date: 12-Oct-11

DUPLICATE RESULTS

Lab Name:	TestAmerica	**SDG:**	W06240	**Collection Date:**	9/15/2011 12:00:00 PM
Lot-Sample No.:	J1I270475-1	**Report No. :**	48753	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2H563	**COC No. :**	F11-159-084	**Matrix:**	SOIL

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271051	7196_CR6			**Work Order:** MMQ891AE		**Report DB ID:** MMQ891ER			**Orig Sa DB ID:** 9MMQ8910			
HEXCHROME	1.55E-01	U		0.0E+00	1.55E-01	mg/kg	N/A	(1.)	9/28/11 05:25 p		2.5039	
	1.55E-01	U	**RPD**	**0.0**				N/A			g	
Batch: 1271144	9310_ALPHABETA_GPC			**Work Order:** MMQ891AH		**Report DB ID:** MMQ891HR			**Orig Sa DB ID:** 9MMQ8910			
ALPHA	4.30E+00		2.9E+00	4.2E+00	3.82E+00	pCi/g	100%	(1.1)	10/10/11 11:58 p		0.0505	GPC10B
	6.47E+00		**RPD**	**40.2**		1.00E+01		(2.)			g	

No. of Results: 2 **Comments:**

RPD - Relative Percent Difference.
MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

FORM II

BLANK RESULTS

Date: 12-Oct-11

Lab Name: TestAmerica

Matrix: SOIL

SDG: W06240

Report No. : 48753

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA ,	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271051	7196_CR6			**Work Order:**	MMRHC1AA		**Report DB ID:**	MMRHC1AB				
HEXCHROME	1.55E-01	U		0.0E+00	1.55E-01	mg/kg	N/A	(1.)	9/28/11 05:25 p		2.5	
						1.55E-01		N/A			g	
Batch: 1271144	9310_ALPHABETA_GPC			**Work Order:**	MMR0R1AA		**Report DB ID:**	MMR0R1AB				
ALPHA	-9.36E-02	U	1.1E+00	1.1E+00	2.73E+00	pCi/g	100%	-0.03	10/11/11 06:43 a		0.0547	GPC10D
					1.11E+00	1.00E+01		-0.16			g	
Batch: 1271145	9310_ALPHABETA_GPC			**Work Order:**	MMR011AA		**Report DB ID:**	MMR011AB				
BETA	7.11E-01	U	1.5E+00	1.5E+00	3.41E+00	pCi/g	100%	0.21	10/6/11 03:30 p		0.2044	GPC31B
					1.57E+00	1.50E+01		0.94			g	
Batch: 1271147	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMR031AA		**Report DB ID:**	MMR031AB				
STRONTIUM	3.35E-02	U	5.1E-02	5.2E-02	1.12E-01	pCi/g	85%	0.3	10/8/11 07:56 a		6.03	GPC32C
					5.21E-02			(1.3)			g	

No. of Results: 4 Comments:

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

FORM II

LCS RESULTS

Date: 12-Oct-11

Lab Name: TestAmerica

Matrix: SOIL

SDG: W06240

Report No. : 48753

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA	Report Unit	Yield	Expected	Expected Uncert	Recovery, Bias	Analysis, Prep Date	Aliquot Size	Primary Detector
Batch: 1271051	7196_CR6			**Work Order:**	MMRHC1AC		**Report DB ID:**	MMRHC1AC					
HEXCHROME	1.89E+01			0.0E+00	1.55E-01	mg/kg	N/A	2.00E+01		95%	9/28/11 05:25 p	2.5	
							Rec Limits:	80	120	-0.1		g	
Batch: 1271144	9310_ALPHABETA_GPC			**Work Order:**	MMR0R1AC		**Report DB ID:**	MMR0R1CS					
ALPHA	6.68E+01		7.2E+00	4.6E+01	2.16E+00	pCi/g	100%	8.42E+01	8.51E-01	79%	10/11/11 08:42 a	0.0539	GPC10A
							Rec Limits:	70	130	-0.2		g	
Batch: 1271145	9310_ALPHABETA_GPC			**Work Order:**	MMR011AC		**Report DB ID:**	MMR011CS					
BETA	6.81E+01		5.3E+00	1.5E+01	3.61E+00	pCi/g	100%	6.61E+01	2.55E+00	103%	10/6/11 03:30 p	0.2047	GPC31C
							Rec Limits:	70	130	0.0		g	
Batch: 1271147	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMR031AC		**Report DB ID:**	MMR031CS					
STRONTIUM	1.10E+00		1.0E-01	3.0E-01	8.35E-02	pCi/g	87%	1.13E+00	1.33E-02	97%	10/10/11 01:49 a	6.03	GPC27A
							Rec Limits:	70	130	0.0		g	

No. of Results: 4 **Comments:**

FORM II

MATRIX SPIKE RESULTS

Date: 12-Oct-11

Lab Name: TestAmerica **SDG:** W06240

Lot-Sample No.: J1I270475-1, B2H563 **Report No. :** 48753 **Matrix:** SOIL

Parameter	SpikeResult, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA	Rpt Unit, CRDL	Yield	Rec-overy	Expected, Uncert	Analysis, Prep Date	Aliquot Size	Analy Method, Primary Detector
Batch: 1271051	Work Order:	MMQ891AC		Report DB ID:	MMQ891CW		Orig Sa DB ID:	9MMQ8910				
HEXCHROME	8.14E+00			0.0E+00	1.55E-01	mg/kg	N/A	80.79%	1.01E+01	9/28/11 05:25 p	2.5075	7196_CR6
	1.55E-01										g	

Number of Results: 1

Comments:

RER - Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPUd))] as defined by ICPT BOA.

Bias - (Result/Expected)-1 as defined by ANSI N13.30.

FORM II

Date: 12-Oct-11

DUPLICATE RESULTS

Lab Name:	**TestAmerica**	**SDG:**	W06241	**Collection Date:**	9/13/2011 11:26:00 AM
Lot-Sample No.:	**J1I270478-1**	**Report No. :**	48754	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	**B2FXF9**	**COC No. :**	F11-159-059	**Matrix:**	SOIL

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1277058	7196_CR6			**Work Order:** MMQ9P1AH		**Report DB ID:** MMQ9P1ER			**Orig Sa DB ID:** 9MMQ9P10			
HEXCHROME	1.82E-01			0.0E+00	1.55E-01	mg/kg	N/A	(1.2)	10/6/11 09:00 a		2.5009	
	3.58E-01		**RPD**	**65.2**		3.50E-01		N/A			g	

No. of Results: 1 **Comments:**

RPD - Relative Percent Difference.

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.

FORM II

BLANK RESULTS

Date: 12-Oct-11

Lab Name: TestAmerica

Matrix: SOIL

SDG: W06241

Report No. : 48754

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA ,	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1277058	7196_CR6			**Work Order:**	MMXKK1AA		**Report DB ID:**	MMXKK1AB				
HEXCHROME	1.55E-01	U		0.0E+00	1.55E-01	mg/kg	N/A	(1.)	10/6/11 09:00 a		2.5	
						1.55E-01		N/A			g	
Batch: 1271138	9310_ALPHABETA_GPC			**Work Order:**	MMRX21AA		**Report DB ID:**	MMRX21AB				
ALPHA	3.05E-01	U	1.2E+00	1.2E+00	2.92E+00	pCi/g	100%	0.1	10/10/11 09:59 p		0.0538	GPC10D
					1.20E+00	1.00E+01		0.49			g	
Batch: 1271139	9310_ALPHABETA_GPC			**Work Order:**	MMRX71AA		**Report DB ID:**	MMRX71AB				
BETA	4.18E+00		2.1E+00	2.1E+00	3.82E+00	pCi/g	100%	(1.1)	10/6/11 02:08 p		0.2002	GPC28B
					1.77E+00	1.50E+01		(3.9)			g	
Batch: 1271140	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMR0A1AA		**Report DB ID:**	MMR0A1AB				
STRONTIUM	-1.59E-02	U	4.9E-02	4.9E-02	1.21E-01	pCi/g	89%	-0.13	10/8/11 07:56 a		6.01	GPC27C
					5.66E-02			-0.65			g	

No. of Results: 4 **Comments:**

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

FORM II

LCS RESULTS

Date: 12-Oct-11

Lab Name: TestAmerica

Matrix: SOIL

SDG: W06241

Report No. : 48754

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA	Report Unit	Yield	Expected	Expected Uncert	Recovery, Bias	Analysis, Prep Date	Aliquot Size	Primary Detector
Batch: 1277058	7196_CR6			**Work Order:**	MMXKK1AC		**Report DB ID:**	MMXKK1AS					
HEXCHROME	1.91E+01			0.0E+00	1.55E-01	mg/kg	N/A	2.00E+01		95%	10/6/11 09:00 a	2.5	
							Rec Limits:	80	120	0.0		g	
Batch: 1271138	9310_ALPHABETA_GPC			**Work Order:**	MMRX21AC		**Report DB ID:**	MMRX21CS					
ALPHA	8.90E+01		8.5E+00	2.0E+01	3.07E+00	pCi/g	100%	8.87E+01	8.97E-01	100%	10/10/11 11:58 p	0.0513	GPC10D
							Rec Limits:	70	130	0.0		g	
Batch: 1271139	9310_ALPHABETA_GPC			**Work Order:**	MMRX71AC		**Report DB ID:**	MMRX71CS					
BETA	6.95E+01		5.5E+00	1.1E+01	3.71E+00	pCi/g	100%	6.65E+01	2.56E+00	105%	10/6/11 02:08 p	0.2043	GPC28C
							Rec Limits:	70	130	0.0		g	
Batch: 1271140	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMR0A1AC		**Report DB ID:**	MMR0A1CS					
STRONTIUM	1.09E+00		1.2E-01	3.1E-01	1.13E-01	pCi/g	91%	1.14E+00	1.33E-02	96%	10/8/11 07:56 a	6.01	GPC28B
							Rec Limits:	70	130	0.0		g	

No. of Results: 4 **Comments:**

FORM II

MATRIX SPIKE RESULTS

Date: 12-Oct-11

Lab Name: TestAmerica **SDG:** W06241

Lot-Sample No.: J1I270478-1, B2FXF9 **Report No. :** 48754 **Matrix:** SOIL

Parameter	SpikeResult, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA	Rpt Unit, CRDL	Yield	Rec-overy	Expected, Uncert	Analysis, Prep Date	Aliquot Size	Analy Method, Primary Detector
Batch: 1277058	Work Order:	MMQ9P1AG		Report DB ID:	MMQ9P1CW		Orig Sa DB ID:	9MMQ9P10				
HEXCHROME	4.88E+00			0.0E+00	1.55E-01	mg/kg	N/A	48.36%	1.01E+01	10/6/11 09:00 a	2.5039	7196_CR6
	3.58E-01										g	

Number of Results: 1

Comments:

TestAmerica
rptSTLRchMs
V5.2.15 A2002

RER - Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPUd))] as defined by ICPT BOA.
Bias - (Result/Expected)-1 as defined by ANSI N13.30.

FORM II

Date: 12-Oct-11

DUPLICATE RESULTS

Lab Name:	TestAmerica	**SDG:**	W06242	**Collection Date:**	8/31/2011 7:30:00 AM
Lot-Sample No.:	J1I270481-1	**Report No. :**	48755	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXJ5	**COC No. :**	F11-159-074	**Matrix:**	SOIL

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271112	7196_CR6			**Work Order:** MMRCE1AH		**Report DB ID:** MMRCE1ER			**Orig Sa DB ID:** 9MMRCE10			
HEXCHROME	1.55E-01	U		0.0E+00	1.55E-01	mg/kg	N/A	(1.)	9/29/11 11:00 a		2.5038	
	1.55E-01	U	**RPD**	**0.0**		3.50E-01		N/A			g	

No. of Results: 1 **Comments:**

RPD - Relative Percent Difference.
MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

FORM II

BLANK RESULTS

Date: 12-Oct-11

Lab Name: TestAmerica

Matrix: SOIL

SDG: W06242

Report No. : 48755

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA ,	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271112	7196_CR6			**Work Order:**	MMRR81AA		**Report DB ID:**	MMRR81AB				
HEXCHROME	1.55E-01	U		0.0E+00	1.55E-01	mg/kg	N/A	(1.)	9/29/11 11:00 a		2.5	
						1.55E-01		N/A			g	
Batch: 1271148	9310_ALPHABETA_GPC			**Work Order:**	MMR041AA		**Report DB ID:**	MMR041AB				
ALPHA	-5.89E-01	U	1.2E+00	1.3E+00	3.12E+00	pCi/g	100%	-0.19	10/11/11 07:20 p		0.0507	GPC10C
					1.29E+00	1.00E+01		-0.94			g	
Batch: 1271149	9310_ALPHABETA_GPC			**Work Order:**	MMR061AA		**Report DB ID:**	MMR061AB				
BETA	1.32E-01	U	1.6E+00	1.6E+00	3.89E+00	pCi/g	100%	0.03	10/6/11 04:56 p		0.2018	GPC32A
					1.81E+00	1.50E+01		0.16			g	
Batch: 1271156	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMR1J1AA		**Report DB ID:**	MMR1J1AB				
STRONTIUM	-3.51E-02	U	4.7E-02	4.8E-02	1.25E-01	pCi/g	89%	-0.28	10/10/11 09:30 p		6.01	GPC28C
					5.79E-02			-(1.5)			g	

No. of Results: 4 **Comments:**

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

FORM II

LCS RESULTS

Date: 12-Oct-11

Lab Name: TestAmerica

SDG: W06242

Matrix: SOIL

Report No. : 48755

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA	Report Unit	Yield	Expected	Expected Uncert	Recovery, Bias	Analysis, Prep Date	Aliquot Size	Primary Detector
Batch: 1271112	7196_CR6			**Work Order:**	MMRR81AC		**Report DB ID:**	MMRR81AS					
HEXCHROME	1.94E+01			0.0E+00	1.55E-01	mg/kg	N/A	2.00E+01		97%	9/29/11 11:00 a	2.5	
							Rec Limits:	80	120	0.0		g	
Batch: 1271148	9310_ALPHABETA_GPC			**Work Order:**	MMR041AC		**Report DB ID:**	MMR041CS					
ALPHA	9.67E+01		8.9E+00	6.9E+01	2.92E+00	pCi/g	100%	8.91E+01	9.00E-01	109%	10/11/11 07:20 p	0.0511	GPC10D
							Rec Limits:	70	130	0.1		g	
Batch: 1271149	9310_ALPHABETA_GPC			**Work Order:**	MMR061AC		**Report DB ID:**	MMR061CS					
BETA	6.49E+01		5.3E+00	1.5E+01	3.77E+00	pCi/g	100%	6.64E+01	2.56E+00	98%	10/6/11 04:56 p	0.203	GPC32B
							Rec Limits:	70	130	0.0		g	
Batch: 1271156	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMR1J1AC		**Report DB ID:**	MMR1J1CS					
STRONTIUM	1.13E+00		1.3E-01	3.2E-01	1.24E-01	pCi/g	91%	1.13E+00	1.32E-02	100%	10/10/11 09:30 p	6.02	GPC28D
							Rec Limits:	70	130	0.0		g	

No. of Results: 4 **Comments:**

FORM II

MATRIX SPIKE RESULTS

Date: 12-Oct-11

Lab Name: TestAmerica **SDG:** W06242

Lot-Sample No.: J1I270481-1, B2FXJ5 **Report No. :** 48755 **Matrix:** SOIL

Parameter	SpikeResult, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA	Rpt Unit, CRDL	Yield	Rec-overy	Expected, Uncert	Analysis, Prep Date	Aliquot Size	Analy Method, Primary Detector
Batch: 1271112	Work Order: MMRCE1AC			Report DB ID: MMRCE1CW			Orig Sa DB ID: 9MMRCE10					
HEXCHROME	9.67E+00			0.0E+00	1.55E-01	mg/kg	N/A	96.89%	9.98E+00	9/29/11 11:00 a	2.5056	7196_CR6
	1.55E-01										g	

Number of Results: 1

Comments:

TestAmerica
rptSTLRchMs
V5.2.15 A2002

RER - Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPUd))] as defined by ICPT BOA.
Bias - (Result/Expected)-1 as defined by ANSI N13.30.

Date: 04 November 2011
To: CH2M Hill (technical representative)
From: Analytical Quality Associates, Inc.
Project: KW Floodplain
Subject: Radiochemical - Sample Data Groups (SDGs) WSCF113047, WSCF113057, WSCF113116, WSCF113156, WSCF113177, WSCF113192, WSCF113205, W06240, W06241 and W06242

INTRODUCTION

This memorandum presents the results of data validation for SDGs WSCF113047, WSCF113057, WSCF113116, WSCF113156, WSCF113177, WSCF113192 and WSCF113205 prepared by WSCF Laboratories and SDGs W06240, W06241 and W06242 prepared by TestAmerica 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
B2FXJ2	08/29/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXJ3	08/29/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXF7	08/29/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXH8	08/29/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXB4	08/29/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXC5	08/29/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXD6	08/29/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXJ8	08/30/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXJ9	08/30/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXK0	08/30/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXK1	08/30/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXB5	08/30/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXB6	08/30/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXB7	08/30/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXB8	08/30/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXB9	08/30/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXC0	08/30/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXC1	08/30/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXC2	08/30/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXC3	08/30/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXC4	08/30/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXD0	08/31/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXD1	09/07/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXD2	09/07/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXD3	09/07/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXD4	09/07/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXC6	08/31/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXC7	08/31/11	Soil	C	Gross αβ, Gamma, Sr-89/90

B2FXC8	08/31/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXC9	08/31/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXJ4	09/07/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXJ5	08/31/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXF0	09/12/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXD5	09/12/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXD7	09/12/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXD8	09/12/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXD9	09/12/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXF1	09/13/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXF2	09/13/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXF3	09/13/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXF4	09/13/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXF5	09/13/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXF6	09/13/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXF8	09/13/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXF9	09/13/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXH0	09/13/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXH1	09/13/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXH2	09/14/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXH3	09/14/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXH4	09/14/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXH5	09/14/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXH6	09/14/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXH7	09/14/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXH9	09/14/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXJ0	09/14/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXJ6	09/14/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXJ7	09/14/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2FXJ1	09/15/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2H560	09/15/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2H561	09/15/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2H562	09/15/11	Soil	C	Gross αβ, Gamma, Sr-89/90
B2H563	09/15/11	Soil	C	Gross αβ, Gamma, Sr-89/90

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. There are no specific preservation requirements for radiochemical soil analysis.

The samples were analyzed within the prescribed holding times.

- **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 WSCF113047, the Sr-89/90 laboratory blank result was > the minimum detectable concentration (MDC). The Sr-89/90 result for samples B2FXJ2, B2FXJ3, B2FXF7, B2FXH8, B2FXB4 and B2FXD6 were detects > the MDC but <5X the blank results and should be qualified as estimates and flagged "J." The Sr-89/90 result for sample B2FXC5 was non-detect and should not be qualified.

For SDG WSCF113057, the gross alpha (batch 189037) and the Sr-89/90 (batch 189039) laboratory blank results were > the MDCs. All associated gross alpha sample results and the Sr-89/90 result for sample B2FXJ9 were detects > the MDC but <5X the blank result and should be qualified as estimates and flagged "J." All other associated Sr-89/90 sample results were non-detects and should not be qualified. See the table in Appendix 2 for a listing of all affected samples.

For SDG W06241, the gross beta laboratory blank result was > the MDC. The gross beta result for sample B2FXJ7 was > the MDC but <5X the blank result and should be qualified as an estimate and flagged "J." All other associated sample results were detects >5X the blank result and should not be qualified.

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.

Sr-89/90 and gross alpha were detected in equipment blank sample B2FXJ3. The Sr-89/90 result has been flagged "J" due to laboratory blank contamination.

Gross alpha and gross beta were detected in equipment blank sample B2FXJ7. The gross beta result has been flagged "J" due to laboratory blank contamination.

Gross beta was detected in equipment blank sample B2FXJ5.

- **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.

- **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 MDCs the precision limits are ones specified by the DV procedure.

Laboratory Duplicate Samples

All laboratory duplicate results were acceptable.

Field Duplicate Samples

All field duplicate results were acceptable with the following exception.

Samples B2FXJ2 and B2FXF7 had Sr-89/90 and samples B2FXJ6 and B2FXH7 had Cs-137 differences >2X the MDCs. No sample data were qualified as a result per data validation procedure guidance.

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-155 MDCs for samples B2FXF7, B2FXH8, B2FXB4, B2FXC5, B2FXK1, B2FXB5, B2FXB6, B2FXB9, B2FXC0, B2FXC1, B2FXC2, B2FXC8, B2FXF2, B2FXF4, B2FXF8, B2FXH3, B2FXH4, B2FXJ0 and B2H562 were > the CRDL.

The Eu-152 and Eu-154 MDCs for sample B2FXC8 were > the CRDLs.

- **Completeness**

SDGs WSCF113047, WSCF113057, WSCF113116, WSCF113156, WSCF113177, WSCF113192, WSCF113205, W06240, W06241 and W06242 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 sample results as estimates were due to laboratory blank contamination for Sr-89/90, gross alpha and gross beta. See the table in Appendix 2 for a listing of all affected sample results.

For SDG W06242, the collection date for samples B2FXD1, B2FXD2, B2FXD3, B2FXD4, B2FXD5, B2FXD7, B2FXD8, B2FXD9, B2FXF0, B2FXJ4 were incorrect.

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: WSCF113047, WSCF113057, WSCF113116, WSCF113156, WSCF113177, WSCF113192, WSCF113205, W06240, W06241, W06242	Reviewer: AQA	Project: KW Floodplain	Page 1 of 1
Analyte(s)	**Qualifier**	**Samples Affected**	**Reason**
Sr-89/90	J	B2FXJ2, B2FXJ3, B2FXF7, B2FXH8, B2FXB4, B2FXD6, B2FXJ9	Laboratory blank contamination
Gross Alpha	J	B2FXJ8, B2FXJ9, B2FXK0, B2FXK1, B2FXB5, B2FXB6, B2FXB7	Laboratory blank contamination
Gross Beta	J	B2FXJ7	Laboratory blank contamination

Comments: None

Appendix 3

Annotated Laboratory Reports

WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF113047

Sample # 113047001
SAF# F11-159
Sample ID B2FXJ2

Matrix SOIL
Sampled 08/29/11
Received 08/29/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Alpha/Beta Prep										**08/30/11**
Gross Alpha/Beta										
Gross Alpha	12587-46-1	LA-508-415		3.0	.8	pCi/g	1	0.47		09/09/11
Gross Beta	12587-47-2	LA-508-415		5.3	1	pCi/g	1	1.0		09/09/11
GEA Prep										**08/30/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.35	.057	pCi/g	1	0.018		08/30/11
Cobalt-60	10198-40-0	LA-508-481	U	-6.8E-4	.0095	pCi/g	1	0.017		08/30/11
Europium-152	14683-23-9	LA-508-481		0.15	.053	pCi/g	1	0.061		08/30/11
Europium-154	15585-10-1	LA-508-481	U	-0.011	.032	pCi/g	1	0.055		08/30/11
Europium-155	14391-16-3	LA-508-481	U	3.9E-3	.043	pCi/g	1	0.077		08/30/11
SR-89/90										**08/31/11**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	J	0.61	1.1	pCi/g	1	0.43		09/07/11

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 # WSCF113047

Sample # 113047002
SAF# F11-159
Sample ID B2FXJ3

Matrix SOIL
Sampled 08/29/11
Received 08/29/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Alpha/Beta Prep										**08/30/11**
Gross Alpha/Beta										
Gross Alpha	12587-46-1	LA-508-415		0.50	.31	pCi/g	1	0.36		09/09/11
Gross Beta	12587-47-2	LA-508-415	U	0.63	.61	pCi/g	1	0.98		09/09/11
GEA Prep										**08/30/11**
GEA										
Cesium-137	10045-97-3	LA-508-481	U	-3.2E-3	.015	pCi/g	1	0.026		08/30/11
Cobalt-60	10198-40-0	LA-508-481	U	3.6E-3	.013	pCi/g	1	0.027		08/30/11
Europium-152	14683-23-9	LA-508-481	U	-0.033	.047	pCi/g	1	0.076		08/30/11
Europium-154	15585-10-1	LA-508-481	U	-0.035	.04	pCi/g	1	0.064		08/30/11
Europium-155	14391-16-3	LA-508-481	U	0.012	.074	pCi/g	1	0.13		08/30/11
SR-89/90										**08/31/11**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	J	0.52	.95	pCi/g	1	0.40		09/07/11

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 # WSCF113047

Sample # 113047003
SAF# F11-159
Sample ID B2FXF7

Matrix SOIL
Sampled 08/29/11
Received 08/29/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Alpha/Beta Prep										**08/30/11**
Gross Alpha/Beta										
Gross Alpha	12587-46-1	LA-508-415		2.1	.66	pCi/g	1	0.45		09/09/11
Gross Beta	12587-47-2	LA-508-415		3.8	.9	pCi/g	1	1.1		09/09/11
GEA Prep										**08/30/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.33	.062	pCi/g	1	0.041		08/30/11
Cobalt-60	10198-40-0	LA-508-481	U	-1.5E-3	.021	pCi/g	1	0.037		08/30/11
Europium-152	14683-23-9	LA-508-481	U	-0.013	.08	pCi/g	1	0.12		08/30/11
Europium-154	15585-10-1	LA-508-481	U	0.027	.073	pCi/g	1	0.13		08/30/11
Europium-155	14391-16-3	LA-508-481	U	0.010	.084	pCi/g	1	0.15		08/30/11
SR-89/90										**08/31/11**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	J	1.6	1.1	pCi/g	1	0.41		09/07/11

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 # WSCF113047

Sample # 113047004
SAF# F11-159
Sample ID B2FXH8

Matrix SOIL
Sampled 08/29/11
Received 08/29/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Alpha/Beta Prep										**08/30/11**
Gross Alpha/Beta										
Gross Alpha	12587-46-1	LA-508-415		0.76	.4	pCi/g	1	0.43		09/09/11
Gross Beta	12587-47-2	LA-508-415		1.9	.74	pCi/g	1	1.0		09/09/11
GEA Prep										**08/30/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.16	.052	pCi/g	1	0.031		08/30/11
Cobalt-60	10198-40-0	LA-508-481	U	-1.8E-3	.017	pCi/g	1	0.031		08/30/11
Europium-152	14683-23-9	LA-508-481	U	-0.014	.064	pCi/g	1	0.092		08/30/11
Europium-154	15585-10-1	LA-508-481	U	0.0040	.061	pCi/g	1	0.11		08/30/11
Europium-155	14391-16-3	LA-508-481	U	0.16	.074	pCi/g	1	0.20		08/30/11
SR-89/90										**08/31/11**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	J	0.49	.94	pCi/g	1	0.43		09/07/11

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 # WSCF113047

Sample # 113047005
SAF# F11-159
Sample ID B2FXB4

Matrix SOIL
Sampled 08/29/11
Received 08/29/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Alpha/Beta Prep										**08/30/11**
Gross Alpha/Beta										
Gross Alpha	12587-46-1	LA-508-415		2.1	.66	pCi/g	1	0.44		09/09/11
Gross Beta	12587-47-2	LA-508-415		3.4	.87	pCi/g	1	1.1		09/09/11
GEA Prep										**08/30/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.10	.042	pCi/g	1	0.035		08/30/11
Cobalt-60	10198-40-0	LA-508-481	U	-0.014	.019	pCi/g	1	0.031		08/30/11
Europium-152	14683-23-9	LA-508-481	U	4.1E-4	.07	pCi/g	1	0.10		08/30/11
Europium-154	15585-10-1	LA-508-481	U	-7.5E-3	.059	pCi/g	1	0.10		08/30/11
Europium-155	14391-16-3	LA-508-481	U	0.26	.18	pCi/g	1	0.30		08/30/11
SR-89/90										**08/31/11**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	J	2.1	1	pCi/g	1	0.45		09/07/11

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 # WSCF113047

Sample # 113047006
SAF# F11-159
Sample ID B2FXC5

Matrix SOIL
Sampled 08/29/11
Received 08/29/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Alpha/Beta Prep										**08/30/11**
Gross Alpha/Beta										
Gross Alpha	12587-46-1	LA-508-415		1.3	.49	pCi/g	1	0.41		09/09/11
Gross Beta	12587-47-2	LA-508-415		2.4	.76	pCi/g	1	1.0		09/09/11
GEA Prep										**08/30/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.16	.048	pCi/g	1	0.027		08/30/11
Cobalt-60	10198-40-0	LA-508-481	U	-0.021	.016	pCi/g	1	0.024		08/30/11
Europium-152	14683-23-9	LA-508-481	U	-0.032	.057	pCi/g	1	0.088		08/30/11
Europium-154	15585-10-1	LA-508-481	U	-0.025	.057	pCi/g	1	0.099		08/30/11
Europium-155	14391-16-3	LA-508-481	U	0.046	.092	pCi/g	1	0.16		08/30/11
SR-89/90										**08/31/11**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	0.13	.78	pCi/g	1	0.35		09/07/11

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 # WSCF113047

Sample # 113047007
SAF# F11-159
Sample ID B2FXD6

Matrix SOIL
Sampled 08/29/11
Received 08/29/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Alpha/Beta Prep										**08/30/11**
Gross Alpha/Beta										
Gross Alpha	12587-46-1	LA-508-415		0.78	.42	pCi/g	1	0.44		09/09/11
Gross Beta	12587-47-2	LA-508-415		3.0	.84	pCi/g	1	1.1		09/09/11
GEA Prep										**08/30/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.37	.072	pCi/g	1	0.037		08/30/11
Cobalt-60	10198-40-0	LA-508-481	U	-7.2E-4	.016	pCi/g	1	0.030		08/30/11
Europium-152	14683-23-9	LA-508-481	U	0.073	.078	pCi/g	1	0.11		08/30/11
Europium-154	15585-10-1	LA-508-481	U	0.033	.063	pCi/g	1	0.12		08/30/11
Europium-155	14391-16-3	LA-508-481	U	0.11	.1	pCi/g	1	0.13		08/30/11
SR-89/90										**08/31/11**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	J	1.2	.9	pCi/g	1	0.43		09/07/11

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 # WSCF113057

Sample # 113057001
SAF# F11-159
Sample ID B2FXJ8

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Alpha/Beta Prep										**09/01/11**
Gross Alpha/Beta										
Gross Alpha	12587-46-1	LA-508-415	J	1.6	.57	pCi/g	1	0.42		09/09/11
Gross Beta	12587-47-2	LA-508-415		4.9	1	pCi/g	1	1.2		09/09/11
GEA Prep										**08/31/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.13	.037	pCi/g	1	0.027		08/31/11
Cobalt-60	10198-40-0	LA-508-481	U	0.020	.011	pCi/g	1	0.022		08/31/11
Europium-152	14683-23-9	LA-508-481	U	0.014	.048	pCi/g	1	0.084		08/31/11
Europium-154	15585-10-1	LA-508-481	U	0.040	.044	pCi/g	1	0.087		08/31/11
Europium-155	14391-16-3	LA-508-481	U	0.023	.061	pCi/g	1	0.11		08/31/11
SR-89/90										**09/01/11**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-0.27	.47	pCi/g	1	0.42		09/09/11

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 # WSCF113057

Sample # 113057002
SAF# F11-159
Sample ID B2FXJ9

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Alpha/Beta Prep										**09/01/11**
Gross Alpha/Beta										
Gross Alpha	12587-46-1	LA-508-415	J	1.7	.62	pCi/g	1	0.44		09/09/11
Gross Beta	12587-47-2	LA-508-415		4.1	1	pCi/g	1	1.3		09/09/11
GEA Prep										**08/31/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.48	.075	pCi/g	1	0.025		08/31/11
Cobalt-60	10198-40-0	LA-508-481	U	0.014	.014	pCi/g	1	0.028		08/31/11
Europium-152	14683-23-9	LA-508-481	U	0.043	.051	pCi/g	1	0.082		08/31/11
Europium-154	15585-10-1	LA-508-481	U	3.3E-3	.045	pCi/g	1	0.073		08/31/11
Europium-155	14391-16-3	LA-508-481	U	0.10	.088	pCi/g	1	0.11		08/31/11
SR-89/90										**09/01/11**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	J	0.62	.52	pCi/g	1	0.45		09/09/11

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 # WSCF113057

Sample # 113057003
SAF# F11-159
Sample ID B2FXK0

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Alpha/Beta Prep										**09/01/11**
Gross Alpha/Beta										
Gross Alpha	12587-46-1	LA-508-415	J	1.1	.52	pCi/g	1	0.47		09/09/11
Gross Beta	12587-47-2	LA-508-415		3.7	1	pCi/g	1	1.3		09/09/11
GEA Prep										**08/31/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.34	.071	pCi/g	1	0.044		08/31/11
Cobalt-60	10198-40-0	LA-508-481	U	-1.4E-3	.022	pCi/g	1	0.041		08/31/11
Europium-152	14683-23-9	LA-508-481	U	0.10	.084	pCi/g	1	0.13		08/31/11
Europium-154	15585-10-1	LA-508-481	U	-0.075	.076	pCi/g	1	0.12		08/31/11
Europium-155	14391-16-3	LA-508-481		0.20	.12	pCi/g	1	0.20		08/31/11
SR-89/90										**09/01/11**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-0.18	.54	pCi/g	1	0.45		09/09/11

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 # WSCF113057

Sample # 113057004
SAF# F11-159
Sample ID B2FXK1

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Alpha/Beta Prep										**09/01/11**
Gross Alpha/Beta										
Gross Alpha	12587-46-1	LA-508-415	J	1.1	.54	pCi/g	1	0.52		09/09/11
Gross Beta	12587-47-2	LA-508-415		5.9	1.2	pCi/g	1	1.4		09/09/11
GEA Prep										**08/31/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.79	.12	pCi/g	1	0.034		08/31/11
Cobalt-60	10198-40-0	LA-508-481	U	0.013	.021	pCi/g	1	0.037		08/31/11
Europium-152	14683-23-9	LA-508-481		0.40	.095	pCi/g	1	0.11		08/31/11
Europium-154	15585-10-1	LA-508-481	U	0.089	.059	pCi/g	1	0.11		08/31/11
Europium-155	14391-16-3	LA-508-481	U	0.052	.088	pCi/g	1	0.15		08/31/11
SR-89/90										**09/01/11**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	0.062	.53	pCi/g	1	0.47		09/09/11

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 # WSCF113057

Sample # 113057005
SAF# F11-159
Sample ID B2FXB5

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Alpha/Beta Prep										**09/01/11**
Gross Alpha/Beta										
Gross Alpha	12587-46-1	LA-508-415	J	0.95	.5	pCi/g	1	0.49		09/09/11
Gross Beta	12587-47-2	LA-508-415		2.4	.95	pCi/g	1	1.4		09/09/11
GEA Prep										**08/31/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.36	.068	pCi/g	1	0.032		08/31/11
Cobalt-60	10198-40-0	LA-508-481	U	0.012	.018	pCi/g	1	0.036		08/31/11
Europium-152	14683-23-9	LA-508-481	U	0.11	.1	pCi/g	1	0.13		08/31/11
Europium-154	15585-10-1	LA-508-481	U	0.016	.068	pCi/g	1	0.11		08/31/11
Europium-155	14391-16-3	LA-508-481	U	0.14	.12	pCi/g	1	0.18		08/31/11
SR-89/90										**09/01/11**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-0.066	.5	pCi/g	1	0.46		09/09/11

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 # WSCF113057

Sample # 113057006
SAF# F11-159
Sample ID B2FXB6

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Alpha/Beta Prep										**09/01/11**
Gross Alpha/Beta										
Gross Alpha	12587-46-1	LA-508-415	J	1.5	.58	pCi/g	1	0.45		09/09/11
Gross Beta	12587-47-2	LA-508-415		4.2	1	pCi/g	1	1.3		09/09/11
GEA Prep										**08/31/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.26	.05	pCi/g	1	0.031		08/31/11
Cobalt-60	10198-40-0	LA-508-481	U	8.9E-3	.014	pCi/g	1	0.028		08/31/11
Europium-152	14683-23-9	LA-508-481		0.19	.056	pCi/g	1	0.075		08/31/11
Europium-154	15585-10-1	LA-508-481	U	-0.017	.049	pCi/g	1	0.086		08/31/11
Europium-155	14391-16-3	LA-508-481	U	0.14	.081	pCi/g	1	0.15		08/31/11
SR-89/90										**09/01/11**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	0.30	.52	pCi/g	1	0.48		09/09/11

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 # WSCF113057

Sample # 113057007
SAF# F11-159
Sample ID B2FXB7

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Alpha/Beta Prep										**09/01/11**
Gross Alpha/Beta										
Gross Alpha	12587-46-1	LA-508-415	J	0.94	.49	pCi/g	1	0.48		09/09/11
Gross Beta	12587-47-2	LA-508-415		2.9	.98	pCi/g	1	1.4		09/09/11
GEA Prep										**08/31/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.31	.063	pCi/g	1	0.026		08/31/11
Cobalt-60	10198-40-0	LA-508-481	U	0.017	.013	pCi/g	1	0.028		08/31/11
Europium-152	14683-23-9	LA-508-481		0.33	.055	pCi/g	1	0.083		08/31/11
Europium-154	15585-10-1	LA-508-481	U	-0.0090	.054	pCi/g	1	0.083		08/31/11
Europium-155	14391-16-3	LA-508-481	U	0.092	.068	pCi/g	1	0.13		08/31/11
SR-89/90										**09/01/11**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-0.32	.52	pCi/g	1	0.45		09/09/11

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 # WSCF113057

Sample # 113057008
SAF# F11-159
Sample ID B2FXB8

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Alpha/Beta Prep										**09/01/11**
Gross Alpha/Beta										
Gross Alpha	12587-46-1	LA-508-415		1.9	.72	pCi/g	1	0.74		09/09/11
Gross Beta	12587-47-2	LA-508-415		2.8	.94	pCi/g	1	1.3		09/09/11
GEA Prep										**08/31/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.21	.042	pCi/g	1	0.031		08/31/11
Cobalt-60	10198-40-0	LA-508-481	U	0.013	.015	pCi/g	1	0.023		08/31/11
Europium-152	14683-23-9	LA-508-481		0.13	.06	pCi/g	1	0.090		08/31/11
Europium-154	15585-10-1	LA-508-481	U	0.015	.041	pCi/g	1	0.079		08/31/11
Europium-155	14391-16-3	LA-508-481	U	-0.024	.061	pCi/g	1	0.11		08/31/11
SR-89/90										**09/01/11**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	0.42	.56	pCi/g	1	0.52		09/13/11

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 # WSCF113057

Sample # 113057009
SAF# F11-159
Sample ID B2FXB9

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Alpha/Beta Prep										**09/01/11**
Gross Alpha/Beta										
Gross Alpha	12587-46-1	LA-508-415		1.6	.67	pCi/g	1	0.74		09/09/11
Gross Beta	12587-47-2	LA-508-415		3.2	.98	pCi/g	1	1.3		09/09/11
GEA Prep										**08/31/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.39	.071	pCi/g	1	0.034		08/31/11
Cobalt-60	10198-40-0	LA-508-481	U	0.016	.016	pCi/g	1	0.034		08/31/11
Europium-152	14683-23-9	LA-508-481		0.26	.076	pCi/g	1	0.11		08/31/11
Europium-154	15585-10-1	LA-508-481	U	1.1E-3	.057	pCi/g	1	0.11		08/31/11
Europium-155	14391-16-3	LA-508-481	U	0.023	.1	pCi/g	1	0.17		08/31/11
SR-89/90										**09/01/11**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406		0.59	.6	pCi/g	1	0.57		09/13/11

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 # WSCF113057

Sample # 113057010
SAF# F11-159
Sample ID B2FXC0

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Alpha/Beta Prep										**09/01/11**
Gross Alpha/Beta										
Gross Alpha	12587-46-1	LA-508-415		1.0	.61	pCi/g	1	0.79		09/09/11
Gross Beta	12587-47-2	LA-508-415		3.4	1	pCi/g	1	1.3		09/09/11
GEA Prep										**08/31/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.34	.069	pCi/g	1	0.036		08/31/11
Cobalt-60	10198-40-0	LA-508-481	U	0.016	.02	pCi/g	1	0.039		08/31/11
Europium-152	14683-23-9	LA-508-481		0.27	.089	pCi/g	1	0.11		08/31/11
Europium-154	15585-10-1	LA-508-481	U	0.046	.067	pCi/g	1	0.13		08/31/11
Europium-155	14391-16-3	LA-508-481	U	0.15	.1	pCi/g	1	0.16		08/31/11
SR-89/90										**09/01/11**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	0.47	.55	pCi/g	1	0.52		09/13/11

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 # WSCF113057

Sample # 113057011
SAF# F11-159
Sample ID B2FXC1

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Alpha/Beta Prep										**09/01/11**
Gross Alpha/Beta										
Gross Alpha	12587-46-1	LA-508-415		2.2	.77	pCi/g	1	0.76		09/09/11
Gross Beta	12587-47-2	LA-508-415		4.9	1.1	pCi/g	1	1.3		09/09/11
GEA Prep										**08/31/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.59	.094	pCi/g	1	0.038		08/31/11
Cobalt-60	10198-40-0	LA-508-481	U	0.016	.017	pCi/g	1	0.035		08/31/11
Europium-152	14683-23-9	LA-508-481		0.65	.089	pCi/g	1	0.12		08/31/11
Europium-154	15585-10-1	LA-508-481		0.16	.088	pCi/g	1	0.13		08/31/11
Europium-155	14391-16-3	LA-508-481	U	0.12	.13	pCi/g	1	0.18		08/31/11
SR-89/90										**09/01/11**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-0.27	.54	pCi/g	1	0.47		09/13/11

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 # WSCF113057

Sample # 113057012
SAF# F11-159
Sample ID B2FXC2

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Alpha/Beta Prep										**09/01/11**
Gross Alpha/Beta										
Gross Alpha	12587-46-1	LA-508-415		0.93	.54	pCi/g	1	0.70		09/09/11
Gross Beta	12587-47-2	LA-508-415		3.5	.98	pCi/g	1	1.3		09/09/11
GEA Prep										**08/31/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.29	.058	pCi/g	1	0.034		08/31/11
Cobalt-60	10198-40-0	LA-508-481	U	0.011	.022	pCi/g	1	0.041		08/31/11
Europium-152	14683-23-9	LA-508-481		0.23	.088	pCi/g	1	0.10		08/31/11
Europium-154	15585-10-1	LA-508-481	U	-1.7E-3	.068	pCi/g	1	0.12		08/31/11
Europium-155	14391-16-3	LA-508-481	U	0.54	.19	pCi/g	1	0.55		08/31/11
SR-89/90										**09/01/11**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406		0.61	.54	pCi/g	1	0.53		09/13/11

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 # WSCF113057

Sample # 113057013
SAF# F11-159
Sample ID B2FXC3

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Alpha/Beta Prep										**09/01/11**
Gross Alpha/Beta										
Gross Alpha	12587-46-1	LA-508-415		1.3	.63	pCi/g	1	0.76		09/09/11
Gross Beta	12587-47-2	LA-508-415		3.4	1	pCi/g	1	1.3		09/09/11
GEA Prep										**08/31/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.40	.067	pCi/g	1	0.027		08/31/11
Cobalt-60	10198-40-0	LA-508-481	U	-0.010	.016	pCi/g	1	0.026		08/31/11
Europium-152	14683-23-9	LA-508-481	U	0.074	.056	pCi/g	1	0.10		08/31/11
Europium-154	15585-10-1	LA-508-481	U	-0.0010	.051	pCi/g	1	0.080		08/31/11
Europium-155	14391-16-3	LA-508-481	U	0.046	.067	pCi/g	1	0.12		08/31/11
SR-89/90										**09/01/11**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-0.096	.52	pCi/g	1	0.52		09/13/11

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 # WSCF113057

Sample # 113057014
SAF# F11-159
Sample ID B2FXC4

Matrix SOIL
Sampled 08/30/11
Received 08/30/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Alpha/Beta Prep										**09/01/11**
Gross Alpha/Beta										
Gross Alpha	12587-46-1	LA-508-415		1.2	.66	pCi/g	1	0.82		09/09/11
Gross Beta	12587-47-2	LA-508-415		3.5	1	pCi/g	1	1.4		09/09/11
GEA Prep										**08/31/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.31	.052	pCi/g	1	0.025		08/31/11
Cobalt-60	10198-40-0	LA-508-481	U	1.8E-3	.015	pCi/g	1	0.027		08/31/11
Europium-152	14683-23-9	LA-508-481		0.27	.055	pCi/g	1	0.084		08/31/11
Europium-154	15585-10-1	LA-508-481	U	0.047	.046	pCi/g	1	0.090		08/31/11
Europium-155	14391-16-3	LA-508-481	U	0.058	.067	pCi/g	1	0.12		08/31/11
SR-89/90										**09/01/11**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406		0.51	.56	pCi/g	1	0.51		09/13/11

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 # WSCF113116

Sample # 113116001
SAF# F11-159
Sample ID B2FXD0

Matrix SOIL
Sampled 08/31/11
Received 09/07/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/08/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.61	.096	pCi/g	1	0.030		09/09/11
Cobalt-60	10198-40-0	LA-508-481	U	5.9E-3	.014	pCi/g	1	0.027		09/09/11
Europium-152	14683-23-9	LA-508-481		0.22	.051	pCi/g	1	0.088		09/09/11
Europium-154	15585-10-1	LA-508-481	U	6.1E-4	.048	pCi/g	1	0.086		09/09/11
Europium-155	14391-16-3	LA-508-481	U	-8.3E-4	.068	pCi/g	1	0.12		09/09/11

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 # WSCF113116

Sample # 113116002
SAF# F11-159
Sample ID B2FXD1

Matrix SOIL
Sampled 09/07/11
Received 09/07/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/08/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.12	.04	pCi/g	1	0.029		09/09/11
Cobalt-60	10198-40-0	LA-508-481	U	-3.7E-3	.015	pCi/g	1	0.027		09/09/11
Europium-152	14683-23-9	LA-508-481	U	0.033	.049	pCi/g	1	0.089		09/09/11
Europium-154	15585-10-1	LA-508-481	U	0.013	.056	pCi/g	1	0.10		09/09/11
Europium-155	14391-16-3	LA-508-481	U	0.051	.071	pCi/g	1	0.12		09/09/11

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 # WSCF113116

Sample # 113116003
SAF# F11-159
Sample ID B2FXD2

Matrix SOIL
Sampled 09/07/11
Received 09/07/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/08/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.22	.047	pCi/g	1	0.022		09/09/11
Cobalt-60	10198-40-0	LA-508-481	U	-0.0070	.011	pCi/g	1	0.019		09/09/11
Europium-152	14683-23-9	LA-508-481		0.11	.044	pCi/g	1	0.062		09/09/11
Europium-154	15585-10-1	LA-508-481	U	0.037	.036	pCi/g	1	0.071		09/09/11
Europium-155	14391-16-3	LA-508-481	U	0.015	.055	pCi/g	1	0.099		09/09/11

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 # WSCF113116

Sample # 113116004
SAF# F11-159
Sample ID B2FXD3

Matrix SOIL
Sampled 09/07/11
Received 09/07/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/08/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.23	.048	pCi/g	1	0.023		09/12/11
Cobalt-60	10198-40-0	LA-508-481	U	0.0020	.012	pCi/g	1	0.022		09/12/11
Europium-152	14683-23-9	LA-508-481	U	0.020	.044	pCi/g	1	0.076		09/12/11
Europium-154	15585-10-1	LA-508-481	U	0.047	.042	pCi/g	1	0.082		09/12/11
Europium-155	14391-16-3	LA-508-481	U	0.033	.055	pCi/g	1	0.10		09/12/11

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 # WSCF113116

Sample # 113116005
SAF# F11-159
Sample ID B2FXD4

Matrix SOIL
Sampled 09/07/11
Received 09/07/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/08/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.14	.033	pCi/g	1	0.026		09/12/11
Cobalt-60	10198-40-0	LA-508-481	U	-5.1E-3	.012	pCi/g	1	0.020		09/12/11
Europium-152	14683-23-9	LA-508-481	U	0.015	.042	pCi/g	1	0.073		09/12/11
Europium-154	15585-10-1	LA-508-481	U	0.025	.035	pCi/g	1	0.070		09/12/11
Europium-155	14391-16-3	LA-508-481	U	0.031	.056	pCi/g	1	0.10		09/12/11

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 # WSCF113116

Sample # 113116006
SAF# F11-159
Sample ID B2FXC6

Matrix SOIL
Sampled 08/31/11
Received 09/07/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/08/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.81	.12	pCi/g	1	0.035		09/12/11
Cobalt-60	10198-40-0	LA-508-481	U	8.1E-3	.016	pCi/g	1	0.032		09/12/11
Europium-152	14683-23-9	LA-508-481		0.35	.068	pCi/g	1	0.10		09/12/11
Europium-154	15585-10-1	LA-508-481	U	-0.016	.066	pCi/g	1	0.10		09/12/11
Europium-155	14391-16-3	LA-508-481	U	0.019	.077	pCi/g	1	0.14		09/12/11

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 # WSCF113116

Sample # 113116007
SAF# F11-159
Sample ID B2FXC7

Matrix SOIL
Sampled 08/31/11
Received 09/07/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/08/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.12	.038	pCi/g	1	0.022		09/12/11
Cobalt-60	10198-40-0	LA-508-481	U	-8.4E-3	.011	pCi/g	1	0.019		09/12/11
Europium-152	14683-23-9	LA-508-481	U	0.023	.043	pCi/g	1	0.075		09/12/11
Europium-154	15585-10-1	LA-508-481	U	0.014	.044	pCi/g	1	0.073		09/12/11
Europium-155	14391-16-3	LA-508-481	U	0.048	.06	pCi/g	1	0.11		09/12/11

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 # WSCF113116

Sample # 113116008
SAF# F11-159
Sample ID B2FXC8

Matrix SOIL
Sampled 08/31/11
Received 09/07/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/08/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.53	.11	pCi/g	1	0.077		09/12/11
Cobalt-60	10198-40-0	LA-508-481	U	0.020	.037	pCi/g	1	0.071		09/12/11
Europium-152	14683-23-9	LA-508-481	U	0.17	.15	pCi/g	1	0.23		09/12/11
Europium-154	15585-10-1	LA-508-481	U	-0.068	.12	pCi/g	1	0.19		09/12/11
Europium-155	14391-16-3	LA-508-481	U	0.063	.16	pCi/g	1	0.29		09/12/11

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 # WSCF113116

Sample # 113116009
SAF# F11-159
Sample ID B2FXC9

Matrix SOIL
Sampled 08/31/11
Received 09/07/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/08/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.32	.059	pCi/g	1	0.021		09/12/11
Cobalt-60	10198-40-0	LA-508-481	U	0.0060	.013	pCi/g	1	0.024		09/12/11
Europium-152	14683-23-9	LA-508-481	U	0.035	.045	pCi/g	1	0.079		09/12/11
Europium-154	15585-10-1	LA-508-481	U	0.027	.038	pCi/g	1	0.074		09/12/11
Europium-155	14391-16-3	LA-508-481	U	0.018	.058	pCi/g	1	0.10		09/12/11

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 # WSCF113116

Sample # 113116010
SAF# F11-159
Sample ID B2FXJ4

Matrix SOIL
Sampled 09/07/11
Received 09/07/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/08/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.079	.026	pCi/g	1	0.025		09/12/11
Cobalt-60	10198-40-0	LA-508-481	U	-3.1E-3	.012	pCi/g	1	0.021		09/12/11
Europium-152	14683-23-9	LA-508-481	U	-9.3E-3	.042	pCi/g	1	0.066		09/12/11
Europium-154	15585-10-1	LA-508-481	U	0.042	.036	pCi/g	1	0.073		09/12/11
Europium-155	14391-16-3	LA-508-481		0.092	.075	pCi/g	1	0.092		09/12/11

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 # WSCF113116

Sample # 113116011
SAF# F11-159
Sample ID B2FXJ5

Matrix SOIL
Sampled 08/31/11
Received 09/07/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/08/11**
GEA										
Cesium-137	10045-97-3	LA-508-481	U	-2.1E-3	.017	pCi/g	1	0.030		09/12/11
Cobalt-60	10198-40-0	LA-508-481	U	-8.5E-3	.015	pCi/g	1	0.025		09/12/11
Europium-152	14683-23-9	LA-508-481	U	0.0030	.055	pCi/g	1	0.086		09/12/11
Europium-154	15585-10-1	LA-508-481	U	-0.015	.045	pCi/g	1	0.080		09/12/11
Europium-155	14391-16-3	LA-508-481	U	0.019	.063	pCi/g	1	0.11		09/12/11

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 # WSCF113156

Sample # 113156001
SAF# F11-159
Sample ID B2FXF0

Matrix SOIL
Sampled 09/12/11
Received 09/12/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/15/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.13	.032	pCi/g	1	0.021		09/20/11
Cobalt-60	10198-40-0	LA-508-481	U	-5.2E-3	.011	pCi/g	1	0.019		09/20/11
Europium-152	14683-23-9	LA-508-481	U	0.023	.044	pCi/g	1	0.076		09/20/11
Europium-154	15585-10-1	LA-508-481	U	0.040	.045	pCi/g	1	0.078		09/20/11
Europium-155	14391-16-3	LA-508-481	U	0.094	.093	pCi/g	1	0.097		09/20/11

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 # WSCF113156

Sample # 113156002
SAF# F11-159
Sample ID B2FXD5

Matrix SOIL
Sampled 09/12/11
Received 09/12/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/15/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.062	.029	pCi/g	1	0.035		09/21/11
Cobalt-60	10198-40-0	LA-508-481	U	2.1E-3	.019	pCi/g	1	0.034		09/21/11
Europium-152	14683-23-9	LA-508-481	U	0.051	.063	pCi/g	1	0.10		09/21/11
Europium-154	15585-10-1	LA-508-481	U	1.9E-3	.06	pCi/g	1	0.11		09/21/11
Europium-155	14391-16-3	LA-508-481	U	0.017	.08	pCi/g	1	0.14		09/21/11

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 # WSCF113156

Sample # 113156003
SAF# F11-159
Sample ID B2FXD7

Matrix SOIL
Sampled 09/12/11
Received 09/12/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/15/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.19	.046	pCi/g	1	0.029		09/21/11
Cobalt-60	10198-40-0	LA-508-481	U	2.4E-3	.016	pCi/g	1	0.030		09/21/11
Europium-152	14683-23-9	LA-508-481	U	0.036	.066	pCi/g	1	0.092		09/21/11
Europium-154	15585-10-1	LA-508-481	U	-0.039	.046	pCi/g	1	0.077		09/21/11
Europium-155	14391-16-3	LA-508-481	U	0.058	.072	pCi/g	1	0.12		09/21/11

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 # WSCF113156

Sample # 113156004
SAF# F11-159
Sample ID B2FXD8

Matrix SOIL
Sampled 09/12/11
Received 09/12/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/15/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.19	.039	pCi/g	1	0.029		09/21/11
Cobalt-60	10198-40-0	LA-508-481	U	-0.010	.013	pCi/g	1	0.022		09/21/11
Europium-152	14683-23-9	LA-508-481	U	0.043	.059	pCi/g	1	0.096		09/21/11
Europium-154	15585-10-1	LA-508-481	U	0.020	.047	pCi/g	1	0.089		09/21/11
Europium-155	14391-16-3	LA-508-481	U	-0.035	.088	pCi/g	1	0.14		09/21/11

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 # WSCF113156

Sample # 113156005
SAF# F11-159
Sample ID B2FXD9

Matrix SOIL
Sampled 09/12/11
Received 09/12/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/15/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.16	.053	pCi/g	1	0.031		09/21/11
Cobalt-60	10198-40-0	LA-508-481	U	0.019	.019	pCi/g	1	0.037		09/21/11
Europium-152	14683-23-9	LA-508-481	U	0.046	.058	pCi/g	1	0.097		09/21/11
Europium-154	15585-10-1	LA-508-481	U	-0.032	.057	pCi/g	1	0.099		09/21/11
Europium-155	14391-16-3	LA-508-481	U	0.057	.076	pCi/g	1	0.13		09/21/11

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 # WSCF113177

Sample # 113177001
SAF# F11-159
Sample ID B2FXF1

Matrix SOIL
Sampled 09/13/11
Received 09/13/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/15/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.20	.042	pCi/g	1	0.024		09/21/11
Cobalt-60	10198-40-0	LA-508-481	U	2.1E-3	.011	pCi/g	1	0.020		09/21/11
Europium-152	14683-23-9	LA-508-481		0.081	.045	pCi/g	1	0.070		09/21/11
Europium-154	15585-10-1	LA-508-481	U	0.020	.037	pCi/g	1	0.070		09/21/11
Europium-155	14391-16-3	LA-508-481	U	0.036	.056	pCi/g	1	0.10		09/21/11

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 # WSCF113177

Sample # 113177002
SAF# F11-159
Sample ID B2FXF2

Matrix SOIL
Sampled 09/13/11
Received 09/13/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/15/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.19	.042	pCi/g	1	0.029		09/21/11
Cobalt-60	10198-40-0	LA-508-481	U	3.0E-4	.014	pCi/g	1	0.026		09/21/11
Europium-152	14683-23-9	LA-508-481	U	0.028	.057	pCi/g	1	0.091		09/21/11
Europium-154	15585-10-1	LA-508-481	U	0.021	.052	pCi/g	1	0.097		09/21/11
Europium-155	14391-16-3	LA-508-481	U	0.011	.088	pCi/g	1	0.15		09/21/11

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 # WSCF113177

Sample # 113177003
SAF# F11-159
Sample ID B2FXF3

Matrix SOIL
Sampled 09/13/11
Received 09/13/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/15/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.33	.056	pCi/g	1	0.023		09/21/11
Cobalt-60	10198-40-0	LA-508-481	U	-3.3E-3	.01	pCi/g	1	0.018		09/21/11
Europium-152	14683-23-9	LA-508-481		0.20	.047	pCi/g	1	0.065		09/21/11
Europium-154	15585-10-1	LA-508-481	U	6.9E-3	.039	pCi/g	1	0.071		09/21/11
Europium-155	14391-16-3	LA-508-481	U	0.058	.056	pCi/g	1	0.10		09/21/11

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 # WSCF113177

Sample # 113177004
SAF# F11-159
Sample ID B2FXF4

Matrix SOIL
Sampled 09/13/11
Received 09/13/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/15/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.37	.067	pCi/g	1	0.030		09/21/11
Cobalt-60	10198-40-0	LA-508-481	U	0.011	.015	pCi/g	1	0.029		09/21/11
Europium-152	14683-23-9	LA-508-481		0.36	.064	pCi/g	1	0.098		09/21/11
Europium-154	15585-10-1	LA-508-481	U	-0.015	.047	pCi/g	1	0.083		09/21/11
Europium-155	14391-16-3	LA-508-481	U	0.018	.095	pCi/g	1	0.16		09/21/11

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 # WSCF113177

Sample # 113177005
SAF# F11-159
Sample ID B2FXF5

Matrix SOIL
Sampled 09/13/11
Received 09/13/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/15/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.21	.044	pCi/g	1	0.024		09/21/11
Cobalt-60	10198-40-0	LA-508-481	U	-3.8E-4	.01	pCi/g	1	0.019		09/21/11
Europium-152	14683-23-9	LA-508-481		0.20	.049	pCi/g	1	0.070		09/21/11
Europium-154	15585-10-1	LA-508-481	U	-1.4E-3	.041	pCi/g	1	0.073		09/21/11
Europium-155	14391-16-3	LA-508-481	U	0.023	.057	pCi/g	1	0.10		09/21/11

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 # WSCF113177

Sample # 113177006
SAF# F11-159
Sample ID B2FXF6

Matrix SOIL
Sampled 09/13/11
Received 09/13/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/15/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.16	.037	pCi/g	1	0.023		09/20/11
Cobalt-60	10198-40-0	LA-508-481	U	6.8E-3	.011	pCi/g	1	0.022		09/20/11
Europium-152	14683-23-9	LA-508-481		0.29	.043	pCi/g	1	0.074		09/20/11
Europium-154	15585-10-1	LA-508-481	U	-1.5E-3	.04	pCi/g	1	0.073		09/20/11
Europium-155	14391-16-3	LA-508-481	U	0.089	.1	pCi/g	1	0.099		09/20/11

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 # WSCF113177

Sample # 113177007
SAF# F11-159
Sample ID B2FXF8

Matrix SOIL
Sampled 09/13/11
Received 09/13/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/15/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.26	.052	pCi/g	1	0.038		09/20/11
Cobalt-60	10198-40-0	LA-508-481	U	6.6E-3	.018	pCi/g	1	0.033		09/20/11
Europium-152	14683-23-9	LA-508-481		0.67	.072	pCi/g	1	0.10		09/20/11
Europium-154	15585-10-1	LA-508-481	U	0.017	.065	pCi/g	1	0.12		09/20/11
Europium-155	14391-16-3	LA-508-481	U	0.096	.088	pCi/g	1	0.16		09/20/11

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 # WSCF113177

Sample # 113177008
SAF# F11-159
Sample ID B2FXF9

Matrix SOIL
Sampled 09/13/11
Received 09/13/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/15/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.19	.042	pCi/g	1	0.031		09/20/11
Cobalt-60	10198-40-0	LA-508-481	U	0.013	.015	pCi/g	1	0.031		09/20/11
Europium-152	14683-23-9	LA-508-481		0.11	.068	pCi/g	1	0.10		09/20/11
Europium-154	15585-10-1	LA-508-481	U	-0.014	.052	pCi/g	1	0.093		09/20/11
Europium-155	14391-16-3	LA-508-481	U	0.042	.066	pCi/g	1	0.11		09/20/11

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 # WSCF113177

Sample # 113177009
SAF# F11-159
Sample ID B2FXH0

Matrix SOIL
Sampled 09/13/11
Received 09/13/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/15/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.16	.042	pCi/g	1	0.028		09/20/11
Cobalt-60	10198-40-0	LA-508-481	U	0.010	.016	pCi/g	1	0.031		09/20/11
Europium-152	14683-23-9	LA-508-481		0.13	.065	pCi/g	1	0.099		09/20/11
Europium-154	15585-10-1	LA-508-481	U	8.4E-3	.046	pCi/g	1	0.085		09/20/11
Europium-155	14391-16-3	LA-508-481	U	-0.010	.085	pCi/g	1	0.14		09/20/11

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 # WSCF113177

Sample # 113177010
SAF# F11-159
Sample ID B2FXH1

Matrix SOIL
Sampled 09/13/11
Received 09/13/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/15/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.24	.056	pCi/g	1	0.033		09/20/11
Cobalt-60	10198-40-0	LA-508-481	U	3.8E-3	.016	pCi/g	1	0.031		09/20/11
Europium-152	14683-23-9	LA-508-481		0.39	.08	pCi/g	1	0.11		09/20/11
Europium-154	15585-10-1	LA-508-481	U	0.065	.066	pCi/g	1	0.12		09/20/11
Europium-155	14391-16-3	LA-508-481		0.20	.14	pCi/g	1	0.17		09/20/11

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 # WSCF113192

Sample # 113192001
SAF# F11-159
Sample ID B2FXH2

Matrix SOIL
Sampled 09/14/11
Received 09/14/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/15/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.23	.046	pCi/g	1	0.028		09/21/11
Cobalt-60	10198-40-0	LA-508-481	U	0.016	.013	pCi/g	1	0.027		09/21/11
Europium-152	14683-23-9	LA-508-481		0.58	.067	pCi/g	1	0.074		09/21/11
Europium-154	15585-10-1	LA-508-481	U	0.058	.043	pCi/g	1	0.085		09/21/11
Europium-155	14391-16-3	LA-508-481	U	0.038	.064	pCi/g	1	0.12		09/21/11

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 # WSCF113192

Sample # 113192002
SAF# F11-159
Sample ID B2FXH3

Matrix SOIL
Sampled 09/14/11
Received 09/14/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/15/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.35	.063	pCi/g	1	0.035		09/21/11
Cobalt-60	10198-40-0	LA-508-481	U	4.7E-3	.016	pCi/g	1	0.031		09/21/11
Europium-152	14683-23-9	LA-508-481		0.19	.061	pCi/g	1	0.11		09/21/11
Europium-154	15585-10-1	LA-508-481	U	0.044	.061	pCi/g	1	0.11		09/21/11
Europium-155	14391-16-3	LA-508-481	U	0.032	.1	pCi/g	1	0.18		09/21/11

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 # WSCF113192

Sample # 113192003
SAF# F11-159
Sample ID B2FXH4

Matrix SOIL
Sampled 09/14/11
Received 09/14/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/15/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.32	.061	pCi/g	1	0.035		09/21/11
Cobalt-60	10198-40-0	LA-508-481	U	0.011	.02	pCi/g	1	0.036		09/21/11
Europium-152	14683-23-9	LA-508-481		0.47	.085	pCi/g	1	0.12		09/21/11
Europium-154	15585-10-1	LA-508-481	U	0.019	.067	pCi/g	1	0.12		09/21/11
Europium-155	14391-16-3	LA-508-481	U	0.11	.092	pCi/g	1	0.17		09/21/11

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 # WSCF113192

Sample # 113192004
SAF# F11-159
Sample ID B2FXH5

Matrix SOIL
Sampled 09/14/11
Received 09/14/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/15/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.15	.045	pCi/g	1	0.031		09/21/11
Cobalt-60	10198-40-0	LA-508-481	U	0.030	.018	pCi/g	1	0.038		09/21/11
Europium-152	14683-23-9	LA-508-481		0.20	.06	pCi/g	1	0.090		09/21/11
Europium-154	15585-10-1	LA-508-481	U	0.013	.057	pCi/g	1	0.11		09/21/11
Europium-155	14391-16-3	LA-508-481	U	0.054	.074	pCi/g	1	0.13		09/21/11

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 # WSCF113192

Sample # 113192005
SAF# F11-159
Sample ID B2FXH6

Matrix SOIL
Sampled 09/14/11
Received 09/14/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/15/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.19	.042	pCi/g	1	0.022		09/21/11
Cobalt-60	10198-40-0	LA-508-481	U	-2.4E-3	.014	pCi/g	1	0.025		09/21/11
Europium-152	14683-23-9	LA-508-481		0.20	.049	pCi/g	1	0.087		09/21/11
Europium-154	15585-10-1	LA-508-481	U	0.018	.046	pCi/g	1	0.087		09/21/11
Europium-155	14391-16-3	LA-508-481	U	0.040	.085	pCi/g	1	0.14		09/21/11

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 # WSCF113192

Sample # 113192006
SAF# F11-159
Sample ID B2FXH7

Matrix SOIL
Sampled 09/14/11
Received 09/14/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/15/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.26	.048	pCi/g	1	0.024		09/21/11
Cobalt-60	10198-40-0	LA-508-481	U	-0.012	.011	pCi/g	1	0.018		09/21/11
Europium-152	14683-23-9	LA-508-481	U	0.038	.051	pCi/g	1	0.081		09/21/11
Europium-154	15585-10-1	LA-508-481	U	0.070	.041	pCi/g	1	0.081		09/21/11
Europium-155	14391-16-3	LA-508-481	U	0.068	.061	pCi/g	1	0.11		09/21/11

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 # WSCF113192

Sample # 113192007
SAF# F11-159
Sample ID B2FXH9

Matrix SOIL
Sampled 09/14/11
Received 09/14/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/15/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.14	.039	pCi/g	1	0.022		09/21/11
Cobalt-60	10198-40-0	LA-508-481	U	-6.7E-3	.011	pCi/g	1	0.019		09/21/11
Europium-152	14683-23-9	LA-508-481	U	0.031	.041	pCi/g	1	0.072		09/21/11
Europium-154	15585-10-1	LA-508-481	U	-0.025	.041	pCi/g	1	0.070		09/21/11
Europium-155	14391-16-3	LA-508-481	U	0.057	.056	pCi/g	1	0.10		09/21/11

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 # WSCF113192

Sample # 113192008
SAF# F11-159
Sample ID B2FXJ0

Matrix SOIL
Sampled 09/14/11
Received 09/14/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/15/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.45	.082	pCi/g	1	0.041		09/21/11
Cobalt-60	10198-40-0	LA-508-481	U	-1.2E-3	.019	pCi/g	1	0.034		09/21/11
Europium-152	14683-23-9	LA-508-481		0.28	.069	pCi/g	1	0.12		09/21/11
Europium-154	15585-10-1	LA-508-481	U	0.098	.061	pCi/g	1	0.13		09/21/11
Europium-155	14391-16-3	LA-508-481	U	-0.013	.089	pCi/g	1	0.15		09/21/11

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 # WSCF113192

Sample # 113192009
SAF# F11-159
Sample ID B2FXJ6

Matrix SOIL
Sampled 09/14/11
Received 09/14/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/15/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.15	.044	pCi/g	1	0.031		09/21/11
Cobalt-60	10198-40-0	LA-508-481	U	0.014	.017	pCi/g	1	0.033		09/21/11
Europium-152	14683-23-9	LA-508-481	U	0.027	.06	pCi/g	1	0.097		09/21/11
Europium-154	15585-10-1	LA-508-481	U	-4.3E-3	.049	pCi/g	1	0.089		09/21/11
Europium-155	14391-16-3	LA-508-481	U	0.023	.073	pCi/g	1	0.12		09/21/11

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 # WSCF113192

Sample # 113192010
SAF# F11-159
Sample ID B2FXJ7

Matrix SOIL
Sampled 09/14/11
Received 09/14/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/15/11**
GEA										
Cesium-137	10045-97-3	LA-508-481	U	2.9E-4	.013	pCi/g	1	0.023		09/21/11
Cobalt-60	10198-40-0	LA-508-481	U	4.1E-3	.0095	pCi/g	1	0.020		09/21/11
Europium-152	14683-23-9	LA-508-481	U	0.024	.039	pCi/g	1	0.066		09/21/11
Europium-154	15585-10-1	LA-508-481	U	0.020	.029	pCi/g	1	0.059		09/21/11
Europium-155	14391-16-3	LA-508-481	U	9.6E-3	.057	pCi/g	1	0.097		09/21/11

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 # WSCF113205

Sample # 113205001
SAF# F11-159
Sample ID B2FXJ1

Matrix SOIL
Sampled 09/15/11
Received 09/15/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/19/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.16	.038	pCi/g	1	0.023		09/21/11
Cobalt-60	10198-40-0	LA-508-481	U	6.7E-3	.013	pCi/g	1	0.022		09/21/11
Europium-152	14683-23-9	LA-508-481		0.13	.039	pCi/g	1	0.070		09/21/11
Europium-154	15585-10-1	LA-508-481	U	1.9E-3	.038	pCi/g	1	0.069		09/21/11
Europium-155	14391-16-3	LA-508-481	U	-1.6E-3	.056	pCi/g	1	0.099		09/21/11

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 # WSCF113205

Sample # 113205002
SAF# F11-159
Sample ID B2H560

Matrix SOIL
Sampled 09/15/11
Received 09/15/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/19/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.22	.048	pCi/g	1	0.035		09/22/11
Cobalt-60	10198-40-0	LA-508-481	U	9.6E-3	.02	pCi/g	1	0.036		09/22/11
Europium-152	14683-23-9	LA-508-481		0.15	.052	pCi/g	1	0.11		09/22/11
Europium-154	15585-10-1	LA-508-481	U	0.066	.061	pCi/g	1	0.12		09/22/11
Europium-155	14391-16-3	LA-508-481	U	0.094	.092	pCi/g	1	0.14		09/22/11

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 # WSCF113205

Sample # 113205003
SAF# F11-159
Sample ID B2H561

Matrix SOIL
Sampled 09/15/11
Received 09/15/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/19/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.20	.048	pCi/g	1	0.031		09/22/11
Cobalt-60	10198-40-0	LA-508-481	U	5.6E-4	.016	pCi/g	1	0.030		09/22/11
Europium-152	14683-23-9	LA-508-481		0.13	.055	pCi/g	1	0.082		09/22/11
Europium-154	15585-10-1	LA-508-481	U	0.025	.058	pCi/g	1	0.097		09/22/11
Europium-155	14391-16-3	LA-508-481	U	-0.0060	.076	pCi/g	1	0.12		09/22/11

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 # WSCF113205

Sample # 113205004
SAF# F11-159
Sample ID B2H562

Matrix SOIL
Sampled 09/15/11
Received 09/15/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/19/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.13	.043	pCi/g	1	0.034		09/22/11
Cobalt-60	10198-40-0	LA-508-481	U	1.5E-3	.016	pCi/g	1	0.030		09/22/11
Europium-152	14683-23-9	LA-508-481	U	0.049	.067	pCi/g	1	0.11		09/22/11
Europium-154	15585-10-1	LA-508-481	U	1.3E-3	.059	pCi/g	1	0.093		09/22/11
Europium-155	14391-16-3	LA-508-481	U	-0.054	.091	pCi/g	1	0.15		09/22/11

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 # WSCF113205

Sample # 113205005
SAF# F11-159
Sample ID B2H563

Matrix SOIL
Sampled 09/15/11
Received 09/15/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**09/19/11**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.13	.032	pCi/g	1	0.016		09/22/11
Cobalt-60	10198-40-0	LA-508-481		0.023	.012	pCi/g	1	0.015		09/22/11
Europium-152	14683-23-9	LA-508-481		0.23	.034	pCi/g	1	0.050		09/22/11
Europium-154	15585-10-1	LA-508-481	U	0.046	.032	pCi/g	1	0.060		09/22/11
Europium-155	14391-16-3	LA-508-481		0.070	.056	pCi/g	1	0.070		09/22/11

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.

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06240	**Collection Date:**	9/15/2011 10:45:00 AM
Lot-Sample No.:	J1I270475-1	**Report No. :**	48753	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXJ1	**COC No. :**	F11-159-084	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271051	7196_CR6			**Work Order:**	MMQ9K1AA		**Report DB ID:**	9MMQ9K10				
~~HEXCHROME~~	~~***1.55E-01***~~	~~U~~		~~0.0E+00~~	~~1.55E-01~~	~~mg/kg~~	~~N/A~~	~~*(1.)*~~	~~9/28/11 05:25 p~~		~~2.5007~~	
							1.55E-01	*N/A*			g	
Batch: 1271144	9310_ALPHABETA_GPC			**Work Order:**	MMQ9K1AD		**Report DB ID:**	9MMQ9K10				
ALPHA	***8.02E+00***		4.4E+00	7.2E+00	6.06E+00	pCi/g	100%	*(1.3)*	10/11/11 06:43 a		0.0505	GPC10C
						2.51E+00	1.00E+01	*(2.2)*			g	
Batch: 1271145	9310_ALPHABETA_GPC			**Work Order:**	MMQ9K1AE		**Report DB ID:**	9MMQ9K10				
BETA	***2.39E+01***		4.1E+00	6.6E+00	4.87E+00	pCi/g	100%	*(4.9)*	10/6/11 03:30 p		0.2009	GPC28D
						2.26E+00	1.50E+01	*(7.3)*			g	
Batch: 1271147	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMQ9K1AC		**Report DB ID:**	9MMQ9K10				
STRONTIUM	***1.25E-01***	U	8.5E-02	9.1E-02	1.68E-01	pCi/g	54%	*0.75*	10/8/11 07:56 a		6.01	GPC32B
						7.80E-02		*(2.8)*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	**TestAmerica**	**SDG:**	W06240	**Collection Date:**	9/15/2011 11:16:00 AM
Lot-Sample No.:	**J1I270475-4**	**Report No. :**	48753	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	**B2H560**	**COC No. :**	F11-159-084	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271051	7196_CR6			**Work Order:**	MMQ9J1AA		**Report DB ID:**	9MMQ9J10				
~~HEXCHROME~~	~~***1.55E-01***~~	~~U~~		~~0.0E+00~~	~~1.55E-01~~	~~mg/kg~~	~~N/A~~	~~*(1.)*~~	~~9/28/11 05:25 p~~		~~2.5066~~	
							1.55E-01	*N/A*			g	
Batch: 1271144	9310_ALPHABETA_GPC			**Work Order:**	MMQ9J1AD		**Report DB ID:**	9MMQ9J10				
ALPHA	***8.95E+00***		4.4E+00	7.8E+00	5.42E+00	pCi/g	100%	*(1.7)*	10/11/11 06:43 a		0.0506	GPC10B
						2.17E+00	1.00E+01	*(2.3)*			g	
Batch: 1271145	9310_ALPHABETA_GPC			**Work Order:**	MMQ9J1AE		**Report DB ID:**	9MMQ9J10				
BETA	***2.77E+01***		4.2E+00	7.4E+00	4.64E+00	pCi/g	100%	*(6.)*	10/6/11 03:30 p		0.2008	GPC28C
						2.15E+00	1.50E+01	*(7.5)*			g	
Batch: 1271147	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMQ9J1AC		**Report DB ID:**	9MMQ9J10				
STRONTIUM	***9.65E-02***	U	8.2E-02	8.6E-02	1.68E-01	pCi/g	53%	*0.57*	10/8/11 07:56 a		6.04	GPC31D
						7.79E-02		*(2.3)*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06240	**Collection Date:**	9/15/2011 11:35:00 AM
Lot-Sample No.:	J1I270475-3	**Report No. :**	48753	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2H561	**COC No. :**	F11-159-084	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271051	7196_CR6			**Work Order:**	MMQ9F1AA		**Report DB ID:**	9MMQ9F10				
~~HEXCHROME~~	~~***1.55E-01***~~	~~U~~		~~0.0E+00~~	~~1.55E-01~~	~~mg/kg~~	~~N/A~~	~~*(1.)*~~	~~9/28/11 05:25 p~~		~~2.5068~~	
							1.55E-01	*N/A*			g	
Batch: 1271144	9310_ALPHABETA_GPC			**Work Order:**	MMQ9F1AD		**Report DB ID:**	9MMQ9F10				
ALPHA	***9.16E+00***		4.2E+00	7.8E+00	4.45E+00	pCi/g	100%	*(2.1)*	10/11/11 06:43 a		0.0505	GPC10A
						1.70E+00	1.00E+01	*(2.4)*			g	
Batch: 1271145	9310_ALPHABETA_GPC			**Work Order:**	MMQ9F1AE		**Report DB ID:**	9MMQ9F10				
BETA	***2.70E+01***		4.2E+00	7.2E+00	4.66E+00	pCi/g	100%	*(5.8)*	10/6/11 03:30 p		0.2007	GPC28B
						2.16E+00	1.50E+01	*(7.5)*			g	
Batch: 1271147	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMQ9F1AC		**Report DB ID:**	9MMQ9F10				
STRONTIUM	***1.13E-01***	U	8.4E-02	8.9E-02	1.70E-01	pCi/g	54%	*0.66*	10/8/11 07:56 a		6.01	GPC31A
						7.90E-02		*(2.5)*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06240	**Collection Date:**	9/15/2011 11:45:00 AM
Lot-Sample No.:	J1I270475-2	**Report No. :**	48753	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2H562	**COC No. :**	F11-159-084	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271051	7196_CR6			**Work Order:**	MMQ9C1AA		**Report DB ID:** 9MMQ9C10					
~~HEXCHROME~~	~~***1.55E-01***~~	~~U~~		~~0.0E+00~~	~~1.55E-01~~	~~mg/kg~~	~~N/A~~	~~*(1.)*~~	~~9/28/11 05:25 p~~		~~2.505~~	
							1.55E-01	*N/A*			g	
Batch: 1271144	9310_ALPHABETA_GPC			**Work Order:**	MMQ9C1AD		**Report DB ID:** 9MMQ9C10					
ALPHA	***4.89E+00***	U	3.6E+00	5.1E+00	6.12E+00	pCi/g	100%	*0.8*	10/10/11 11:58 p		0.0504	GPC10C
						2.55E+00	1.00E+01	*(1.9)*			g	
Batch: 1271145	9310_ALPHABETA_GPC			**Work Order:**	MMQ9C1AE		**Report DB ID:** 9MMQ9C10					
BETA	***2.72E+01***		4.2E+00	7.1E+00	4.81E+00	pCi/g	100%	*(5.7)*	10/6/11 03:30 p		0.2006	GPC27B
						2.24E+00	1.50E+01	*(7.6)*			g	
Batch: 1271147	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMQ9C1AC		**Report DB ID:** 9MMQ9C10					
STRONTIUM	***2.52E-02***	U	7.5E-02	7.5E-02	1.71E-01	pCi/g	54%	*0.15*	10/8/11 07:56 a		6.03	GPC28D
						7.93E-02		*0.67*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06240	**Collection Date:**	9/15/2011 12:00:00 PM
Lot-Sample No.:	J1I270475-1	**Report No. :**	48753	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2H563	**COC No. :**	F11-159-084	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271051	7196_CR6			**Work Order:**	MMQ891AA		**Report DB ID:**	9MMQ8910				
~~HEXCHROME~~	~~***1.55E-01***~~	~~U~~		~~0.0E+00~~	~~1.55E-01~~	~~mg/kg~~	~~N/A~~	~~*(1.)*~~	~~9/28/11 05:25 p~~		~~2.5016~~	
							1.55E-01	*N/A*			g	
Batch: 1271144	9310_ALPHABETA_GPC			**Work Order:**	MMQ891AF		**Report DB ID:**	9MMQ8910				
ALPHA	***6.47E+00***		3.4E+00	5.7E+00	3.86E+00	pCi/g	100%	*(1.7)*	10/10/11 11:58 p		0.0507	GPC10A
						1.40E+00	1.00E+01	*(2.2)*			g	
Batch: 1271145	9310_ALPHABETA_GPC			**Work Order:**	MMQ891AG		**Report DB ID:**	9MMQ8910				
BETA	***3.10E+01***		4.4E+00	7.9E+00	4.63E+00	pCi/g	100%	*(6.7)*	10/6/11 03:30 p		0.2002	GPC27A
						2.15E+00	1.50E+01	*(7.8)*			g	
Batch: 1271147	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMQ891AE		**Report DB ID:**	9MMQ8910				
STRONTIUM	***7.99E-02***	U	8.4E-02	8.6E-02	1.78E-01	pCi/g	53%	*0.45*	10/8/11 07:56 a		6.03	GPC28C
						8.28E-02		*(1.9)*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06241	**Collection Date:**	9/13/2011 9:27:00 AM
Lot-Sample No.:	J1I270478-8	**Report No. :**	48754	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXF1	**COC No. :**	F11-159-051-	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271138	9310_ALPHABETA_GPC			**Work Order:**	MMRAF1AD		**Report DB ID:**	9MMRAF10				
ALPHA	***3.37E+00***	U	3.3E+00	3.4E+00	6.13E+00	pCi/g	100%	*0.55*	10/10/11 09:14 a		0.0501	GPC10C
						2.55E+00	1.00E+01	*(2.)*			g	
Batch: 1271139	9310_ALPHABETA_GPC			**Work Order:**	MMRAF1AE		**Report DB ID:**	9MMRAF10				
BETA	***2.50E+01***		4.1E+00	5.2E+00	5.00E+00	pCi/g	100%	*(5.)*	10/5/11 09:06 p		0.2001	GPC27B
						2.33E+00	1.50E+01	*(9.7)*			g	
Batch: 1271140	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRAF1AC		**Report DB ID:**	9MMRAF10				
STRONTIUM	***5.13E-02***	U	7.9E-02	8.0E-02	1.73E-01	pCi/g	55%	*0.3*	10/8/11 06:51 a		6.04	GPC28C
						8.06E-02		*(1.3)*			g	
Batch: 1277058	7196_CR6			**Work Order:**	MMRAF1AA		**Report DB ID:**	9MMRAF10				
~~HEXCHROME~~	~~***1.55E-01***~~	~~U~~		~~0.0E+00~~	~~1.55E-01~~	~~mg/kg~~	~~N/A~~	~~*(1.)*~~	~~10/6/11 09:00 a~~		~~2.5253~~	
							1.55E-01	*N/A*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06241	**Collection Date:**	9/13/2011 9:40:00 AM
Lot-Sample No.:	J1I270478-9	**Report No. :**	48754	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXF2	**COC No. :**	F11-159-051-	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271138	9310_ALPHABETA_GPC			**Work Order:**	MMRAK1AD		**Report DB ID:**	9MMRAK10				
ALPHA	***6.50E+00***		4.0E+00	4.2E+00	6.01E+00	pCi/g	100%	*(1.1)*	10/10/11 09:14 a		0.05	GPC10D
						2.48E+00	1.00E+01	*(3.1)*			g	
Batch: 1271139	9310_ALPHABETA_GPC			**Work Order:**	MMRAK1AE		**Report DB ID:**	9MMRAK10				
BETA	***2.19E+01***		3.9E+00	4.8E+00	4.98E+00	pCi/g	100%	*(4.4)*	10/5/11 09:06 p		0.2002	GPC27C
						2.33E+00	1.50E+01	*(9.2)*			g	
Batch: 1271140	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRAK1AC		**Report DB ID:**	9MMRAK10				
STRONTIUM	***8.84E-02***	U	7.8E-02	8.1E-02	1.61E-01	pCi/g	59%	*0.55*	10/8/11 06:51 a		6.02	GPC28D
						7.48E-02		*(2.2)*			g	
Batch: 1277058	7196_CR6			**Work Order:**	MMRAK1AA		**Report DB ID:**	9MMRAK10				
~~HEXCHROME~~	~~***1.55E-01***~~	~~U~~		~~0.0E+00~~	~~1.55E-01~~	~~mg/kg~~	~~N/A~~	~~*(1.)*~~	~~10/6/11 09:00 a~~		~~2.5175~~	
							1.55E-01	*N/A*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06241	**Collection Date:**	9/13/2011 9:51:00 AM
Lot-Sample No.:	J1I270478-6	**Report No. :**	48754	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXF3	**COC No. :**	F11-159-052-	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271138	9310_ALPHABETA_GPC			**Work Order:**	MMQ981AD		**Report DB ID:**	9MMQ9810				
ALPHA	***1.35E+01***		4.8E+00	5.5E+00	3.86E+00	pCi/g	100%	*(3.5)*	10/10/11 09:14 a		0.0506	GPC10A
						1.40E+00	1.00E+01	*(4.9)*			g	
Batch: 1271139	9310_ALPHABETA_GPC			**Work Order:**	MMQ981AE		**Report DB ID:**	9MMQ9810				
BETA	***2.33E+01***		4.0E+00	5.0E+00	4.93E+00	pCi/g	100%	*(4.7)*	10/5/11 09:06 p		0.2003	GPC26C
						2.29E+00	1.50E+01	*(9.3)*			g	
Batch: 1271140	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMQ981AC		**Report DB ID:**	9MMQ9810				
STRONTIUM	***1.08E-02***	U	7.7E-02	7.7E-02	1.80E-01	pCi/g	56%	*0.06*	10/8/11 06:51 a		6.01	GPC27C
						8.40E-02		*0.28*			g	
Batch: 1277058	7196_CR6			**Work Order:**	MMQ981AA		**Report DB ID:**	9MMQ9810				
~~HEXCHROME~~	~~***2.01E-01***~~			~~0.0E+00~~	~~1.55E-01~~	~~mg/kg~~	~~N/A~~	~~*(1.3)*~~	~~10/6/11 09:00 a~~		~~2.5235~~	
							1.55E-01	*N/A*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06241	**Collection Date:**	9/13/2011 10:12:00 AM
Lot-Sample No.:	J1I270478-7	**Report No. :**	48754	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXF4	**COC No. :**	F11-159-053-	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271138	9310_ALPHABETA_GPC			**Work Order:**	MMRAA1AD		**Report DB ID:**	9MMRAA10				
ALPHA	***1.14E+01***		4.5E+00	5.0E+00	3.82E+00	pCi/g	100%	*(3.)*	10/10/11 09:14 a		0.0509	GPC10B
						1.37E+00	1.00E+01	*(4.5)*			g	
Batch: 1271139	9310_ALPHABETA_GPC			**Work Order:**	MMRAA1AE		**Report DB ID:**	9MMRAA10				
BETA	***2.48E+01***		4.0E+00	5.1E+00	4.76E+00	pCi/g	100%	*(5.2)*	10/5/11 09:06 p		0.2001	GPC27A
						2.21E+00	1.50E+01	*(9.7)*			g	
Batch: 1271140	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRAA1AC		**Report DB ID:**	9MMRAA10				
STRONTIUM	***2.73E-01***		9.7E-02	1.2E-01	1.64E-01	pCi/g	58%	*(1.7)*	10/8/11 06:51 a		6.02	GPC28B
						7.62E-02		*(4.6)*			g	
Batch: 1277058	7196_CR6			**Work Order:**	MMRAA1AA		**Report DB ID:**	9MMRAA10				
~~HEXCHROME~~	~~***3.79E-01***~~			~~0.0E+00~~	~~1.55E-01~~	~~mg/kg~~	~~N/A~~	~~*(2.4)*~~	~~10/6/11 09:00 a~~		~~2.5078~~	
							1.55E-01	*N/A*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06241	**Collection Date:**	9/13/2011 10:35:00 AM
Lot-Sample No.:	J1I270478-5	**Report No. :**	48754	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXF5	**COC No. :**	F11-159-054-	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC | MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271138	9310_ALPHABETA_GPC			**Work Order:**	MMQ941AD		**Report DB ID:**	9MMQ9410				
ALPHA	***6.09E+00***		3.9E+00	4.1E+00	5.99E+00	pCi/g	100%	*(1.)*	10/10/11 07:14 a		0.0507	GPC10D
						2.47E+00	1.00E+01	*(3.)*			g	
Batch: 1271139	9310_ALPHABETA_GPC			**Work Order:**	MMQ941AE		**Report DB ID:**	9MMQ9410				
BETA	***2.29E+01***		4.0E+00	4.9E+00	5.03E+00	pCi/g	100%	*(4.5)*	10/5/11 09:06 p		0.2007	GPC26B
						2.35E+00	1.50E+01	*(9.4)*			g	
Batch: 1271140	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMQ941AC		**Report DB ID:**	9MMQ9410				
STRONTIUM	***4.28E-02***	U	8.7E-02	8.8E-02	1.96E-01	pCi/g	46%	*0.22*	10/8/11 06:51 a		6.02	GPC27B
						9.14E-02		*0.97*			g	
Batch: 1277058	7196_CR6			**Work Order:**	MMQ941AA		**Report DB ID:**	9MMQ9410				
~~HEXCHROME~~	~~***3.13E-01***~~			~~0.0E+00~~	~~1.55E-01~~	~~mg/kg~~	~~N/A~~	~~*(2.)*~~	~~10/6/11 09:00 a~~		~~2.5043~~	
							1.55E-01	*N/A*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06241	**Collection Date:**	9/13/2011 10:54:00 AM
Lot-Sample No.:	J1I270478-4	**Report No. :**	48754	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXF6	**COC No. :**	F11-159-055-	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271138	9310_ALPHABETA_GPC			**Work Order:**	MMQ911AD		**Report DB ID:**	9MMQ9110				
ALPHA	***7.97E+00***		4.2E+00	4.5E+00	6.14E+00	pCi/g	100%	*(1.3)*	10/10/11 07:14 a		0.05	GPC10C
						2.55E+00	1.00E+01	*(3.5)*			g	
Batch: 1271139	9310_ALPHABETA_GPC			**Work Order:**	MMQ911AE		**Report DB ID:**	9MMQ9110				
BETA	***2.39E+01***		4.1E+00	5.1E+00	5.28E+00	pCi/g	100%	*(4.5)*	10/5/11 09:06 p		0.2	GPC26A
						2.48E+00	1.50E+01	*(9.5)*			g	
Batch: 1271140	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMQ911AC		**Report DB ID:**	9MMQ9110				
STRONTIUM	***8.40E-02***	U	7.1E-02	7.4E-02	1.46E-01	pCi/g	58%	*0.58*	10/8/11 06:51 a		6.03	GPC27A
						6.72E-02		*(2.3)*			g	
Batch: 1277058	7196_CR6			**Work Order:**	MMQ911AA		**Report DB ID:**	9MMQ9110				
~~HEXCHROME~~	~~***1.55E-01***~~	~~U~~		~~0.0E+00~~	~~1.55E-01~~	~~mg/kg~~	~~N/A~~	~~*(1.)*~~	~~10/6/11 09:00 a~~		~~2.5034~~	
							1.55E-01	*N/A*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06241	**Collection Date:**	9/13/2011 11:09:00 AM
Lot-Sample No.:	J1I270478-3	**Report No. :**	48754	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXF8	**COC No. :**	F11-159-057	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271138	9310_ALPHABETA_GPC			**Work Order:**	MMQ9X1AD		**Report DB ID:**	9MMQ9X10				
ALPHA	***1.19E+01***		4.5E+00	5.1E+00	3.82E+00	pCi/g	100%	*(3.1)*	10/10/11 07:14 a		0.0505	GPC10B
						1.37E+00	1.00E+01	*(4.6)*			g	
Batch: 1271139	9310_ALPHABETA_GPC			**Work Order:**	MMQ9X1AE		**Report DB ID:**	9MMQ9X10				
BETA	***2.84E+01***		4.4E+00	5.7E+00	5.17E+00	pCi/g	100%	*(5.5)*	10/5/11 08:40 p		0.2007	GPC32D
						2.42E+00	1.50E+01	*(9.9)*			g	
Batch: 1271140	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMQ9X1AC		**Report DB ID:**	9MMQ9X10				
STRONTIUM	***3.72E-02***	U	6.6E-02	6.6E-02	1.46E-01	pCi/g	59%	*0.26*	10/8/11 06:51 a		6.01	GPC26C
						6.74E-02		*(1.1)*			g	
Batch: 1277058	7196_CR6			**Work Order:**	MMQ9X1AA		**Report DB ID:**	9MMQ9X10				
~~HEXCHROME~~	~~***1.85E-01***~~			~~0.0E+00~~	~~1.55E-01~~	~~mg/kg~~	~~N/A~~	~~*(1.2)*~~	~~10/6/11 09:00 a~~		~~2.5069~~	
							1.55E-01	*N/A*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06241	**Collection Date:**	9/13/2011 11:26:00 AM
Lot-Sample No.:	J1I270478-1	**Report No. :**	48754	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXF9	**COC No. :**	F11-159-058-	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271138	9310_ALPHABETA_GPC			**Work Order:**	MMQ9P1AD		**Report DB ID:**	9MMQ9P10				
ALPHA	***6.57E+00***		3.7E+00	3.9E+00	4.54E+00	pCi/g	100%	*(1.4)*	10/5/11 02:36 p		0.0506	GPC10B
						1.73E+00	1.00E+01	*(3.3)*			g	
Batch: 1271139	9310_ALPHABETA_GPC			**Work Order:**	MMQ9P1AE		**Report DB ID:**	9MMQ9P10				
BETA	***3.01E+01***		4.4E+00	5.9E+00	4.84E+00	pCi/g	100%	*(6.2)*	10/5/11 08:40 p		0.2007	GPC32A
						2.25E+00	1.50E+01	*(10.2)*			g	
Batch: 1271140	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMQ9P1AC		**Report DB ID:**	9MMQ9P10				
STRONTIUM	***5.63E-02***	U	8.4E-02	8.5E-02	1.84E-01	pCi/g	53%	*0.31*	10/8/11 06:51 a		6.01	GPC26A
						8.61E-02		*(1.3)*			g	
Batch: 1277058	7196_CR6			**Work Order:**	MMQ9P1AA		**Report DB ID:**	9MMQ9P10				
~~HEXCHROME~~	~~***3.58E-01***~~			~~0.0E+00~~	~~1.55E-01~~	~~mg/kg~~	~~N/A~~	~~*(2.3)*~~	~~10/6/11 09:00 a~~		~~2.5034~~	
							1.55E-01	*N/A*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06241	**Collection Date:**	9/13/2011 11:50:00 AM
Lot-Sample No.:	J1I270478-2	**Report No. :**	48754	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXH0	**COC No. :**	F11-159-059-	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271138	9310_ALPHABETA_GPC			**Work Order:**	MMQ9R1AD		**Report DB ID:**	9MMQ9R10				
ALPHA	***4.52E+00***		3.0E+00	3.1E+00	3.86E+00	pCi/g	100%	*(1.2)*	10/10/11 07:14 a		0.0506	GPC10A
						1.40E+00	1.00E+01	*(2.9)*			g	
Batch: 1271139	9310_ALPHABETA_GPC			**Work Order:**	MMQ9R1AE		**Report DB ID:**	9MMQ9R10				
BETA	***2.77E+01***		4.1E+00	5.6E+00	4.35E+00	pCi/g	100%	*(6.4)*	10/5/11 08:40 p		0.2006	GPC32C
						2.01E+00	1.50E+01	*(9.9)*			g	
Batch: 1271140	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMQ9R1AC		**Report DB ID:**	9MMQ9R10				
STRONTIUM	***1.25E-01***	U	8.3E-02	8.9E-02	1.64E-01	pCi/g	57%	*0.76*	10/8/11 06:51 a		6.01	GPC26B
						7.66E-02		*(2.8)*			g	
Batch: 1277058	7196_CR6			**Work Order:**	MMQ9R1AA		**Report DB ID:**	9MMQ9R10				
~~HEXCHROME~~	~~***1.55E-01***~~	~~U~~		~~0.0E+00~~	~~1.55E-01~~	~~mg/kg~~	~~N/A~~	~~*(1.)*~~	~~10/6/11 09:00 a~~		~~2.5087~~	
							1.55E-01	*N/A*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06241	**Collection Date:**	9/13/2011 12:19:00 PM
Lot-Sample No.:	J1I270478-19	**Report No. :**	48754	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXH1	**COC No. :**	F11-159-060-	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271138	9310_ALPHABETA_GPC			**Work Order:**	MMRCC1AD		**Report DB ID:**	9MMRCC10				
ALPHA	***1.15E+01***		4.5E+00	5.0E+00	3.82E+00	pCi/g	100%	*(3.)*	10/10/11 09:59 p		0.0506	GPC10B
						1.37E+00	1.00E+01	*(4.5)*			g	
Batch: 1271139	9310_ALPHABETA_GPC			**Work Order:**	MMRCC1AE		**Report DB ID:**	9MMRCC10				
BETA	***2.43E+01***		4.0E+00	5.0E+00	4.81E+00	pCi/g	100%	*(5.)*	10/6/11 02:08 p		0.2004	GPC27B
						2.24E+00	1.50E+01	*(9.7)*			g	
Batch: 1271140	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRCC1AC		**Report DB ID:**	9MMRCC10				
STRONTIUM	***7.07E-02***	U	7.3E-02	7.5E-02	1.53E-01	pCi/g	54%	*0.46*	10/8/11 07:56 a		6.02	GPC27A
						7.04E-02		*(1.9)*			g	
Batch: 1277058	7196_CR6			**Work Order:**	MMRCC1AA		**Report DB ID:**	9MMRCC10				
~~HEXCHROME~~	~~***1.55E-01***~~	~~U~~		~~0.0E+00~~	~~1.55E-01~~	~~mg/kg~~	~~N/A~~	~~*(1.)*~~	~~10/6/11 09:00 a~~		~~2.5091~~	
							1.55E-01	*N/A*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06241	**Collection Date:**	9/14/2011 8:54:00 AM
Lot-Sample No.:	J1I270478-16	**Report No. :**	48754	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXH2	**COC No. :**	F11-159-061-	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271138	9310_ALPHABETA_GPC			**Work Order:**	MMRA81AD		**Report DB ID:**	9MMRA810				
ALPHA	***2.60E+00***	U	3.1E+00	3.2E+00	6.14E+00	pCi/g	100%	*0.42*	10/10/11 04:22 p		0.05	GPC10C
						2.55E+00	1.00E+01	*(1.6)*			g	
Batch: 1271139	9310_ALPHABETA_GPC			**Work Order:**	MMRA81AE		**Report DB ID:**	9MMRA810				
BETA	***2.86E+01***		4.2E+00	5.7E+00	4.36E+00	pCi/g	100%	*(6.6)*	10/5/11 09:34 p		0.2001	GPC32C
						2.01E+00	1.50E+01	*(10.)*			g	
Batch: 1271140	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRA81AC		**Report DB ID:**	9MMRA810				
STRONTIUM	***7.59E-02***	U	7.9E-02	8.1E-02	1.67E-01	pCi/g	55%	*0.45*	10/8/11 07:56 a		6.01	GPC26B
						7.77E-02		*(1.9)*			g	
Batch: 1277058	7196_CR6			**Work Order:**	MMRA81AA		**Report DB ID:**	9MMRA810				
~~HEXCHROME~~	~~***1.55E-01***~~	~~U~~		~~0.0E+00~~	~~1.55E-01~~	~~mg/kg~~	~~N/A~~	~~*(1.)*~~	~~10/6/11 09:00 a~~		~~2.5105~~	
							1.55E-01	*N/A*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06241	**Collection Date:**	9/14/2011 9:10:00 AM
Lot-Sample No.:	J1I270478-17	**Report No. :**	48754	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXH3	**COC No. :**	F11-159-062-	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271138	9310_ALPHABETA_GPC			**Work Order:**	MMRA91AD		**Report DB ID:**	9MMRA910				
ALPHA	***5.32E+00***	U	3.7E+00	3.9E+00	6.01E+00	pCi/g	100%	*0.89*	10/10/11 04:22 p		0.0501	GPC10D
						2.48E+00	1.00E+01	*(2.8)*			g	
Batch: 1271139	9310_ALPHABETA_GPC			**Work Order:**	MMRA91AE		**Report DB ID:**	9MMRA910				
BETA	***2.72E+01***		4.3E+00	5.6E+00	5.18E+00	pCi/g	100%	*(5.3)*	10/5/11 09:34 p		0.2004	GPC32D
						2.42E+00	1.50E+01	*(9.8)*			g	
Batch: 1271140	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRA91AC		**Report DB ID:**	9MMRA910				
STRONTIUM	***8.62E-02***	U	7.4E-02	7.7E-02	1.52E-01	pCi/g	55%	*0.57*	10/8/11 07:56 a		6.04	GPC26C
						7.02E-02		*(2.2)*			g	
Batch: 1277058	7196_CR6			**Work Order:**	MMRA91AA		**Report DB ID:**	9MMRA910				
~~HEXCHROME~~	~~***1.55E-01***~~	~~U~~		~~0.0E+00~~	~~1.55E-01~~	~~mg/kg~~	~~N/A~~	~~*(1.)*~~	~~10/6/11 09:00 a~~		~~2.5379~~	
							1.55E-01	*N/A*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06241	**Collection Date:**	9/14/2011 9:20:00 AM
Lot-Sample No.:	J1I270478-18	**Report No. :**	48754	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXH4	**COC No. :**	F11-159-063-	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271138	9310_ALPHABETA_GPC			**Work Order:**	MMRCA1AD		**Report DB ID:**	9MMRCA10				
ALPHA	***4.91E+00***		3.1E+00	3.2E+00	3.86E+00	pCi/g	100%	*(1.3)*	10/10/11 09:59 p		0.0508	GPC10A
						1.40E+00	1.00E+01	*(3.)*			g	
Batch: 1271139	9310_ALPHABETA_GPC			**Work Order:**	MMRCA1AE		**Report DB ID:**	9MMRCA10				
BETA	***3.01E+01***		4.3E+00	5.7E+00	4.63E+00	pCi/g	100%	*(6.5)*	10/6/11 02:08 p		0.2004	GPC27A
						2.15E+00	1.50E+01	*(10.5)*			g	
Batch: 1271140	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRCA1AC		**Report DB ID:**	9MMRCA10				
STRONTIUM	***1.12E-01***	U	8.3E-02	8.8E-02	1.67E-01	pCi/g	52%	*0.67*	10/8/11 07:56 a		6.02	GPC26D
						7.74E-02		*(2.5)*			g	
Batch: 1277058	7196_CR6			**Work Order:**	MMRCA1AA		**Report DB ID:**	9MMRCA10				
~~HEXCHROME~~	~~***1.55E-01***~~	~~U~~		~~0.0E+00~~	~~1.55E-01~~	~~mg/kg~~	~~N/A~~	~~*(1.)*~~	~~10/6/11 09:00 a~~		~~2.5165~~	
							1.55E-01	*N/A*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06241	**Collection Date:**	9/14/2011 9:35:00 AM
Lot-Sample No.:	J1I270478-20	**Report No. :**	48754	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXH5	**COC No. :**	F11-159-064-	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271138	9310_ALPHABETA_GPC			**Work Order:**	MMRCD1AD		**Report DB ID:**	9MMRCD10				
ALPHA	***1.10E+01***		4.8E+00	5.3E+00	6.13E+00	pCi/g	100%	*(1.8)*	10/10/11 09:59 p		0.0503	GPC10C
						2.55E+00	1.00E+01	*(4.2)*			g	
Batch: 1271139	9310_ALPHABETA_GPC			**Work Order:**	MMRCD1AE		**Report DB ID:**	9MMRCD10				
BETA	***2.58E+01***		4.1E+00	5.2E+00	4.95E+00	pCi/g	100%	*(5.2)*	10/6/11 02:08 p		0.2002	GPC27C
						2.31E+00	1.50E+01	*(9.9)*			g	
Batch: 1271140	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRCD1AC		**Report DB ID:**	9MMRCD10				
STRONTIUM	***1.09E-01***	U	7.5E-02	8.1E-02	1.51E-01	pCi/g	62%	*0.73*	10/8/11 07:56 a		6.04	GPC27B
						7.02E-02		*(2.7)*			g	
Batch: 1277058	7196_CR6			**Work Order:**	MMRCD1AA		**Report DB ID:**	9MMRCD10				
~~HEXCHROME~~	~~***1.55E-01***~~	~~U~~		~~0.0E+00~~	~~1.55E-01~~	~~mg/kg~~	~~N/A~~	~~*(1.)*~~	~~10/6/11 09:00 a~~		~~2.5033~~	
							1.55E-01	*N/A*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06241	**Collection Date:**	9/14/2011 9:42:00 AM
Lot-Sample No.:	J1I270478-12	**Report No. :**	48754	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXH6	**COC No. :**	F11-159-065-	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271138	9310_ALPHABETA_GPC			**Work Order:**	MMRA41AD		**Report DB ID:**	9MMRA410				
ALPHA	***7.57E+00***		4.2E+00	4.4E+00	6.12E+00	pCi/g	100%	*(1.2)*	10/10/11 11:10 a		0.0504	GPC10C
						2.55E+00	1.00E+01	*(3.4)*			g	
Batch: 1271139	9310_ALPHABETA_GPC			**Work Order:**	MMRA41AE		**Report DB ID:**	9MMRA410				
BETA	***2.26E+01***		3.9E+00	4.9E+00	4.80E+00	pCi/g	100%	*(4.7)*	10/5/11 09:25 p		0.2003	GPC28B
						2.23E+00	1.50E+01	*(9.2)*			g	
Batch: 1271140	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRA41AC		**Report DB ID:**	9MMRA410				
STRONTIUM	***3.83E-02***	U	6.9E-02	6.9E-02	1.53E-01	pCi/g	60%	*0.25*	10/8/11 06:51 a		6.03	GPC31D
						7.08E-02		*(1.1)*			g	
Batch: 1277058	7196_CR6			**Work Order:**	MMRA41AA		**Report DB ID:**	9MMRA410				
~~HEXCHROME~~	~~***1.55E-01***~~	~~U~~		~~0.0E+00~~	~~1.55E-01~~	~~mg/kg~~	~~N/A~~	~~*(1.)*~~	~~10/6/11 09:00 a~~		~~2.5222~~	
							1.55E-01	*N/A*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06241	**Collection Date:**	9/14/2011 10:00:00 AM
Lot-Sample No.:	J1I270478-13	**Report No. :**	48754	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXH7	**COC No. :**	F11-159-066-	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271138	9310_ALPHABETA_GPC			**Work Order:**	MMRA51AD		**Report DB ID:**	9MMRA510				
ALPHA	***8.07E+00***		4.3E+00	4.6E+00	6.01E+00	pCi/g	100%	*(1.3)*	10/10/11 11:10 a		0.05	GPC10D
						2.48E+00	1.00E+01	*(3.5)*			g	
Batch: 1271139	9310_ALPHABETA_GPC			**Work Order:**	MMRA51AE		**Report DB ID:**	9MMRA510				
BETA	***2.84E+01***		4.3E+00	5.7E+00	4.86E+00	pCi/g	100%	*(5.8)*	10/5/11 09:25 p		0.2003	GPC28C
						2.26E+00	1.50E+01	*(9.9)*			g	
Batch: 1271140	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRA51AC		**Report DB ID:**	9MMRA510				
STRONTIUM	***4.78E-02***	U	7.9E-02	8.0E-02	1.75E-01	pCi/g	52%	*0.27*	10/8/11 06:51 a		6.03	GPC32B
						8.11E-02		*(1.2)*			g	
Batch: 1277058	7196_CR6			**Work Order:**	MMRA51AA		**Report DB ID:**	9MMRA510				
~~HEXCHROME~~	~~***2.02E-01***~~			~~0.0E+00~~	~~1.55E-01~~	~~mg/kg~~	~~N/A~~	~~*(1.3)*~~	~~10/6/11 09:00 a~~		~~2.517~~	
							1.55E-01	*N/A*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06241	**Collection Date:**	9/14/2011 10:12:00 AM
Lot-Sample No.:	J1I270478-14	**Report No. :**	48754	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXH9	**COC No. :**	F11-159-068-	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC | MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271138	9310_ALPHABETA_GPC			**Work Order:**	MMRA61AD		**Report DB ID:**	9MMRA610				
ALPHA	***4.91E+00***		3.1E+00	3.2E+00	3.86E+00	pCi/g	100%	*(1.3)*	10/10/11 04:22 p		0.0506	GPC10A
						1.40E+00	1.00E+01	*(3.)*			g	
Batch: 1271139	9310_ALPHABETA_GPC			**Work Order:**	MMRA61AE		**Report DB ID:**	9MMRA610				
BETA	***2.57E+01***		4.2E+00	5.4E+00	4.97E+00	pCi/g	100%	*(5.2)*	10/5/11 09:25 p		0.2007	GPC28D
						2.31E+00	1.50E+01	*(9.6)*			g	
Batch: 1271140	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRA61AC		**Report DB ID:**	9MMRA610				
STRONTIUM	***-2.48E-02***	U	6.0E-02	6.1E-02	1.52E-01	pCi/g	59%	*-0.16*	10/8/11 06:51 a		6.04	GPC32C
						7.07E-02		*-0.82*			g	
Batch: 1277058	7196_CR6			**Work Order:**	MMRA61AA		**Report DB ID:**	9MMRA610				
~~HEXCHROME~~	~~***1.55E-01***~~	~~U~~		~~0.0E+00~~	~~1.55E-01~~	~~mg/kg~~	~~N/A~~	~~*(1.)*~~	~~10/6/11 09:00 a~~		~~2.5046~~	
							1.55E-01	*N/A*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06241	**Collection Date:**	9/14/2011 10:30:00 AM
Lot-Sample No.:	J1I270478-15	**Report No. :**	48754	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXJ0	**COC No. :**	F11-159-069-	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271138	9310_ALPHABETA_GPC			**Work Order:**	MMRA71AD		**Report DB ID:**	9MMRA710				
ALPHA	***1.75E+01***		5.4E+00	6.5E+00	3.83E+00	pCi/g	100%	*(4.6)*	10/10/11 04:22 p		0.0501	GPC10B
						1.38E+00	1.00E+01	*(5.4)*			g	
Batch: 1271139	9310_ALPHABETA_GPC			**Work Order:**	MMRA71AE		**Report DB ID:**	9MMRA710				
BETA	***2.53E+01***		4.1E+00	5.3E+00	4.85E+00	pCi/g	100%	*(5.2)*	10/5/11 09:34 p		0.2005	GPC32A
						2.25E+00	1.50E+01	*(9.6)*			g	
Batch: 1271140	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRA71AC		**Report DB ID:**	9MMRA710				
STRONTIUM	***1.47E-01***	U	8.9E-02	9.7E-02	1.75E-01	pCi/g	56%	*0.84*	10/8/11 07:56 a		6.03	GPC26A
						8.16E-02		*(3.)*			g	
Batch: 1277058	7196_CR6			**Work Order:**	MMRA71AA		**Report DB ID:**	9MMRA710				
~~HEXCHROME~~	~~***1.55E-01***~~	~~U~~		~~0.0E+00~~	~~1.55E-01~~	~~mg/kg~~	~~N/A~~	~~*(1.)*~~	~~10/6/11 09:00 a~~		~~2.5267~~	
							1.55E-01	*N/A*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06241	**Collection Date:**	9/14/2011 10:00:00 AM
Lot-Sample No.:	J1I270478-10	**Report No. :**	48754	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXJ6	**COC No. :**	F11-159-075-	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271138	9310_ALPHABETA_GPC			**Work Order:**	MMRAV1AD		**Report DB ID:**	9MMRAV10				
ALPHA	***5.70E+00***		3.3E+00	3.5E+00	3.87E+00	pCi/g	100%	*(1.5)*	10/10/11 11:10 a		0.0503	GPC10A
						1.41E+00	1.00E+01	*(3.3)*			g	
Batch: 1271139	9310_ALPHABETA_GPC			**Work Order:**	MMRAV1AE		**Report DB ID:**	9MMRAV10				
BETA	***2.84E+01***		4.2E+00	5.5E+00	4.73E+00	pCi/g	100%	*(6.)*	10/5/11 09:24 p		0.2001	GPC31C
						2.20E+00	1.50E+01	*(10.2)*			g	
Batch: 1271140	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRAV1AC		**Report DB ID:**	9MMRAV10				
STRONTIUM	***1.57E-01***	U	8.5E-02	9.4E-02	1.61E-01	pCi/g	58%	*0.98*	10/8/11 06:51 a		6.01	GPC31A
						7.46E-02		*(3.3)*			g	
Batch: 1277058	7196_CR6			**Work Order:**	MMRAV1AA		**Report DB ID:**	9MMRAV10				
~~HEXCHROME~~	~~***3.32E-01***~~			~~0.0E+00~~	~~1.55E-01~~	~~mg/kg~~	~~N/A~~	~~*(2.1)*~~	~~10/6/11 09:00 a~~		~~2.5291~~	
							1.55E-01	*N/A*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06241	**Collection Date:**	9/14/2011 8:30:00 AM
Lot-Sample No.:	J1I270478-11	**Report No. :**	48754	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXJ7	**COC No. :**	F11-159-076-	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271138	9310_ALPHABETA_GPC			**Work Order:**	MMRA01AD		**Report DB ID:**	9MMRA010				
ALPHA	***6.68E+00***		3.5E+00	3.8E+00	3.82E+00	pCi/g	100%	*(1.7)*	10/10/11 11:10 a		0.0509	GPC10B
						1.37E+00	1.00E+01	*(3.5)*			g	
Batch: 1271139	9310_ALPHABETA_GPC			**Work Order:**	MMRA01AE		**Report DB ID:**	9MMRA010				
BETA	***8.78E+00***	J	2.9E+00	3.1E+00	4.66E+00	pCi/g	100%	*(1.9)*	10/5/11 09:24 p		0.2005	GPC31D
						2.16E+00	1.50E+01	*(5.7)*			g	
Batch: 1271140	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRA01AC		**Report DB ID:**	9MMRA010				
STRONTIUM	***4.54E-02***	U	4.9E-02	5.1E-02	1.04E-01	pCi/g	90%	*0.44*	10/8/11 06:51 a		6.03	GPC31B
						4.82E-02		*(1.8)*			g	
Batch: 1277058	7196_CR6			**Work Order:**	MMRA01AA		**Report DB ID:**	9MMRA010				
~~HEXCHROME~~	~~***1.55E-01***~~	~~U~~		~~0.0E+00~~	~~1.55E-01~~	~~mg/kg~~	~~N/A~~	~~*(1.)*~~	~~10/6/11 09:00 a~~		~~2.5141~~	
							1.55E-01	*N/A*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06242	**Collection Date:**	8/31/2011 9:30:00 AM
Lot-Sample No.:	J1I270481-6	**Report No. :**	48755	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXC6	**COC No. :**	F11-159-074	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271112	7196_CR6			**Work Order:**	MMRCL1AA		**Report DB ID:**	9MMRCL10				
~~HEXCHROME~~	~~***1.55E-01***~~	~~U~~		~~0.0E+00~~	~~1.55E-01~~	~~mg/kg~~	~~N/A~~	~~*(1.)*~~	~~9/29/11 11:00 a~~		~~2.5022~~	
							1.55E-01	*N/A*			g	
Batch: 1271148	9310_ALPHABETA_GPC			**Work Order:**	MMRCL1AC		**Report DB ID:**	9MMRCL10				
ALPHA	***7.60E+00***		4.2E+00	6.9E+00	5.68E+00	pCi/g	100%	*(1.3)*	10/11/11 01:19 p		0.0506	GPC10D
						2.31E+00	1.00E+01	*(2.2)*			g	
Batch: 1271149	9310_ALPHABETA_GPC			**Work Order:**	MMRCL1AF		**Report DB ID:**	9MMRCL10				
BETA	***2.49E+01***		4.1E+00	6.7E+00	4.72E+00	pCi/g	100%	*(5.3)*	10/6/11 04:56 p		0.2009	GPC26C
						2.19E+00	1.50E+01	*(7.4)*			g	
Batch: 1271156	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRCL1AE		**Report DB ID:**	9MMRCL10				
STRONTIUM	***1.21E-01***	U	1.1E-01	1.2E-01	2.33E-01	pCi/g	45%	*0.52*	10/10/11 08:38 p		6.02	GPC27C
						1.09E-01		*(2.1)*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06242	**Collection Date:**	8/31/2011 9:50:00 AM
Lot-Sample No.:	J1I270481-5	**Report No. :**	48755	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXC7	**COC No. :**	F11-159-036-	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271112	7196_CR6			**Work Order:**	MMRCK1AA		**Report DB ID:**	9MMRCK10				
~~HEXCHROME~~	~~***1.55E-01***~~	~~U~~		~~0.0E+00~~	~~1.55E-01~~	~~mg/kg~~	~~N/A~~	~~*(1.)*~~	~~9/29/11 11:00 a~~		~~2.5018~~	
							1.55E-01	*N/A*			g	
Batch: 1271148	9310_ALPHABETA_GPC			**Work Order:**	MMRCK1AC		**Report DB ID:**	9MMRCK10				
ALPHA	***8.47E+00***		4.5E+00	7.6E+00	6.11E+00	pCi/g	100%	*(1.4)*	10/11/11 01:19 p		0.0501	GPC10C
						2.53E+00	1.00E+01	*(2.2)*			g	
Batch: 1271149	9310_ALPHABETA_GPC			**Work Order:**	MMRCK1AF		**Report DB ID:**	9MMRCK10				
BETA	***2.46E+01***		4.0E+00	6.6E+00	4.74E+00	pCi/g	100%	*(5.2)*	10/6/11 04:56 p		0.2003	GPC26B
						2.20E+00	1.50E+01	*(7.5)*			g	
Batch: 1271156	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRCK1AE		**Report DB ID:**	9MMRCK10				
STRONTIUM	***8.94E-04***	U	7.3E-02	7.3E-02	1.73E-01	pCi/g	60%	*0.01*	10/10/11 08:38 p		6.02	GPC27B
						8.05E-02		*0.02*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06242	**Collection Date:**	8/31/2011 10:10:00 AM
Lot-Sample No.:	J1I270481-4	**Report No. :**	48755	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXC8	**COC No. :**	F11-159-074	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271112	7196_CR6			**Work Order:**	MMRCJ1AA		**Report DB ID:**	9MMRCJ10				
~~HEXCHROME~~	~~***1.55E-01***~~	~~U~~		~~0.0E+00~~	~~1.55E-01~~	~~mg/kg~~	~~N/A~~	~~*(1.)*~~	~~9/29/11 11:00 a~~		~~2.5024~~	
							1.55E-01	*N/A*			g	
Batch: 1271148	9310_ALPHABETA_GPC			**Work Order:**	MMRCJ1AC		**Report DB ID:**	9MMRCJ10				
ALPHA	***9.45E+00***		4.5E+00	8.2E+00	5.47E+00	pCi/g	100%	*(1.7)*	10/11/11 01:19 p		0.05	GPC10B
						2.19E+00	1.00E+01	*(2.3)*			g	
Batch: 1271149	9310_ALPHABETA_GPC			**Work Order:**	MMRCJ1AF		**Report DB ID:**	9MMRCJ10				
BETA	***2.95E+01***		4.4E+00	7.6E+00	5.10E+00	pCi/g	100%	*(5.8)*	10/6/11 04:56 p		0.2002	GPC26A
						2.39E+00	1.50E+01	*(7.7)*			g	
Batch: 1271156	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRCJ1AE		**Report DB ID:**	9MMRCJ10				
STRONTIUM	***1.21E-01***	U	8.5E-02	9.1E-02	1.70E-01	pCi/g	61%	*0.71*	10/10/11 08:38 p		6.01	GPC27A
						7.89E-02		*(2.7)*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06242	**Collection Date:**	8/31/2011 10:30:00 AM
Lot-Sample No.:	J1I270481-3	**Report No. :**	48755	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXC9	**COC No. :**	F11-159-074	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271112	7196_CR6			**Work Order:**	MMRCH1AA		**Report DB ID:**	9MMRCH10				
~~HEXCHROME~~	~~***2.09E-01***~~			~~0.0E+00~~	~~1.55E-01~~	~~mg/kg~~	~~N/A~~	~~*(1.4)*~~	~~9/29/11 11:00 a~~		~~2.5098~~	
							1.55E-01	*N/A*			g	
Batch: 1271148	9310_ALPHABETA_GPC			**Work Order:**	MMRCH1AC		**Report DB ID:**	9MMRCH10				
ALPHA	***5.22E+00***		3.3E+00	5.0E+00	4.41E+00	pCi/g	100%	*(1.2)*	10/11/11 01:19 p		0.0506	GPC10A
						1.68E+00	1.00E+01	*(2.1)*			g	
Batch: 1271149	9310_ALPHABETA_GPC			**Work Order:**	MMRCH1AF		**Report DB ID:**	9MMRCH10				
BETA	***2.58E+01***		4.2E+00	7.0E+00	5.13E+00	pCi/g	100%	*(5.)*	10/6/11 03:54 p		0.2008	GPC32D
						2.40E+00	1.50E+01	*(7.4)*			g	
Batch: 1271156	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRCH1AE		**Report DB ID:**	9MMRCH10				
STRONTIUM	***6.63E-02***	U	8.1E-02	8.3E-02	1.75E-01	pCi/g	58%	*0.38*	10/10/11 08:37 p		6.03	GPC26C
						8.12E-02		*(1.6)*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06242	**Collection Date:**	8/31/2011 10:56:00 AM
Lot-Sample No.:	J1I270481-11	**Report No. :**	48755	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXD0	**COC No. :**	F11-159-074	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271112	7196_CR6			**Work Order:**	MMRC11AA		**Report DB ID:**	9MMRC110				
~~HEXCHROME~~	~~***1.55E-01***~~	~~U~~		~~0.0E+00~~	~~1.55E-01~~	~~mg/kg~~	~~N/A~~	~~*(1.)*~~	~~9/29/11 11:00 a~~		~~2.5026~~	
							1.55E-01	*N/A*			g	
Batch: 1271148	9310_ALPHABETA_GPC			**Work Order:**	MMRC11AC		**Report DB ID:**	9MMRC110				
ALPHA	***4.84E+00***		3.3E+00	4.8E+00	4.41E+00	pCi/g	100%	*(1.1)*	10/11/11 05:22 p		0.0505	GPC10A
						1.68E+00	1.00E+01	*(2.)*			g	
Batch: 1271149	9310_ALPHABETA_GPC			**Work Order:**	MMRC11AF		**Report DB ID:**	9MMRC110				
BETA	***2.53E+01***		4.1E+00	6.8E+00	4.67E+00	pCi/g	100%	*(5.4)*	10/6/11 04:56 p		0.2003	GPC28B
						2.16E+00	1.50E+01	*(7.4)*			g	
Batch: 1271156	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRC11AE		**Report DB ID:**	9MMRC110				
STRONTIUM	***1.13E-01***	U	9.3E-02	9.8E-02	1.91E-01	pCi/g	53%	*0.59*	10/10/11 09:30 p		6.0	GPC26C
						8.86E-02		*(2.3)*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06242	**Collection Date:**	~~8/31/2011~~ 09/07/2011 9:30:00 AM
Lot-Sample No.:	J1I270481-10	**Report No. :**	48755	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXD1	**COC No. :**	F11-159-074	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271112	7196_CR6			**Work Order:**	MMRCX1AA		**Report DB ID:**	9MMRCX10				
~~HEXCHROME~~	~~***1.55E-01***~~	~~U~~		~~0.0E+00~~	~~1.55E-01~~	~~mg/kg~~	~~N/A~~	~~*(1.)*~~	~~9/29/11 11:00 a~~		~~2.5013~~	
							1.55E-01	*N/A*			g	
Batch: 1271148	9310_ALPHABETA_GPC			**Work Order:**	MMRCX1AC		**Report DB ID:**	9MMRCX10				
ALPHA	***6.51E+00***		4.0E+00	6.2E+00	5.74E+00	pCi/g	100%	*(1.1)*	10/11/11 03:16 p		0.0501	GPC10D
						2.34E+00	1.00E+01	*(2.1)*			g	
Batch: 1271149	9310_ALPHABETA_GPC			**Work Order:**	MMRCX1AF		**Report DB ID:**	9MMRCX10				
BETA	***1.98E+01***		3.8E+00	5.6E+00	4.96E+00	pCi/g	100%	*(4.)*	10/6/11 04:56 p		0.2	GPC27C
						2.31E+00	1.50E+01	*(7.)*			g	
Batch: 1271156	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRCX1AE		**Report DB ID:**	9MMRCX10				
STRONTIUM	***1.07E-01***	U	8.4E-02	8.9E-02	1.72E-01	pCi/g	60%	*0.62*	10/10/11 09:30 p		6.03	GPC26B
						8.02E-02		*(2.4)*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06242	**Collection Date:**	~~8/31/2011~~ 09/07/2011 9:40:00 AM
Lot-Sample No.:	J1I270481-9	**Report No. :**	48755	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXD2	**COC No. :**	F11-159-074	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271112	7196_CR6			**Work Order:**	MMRCQ1AA		**Report DB ID:**	9MMRCQ10				
~~HEXCHROME~~	~~***1.55E-01***~~	~~U~~		~~0.0E+00~~	~~1.55E-01~~	~~mg/kg~~	~~N/A~~	~~*(1.)*~~	~~9/29/11 11:00 a~~		~~2.5063~~	
							1.55E-01	*N/A*			g	
Batch: 1271148	9310_ALPHABETA_GPC			**Work Order:**	MMRCQ1AC		**Report DB ID:**	9MMRCQ10				
ALPHA	***6.12E+00***		4.1E+00	6.0E+00	6.07E+00	pCi/g	100%	*(1.)*	10/11/11 03:16 p		0.0504	GPC10C
						2.52E+00	1.00E+01	*(2.1)*			g	
Batch: 1271149	9310_ALPHABETA_GPC			**Work Order:**	MMRCQ1AF		**Report DB ID:**	9MMRCQ10				
BETA	***2.36E+01***		4.0E+00	6.4E+00	4.80E+00	pCi/g	100%	*(4.9)*	10/6/11 04:56 p		0.2008	GPC27B
						2.24E+00	1.50E+01	*(7.4)*			g	
Batch: 1271156	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRCQ1AE		**Report DB ID:**	9MMRCQ10				
STRONTIUM	***7.91E-02***	U	7.6E-02	7.9E-02	1.60E-01	pCi/g	67%	*0.49*	10/10/11 08:37 p		6.0	GPC28D
						7.42E-02		*(2.)*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06242	**Collection Date:**	~~8/31/2011~~ 09/07/2011 10:14:00 AM
Lot-Sample No.:	J1I270481-8	**Report No. :**	48755	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXD3	**COC No. :**	F11-159-074	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271112	7196_CR6			**Work Order:**	MMRCN1AA		**Report DB ID:**	9MMRCN10				
~~HEXCHROME~~	~~***1.55E-01***~~	~~U~~		~~0.0E+00~~	~~1.55E-01~~	~~mg/kg~~	~~N/A~~	~~*(1.)*~~	~~9/29/11 11:00 a~~		~~2.5048~~	
							1.55E-01	*N/A*			g	
Batch: 1271148	9310_ALPHABETA_GPC			**Work Order:**	MMRCN1AC		**Report DB ID:**	9MMRCN10				
ALPHA	***7.00E+00***		4.1E+00	6.5E+00	5.45E+00	pCi/g	100%	*(1.3)*	10/11/11 03:16 p		0.0501	GPC10B
						2.18E+00	1.00E+01	*(2.2)*			g	
Batch: 1271149	9310_ALPHABETA_GPC			**Work Order:**	MMRCN1AF		**Report DB ID:**	9MMRCN10				
BETA	***2.26E+01***		3.9E+00	6.2E+00	4.63E+00	pCi/g	100%	*(4.9)*	10/6/11 04:56 p		0.2003	GPC27A
						2.15E+00	1.50E+01	*(7.3)*			g	
Batch: 1271156	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRCN1AE		**Report DB ID:**	9MMRCN10				
STRONTIUM	***1.15E-01***	U	8.3E-02	8.8E-02	1.66E-01	pCi/g	62%	*0.69*	10/10/11 08:37 p		6.04	GPC28C
						7.70E-02		*(2.6)*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06242	**Collection Date:**	~~8/31/2011~~ 09/07/2011 10:24:00 AM
Lot-Sample No.:	J1I270481-7	**Report No. :**	48755	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXD4	**COC No. :**	F11-159-074	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271112	7196_CR6			**Work Order:**	MMRCL1AA		**Report DB ID:**	9MMRCM10				
~~HEXCHROME~~	~~***1.55E-01***~~	~~U~~		~~0.0E+00~~	~~1.55E-01~~	~~mg/kg~~	~~N/A~~	~~*(1.)*~~	~~9/29/11 11:00 a~~		~~2.5071~~	
							1.55E-01	*N/A*			g	
Batch: 1271148	9310_ALPHABETA_GPC			**Work Order:**	MMRCM1AC		**Report DB ID:**	9MMRCM10				
ALPHA	***5.74E+00***		3.5E+00	5.4E+00	4.51E+00	pCi/g	100%	*(1.3)*	10/11/11 03:16 p		0.05	GPC10A
						1.72E+00	1.00E+01	*(2.1)*			g	
Batch: 1271149	9310_ALPHABETA_GPC			**Work Order:**	MMRCM1AF		**Report DB ID:**	9MMRCM10				
BETA	***2.50E+01***		4.0E+00	6.7E+00	4.49E+00	pCi/g	100%	*(5.6)*	10/6/11 04:56 p		0.2005	GPC26D
						2.08E+00	1.50E+01	*(7.5)*			g	
Batch: 1271156	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRCM1AE		**Report DB ID:**	9MMRCM10				
STRONTIUM	***1.41E-01***	U	8.3E-02	9.1E-02	1.61E-01	pCi/g	67%	*0.88*	10/10/11 08:37 p		6.01	GPC28B
						7.48E-02		*(3.1)*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name: TestAmerica
Lot-Sample No.: J1I270481-15
Client Sample ID: B2FXD5

SDG: W06242
Report No. : 48755
COC No. : F11-159-074

Collection Date: ~~8/31/2011~~ 09/12/2011 9:40:00 AM
Received Date: 9/27/2011 2:15:00 PM
Matrix: SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271112	7196_CR6			**Work Order:**	MMRC51AA		**Report DB ID:**	9MMRC510				
~~HEXCHROME~~	~~***1.55E-01***~~	~~U~~		~~0.0E+00~~	~~1.55E-01~~	~~mg/kg~~	~~N/A~~	~~*(1.)*~~	~~9/29/11 11:00 a~~		~~2.5014~~	
							1.55E-01	*N/A*			g	
Batch: 1271148	9310_ALPHABETA_GPC			**Work Order:**	MMRC51AC		**Report DB ID:**	9MMRC510				
ALPHA	***3.71E+00***	U	3.0E+00	4.0E+00	4.45E+00	pCi/g	100%	*0.83*	10/11/11 07:20 p		0.0502	GPC10A
						1.70E+00	1.00E+01	*(1.8)*			g	
Batch: 1271149	9310_ALPHABETA_GPC			**Work Order:**	MMRC51AF		**Report DB ID:**	9MMRC510				
BETA	***2.30E+01***		3.9E+00	6.2E+00	4.58E+00	pCi/g	100%	*(5.)*	10/6/11 04:56 p		0.2004	GPC31C
						2.12E+00	1.50E+01	*(7.4)*			g	
Batch: 1271156	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRC51AE		**Report DB ID:**	9MMRC510				
STRONTIUM	***1.07E-01***	U	8.2E-02	8.7E-02	1.67E-01	pCi/g	66%	*0.64*	10/10/11 09:30 p		6.01	GPC27C
						7.77E-02		*(2.5)*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06242	**Collection Date:**	~~8/31/2011~~ 09/12/2011 10:10:00 AM
Lot-Sample No.:	J1I270481-14	**Report No. :**	48755	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXD7	**COC No. :**	F11-159-074	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271112	7196_CR6			**Work Order:**	MMRC41AA		**Report DB ID:**	9MMRC410				
~~HEXCHROME~~	~~***1.55E-01***~~	~~U~~		~~0.0E+00~~	~~1.55E-01~~	~~mg/kg~~	~~N/A~~	~~*(1.)*~~	~~9/29/11 11:00 a~~		~~2.5049~~	
							1.55E-01	*N/A*			g	
Batch: 1271148	9310_ALPHABETA_GPC			**Work Order:**	MMRC41AC		**Report DB ID:**	9MMRC410				
ALPHA	***7.23E+00***		4.2E+00	6.7E+00	5.70E+00	pCi/g	100%	*(1.3)*	10/11/11 05:22 p		0.0503	GPC10D
						2.32E+00	1.00E+01	*(2.2)*			g	
Batch: 1271149	9310_ALPHABETA_GPC			**Work Order:**	MMRC41AF		**Report DB ID:**	9MMRC410				
BETA	***2.39E+01***		3.9E+00	6.4E+00	4.33E+00	pCi/g	100%	*(5.5)*	10/6/11 04:56 p		0.201	GPC31B
						2.00E+00	1.50E+01	*(7.5)*			g	
Batch: 1271156	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRC41AE		**Report DB ID:**	9MMRC410				
STRONTIUM	***5.65E-02***	U	7.6E-02	7.7E-02	1.66E-01	pCi/g	63%	*0.34*	10/10/11 09:30 p		6.02	GPC27B
						7.70E-02		*(1.5)*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06242	**Collection Date:**	~~8/31/2011~~ 09/12/2011 10:40:00 AM
Lot-Sample No.:	J1I270481-13	**Report No. :**	48755	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXD8	**COC No. :**	F11-159-074	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271112	7196_CR6			**Work Order:**	MMRC31AA		**Report DB ID:**	9MMRC310				
~~HEXCHROME~~	~~***1.55E-01***~~	~~U~~		~~0.0E+00~~	~~1.55E-01~~	~~mg/kg~~	~~N/A~~	~~*(1.)*~~	~~9/29/11 11:00 a~~		~~2.5045~~	
							1.55E-01	*N/A*			g	
Batch: 1271148	9310_ALPHABETA_GPC			**Work Order:**	MMRC31AC		**Report DB ID:**	9MMRC310				
ALPHA	***5.74E+00***	U	4.0E+00	5.7E+00	6.07E+00	pCi/g	100%	*0.95*	10/11/11 05:22 p		0.0505	GPC10C
						2.52E+00	1.00E+01	*(2.)*			g	
Batch: 1271149	9310_ALPHABETA_GPC			**Work Order:**	MMRC31AF		**Report DB ID:**	9MMRC310				
BETA	***2.42E+01***		4.1E+00	6.6E+00	4.88E+00	pCi/g	100%	*(4.9)*	10/6/11 04:56 p		0.2001	GPC28D
						2.27E+00	1.50E+01	*(7.3)*			g	
Batch: 1271156	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRC31AE		**Report DB ID:**	9MMRC310				
STRONTIUM	***4.41E-02***	U	6.9E-02	7.0E-02	1.53E-01	pCi/g	67%	*0.29*	10/10/11 09:30 p		6.03	GPC27A
						7.11E-02		*(1.3)*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	SDG:	W06242	Collection Date:	~~8/31/2011~~ 09/12/2011 11:07:00 AM
Lot-Sample No.:	J1I270481-2	Report No. :	48755	Received Date:	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXD9	COC No. :	F11-159-074	Matrix:	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC | MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271112	7196_CR6			Work Order:	MMRC21AA		Report DB ID: 9MMRC210					
~~HEXCHROME~~	~~***1.55E-01***~~	~~U~~		~~0.0E+00~~	~~1.55E-01~~	~~mg/kg~~	~~N/A~~	~~*(1.)*~~	~~9/29/11 11:00 a~~		~~2.5015~~	
							1.55E-01	*N/A*			g	
Batch: 1271148	9310_ALPHABETA_GPC			Work Order:	MMRC21AC		Report DB ID: 9MMRC210					
ALPHA	***6.13E+00***		3.9E+00	5.8E+00	5.39E+00	pCi/g	100%	*(1.1)*	10/11/11 05:22 p		0.0505	GPC10B
						2.16E+00	1.00E+01	*(2.1)*			g	
Batch: 1271149	9310_ALPHABETA_GPC			Work Order:	MMRC21AF		Report DB ID: 9MMRC210					
BETA	***2.80E+01***		4.2E+00	7.4E+00	4.64E+00	pCi/g	100%	*(6.)*	10/6/11 04:56 p		0.2006	GPC28C
						2.15E+00	1.50E+01	*(7.6)*			g	
Batch: 1271156	SRTOT_SEP_PRECIP_GPC			Work Order:	MMRC21AE		Report DB ID: 9MMRC210					
STRONTIUM	***9.17E-02***	U	7.5E-02	7.9E-02	1.52E-01	pCi/g	64%	*0.6*	10/10/11 09:30 p		6.02	GPC26D
						7.05E-02		*(2.3)*			g	

No. of Results: 4 Comments:

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06242	**Collection Date:**	~~8/31/2011~~ 09/12/2011 11:49:00 AM
Lot-Sample No.:	J1I270481-16	**Report No. :**	48755	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXF0	**COC No. :**	F11-159-074	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271112	7196_CR6			**Work Order:**	MMRC61AA		**Report DB ID:**	9MMRC610				
~~HEXCHROME~~	~~***1.55E-01***~~	~~U~~		~~0.0E+00~~	~~1.55E-01~~	~~mg/kg~~	~~N/A~~	~~*(1.)*~~	~~9/29/11 11:00 a~~		~~2.503~~	
							1.55E-01	*N/A*			g	
Batch: 1271148	9310_ALPHABETA_GPC			**Work Order:**	MMRC61AC		**Report DB ID:**	9MMRC610				
ALPHA	***6.58E+00***		4.0E+00	6.2E+00	5.43E+00	pCi/g	100%	*(1.2)*	10/11/11 07:20 p		0.0503	GPC10B
						2.17E+00	1.00E+01	*(2.1)*			g	
Batch: 1271149	9310_ALPHABETA_GPC			**Work Order:**	MMRC61AF		**Report DB ID:**	9MMRC610				
BETA	***2.55E+01***		4.0E+00	6.8E+00	4.55E+00	pCi/g	100%	*(5.6)*	10/6/11 04:56 p		0.2005	GPC31D
						2.11E+00	1.50E+01	*(7.5)*			g	
Batch: 1271156	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRC61AE		**Report DB ID:**	9MMRC610				
STRONTIUM	***4.05E-02***	U	8.3E-02	8.3E-02	1.86E-01	pCi/g	56%	*0.22*	10/10/11 09:30 p		6.0	GPC28B
						8.63E-02		*0.97*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	SDG:	W06242	Collection Date:	~~8/31/2011~~ 09/07/2011 9:50:00 AM
Lot-Sample No.:	J1I270481-2	Report No. :	48755	Received Date:	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXJ4	COC No. :	F11-159-074	Matrix:	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271112	7196_CR6			Work Order:	MMRCG1AA		Report DB ID: 9MMRCG10					
~~HEXCHROME~~	~~***1.55E-01***~~	~~U~~		~~0.0E+00~~	~~1.55E-01~~	~~mg/kg~~	~~N/A~~	~~*(1.)*~~	~~9/29/11 11:00 a~~		~~2.5025~~	
							1.55E-01	*N/A*			g	
Batch: 1271148	9310_ALPHABETA_GPC			Work Order:	MMRCG1AC		Report DB ID: 9MMRCG10					
ALPHA	***3.71E+00***	U	3.4E+00	4.3E+00	5.68E+00	pCi/g	100%	*0.65*	10/11/11 10:55 a		0.0505	GPC10D
						2.31E+00	1.00E+01	*(1.7)*			g	
Batch: 1271149	9310_ALPHABETA_GPC			Work Order:	MMRCG1AF		Report DB ID: 9MMRCG10					
BETA	***1.80E+01***		3.6E+00	5.3E+00	4.70E+00	pCi/g	100%	*(3.8)*	10/6/11 03:54 p		0.2004	GPC32B
						2.18E+00	1.50E+01	*(6.8)*			g	
Batch: 1271156	SRTOT_SEP_PRECIP_GPC			Work Order:	MMRCG1AE		Report DB ID: 9MMRCG10					
STRONTIUM	***6.36E-02***	U	8.6E-02	8.8E-02	1.88E-01	pCi/g	55%	*0.34*	10/10/11 08:37 p		6.02	GPC26B
						8.74E-02		*(1.4)*			g	

No. of Results: 4 Comments:

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

FORM I

SAMPLE RESULTS

Date: 12-Oct-11

Lab Name:	TestAmerica	**SDG:**	W06242	**Collection Date:**	8/31/2011 7:30:00 AM
Lot-Sample No.:	J1I270481-1	**Report No. :**	48755	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXJ5	**COC No. :**	F11-159-074	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC | MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271112	7196_CR6			**Work Order:**	MMRCE1AA		**Report DB ID:**	9MMRCE10				
~~HEXCHROME~~	~~***1.55E-01***~~	~~U~~		~~0.0E+00~~	~~1.55E-01~~	~~mg/kg~~	~~N/A~~	~~*(1.)*~~	~~9/29/11 11:00 a~~		~~2.5065~~	
							1.55E-01	*N/A*			g	
Batch: 1271148	9310_ALPHABETA_GPC			**Work Order:**	MMRCE1AC		**Report DB ID:**	9MMRCE10				
ALPHA	***2.95E+00***	U	3.1E+00	3.8E+00	5.35E+00	pCi/g	100%	*0.55*	10/11/11 10:55 a		0.0508	GPC10B
						2.14E+00	1.00E+01	*(1.6)*			g	
Batch: 1271149	9310_ALPHABETA_GPC			**Work Order:**	MMRCE1AF		**Report DB ID:**	9MMRCE10				
BETA	***1.44E+01***		3.4E+00	4.6E+00	4.82E+00	pCi/g	100%	*(3.)*	10/6/11 03:54 p		0.2002	GPC32A
						2.24E+00	1.50E+01	*(6.3)*			g	
Batch: 1271156	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMRCE1AE		**Report DB ID:**	9MMRCE10				
STRONTIUM	***7.95E-02***	U	6.9E-02	7.2E-02	1.44E-01	pCi/g	86%	*0.55*	10/10/11 08:37 p		6.01	GPC26A
						6.74E-02		*(2.2)*			g	

No. of Results: 4 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

EH
11/04/11

Appendix 4

Laboratory Narrative and Chain-of-Custody Documentation

Attachment 2
Narrative
WSCF113047

Introduction

Samples were received at the WSCF laboratory as referenced on the WSCF SAF Number Cross Reference table included in the final report. 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

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):

- Matrix Spike and Insoluble Matrix Spike recoveries are outside established laboratory limits. Affected sample results in this batch were "N" flagged.
- All other applicable QC controls are within the established limits.

Attachment 2
Narrative
WSCF113047

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):

- Manganese – Matrix Spike and/or Matrix Spike Duplicate recoveries are outside established laboratory limits. Affected sample results in this batch were "N" flagged.
- Mercury and Molybdenum - The LCS recovery was outside laboratory acceptance limits. Sample Issue Resolution Form SDR11-400 regarding the LCS failure is attached to this report.
- All other applicable QC controls are within the established limits.

Radiochemistry Comments

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

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:
  - Europium-152 – 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 applicable QC controls are within the established limits.
- Gross Alpha / Gross Beta:
  - Gross Beta – 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 applicable QC controls are within the established limits.
- Strontium-89/90:
  - The Blank is less than two times the RDL. "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 applicable QC controls are within the established limits.

Narrative

Attachment 2
Narrative
WSCF113047

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
WSCF113047

SAMPLE ISSUE RESOLUTION

SIR NUM	SDR11-400
REV NUM	0
DATE INITIATED	9/6/2011

SAMPLE EVENT INFORMATION

SAF NUM(S)	F11-057, F11-159
OPERABLE UNIT(S)	100-KR-2, 100-NR-2
PROJECT(S)	KW Floodplain, 100 Area RI/FS
SAMPLE EVENT TITLE(S)	100-K-63 KW Floodplain, 100 Area RI/FS
LABORATORY	Waste Sampling & Characterization

SAMPLING INFORMATION

NUMBER OF SAMPLES	9
SAMPLE NUMBERS	B2C7W7, B2C7W8, B2FXB4, B2FXC5, B2FXD6, B2FXF7, B2FXH8, B2FXJ2, B2FXJ3
SAMPLE MATRIX	SOIL
COLLECTION DATE	8/29/2011 - 9/1/2011
SDG NUM	WSCF113059, WSCF113078, WSCF113047

ISSUE BACKGROUND

CLASS	Laboratory Issue
TYPE	Quality Control Failure
DESCRIPTION	The 200.8 Mercury LCS was high at 130.7% with control limits of 69-124%. The MS (114%) and MSD (117%) were within the limits of 70-130%. The blank was non-detect. And The 200.8 Molybdenum LCS was high at 139.9% with control limits of 80-125%. The MS (107%) and MSD (112%) were within the limits of 70-130%. The blank was non-detect.

DISPOSITION

DESCRIPTION	Suggested disposition: Report the data and note LCS failures in the case narrative.
JUSTIFICATION	

Submitted by: Marisol Avila Date: 9/6/2011
Accepted by: Deb Alexander Date: 9/8/2011
Accepted by: Scott Luke Date: 9/8/2011

A-6003-640 (03/30) PAGE 1 of 1

4

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

F11-159-071 — PAGE 1 OF 2

COLLECTOR	F.M. Hall
COMPANY CONTACT	LUKE, SN
TELEPHONE NO.	372-1667
PROJECT COORDINATOR	LUKE, SN
PRICE CODE	C01
DATA TURNAROUND	12 Days / 12 Days
AIR QUALITY	☐
SAMPLING LOCATION	100-K-63 Grubbed Area Sample #53
PROJECT DESIGNATION	100-K-63 KW Floodplain Verification Sampling (Waste Area A1)- Soil
SAF NO.	F11-159
ICE CHEST NO.	GWS-007
FIELD LOGBOOK NO.	HNF-N-507-23
ACTUAL SAMPLE DEPTH	0-1'
COA	302676ES10
METHOD OF SHIPMENT	GOVERNMENT VEHICLE
ORIGINAL	
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)

113047

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool<4C	None	None
HOLDING TIME	6 Months	6 Months	6 Months
TYPE OF CONTAINER	G/P	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXJ2	SOIL	AUG 29 2011	1140	✓	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
F.M. Hall	AUG 29 2011 1450	[illegible]	AUG 29 2011 1455

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

PRINTED ON 7/25/2011 — A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-071	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #53	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A1)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: 6WS-007	FIELD LOGBOOK NO.: HNF-N-807-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

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Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-072

PAGE 1 OF 2

COLLECTOR: [illegible]

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: 12 Days / 12 Days

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #54

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159-

AIR QUALITY: ☐

ICE CHEST NO.: GW3-007

FIELD LOGBOOK NO.: HNF-N-807-23-

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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=Vegetaton, W=Water, WI=Wipe, X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS: Contains Radioactive Material at concentrations that may or may not be regulated for transportetion 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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXJ3	2 SOIL	AUG 29 2011	0900	✓	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall [signature]	AUG 29 2011 1450	[signature]	AUG 29 2011 1455
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
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

PRINTED ON 7/25/2011

A 6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-072	PAGE 2 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #54	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	ORIGINAL
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	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 402579ES20.□□** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

PRINTED ON 7/25/2011 A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-056 | PAGE 1 OF 2

COLLECTOR: FM Hall

SAMPLING LOCATION: CHPRC

100-K-63 Grubbed Area Sample #4

ICE CHEST NO.: GWS-007

SHIPPED TO: Waste Sampling & Characterization

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

FIELD LOGBOOK NO.: HNF-N-507-23.

ACTUAL SAMPLE DEPTH: 0-1'

OFFSITE PROPERTY NO.: N/A

PROJECT COORDINATOR: LUKE, SN

SAF NO.: F11-159

COA: 302676ES10

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

PRICE CODE: C01

AIR QUALITY:

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

DATA TURNAROUND: 12 Days / 12 Days

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXF7 3	SOIL	AUG 29 2011	1140	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: AUG 29 2011 1455	RECEIVED BY/STORED IN: Bisoral Fly	DATE/TIME: AUG 29 2011 1455
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F11-159-056	PAGE 2 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01
				DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #4	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A)- Soil		SAF NO.: F11-159	AIR QUALITY: L
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE
				ORIGINAL
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 402579ES20.□□** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

PRINTED ON 7/25/2011 A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-067 PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #5

ICE CHEST NO.: GWS-007

SHIPPED TO: Waste Sampling & Characterization

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A1)- Soil

FIELD LOGBOOK NO.: HNF-N-507-23.

ACTUAL SAMPLE DEPTH: 0-1'

OFFSITE PROPERTY NO.: N/A

PROJECT COORDINATOR: LUKE, SN

SAF NO.: F11-159

COA: 302676ES10

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

PRICE CODE: C01

AIR QUALITY:

DATA TURNAROUND: 12 Days / 12 Days

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXH8 4	SOIL	AUG 29 2011	1215	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 29 2011 / 1455	[illegible]	AUG 29 2011 / 1455

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-067	PAGE 2 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #5	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23.	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-023	PAGE 1 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #1	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A1)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-27	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXB4	5	SOIL	AUG 29 2011	1030	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: AUG 29 2011 / 1455	RECEIVED BY/STORED IN: [signature]	DATE/TIME: AUG 29 2011 / 1455
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-023	PAGE 2 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #1	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-807-22	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.□□** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

PRINTED ON 7/25/2011 A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F11-159-034 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	AIR QUALITY: ☐	DATA TURNAROUND: 12 Days / 12 Days	
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #2	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A1)- Soil	SAF NO.: F11-159	
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL		
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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXC5	SOIL	AUG 29 2011	1055	✓	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 29 2011 1455	[illegible]	AUG 29 2011 1455

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

PRINTED ON 7/25/2011 — A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-034	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #2	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A1)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: 6WS-007	FIELD LOGBOOK NO.: HNF-N-607-23	ACTUAL SAMPLE DEPTH: 0-1	COA: 3C2676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.□□** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

PRINTED ON 7/25/2011 | 4-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-045

PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: 12 Days / 12 Days

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #3

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

AIR QUALITY: ☐

ICE CHEST NO.: GWS-007

FIELD LOGBOOK NO.: HNF-N-507-23.

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXD6 7	SOIL	AUG 29 2011	1115	✓	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 29 2011 1145		AUG 29 2011 1145

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-045	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #3	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A)- Soil		SAF NO.: F11 150	AIR QUALITY:	
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.□□** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

PRINTED ON 7/25/2011 A-6003-618 (REV 2)

Attachment 2
Narrative
WSCF113057

Introduction

Samples were received at the WSCF laboratory as referenced on the WSCF SAF Number Cross Reference table included in the final report. 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. Also attached is SDR11-411 regarding Mercury LCS failure.

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

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

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

Analytical Methodology for Requested Analyses

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

Inorganic Comments

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

- Batch QC 189366

- Matrix Spike and Insoluble Matrix Spike recoveries are outside established laboratory limits. Affected sample results in this batch were "N" flagged.
- All other applicable QC controls are within the established limits.

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

- Sample Issue Resolution Form SDR11-411 regarding Mercury LCS failure is attached to this report. The resolution for the Mercury LCS failure was to reprep and reanalyze the samples. However, due to WSCFs Stop Work due to Hood Restrictions, the samples were returned to the client for reanalysis at another laboratory. The Mercury results provided in this report are those that contained the LCS failed recovery.
- Mercury – The LCS recovery is outside established laboratory limits. Affected sample and QC results in this batch were flagged.
- Manganese – MS / MSD Relative Percent Difference (RPD) is outside established laboratory limits. The quality control report was flagged for RPD failure.
- Manganese – Matrix Spike recovery was outside established laboratory limits. Affected sample results in this batch were "N" flagged.
- All other applicable QC controls are within the established limits.

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 189022
    - Eruopium-152 – 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 applicable QC controls are within the established limits.
- Gross Alpha / Gross Beta:
  - Batch QC 189037

- Gross Alpha – The Blank is less than two times the RDL. "B" Flag not required.
- Gross Beta – 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 applicable QC controls are within the established limits.

- Strontium-89/90:
  - Batch QC 189039
    - The Blank is less than two times the RDL. "B" Flag not required.
    - All other applicable QC controls are within the established limits.

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

Narrative

Attachment 2
Narrative
WSCF113057

SAMPLE ISSUE RESOLUTION

SIR NUM	SDR11-411
REV NUM	0
DATE INITIATED	9/15/2011

SAMPLE EVENT INFORMATION

SAF NUM(S)	F11-159
OPERABLE UNIT(S)	100-KR-2
PROJECT(S)	KW Floodplain
SAMPLE EVENT TITLE(S)	100-K-63 KW Floodplain
LABORATORY	Waste Sampling & Characterization

SAMPLING INFORMATION

NUMBER OF SAMPLES	14
SAMPLE NUMBERS	B2FXB5, B2FXB6, B2FXB7, B2FXB8, B2FXB9, B2FXC0, B2FXC1, B2FXC2, B2FXC3, B2FXC4, B2FXJ8, B2FXJ9, B2FXK0, B2FXK1
SAMPLE MATRIX	SOIL
COLLECTION DATE	8/30/2011 - 8/30/2011
SDG NUM	WSCF113057

ISSUE BACKGROUND

CLASS	Laboratory Issue
TYPE	Quality Control Failure
DESCRIPTION	The 200.8 Mercury LCS was high at 173.3% with control limits of 85-115%. The MS (128%) and MSD (108.5%) were within the limits of 70-130%. The blank was non-detect. All sample results for Mercury were non-detect.

DISPOSITION

DESCRIPTION	Proposed Disposition: Report the mercury data and note the LCS QC failure in the case narrative.
JUSTIFICATION	Requested Disposition: Re-run the affected samples within the 28-day hold time and report results.

Submitted by: Marisol Avila Date: 9/15/2011
Accepted by: Jennifer Hammons Date: 9/15/2011

A-6003-640 (03/30) PAGE 1 of 1

4

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

F11-159-~~078~~ 077 — PAGE 1 OF 2

COLLECTOR: F. Hall	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days	AIR QUALITY: ☐	
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #7	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil	SAF NO.: F11-159	
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23-	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL		
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)

8-31-11 Kler

102 113057

SPECIAL HANDLING AND/OR STORAGE

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

DB 8/31/11 Shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
~~B2FX39~~ B2FXJ8	SOIL	1	8/30/11	0960	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
F. Hall	AUG 30 2011 1500	HNP Sonkinnd	AUG 30 2011 1500

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-~~078~~ 077	PAGE 2 OF 2
COLLECTOR: F. Hall	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #7	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: [ ]	
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-33	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.□□** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS (Mercury); Chromium Hex - 7196;~~ KB 9/26/11
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

PRINTED ON 7/25/2011 A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-078

PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days		
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #7	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
AIR QUALITY: ☐			
ICE CHEST NO.: GW3-007	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL		
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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 8/24/11 SHIPPED

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B2FXJ9 2	SOIL	8/30/11	0916

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 30 2011 1500	M. Nelson M. Nelson	AUG 30 2011 1500

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-078	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #7	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A1)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS - 007	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0 - 1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - /196;~~ KB 9/26/11
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

PRINTED ON 7/25/2011 A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-079 PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #8

ICE CHEST NO.: 6WS-007

SHIPPED TO: Waste Sampling & Characterization

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A3)- Soil

FIELD LOGBOOK NO.: HNF-N-607-23.

ACTUAL SAMPLE DEPTH: 0-1'

OFFSITE PROPERTY NO.: N/A

PROJECT COORDINATOR: LUKE, SN

SAF NO.: F11-159

COA: 302676ES10

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

PRICE CODE: C01

AIR QUALITY: ☐

DATA TURNAROUND: 12 Days / 12 Days

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXK0	SOIL	8/30/11	0930	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 30 2011 500	M. Nelson Hines	AUG 30 2011 500
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-079	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372 1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #8	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A3)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

PRINTED ON 7/26/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-080 | PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC

COMPANY CONTACT: LUKE, SN | TELEPHONE NO.: 372-1667 | PROJECT COORDINATOR: LUKE, SN | PRICE CODE: C01 | DATA TURNAROUND: 12 Days / 12 Days

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #9

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil | SAF NO.: F11-159 | AIR QUALITY: ☐

ICE CHEST NO.: 6WS-007

FIELD LOGBOOK NO.: HNF-N-507-23. | ACTUAL SAMPLE DEPTH: 0-1' | COA: 302676ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | **ORIGINAL**

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXK1 4	SOIL	8/30/11	0942	✓	✓	✓

KB 9/26/11 Shipped

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 30 2011 1500	M.Ne/SNLMNES	AUG 30 2011 1500

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — **F11-159-080** — **PAGE 2 OF 2**

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #9	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		**SAF NO.** F11-159
ICE CHEST NO. GWS-007	**FIELD LOGBOOK NO.** HNF-N-507-23	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 302676ES10
SHIPPED TO Waste Sampling & Characterization	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

PRICE CODE C01

AIR QUALITY ☐

DATA TURNAROUND 12 Days / 12 Days

METHOD OF SHIPMENT GOVERNMENT VEHICLE

ORIGINAL

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ KB 9/26/11
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

PRINTED ON 7/25/2011 — A-6003-618 (REV 2)

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

F11-159-024 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: 12 Days / 12 Days

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #10

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

AIR QUALITY:

ICE CHEST NO.: GWS-007

FIELD LOGBOOK NO.: HNF-N-507-23.

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

VB 9/12/11 Shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXB5 5	SOIL	8/30/11	1009	✓	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 30 2011 1500	M. Nelson	AUG 30 2011 1500

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

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

F11-159-024 — PAGE 2 OF 2

COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #10	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01 — AIR QUALITY: ☐ — DATA TURNAROUND: 12 Days / 12 Days — METHOD OF SHIPMENT: GOVERNMENT VEHICLE — **ORIGINAL**

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}, 200.8 HG ICPMS {Mercury}; Chromium Hex 7196;~~ KB 9/26/11
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

PRINTED ON 7/25/2011 — N-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-025

PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: 12 Days / 12 Days

AIR QUALITY: ☐

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #11

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A1)- Soil

SAF NO.: F11-159

ICE CHEST NO.: GWS-007

FIELD LOGBOOK NO.: HNF-N-507-23

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 08/30/11 Shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXB6 6	SOIL	8/30/11	0950	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 30 2011 1500	M. Nelson	AUG 30 2011 1500

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

PRINTED ON 7/25/2011

A-6003-619 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-025	PAGE 2 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #11	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-607-23.	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG_ICPMS {Mercury}; Chromium Hex - 7196;~~ KB 9/26/11

(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};

(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F11-159-026 — PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days	AIR QUALITY: ☐	SAF NO.: F11-159
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #12	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-807-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL		
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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 9/29/11

Shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXB7	SOIL	8/30/11	1020	✓	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall, CHPRC	AUG 30 2011 1500	M. Nelson M. Neal	AUG 30 2011 1500

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

PRINTED ON 7/25/2011 — A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-026

PAGE 2 OF 2

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #12	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		**SAF NO.** F11 159
ICE CHEST NO. GWS-007	**FIELD LOGBOOK NO.** HNF-N-507-23	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 302676ES10
SHIPPED TO Waste Sampling & Characterization	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

PRICE CODE C01

AIR QUALITY ☐

DATA TURNAROUND 12 Days / 12 Days

METHOD OF SHIPMENT GOVERNMENT VEHICLE

ORIGINAL

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}, 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ KB 9/26/11

(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};

(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

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A-6003-618 (REV 7)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-027	PAGE 1 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #13	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

VB 8/30/11 Shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXB8	SOIL	8/30/11	1031	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: AUG 30 2011 1500	RECEIVED BY/STORED IN: M Nelson M Nelson	DATE/TIME: AUG 30 2011 1500	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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-027	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT LUKE, SN	TELEPHONE NO. 372-1667	PROJECT COORDINATOR LUKE, SN	PRICE CODE C01	DATA TURNAROUND 12 Days / 12 Days
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #13	PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO. F11-159	AIR QUALITY ☐	
ICE CHEST NO. GWS-007	FIELD LOGBOOK NO. HNF-N-507-23.	ACTUAL SAMPLE DEPTH 0-1'	COA 302676ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8 HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ KB 9/26/11
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

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

F11-159-028 | PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days		
AIR QUALITY: ☐			
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #14	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GW3-004	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL		
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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 8/30/11 Shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXB9 9	SOIL	8/30/11	1044	✓	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 30 2011 1500	M. Nelson	AUG 30 2011 1500

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

PRINTED ON 7/25/2011 — A-6003-010 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-028

PAGE 2 OF 2

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN
PRICE CODE C01	**DATA TURNAROUND** 12 Days / 12 Days		
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #14	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil	**SAF NO.** F11-159	**AIR QUALITY** ☐
ICE CHEST NO. GW3-004	**FIELD LOGBOOK NO.** HNF-N-507-23	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 302676ES10
METHOD OF SHIPMENT GOVERNMENT VEHICLE	**ORIGINAL**		
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 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8-HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ KB 9/26/11
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

PRINTED ON 7/25/2011

A 6003-618 (REV 2)

Tuesday, September 27, 2011 9:58:37 AM
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CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F11-159-029 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days		
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #15	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A)- Soil	SAF NO.: F11-159	AIR QUALITY: ☐
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL		
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, SF=Sediment, T=Tissue, V=Vegetation, W=Water, WI=Wipe, X=Other

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

SPECIAL HANDLING AND/OR STORAGE

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

KB 9/26/11 Shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXC0 / 0	SOIL	8/30/11	1056	✓	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 30 2011 1500	M. Nel/Sanuob	AUG 30 2011 1500

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

PRINTED ON 7/25/2011 — A-6003-518 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-029	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100 K 63 Grubbed Area Sample #15	PROJECT DESIGNATION: 100 K 63 KW Floodplain Verification Sampling (Waste Area A) - Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GW3 -007	FIELD LOGBOOK NO.: HNF-N-807-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.□□** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ VB 9/26/11
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

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A-6003-618 (REV 2)

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CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-1S9-030

PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: 12 Days / 12 Days

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #16

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

AIR QUALITY: ☐

ICE CHEST NO.: GWS-007

FIELD LOGBOOK NO.: HNF-N-507-23.

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

Shipped 8/30/11

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B2FXC1	SOIL	8/30/11	1109

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 30 2011 1500	M. Nelson M. Nelson	AUG 30 2011 1500

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

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

F11-159-030 — PAGE 2 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372 1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #16	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01

AIR QUALITY: ☐

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

DATA TURNAROUND: 12 Days / 12 Days

ORIGINAL

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ KB 9/26/11
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-031

PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: 12 Days / 12 Days

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #17

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A)- Soil

SAF NO.: F11-159

AIR QUALITY: ☐

ICE CHEST NO.: GWS-007

FIELD LOGBOOK NO.: HNF-N-507-23.

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 01/26/11 Shipped

SAMPLE NO.		MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXC2	12	SOIL	8/30/11	1120	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 30 2011 1500	M. Nelson Miner	AUG 30 2011 1500

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-031	PAGE 2 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #17	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ VB 9/26/11
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

PRINTED ON 7/25/2011 A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-032 PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: 12 Days / 12 Days

AIR QUALITY: ☐

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #18

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

ICE CHEST NO.: GWS-007

FIELD LOGBOOK NO.: HNF-N-507-

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

DB 9/28/11 Initial

SAMPLE NO.		MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXC3	13	SOIL	8/30/11	1135	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 30 2011 1500	M. Nelson M. Nelson	AUG 30 2011 1500

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-032	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #18	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.□□** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ KB 9/26/11
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F11-159-033 — PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days	AIR QUALITY: L	SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #19
PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil	SAF NO.: F11-159	ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23
ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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	[redacted]
B2FXC4 14	SOIL	8/30/11	1200	✓ ✓ ✓

Shipped 9/12/11

CHAIN OF POSSESSION	DATE/TIME	SIGN/ PRINT NAMES	DATE/TIME
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	AUG 30 2011 1500	RECEIVED BY/STORED IN: M. NCISAM	AUG 30 2011 1500
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
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

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Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-033	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K 63 Grubbed Area Sample #19	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A1)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	ORIGINAL
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23.	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	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 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8 HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ KB 9/26/11

(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};

(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

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A-6003-610 (REV 2)

Attachment 2
Narrative
WSCF113116

Introduction

Samples were received at the WSCF laboratory as referenced on the WSCF SAF Number Cross Reference table included in the final report. 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

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):

- All applicable QC controls are within the established limits.

Attachment 2
Narrative
WSCF113116

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):

- Gamma Energy Analysis:
    - All applicable QC controls are within the established limits.

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

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-039

PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: 12 Days / 12 Days

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #24

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

AIR QUALITY: ☐

ICE CHEST NO.: GWS-023

FIELD LOGBOOK NO.: HNF-N-507-23.

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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)

113116

SPECIAL HANDLING AND/OR STORAGE

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

KB 01/20/11 shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXD0	SOIL	8/31/11	1056	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall	AUG 31 2011/1300	MOI109SSU #1	AUG 31 2011/1300
MOI109 SSU #1	9-7-11 1230	FM Hall	9-7-11 1230
FM Hall	9-7-11 1415	M. Nelson M. Nelson	9-7-11 1415

SPECIAL INSTRUCTIONS: SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F11-159-039 — PAGE 2 OF 2

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN	**PRICE CODE** C01 — **DATA TURNAROUND** 12 Days / 12 Days
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #24	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		**SAF NO.** F11-159	**AIR QUALITY** ☐
ICE CHEST NO. GWS - 023	**FIELD LOGBOOK NO.** HNF-N-507-23	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 302676ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE — **ORIGINAL**
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 402579ES20.□□** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG_ICPMS {Mercury}; Chromium Hex - 7196;~~ KB 9/26/11

(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium 89,90 -- Total Sr;~~ KB 9/26/11

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Tuesday, September 27, 2011 10:12:33 AM
Page 4 of 24

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-040	PAGE 1 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #25	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.	FIELD LOGBOOK NO.	ACTUAL SAMPLE DEPTH: SURFACE	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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
B2FXD1	SOIL	SEP 07 2011	0830

Shipped 07/20/11 KB

Shipped 07/20/11 KB

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: FM Hall, CHPRC	DATE/TIME: SEP 07 2011 1415	RECEIVED BY/STORED IN: M. Nelson	DATE/TIME: SEP 07 2011 1415	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-040	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #25	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.	FIELD LOGBOOK NO.	ACTUAL SAMPLE DEPTH: SURFACE	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ KB 9/26/11

(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 - Total Sr;~~ KB 9/26/11

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F11-159-041 — PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days		
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #26	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A1)- Soil		SAF NO.: F11-159
AIR QUALITY: ☐			
ICE CHEST NO.	FIELD LOGBOOK NO.	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL		
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	GP
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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
B2FXD2 3	SOIL	SEP 07 2011	0940

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 07 2011 1415	M. Nelson	SEP 07 2011 1415

SPECIAL INSTRUCTIONS: SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

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

PRINTED ON 7/25/2011 — A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

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

F11-159-041 — PAGE 2 OF 2

COLLECTOR: FM Hall	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: CHPRC 100-K-63 Grubbed Area Sample #26	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.	FIELD LOGBOOK NO.	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01

AIR QUALITY: ☐

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

DATA TURNAROUND: 12 Days / 12 Days

ORIGINAL

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ KB 9/26/11

(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};

~~(3) Gross Alpha {Gross alpha}, Gross beta {Gross beta}, Strontium 89,90 - Total Sr;~~ KB 9/26/11

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

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

F11-159-042 — PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days		
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #27	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A)- Soil		SAF NO.: F11-159
AIR QUALITY: ☐			
ICE CHEST NO.	FIELD LOGBOOK NO.	ACTUAL SAMPLE DEPTH: SURFACE	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL		
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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 01/26/11 shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXD3 4	SOIL	SEP 07 2011	1014	✓	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 07 2011 1445	M. Nelson M.Nels	SEP 07 2011 1415

SPECIAL INSTRUCTIONS: SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

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

PRINTED ON 7/25/2011 — A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-042	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #27	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.	FIELD LOGBOOK NO.	ACTUAL SAMPLE DEPTH: SURFACE	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ KB 9/26/11
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium 89,90 - Total Sr;~~ KB 9/26/11

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A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F11-159-043	PAGE 1 OF 2
COLLECTOR: FM Hall	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01
SAMPLING LOCATION: CHPRC 100-K-63 Grubbed Area Sample #28	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A1)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐
ICE CHEST NO.	FIELD LOGBOOK NO.	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	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: 12 Days / 12 Days

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

UB 01/20/11 Shipped

UB 01/20/11 Shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B2FXD4	SOIL	SEP 07 2011	1624

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 07 2011 1415	RECEIVED BY/STORED IN: M. Nelson	DATE/TIME: SEP 07 2011 1415	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-043	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT LUKE, SN	TELEPHONE NO. 372-1667	PROJECT COORDINATOR LUKE, SN	PRICE CODE C01	DATA TURNAROUND 12 Days / 12 Days
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #28	PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area A)- Soil		SAF NO. F11-159	AIR QUALITY ☐	
ICE CHEST NO.	FIELD LOGBOOK NO.	ACTUAL SAMPLE DEPTH 0-1'	COA 302676ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8-HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ VB 9/26/11

(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};

~~(3) Gross Alpha {Gross alpha}, Gross Beta {Gross beta}, Strontium-89,90 - Total Sr;~~ VB 9/26/11

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A-5003-518 (REV 2)

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F11-159-035 — PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days	SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #20	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A1)- Soil
SAF NO.: F11-159	AIR QUALITY: ☐	ICE CHEST NO.: GWS-023	FIELD LOGBOOK NO.: HNF-N-507-23
ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

VB 9/20/11 Shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B2FXC6	SOIL	8/31/11	0930

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 31 2011 / 1300	M01109SSU#1	AUG 31 2011 / 1300
M01109 SSU #1	9-7-11 / 1230	FM HALL	9-7-11 / 1230
FM HALL	9-7-11 / 1415	M. Nelson M.Nelson	9-7-11 / 1415

SPECIAL INSTRUCTIONS: SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

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

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CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-035	PAGE 2 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #20	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	12 Days / 12 Days
ICE CHEST NO.: GWS-023	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ KB 9/26/11

(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium 89,90 - Total Sr;~~ KB 9/26/11

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A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F11-159-036 — PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days	AIR QUALITY: ☐	SAF NO.: F11-159
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #21	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A1)- Soil		
ICE CHEST NO.: GWS-023	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL		
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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 9/26/11 Shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXC7	SOIL	8/31/11	0950	✓	✓	✓

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall, CHPRC	AUG 31 2011/1300	M01109SSU#1	AUG 31 2011/1300
M01109 SSU #1	9-7-11 2230	FM Hall	9-7-11 2230
FM Hall	9-7-11 1415	M. Nelson	9-7-11 1415

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

PRINTED ON 7/25/2011 — A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F11-159-036	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01 / DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #21	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐
ICE CHEST NO.: GWS-023	FIELD LOGBOOK NO.: HNF-~~N-507~~-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE / ORIGINAL
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 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}, 260.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ KB 9/26/11

(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;~~ KB 9/26/11

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Tuesday, September 27, 2011 10:12:33 AM
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CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F11-159-037 — PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	AIR QUALITY: ☐	DATA TURNAROUND: 12 Days / 12 Days	
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #22	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A)- Soil	SAF NO.: F11-159	
ICE CHEST NO.: GWS-023	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 30267GES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL		
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 KB	P	G/P KB
NO. OF CONTAINER(S)	1 8/26/11	1	1 8/26/11
VOLUME	250mL Shipped	500mL	250mL Shipped
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			
B2FXC8	SOIL	8/31/11	1010	✓	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall	AUG 31 2011 / 1300	M01109SSU #1	AUG 31 2011 / 1300
M01109 SSU #1	9-7-11 / 230	FM Hall	9-7-11 / 230
FM Hall	9-7-11 / HIS	M. Nelson	9-7-11 / HIS

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

PRINTED ON 7/25/2011 — A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-037 PAGE 2 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #22	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A1)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-023	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01

AIR QUALITY: ☐

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

DATA TURNAROUND: 12 Days / 12 Days

ORIGINAL

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8 HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ KB 9/26/11

(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 - Total Sr~~; KB 9/26/11

PRINTED ON 7/25/2011

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CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F11-159-038 — PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days	AIR QUALITY: ☐	SAF NO.: F11-159
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #23	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		
ICE CHEST NO.: GWS-023	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL		
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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250ml	500mL	250ml
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 9/12/11 Shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	[redacted]		
B2FXC9	SOIL	8/31/11	1030	✓	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall, CHPRC	AUG 31 2011 / 1300	M01109550 #1	AUG 31 2011 / 1300
M01109 554 #1	9-7-11 1230	FM HALL	9-7-11 1230
FM HALL	9-7-11 1415	M. Nelson M. Nelson	1415 7-7-11

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

PRINTED ON 7/25/2011 — A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-038 | PAGE 2 OF 2

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #23	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area A1)- Soil		**SAF NO.** F11-159
ICE CHEST NO. GWS-023	**FIELD LOGBOOK NO.** HNF-N-507-23	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 302676ES10
SHIPPED TO Waste Sampling & Characterization	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

PRICE CODE C01 | **AIR QUALITY** ☐ | **METHOD OF SHIPMENT** GOVERNMENT VEHICLE | **DATA TURNAROUND** 12 Days / 12 Days

ORIGINAL

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;~~ KB 9/26/11

(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium 89,90 - Total Sr;~~ KB 9/26/11

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CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-073 PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: 12 Days / 12 Days

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #55

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

AIR QUALITY: ☐

ICE CHEST NO.:

FIELD LOGBOOK NO.:

ACTUAL SAMPLE DEPTH: SURFACE

COA: 302676ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 9/26/11 Shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXJ4 10	SOIL	SEP 07 2011	0940	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 07 2011 1415	M. Nelson	SEP 07 2011 1415

SPECIAL INSTRUCTIONS: SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION: RECEIVED BY | TITLE | DATE/TIME

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

PRINTED ON 7/25/2011

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Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-073	PAGE 2 OF 2
COLLECTOR: FM Hall CH2MHC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100 K 63 Grubbed Area Sample #55	PROJECT DESIGNATION: 100 K 63 KW Floodplain Verification Sampling (Waste Area AJ) Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.	FIELD LOGBOOK NO.	ACTUAL SAMPLE DEPTH: SURFACE	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.□□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKT 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS (Mercury); Chromium Hex - 7196;~~ KB 9/26/11
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 - Total Sr;~~ KB 9/26/11

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

F11-159-074 — PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #56	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: 6WS-023	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01 — AIR QUALITY: ☐ — DATA TURNAROUND: 12 Days / 12 Days — METHOD OF SHIPMENT: GOVERNMENT VEHICLE — **ORIGINAL**

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250ml	500ml	250ml
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 9/20/11 Shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXJ5 //	SOIL	AUG 31 2011	0730	✓	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall	AUG 31 2011 / 1300	M01109SSU#1	AUG 31 2011 / 1300
M01109#1 SSU	9-7-11 / 1230	FM Hall	9-7-11 / 1230
FM Hall	9-7-11 / 1415	M. Nelson	9-7-11 / 1415

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

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

PRINTED ON 7/25/2011 — A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F11-159-074	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01 / DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #56	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY:
ICE CHEST NO.: GWS-023	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A	ORIGINAL

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 4025/9ES20.□□** 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, Berylliu~~m, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}, ~~200.8_HG - ICPMS (Mercury); Chromium Hex - 7196;~~ KB 9/26/11
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
~~(3) Gross Alpha {Gross alpha}, Gross Beta {Gross beta}; Strontium 89,90 - Total Sr;~~ 9/26/11

PRINTED ON 7/25/2011 A-6003-518 (REV 2)

Tuesday, September 27, 2011 10:12:33 AM
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Attachment 2
Narrative
WSCF113156

Introduction

Samples were received at the WSCF laboratory as referenced on the WSCF SAF Number Cross Reference table included in the final report. 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.

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):

- Gamma Energy Analysis:
    - All applicable QC controls are within the established limits.

Attachment 2
Narrative
WSCF113156

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

F11-159-049

PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	AIR QUALITY: ☐	DATA TURNAROUND: 12 Days / 12 Days	
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #33	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil	SAF NO.: F11-159	
ICE CHEST NO.: GWS-001	FIELD LOGBOOK NO.: HNF-N-507-33	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL		
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)

113156

SPECIAL HANDLING AND/OR STORAGE

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

VB 9/26/11 Shipped

VB 9/26/11 Shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	[redacted]		
B2FXF0 1	SOIL	SEP 12 2011	1149	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 12 2011 1450	TA Pinazian	SEP 12 2011 1450

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-049	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #33	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A3)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: 6WS-001	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

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Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F11-159-044 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	AIR QUALITY: ☐	DATA TURNAROUND: 12 Days / 12 Days	
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #29	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ) - Soil	SAF NO.: F11-159	
ICE CHEST NO.: GWS-001	FIELD LOGBOOK NO.: HNF-N-607-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL		
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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

DB 9/26/11 Shipped — DB 9/26/11 Shipped

SAMPLE NO.		MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXD5	2	SOIL	SEP 12 2011	0940	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 12 2011 1450	RECEIVED BY/STORED IN: TA Frazier	DATE/TIME: SEP 12 2011 1450
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
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

PRINTED ON 7/25/2011 — A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-044	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #29	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ) Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-001	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.□□** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

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CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-046

PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: 12 Days / 12 Days

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #30

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

AIR QUALITY: ☐

ICE CHEST NO.: GWS-001

FIELD LOGBOOK NO.: HNF-N-507-23

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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
W1=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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXD7 3	SOIL	SEP 12 2011	1010	✓	✓	✓

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall	SEP 12 2011 1450	TA Pizzica	SEP 12 2011 1450

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-046	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #30	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICF CHEST NO.: GWS - 001	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0 - 1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

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A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-047

PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: 12 Days / 12 Days

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #31

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

AIR QUALITY: ☐

ICE CHEST NO.: GWS-001

FIELD LOGBOOK NO.: HNF-N-607-23.

ACTUAL SAMPLE DEPTH: 0-1'

COA: 3026/6ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 9/26/11 Shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXD8	SOIL	SEP 12 2011	1040	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall, CHPRC	SEP 12 2011 1450	[illegible]	SEP 12 2011 1450

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

PRINTED ON 7/25/2011

A-6000-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-047	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #31	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-001	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.□□** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

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CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F11-159-048 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days	AIR QUALITY: ☐	SAF NO.: F11-159
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #32	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		
ICE CHEST NO.: GWS-001 ~~HNF-N-507-~~ KY 9/12/11	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL		
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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 9/12/11 Shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	[redacted]		
B2FXD9 5	SOIL	SEP 12 2011	1107	✓	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 12 2011 1450	JA Pinzion	SEP 12 2011 1450

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

PRINTED ON 7/25/2011 — A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-048	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #32	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-001	FIELD LOGBOOK NO.: HNF-N-507-23.	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.□□** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

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A 6003 610 (REV 2)

Attachment 2
Narrative
WSCF113177

Introduction

Samples were received at the WSCF laboratory as referenced on the WSCF SAF Number Cross Reference table included in the final report. 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.

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):

Gamma Energy Analysis:

- Europium-152 – 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 applicable QC controls are within the established limits.

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

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-050	PAGE 1 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #34	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A1)- Soil		SAF NO.: F11-159	AIR QUALITY:	
ICE CHEST NO.: GWS-107	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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)

113177

SPECIAL HANDLING AND/OR STORAGE

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

KB 9/26/11 Shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXF1	SOIL	SEP 13 2011	0927	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 13 2011 1450	RECEIVED BY/STORED IN: [signature]	DATE/TIME: SEP 13 2011 1450	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

PRINTED ON 7/25/2011

A 6003 618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-050	PAGE 2 OF 2
COLLECTOR	COMPANY CONTACT LUKE, SN	TELEPHONE NO. 372-1667	PROJECT COORDINATOR LUKE, SN	PRICE CODE C01	DATA TURNAROUND 12 Days / 12 Days
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #34	PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO. F11-159	AIR QUALITY ☐	
ICE CHEST NO. GWS-107	FIELD LOGBOOK NO. HNF-N-607-73	ACTUAL SAMPLE DEPTH 0-1'	COA 302676ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.LLL** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

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CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F11-159-051 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days		
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #35	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
AIR QUALITY: ☐			
ICE CHEST NO.: CWS-107	FIELD LOGBOOK NO.: HNF-N-807-73	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL		
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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 9/26/11 shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXF2 2	SOIL	SEP 13 2011	0940	✓	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 13 2011 1400	[illegible]	SEP 13 2011 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

PRINTED ON 7/25/2011 — A-6003-618 (REV 7)

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-051	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #35	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-107	FIELD LOGBOOK NO.: HNF-N-807-23	ACTUAL SAMPLE DEPTH: Gnl'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-052

PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: 12 Days / 12 Days

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #36

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A1)- Soil

SAF NO.: F11-159

AIR QUALITY: ☐

ICE CHEST NO.: GWS-107

FIELD LOGBOOK NO.: HNF-N-507-23

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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--1C	None	None
HOLDING TIME	6 Months	6 Months	6 Months
TYPE OF CONTAINER	G/P	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXF3 3	SOIL	SEP 13 2011	0951	✓	✓	✓

KB 09/20/11 Shipped

KB 09/20/11 Shipped

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 13 2011 1450	[signature]	SEP 13 2011 1450

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-052	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #36	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-107	FIELD LOGBOOK NO.: HNF-N-507-23.	ACTUAL SAMPLE DEPTH: 0-6'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F11-159-053 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	AIR QUALITY: ☐	DATA TURNAROUND: 12 Days / 12 Days	
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #37	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil	SAF NO.: F11-159	
ICE CHEST NO.: GWS-107	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: G-1'	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL		
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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 9/20/11 Shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B2FXF4 4	SOIL	SEP 13 2011	1012

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 13 2011 1450	Overnight Express	SEP 13 2011 1450

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

PRINTED ON 7/25/2011 — A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-053	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #37	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-107	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.□□** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

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

F11-159-054 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: 12 Days / 12 Days

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #38

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

AIR QUALITY: ☐

ICE CHEST NO.: GWS-107

FIELD LOGBOOK NO.: HNF-N-607-23.

ACTUAL SAMPLE DEPTH: 0-11

COA: 302676ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

YB 9/26/11 shipped

YB 9/26/11 shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B2FXF5 5	SOIL	SEP 13 2011	1035

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 13 2011 1450	TA Fonzi	SEP 13 2011 1450

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

PRINTED ON 7/25/2011

A-6003-61B (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-054	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #38	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ) Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-107	FIELD LOGBOOK NO.: HNF-N-807-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F11-159-055 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	AIR QUALITY: ☐	DATA TURNAROUND: 12 Days / 12 Days	
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #39	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil	SAF NO.: F11-159	
ICE CHEST NO.: GWS-107	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL		
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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXF6	SOIL	SEP 13 2011	1054	✓	✓	✓

KB 9/26/11 analyzed

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 13 2011 1450	TA Fraziers	SEP 13 2011 1450

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

PRINTED ON 7/25/2011 — A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-055	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #39	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-107	FIELD LOGBOOK NO.: HNF-N-507-23.	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676FS10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579LS20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

PRINTED ON 7/25/2011 A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-057 | PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days	AIR QUALITY: ☐	SAF NO.: F11-159
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #40	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A)- Soil		
ICE CHEST NO.: GWS-107	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL		
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.: N/A	BILL OF LADING/AIR BILL NO.: N/A	

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

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

SPECIAL HANDLING AND/OR STORAGE

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

KB 9/26/11 shipped

KB 9/26/11 shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXF8 7	SOIL	SEP 13 2011	1109	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 13 2011 1450	[illegible]	SEP 13 2011 1450

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-057	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #40	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY:	
ICE CHEST NO.: GWS-107	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.□□** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-058

PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: 12 Days / 12 Days

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #41

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

AIR QUALITY: ☐

ICE CHEST NO.: GWS-107

FIELD LOGBOOK NO.: HNF-N-507-23

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

VB 9/12/11 Shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXF9	SOIL	SEP 13 2011	1126	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall	SEP 13 2011 1450	IA Fraziar	SEP 13 2011 1450

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-058	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #41	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A) - Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-107	FIELD LOGBOOK NO.: HNF-N-807-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

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Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F11-159-059 — PAGE 1 OF 2

COLLECTOR	FM Hall CHPRC
SAMPLING LOCATION	100-K-63 Grubbed Area Sample #42
ICE CHEST NO.	GUS-107
SHIPPED TO	Waste Sampling & Characterization
COMPANY CONTACT	LUKE, SN
TELEPHONE NO.	372-1667
PROJECT COORDINATOR	LUKE, SN
PRICE CODE	C01
DATA TURNAROUND	12 Days / 12 Days
PROJECT DESIGNATION	100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil
SAF NO.	F11-159
AIR QUALITY	☐
FIELD LOGBOOK NO.	HNF-N-507-23
ACTUAL SAMPLE DEPTH	0-1'
COA	302676ES10
METHOD OF SHIPMENT	GOVERNMENT VEHICLE
ORIGINAL	
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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 9/26/11 Shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXH0 9	SOIL	SEP 13 2011	1150	✓	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 13 2011 1450	[illegible]	SEP 13 2011 1450

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

PRINTED ON 7/25/2011 — A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-059	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #42	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A3)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-107	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

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Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-060	PAGE 1 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #43	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-107	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

MATRIX*: A=Air, Dr=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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXH1 ID	SOIL	SEP 13 2011	1219	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 13 2011 1450	RECEIVED BY/STORED IN: TA Frazier	DATE/TIME: SEP 13 2011 1450	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

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Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-060	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #43	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS - 107	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0 - 1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

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Attachment 2
Narrative
WSCF113192

Introduction

Samples were received at the WSCF laboratory as referenced on the WSCF SAF Number Cross Reference table included in the final report. 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.

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):

- Gamma Energy Analysis:
    - All applicable QC controls are within the established limits.

Narrative

Attachment 2
Narrative
WSCF113192

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

F11-159-061 PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #44	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-106	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01 AIR QUALITY: ☐ DATA TURNAROUND: 12 Days / 12 Days

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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)

113192

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool~4C	None	None
HOLDING TIME	6 Months	6 Months	6 Months
TYPE OF CONTAINER	G/P	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXH2	SOIL	SEP 14 2011	0854	✓	✓	✓

KB 09/14/11 Shipped

KB 09/14/11 Shipped

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 14 2011 1450	M. Nelson	SEP 14 2011 1450

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-061	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #44	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY:	
ICE CHEST NO.: GWS-106	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.□□** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

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A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F11-159-062 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	AIR QUALITY: ☐	DATA TURNAROUND: 12 Days / 12 Days	
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #45	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A1)- Soil	SAF NO.: F11-159	
ICE CHEST NO.: GWS-106	FIELD LOGBOOK NO.: HNF-N-807-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL		
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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

DB 9/21/11 shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B2FXH3 2	SOIL	SEP 14 2011	0910

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 14 2011 1450	M Nelson M Neb	SEP 14 2011 1450
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
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

PRINTED ON 7/25/2011 — A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-062	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #45	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-106	FIELD LOGBOOK NO.: HNF-N-507-3	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579LS20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

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Sample Receipt

Chain of Custody

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

F11-159-063 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKF, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKF, SN
PRICE CODE: C01	AIR QUALITY: ☐	DATA TURNAROUND: 12 Days / 12 Days	
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #46	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil	SAF NO.: F11-159	
ICE CHEST NO.: GWS-106	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL		
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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 9/26/11 Shipped

SAMPLE NO.		MATRIX*	SAMPLE DATE	SAMPLE TIME
B2FXH4	3	SOIL	SEP 14 2011	0920

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 14 2011 1450	RECEIVED BY/STORED IN: M. Nelson	DATE/TIME: SEP 14 2011 1450
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
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

PRINTED ON 7/25/2011 — A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-063	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #46	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A1)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-106	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

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A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F11-159-064 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	AIR QUALITY: ☐	DATA TURNAROUND: 12 Days / 12 Days	
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #47	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A1)- Soil	SAF NO.: F11-159	
ICE CHEST NO.: GW3-106	FIELD LOGBOOK NO.: HNF-N-507-23.	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL		
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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 9/26/11 shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B2FXH5 4	SOIL	SEP 14 2011	0935

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 14 2011 1450	M. Nelson M. Nelson	SEP 14 2011 1450

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

PRINTED ON 7/25/2011 — A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-064	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #47	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A1)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-106	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.□□** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

PRINTED ON 7/25/2011 A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F11-159-065 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	AIR QUALITY:	DATA TURNAROUND: 12 Days / 12 Days	
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #48	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A1)- Soil	SAF NO.: F11-159	
ICE CHEST NO.: GWS-106	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL		
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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

VB 9/26/11 Shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXH6 5	SOIL	SEP 14 2011	0942	✓	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 14 2011 1450	M. Nelson M. Nelson	SEP 14 2011 1450

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

PRINTED ON 7/25/2011 — A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-065	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #48	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-106	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.□□** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

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Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-066	PAGE 1 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #49	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ) - Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-106	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 9/26/11 Shipped

SAMPLE NO.		MATRIX*	SAMPLE DATE	SAMPLE TIME
B2FXH7	L0	SOIL	SEP 14 2011	1000

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
FM Hall CHPRC	SEP 14 2011 1450	M. Nelson M. Nelson	SEP 14 2011 1450	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-066	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #49	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-106	FIELD LOGBOOK NO.: HNF-N-807-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

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A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F11-159-068 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days		
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #50	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A1)- Soil		SAF NO.: F11-159
AIR QUALITY: ☐			
ICE CHEST NO.: GWS-106	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL		
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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 9/20/11 shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B2FXH9 7	SOIL	SEP 14 2011	1012

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 14 2011 1450		SEP 14 2011 1450
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
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

PRINTED ON 7/25/2011 — A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-068	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-G3 Grubbed Area Sample 450	PROJECT DESIGNATION: 100-K-G3 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS - 106	FIELD LOGBOOK NO.: HNF-N-507-23.	ACTUAL SAMPLE DEPTH: 0 - 1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

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A-6003-618 (REV 2)

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

F11-159-069 — PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	AIR QUALITY: ☐	DATA TURNAROUND: 12 Days / 12 Days	
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #51	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil	SAF NO.: F11-159	
ICE CHEST NO.: GWS-106	FIELD LOGBOOK NO.: HNF-N-807-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL		
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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 9/26/11 Shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXJ0	SOIL	SEP 14 2011	1030	✓	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall, CHPRC	SEP 14 2011 1450	K Overall	SEP 14 2011 1450

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

PRINTED ON 7/25/2011 — A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2M Hill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-069	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #51	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-106	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

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A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-075 | PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: 12 Days / 12 Days

AIR QUALITY: ☐

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #57

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

ICE CHEST NO.: GWS-106

FIELD LOGBOOK NO.: HNF-N-507-23

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 9/26/11 shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B2FXJ6 9	SOIL	SEP 14 2011	1000

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 14 2011 1450	[illegible]	SEP 14 2011 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

PRINTED ON 7/25/2011

A-5003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-075	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #57	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-106	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.□□** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F11-159-076 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days	AIR QUALITY: ☐	
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #58	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A1)- Soil	SAF NO.: F11-159	
ICE CHEST NO.: GWS-006	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: N/A	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL		
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	GP	P	GP
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 9/26/11 shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXJ7 ID	SOIL	SEP 14 2011	0830	✓	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 14 2011 1450	M Nelson M Nelson	SEP 14 2011 1450

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

PRINTED ON 7/25/2011 — A 6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-076	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #58	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GW3-006	FIELD LOGBOOK NO.: HNF-N-607-23	ACTUAL SAMPLE DEPTH: N/A	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

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A-6003-618 (REV 2)

Attachment 2
Narrative
WSCF113205

Introduction

Samples were received at the WSCF laboratory as referenced on the WSCF SAF Number Cross Reference table included in the final report. 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.

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):

- Gamma Energy Analysis:
    - All applicable QC controls are within the established limits.

Narrative

Attachment 2
Narrative
WSCF113205

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

F11-159-070

PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: 12 Days / 12 Days

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #52

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Samping (Waste Area A)- Soil

SAF NO.: F11-159

AIR QUALITY: ☐

ICE CHEST NO.: BWS-007

FIELD LOGBOOK NO.: HNF-N-507-23.

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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)

113205

SPECIAL HANDLING AND/OR STORAGE

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

KB 01/26/11 shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXJ1	SOIL	9/13/11	1045	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 15 2011 1450	TA Frazier	SEP 15 2011 1450

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-070	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #52	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23.	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

PRINTED ON 7/25/2011 A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-081

PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: 12 Days / 12 Days

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #59

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A1)- Soil

SAF NO.: F11-159

AIR QUALITY: ☐

ICE CHEST NO.: GWS-007

FIELD LOGBOOK NO.: HNF-N-507-23.

ACTUAL SAMPLE DEPTH: 0-1

COA: 302676ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	S/T ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 9/26/11 Shipped

KB 9/26/11 Shipped

SAMPLE NO.		MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2H560	2	SOIL	9/15/11	1116	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 15 2011 1450	TA Brazier	SEP 15 2011 1450
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
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

PRINTED ON 8/29/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — **F11-159-081** — **PAGE 2 OF 2**

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN	**PRICE CODE** C01	**DATA TURNAROUND** 12 Days / 12 Days
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #59	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area A)- Soil		**SAF NO.** F11-159	**AIR QUALITY** [ ]	
ICE CHEST NO. GW3-007	**FIELD LOGBOOK NO.** HNF-N-507-23	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 302676ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	**ORIGINAL**
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 402579ES20.

** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

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Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-082

PAGE 1 OF 2

COLLECTOR: FM Hall

SAMPLING LOCATION: CHPRC

100-K-63 Grubbed Area Sample #60

ICE CHEST NO.: GWS-007

SHIPPED TO: Waste Sampling & Characterization

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

FIELD LOGBOOK NO.: HNF-N-507-23.

ACTUAL SAMPLE DEPTH: 0-1'

OFFSITE PROPERTY NO.: N/A

PROJECT COORDINATOR: LUKE, SN

SAF NO.: F11-159

COA: 302676ES10

PRICE CODE: C01

AIR QUALITY: ☐

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

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

DATA TURNAROUND: 12 Days / 12 Days

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 9/26/11 shipped

KB 9/26/11 shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B2H561 3	SOIL	9/15/11	1135

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 15 2011 1450	TA Fraziel	SEP 15 2011 1450

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

PRINTED ON 8/29/2011

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — **F11-159-082** — **PAGE 2 OF 2**

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN	**PRICE CODE** C01	**DATA TURNAROUND** 12 Days / 12 Days
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #60	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		**SAF NO.** F11-159	**AIR QUALITY** ☐	
ICE CHEST NO. GWS-007	**FIELD LOGBOOK NO.** HNF-N-507-23.	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 302676ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	**ORIGINAL**
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 402579ES20.

** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

PRINTED ON 8/29/2011 — A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F11-159-083 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days		
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #61	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil	SAF NO.: F11-159	AIR QUALITY: ☐
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23.	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL		
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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 9/26/11 shipped

KB 9/26/11 shipped

SAMPLE NO.		MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2H562	4	SOIL	9/15/11	1145	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: SEP 15 2011 1450	RECEIVED BY/STORED IN: [signature]	DATE/TIME: SEP 15 2011 1450
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
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

PRINTED ON 8/29/2011 — A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-083

PAGE 2 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #61	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
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 402579ES20.

** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

PRINTED ON 8/29/2011

A-6002-618 (REV 2)

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F11-159-084 — PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	DATA TURNAROUND: 12 Days / 12 Days		
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #62	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A)- Soil		SAF NO.: F11-159
AIR QUALITY: ☐			
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL		
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	GP	P	GP
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 9/24/11 shipped

KB 9/21/11 shipped

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2H563	5 SOIL	9/15/11	1200	✓	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 15 2011 1450	TA Frozin	SEP 15 2011 1450

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

PRINTED ON 8/29/2011 — A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — **F11-159-084** — **PAGE 2 OF 2**

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN	**PRICE CODE** C01	**DATA TURNAROUND** 12 Days / 12 Days
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #52	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		**SAF NO.** F11-159	**AIR QUALITY** ☐	
ICE CHEST NO. GWS-007	**FIELD LOGBOOK NO.** HNF-N-507-23	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 302676ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	**ORIGINAL**
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 402579ES20.

** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}; Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

PRINTED ON 8/29/2011 — A-6003-618 (REV 2)

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Certificate of Analysis

TestAmerica Laboratories, Inc.

CH2M Hill Plateau Remediation Company
P.O. Box 1600
Mail Stop – R3-60
Richland, WA 99352

October 12, 2011

Attention: Scot Fitzgerald

SAF Number	:	F11-159
Date SDG Closed	:	September 27, 2011
Number of Samples	:	Five (5)
Sample Type	:	Soil
SDG Number	:	W06240
Data Deliverable	:	15 Day Summary

CASE NARRATIVE

I. Introduction

On September 27, 2011 five soil samples were received at TestAmerica (TARL). Upon receipt, the samples were assigned the following laboratory ID numbers to correspond with the CH2M specific ID:

CH2M ID#	TARL ID#	MATRIX	DATE OF RECEIPT
B2H563	MMQ89	SOIL	9/27/11
B2H562	MMQ9C	SOIL	9/27/11
B2H561	MMQ9F	SOIL	9/27/11
B2H560	MMQ9J	SOIL	9/27/11
B2FXJ1	MMQ9K	SOIL	9/27/11

II. Sample Receipt

The samples were received in good condition and no anomalies were noted during check-in.

On September 28, 2011 TestAmerica received instructions (via phone call) to analyze all the samples in this SDG for alpha, beta, total strontium and hexavalent chromium even though the COCs only request hexavalent chromium. TARL received an SIR on October 11, 2011. TARL accepted the proposed resolution included in the SIR (CHPRC Tracking Number: SDR12-014) on October 11, 2011.

III. Analytical Results/Methodology

The analytical results for this report are presented by laboratory sample ID. Each set of data includes sample identification information, analytical results and the appropriate associated statistical errors.

The requested analyses were:

Gas Proportional Counting
Gross Alpha by method RL-GPC-001
Gross Beta by method RL-GPC-001
Strontium-90 by method RL-GPC-003
Chemical Analysis
Hexavalent Chromium by EPA method 7196A

IV. Quality Control

The analytical results for each analysis performed includes a minimum of one laboratory control sample (LCS), one method (reagent) blank, and one duplicate sample analysis. Any exceptions have been noted in the "Comments" section.

QC and sample results are reported in the same units.

V. Comments

Gas Proportional Counting
Gross Alpha by method RL-GPC-001:
The LCS, batch blank, samples and sample duplicate (B2H563) results are within contractual requirements.

Gross Beta by method RL-GPC-001:
The LCS, batch blank, samples and sample duplicate (B2H562) results are within contractual requirements.

Strontium-90 by method RL-GPC-003:
The LCS, batch blank, samples and sample duplicate (B2H561) results are within contractual requirements.

Chemical Analysis
Hexavalent Chromium by EPA method 7196A
The LCS, batch blank, samples, sample duplicate (B2H563) and sample matrix spike (B2H563) results are within contractual requirements.

CH2M Hill Plateau Remediation Company
October 12, 2011

I certify that this Certificate of Analysis 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 hard copy data package has been authorized by the Laboratory Manager, or a designee as verified by the following signature.

Reviewed and approved:

Sandra Seger
Project Manager

SAMPLE ISSUE RESOLUTION

SIR NUM	SDR12-014
REV NUM	0
DATE INITIATED	10/11/2011

SAMPLE EVENT INFORMATION

SAF NUM(S)	F11-159
OPERABLE UNIT(S)	100-KR-2
PROJECT(S)	KW Floodplain
SAMPLE EVENT TITLE(S)	100-K-63 KW Floodplain
LABORATORY	TestAmerica Incorporated, Richland

SAMPLING INFORMATION

NUMBER OF SAMPLES	5
SAMPLE NUMBERS	B2FXJ1, B2H560, B2H561, B2H562, B2H563
SAMPLE MATRIX	SOIL
COLLECTION DATE	9/15/2011 - 9/15/2011
SDG NUM	W06240

ISSUE BACKGROUND

CLASS	General Laboratory Direction
TYPE	Addition of Analysis
DESCRIPTION	Hexavalent chromium was the only analysis requested on the COCs of samples diverted to TestAmerica Richland. The CHPRC customer is requesting the addition of total alpha, total beta, and total strontium analyses for the listed samples. Steve Trent of CHPRC made original customer request by telephone on 9/28/2011.

DISPOSITION

DESCRIPTION	Proposed Disposition: Add the additional requested analyses for the listed samples.
JUSTIFICATION	Accepted Disposition: Accept proposed disposition.

Submitted by:	Steve Trent / CHPRC	Date: 10/11/2011
Accepted by:	Sandra Seger / TARL	Date: 10/11/2011

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-084 – B

COLLECTOR FM Hall CHPRC

COMPANY CONTACT LUKE, SN

TELEPHONE NO. 372-1667

PROJECT COORDINATOR LUKE, SN

PRICE CODE C01

DATA TURNAROUND ~~12 Days / 12 Days~~ 9/27/11 15 Days/15 Days

SAMPLING LOCATION 100-K-63 Grubbed Area Sample #62

PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO. F11-159

AIR QUALITY ☐

ICE CHEST NO. GWS-007

FIELD LOGBOOK NO. HNF-N-507-23

ACTUAL SAMPLE DEPTH 0-1'

COA 302676ES10

METHOD OF SHIPMENT GOVERNMENT VEHICLE

ORIGINAL

SHIPPED TO ~~Waste Sampling & Characterization~~ TARL 9/27/11

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	~~SEE ITEM (3) IN SPECIAL INSTRUCTIONS~~ Chromium Hex-7196

SDG#W06240
LOT#J11270475
~~Report: 11/07/11~~ Due 10/12/11
SKS 9/28/11

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2H563 5	SOIL	9/15/11	1200	✓	✓	✓

J11270475

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 15 2011 1450	TA Frazier	SEP 15 2011 1450
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
M. Nelson-Mines	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
SSU-1	9-27-11 1015	CE Hall	9-27-11 1015
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
CE Hall	9-27-11 1415	J. Beck	9-27-11 1415
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

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

PRINTED ON 9/28/2011

4-6003-618 (REV 7)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-084 – B

COLLECTOR: FM Hall CHPRC

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days / 15 Days

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #62

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

AIR QUALITY: ☐

ICE CHEST NO.: GWS-007

FIELD LOGBOOK NO.: ~~HNF-N-507-~~ 23

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL

OFFSITE PROPERTY NO.: N/A

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

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.~~

~~** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury};~~ Chromium Hex - 7196;

~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;~~

SDG W46240

PRINTED ON 8/29/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-083 – B

COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #61	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01

AIR QUALITY: ☐

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days / 15 Days

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2H562 4	SOIL	9/15/11	1145	✓	✓	✓

SDGW06240

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall	SEP 15 2011 1450	TARL	SEP 15 2011 1450
M. Nelson, CHPRC	9/26/11 1315	L.D. Wall, CHPRC	9/26/11 1315
L.D. Wall, CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	9-27-11 1015	C. Hutton	9-27-11 1015
C. Hutton	9-27-11 1415	J. Beck, TARL	9-27-11 1415

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

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

PRINTED ON 8/30/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-083 – B

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days/15 Days ORIGINAL
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #61	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.~~

~~** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8-HG - ICPMS {Mercury};~~ Chromium Hex - 7196;

~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 - Total Sr;~~

SDG W06240

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-082 -B

COLLECTOR: FM Hall	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: CHPRC	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
100-K-63 Grubbed Area Sample #60			
ICE CHEST NO.: GWS-007	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01

AIR QUALITY: ☐

DATA TURNAROUND: ~~12 Days / 12 Days~~ 9/27/11 15 Days/15 Days

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2H561	3	SOIL	MMQ9F	9/15/11	1135	✓	✓

SDGW06240

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall	SEP 15 2011 1450	TA Brazier	SEP 15 2011 1450
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
M. Nelson	9/26/11 1315	L.D. Wall	9/26/11 1315
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
L.D. Wall	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
SSU-1	9-27-11 1015	C Fulton	9-27-11 1015
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
C Fulton	9-27-11 1415	J. Bock TARL	1415 9-27-11
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	

PRINTED ON 8/29/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-082 — B

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN	**PRICE CODE** C01	**DATA TURNAROUND** ~~12 Days / 12 Days~~ mm 9/27/11 15 Days/15 Days
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #60	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		**SAF NO.** F11-159	**AIR QUALITY** ☐	**ORIGINAL**
ICE CHEST NO. CGWS-007	**FIELD LOGBOOK NO.** HNF-N-507-23.	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 302676ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO mm ~~Waste Sampling & Characterization~~ TARL 9/27/11	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.~~ mm 9/27/11

~~** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.~~ mm 9/27/11

~~(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic,~~ mm 9/27/11

mm 9/27/11 ~~Beryllium, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8 HG - ICPMS {Mercury};~~ Chromium Hex - 7196;

~~(2) Gamma Spectroscopy {Cesium 137, Cobalt 60, Europium 152, Europium 154, Europium 155};~~ mm 9/27/11

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium 89,90 - Total Sr;~~ mm 9/27/11

WO 6240

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-081 – B

COLLECTOR FM Hall CHPRC

SAMPLING LOCATION 100-K-63 Grubbed Area Sample #59

ICE CHEST NO. GWS-007

SHIPPED TO ~~Waste Sampling & Characterization~~ TARL

COMPANY CONTACT LUKE, SN

TELEPHONE NO. 372-1667

PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

FIELD LOGBOOK NO. HNF-N-~~507~~-23.

ACTUAL SAMPLE DEPTH 0-1

OFFSITE PROPERTY NO. N/A

PROJECT COORDINATOR LUKE, SN

SAF NO. F11-159

COA 302676ES10

BILL OF LADING/AIR BILL NO. N/A

PRICE CODE C01

AIR QUALITY ☐

METHOD OF SHIPMENT GOVERNMENT VEHICLE

DATA TURNAROUND ~~12 Days / 12 Days~~ 15 Days/15 Days

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2H560	2	SOIL	MMQ9J	9/15/11	1116	✓	✓ ✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall	SEP 15 2011 1450	TA Frazier	SEP 15 2011 1450
M. Nelson	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	9-27-11 1015	C Fulton	9-27-11 1015
C Fulton	9-27-11 1415	J Beck TARL	9-27-11 1415

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

WO 6240

LABORATORY SECTION RECEIVED BY | TITLE | DATE/TIME

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

PRINTED ON 8/29/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-081 – B

COLLECTOR	FM Hall CHPRC	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE C01
		LUKE, SN	372-1667	LUKE, SN	DATA TURNAROUND
SAMPLING LOCATION		PROJECT DESIGNATION		SAF NO.	AIR QUALITY ☐
100-K-63 Grubbed Area Sample #59		100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		F11-159	~~12 Days / 12 Days~~ 15 Days/15 Days mm 9/22/11
ICE CHEST NO.	GWS-007	FIELD LOGBOOK NO. HNF-N-507-23	ACTUAL SAMPLE DEPTH 0-1'	COA 302676ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE
					ORIGINAL
SHIPPED TO	~~Waste Sampling & Characterization~~ TARL mm 9/22/11	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A	

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.~~ mm 9/22/11

~~** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.~~ mm 9/22/11

~~(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury};~~ Chromium Hex - 7196; mm 9/22/11 mm 9/22/11

~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~ mm 9/22/11

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium 89,90 - Total Sr,~~ mm 9/22/11

WD6240

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-070 – B | PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #52	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GW3-007	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01 | AIR QUALITY: ☐ | DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days/15 Days 9/27/11 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | ORIGINAL

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)

113205

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool~4C	None	None
HOLDING TIME	6 Months	6 Months	6 Months
TYPE OF CONTAINER	G/P	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXJ1	SOIL	9/15/11	1045	✓	✓	

WQ6240

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 15 2011 1450	TA Filazien	SEP 15 2011 1450
M. Nelson	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	9-27-11 1015	C Fulton	9-27-11 1015
C Fulton	9-27-11 1415	J. Bock TARL	9-27-11 1415

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

Please email copies of chain of custody, Sample receipt Form, and final report to Marisol Avila (marisol_avila@rl.gov) and Heather Medley (Heather_A_Medley@rl.gov) WSCF Project Manager

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

PRINTED ON 7/25/2011 | A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-070 – B

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #52	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		**SAF NO.** F11-159
ICE CHEST NO. GWS-007	**FIELD LOGBOOK NO.** HNF-~~N-507-~~23.	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 302676ES10
SHIPPED TO ~~Waste Sampling & Characterization~~ TARL	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

PRICE CODE C01

AIR QUALITY ☐

METHOD OF SHIPMENT GOVERNMENT VEHICLE

DATA TURNAROUND ~~12 Days / 12 Days~~ 15 Days/15 Days

ORIGINAL

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury};~~ Chromium Hex - 7196;

~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;~~

W06240

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Certificate of Analysis

TestAmerica Laboratories, Inc.

CH2M Hill Plateau Remediation Company
P.O. Box 1600
Mail Stop – R3-60
Richland, WA 99352

October 12, 2011

Attention: Scot Fitzgerald

SAF Number	:	F11-159
Date SDG Closed	:	September 27, 2011
Number of Samples	:	Twenty (20)
Sample Type	:	Soil
SDG Number	:	W06241
Data Deliverable	:	15 Day Summary

CASE NARRATIVE

I. Introduction

On September 27, 2011 twenty soil samples were received at TestAmerica (TARL). Upon receipt, the samples were assigned the following laboratory ID numbers to correspond with the CH2M specific ID:

CH2M ID#	TARL ID#	MATRIX	DATE OF RECEIPT
B2FXF9	MMQ9P	SOIL	9/27/11
B2FXH0	MMQ9R	SOIL	9/27/11
B2FXF8	MMQ9X	SOIL	9/27/11
B2FXF6	MMQ91	SOIL	9/27/11
B2FXF5	MMQ94	SOIL	9/27/11
B2FXF3	MMQ98	SOIL	9/27/11
B2FXF4	MMRAA	SOIL	9/27/11
B2FXF1	MMRAF	SOIL	9/27/11
B2FXF2	MMRAK	SOIL	9/27/11
B2FXJ6	MMRAV	SOIL	9/27/11
B2FXJ7	MMRA0	SOIL	9/27/11
B2FXH6	MMRA4	SOIL	9/27/11
B2FXH7	MMRA5	SOIL	9/27/11
B2FXH9	MMRA6	SOIL	9/27/11

B2FXJ0	MMRA7	SOIL	9/27/11
B2FXH2	MMRA8	SOIL	9/27/11
B2FXH3	MMRA9	SOIL	9/27/11
B2FXH4	MMRCA	SOIL	9/27/11
B2FXH1	MMRCC	SOIL	9/27/11
B2FXH5	MMRCD	SOIL	9/27/11

II. Sample Receipt

The samples were received in good condition and no anomalies were noted during check-in.

On September 28, 2011 TestAmerica received instructions (via phone call) to analyze all the samples in this SDG for alpha, beta, total strontium and hexavalent chromium even though the COCs only request hexavalent chromium. TARL received an SIR on October 11, 2011. TARL accepted the proposed resolution included in the SIR (CHPRC Tracking Number: SDR12-015) on October 11, 2011.

III. Analytical Results/Methodology

The analytical results for this report are presented by laboratory sample ID. Each set of data includes sample identification information, analytical results and the appropriate associated statistical errors.

The requested analyses were:

Gas Proportional Counting
Gross Alpha by method RL-GPC-001
Gross Beta by method RL-GPC-001
Strontium-90 by method RL-GPC-003
Chemical Analysis
Hexavalent Chromium by EPA method 7196A

IV. Quality Control

The analytical results for each analysis performed includes a minimum of one laboratory control sample (LCS), one method (reagent) blank, and one duplicate sample analysis. Any exceptions have been noted in the "Comments" section.

QC and sample results are reported in the same units.

CH2M Hill Plateau Remediation Company
October 12, 2011

V. Comments

Gas Proportional Counting

Gross Alpha by method RL-GPC-001:
The LCS, batch blank, samples and sample duplicate (B2FXF9) results are within contractual requirements.

Gross Beta by method RL-GPC-001:
The LCS, batch blank, samples and sample duplicate (B2FXH0) results are within contractual requirements.

Strontium-90 by method RL-GPC-003:
The LCS, batch blank, samples and sample duplicate (B2FXF8) results are within contractual requirements.

Chemical Analysis

Hexavalent Chromium by EPA method 7196A
The matrix spike recovered low at 48.4%. The post digestive matrix spike recovered at 90.4% and the LCS recovered at 95.4%. Suspect a reducing capacity / matrix interference in the sample but not enough to reduce the insoluble PbCr04. The insoluble PbCr04 is at 96.3%. The sample and duplicate are not within limits due to insufficient volume to choose homogeneous mixture. Except as noted, the LCS, batch blank, samples, sample duplicate (B2FXF9) and sample matrix spike (B2FXF9) results are within contractual requirements.

I certify that this Certificate of Analysis 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 hard copy data package has been authorized by the Laboratory Manager, or a designee as verified by the following signature.

Reviewed and approved:

Sandra Seger
Project Manager

SAMPLE ISSUE RESOLUTION

SIR NUM	SDR12-015
REV NUM	0
DATE INITIATED	10/11/2011

SAMPLE EVENT INFORMATION

SAF NUM(S)	F11-159
OPERABLE UNIT(S)	100-KR-2
PROJECT(S)	KW Floodplain
SAMPLE EVENT TITLE(S)	100-K-63 KW Floodplain
LABORATORY	TestAmerica Incorporated, Richland

SAMPLING INFORMATION

NUMBER OF SAMPLES	20
SAMPLE NUMBERS	B2FXF1, B2FXF2, B2FXF3, B2FXF4, B2FXF5, B2FXF6, B2FXF8, B2FXF9, B2FXH0, B2FXH1, B2FXH2, B2FXH3, B2FXH4, B2FXH5, B2FXH6, B2FXH7, B2FXH9, B2FXJ0, B2FXJ6, B2FXJ7
SAMPLE MATRIX	SOIL
COLLECTION DATE	9/13/2011 - 9/14/2011
SDG NUM	W06241

ISSUE BACKGROUND

CLASS	General Laboratory Direction
TYPE	Addition of Analysis
DESCRIPTION	Hexavalent chromium was the only analysis requested on the COCs of samples diverted to TestAmerica Richland. The CHPRC customer is requesting the addition of total alpha, total beta, and total strontium analyses for the listed samples. Steve Trent of CHPRC made original customer request by telephone on 9/28/2011.

DISPOSITION

DESCRIPTION	Proposed Disposition: Add the additional requested analyses for the listed samples.
JUSTIFICATION	Accepted Disposition: Accept proposed disposition.

Submitted by:	Steve Trent / CHPRC	Date: 10/11/2011
Accepted by:	Sandra Seger / TARL	Date: 10/11/2011

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-058 – B | PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	AIR QUALITY: ☐	DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days/15 Days	
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #41	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil	SAF NO.: F11-159	
ICE CHEST NO.: GWS-107	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL		
SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL	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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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
B2FXF9 8	SOIL MMQ9P	SEP 13 2011	1126

SDG# W06241
LOT# J11270478
~~Report: 11/7/11~~ Due 10/12/11
SKS 9/28/11

J11270478

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
FM Hall CHPRC	SEP 13 2011 1450	TARL	SEP 13 2011 1450	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
SSU-1	9-27-11 1015		9-27-11 1015	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
	9-27-11 1415	TARL	9-27-11 1415	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-058 — B	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: ~~12 Days / 12 Days~~ MVW 9/27/11 15 Days/15 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #41	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	ORIGINAL
ICE CHEST NO.: GWS-107	FIELD LOGBOOK NO.: ~~HNF-N-507-23~~	ACTUAL SAMPLE DEPTH: G-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: MVW 9/27/11 ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

SPECIAL INSTRUCTIONS

MVW 9/27/11 ~~** The CACN for WSCF Analytical is 402579ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.~~
MVW 9/27/11 ~~(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic,~~
MVW 9/27/11 ~~Beryllium, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury};~~ Chromium Hex - 7196;
MVW 9/27/11 ~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155},~~
MVW 9/27/11 ~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;~~

WQ6241

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-059 – B | PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #42

ICE CHEST NO.: GLS-107

SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL (MWM 9/27/11)

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

FIELD LOGBOOK NO.: HNF-N-507-23

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

OFFSITE PROPERTY NO.: N/A

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

PRICE CODE: C01

AIR QUALITY: ☐

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days / 15 Days (MWM 9/27/11)

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

SDG #W06241
LOT #J1I270178

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXH0 9	SOIL	MMQ9R	SEP 13 2011	1150	✓	✓ ✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 13 2011 1450	TARFRAZIER	SEP 13 2011 1450
L.D. Wall CHPRC	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	9-27-11 1015	C.F. Van	9-27-11 1015
C.F. Van	9-27-11 1415	J. Rock TARL	9-27-11 1415

SPECIAL INSTRUCTIONS: SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION: RECEIVED BY | TITLE | DATE/TIME

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

PRINTED ON 7/25/2011 | A 6003 618 (05/2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-059 - B	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: ~~12 Days / 12 Days~~ MVM 9/27/11 15 Days/15 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #42	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	ORIGINAL
ICE CHEST NO.: GW3-107	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: MVM 9/27/11 ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.~~ ~~** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.~~ MVM 9/27/11

MVM 9/27/11 ~~(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury};~~ Chromium Hex - 7196; MVM 9/27/11

~~(2) Gamma Spectroscopy {Cesium 137, Cobalt 60, Europium 152, Europium 154, Europium 155};~~ MVM 9/27/11

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium 89,90 - Total Sr;~~ MVM 9/27/11

WO6241

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-057 – B

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #40	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-107	FIELD LOGBOOK NO.: HNF-N-507-23.	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL (MMM 9/27/11)	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01

AIR QUALITY: ☐

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days / 15 Days (MMM 9/27/11)

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SDG# WX6211
REC'D 9/27/11
LOT# JII270478

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXF8 7	SOIL MMQ9X	SEP 13 2011	1109	–	–	–

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 13 2011 1450	[illegible]	SEP 13 2011 1450
[illegible]	9/26/11 1315	L.D. Wall CHPRC	1315 9/26/11
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	9-27-11 1015	CF Hutton	9-27-11 1015
CF Hutton	9-27-11 1415	J. Beck TARL	9-27-11 1415

SPECIAL INSTRUCTIONS: SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

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

PRINTED ON 7/25/2011

A-6003-618 (REV. 3)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-057 – B	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: ~~12 Days / 12 Days~~ MVM 9/27/11 15 Days/15 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #40	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-107	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
SHIPPED TO: MVM 9/27/11 ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.~~ ☐☐ ~~** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.~~ MVM 9/27/11

MVM 9/27/11 ~~(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS (Mercury);~~ Chromium Hex - 7196; MVM 9/27/11

~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~ MVM 9/27/11

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium 89,90 - Total Sr;~~ MVM 9/27/11

W06241

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-055 – B

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days / 15 Days MMK 9/27/11		
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #39	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
AIR QUALITY: ☐			
ICE CHEST NO.: GWS-107	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE			
SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL MMK 9/27/11	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A
ORIGINAL			

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SDG# W06241
LOT# JII270478

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXF6 6	SOIL MMQ91	SEP 13 2011	1054	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall	SEP 13 2011 1450	TA Frazier	SEP 13 2011 1450
[illegible]	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	9-27-11 1015	[illegible]	9-27-11 1015
[illegible]	9-27-11 1415	J. Fach TALC	9-27-11 1415

SPECIAL INSTRUCTIONS: SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-055 – B	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: ~~12 Days / 12 Days~~ MVM 9/27/11
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #39	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GW3-107	FIELD LOGBOOK NO.: HNF-~~N-507~~-23.	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
SHIPPED TO: MVM 9/27/11 ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.~~ MVM 9/27/11

MVM 9/27/11 ~~(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury};~~ Chromium Hex - 7196; MVM 9/27/11

~~(2) Gamma Spectroscopy {Cesium 137, Cobalt 60, Europium 152, Europium 154, Europium 155};~~ MVM 9/27/11

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium 89,90 - Total Sr;~~ MVM 9/27/11

W06241

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-054 – B

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #38	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-107	FIELD LOGBOOK NO.: HNF-N-507-23.	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01

AIR QUALITY: ☐

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days/15 Days

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXF5 5	SOIL	SEP 13 2011	1035	✓	✓	✓

SDG# W06241
LOT# JII270478

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 13 2011 1450	TARL	SEP 13 2011 1450
	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	9-27-11 1015		9-27-11 1015
	9-27-11 1415	TALK	9-27-11 1415

SPECIAL INSTRUCTIONS: SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-054 – B	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: ~~12 Days / 12 Days~~ MVM 9/27/11 15 Days/15 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #38	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	ORIGINAL
ICE CHEST NO.: GWS-107	FIELD LOGBOOK NO.: HNF-N-607-23	ACTUAL SAMPLE DEPTH: G-1	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: MVM 9/27/11 ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.~~ MVM 9/27/11

MVM 9/27/11 ~~(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium); 200.8_HG - ICPMS (Mercury);~~ Chromium Hex - 7196; MVM 9/27/11

~~(2) Gamma Spectroscopy (Cesium 137, Cobalt 60, Europium 152, Europium 154, Europium 155);~~ MVM 9/27/11

~~(3) Gross Alpha (Gross alpha); Gross Beta (Gross beta); Strontium 89,90 - Total Sr;~~ MVM 9/27/11

WO6241

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-052 – B

COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days/15 Days MMM 9/27/11		
AIR QUALITY: [ ]			
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #36	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil	SAF NO.: F11-159	
ICE CHEST NO.: GWS-107	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE			
SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL MMM 9/27/11	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 9/26/11

SDG# W06241
LOT# JII270478

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXF3 3	SOIL MMQ98	SEP 13 2011	0951	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall, CHPRC	SEP 13 2011 1450	Barrell Bream	SEP 13 2011 1450
Barrell Bream	9/26/11 1315	L.D. Wall, CHPRC	1315 9/26/11
L.D. Wall, CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	9-27-11 1015	Clifton	9-27-11 1015
Clifton	9-27-11 1415	J Sock	1415 9-27-11

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

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

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-052 – B	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT LUKE, SN	TELEPHONE NO. 372-1667	PROJECT COORDINATOR LUKE, SN	PRICE CODE C01	DATA TURNAROUND ~~12 Days / 12 Days~~ MVM 9/27/11 15 Days/15 Days ORIGINAL
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #36	PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO. F11-159	AIR QUALITY ☐	
ICE CHEST NO. CWS-107	FIELD LOGBOOK NO. HNF-N-507-23	ACTUAL SAMPLE DEPTH 0-1'	COA 302676ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	
SHIPPED TO MVM 9/27/11 ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A		

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.~~ ~~** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.~~ MVM 9/27/11

MVM 9/27/11 ~~(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury};~~ Chromium Hex - 7196; MVM 9/27/11

~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~ MVM 9/27/11

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium 89,90 - Total Sr;~~ MVM 9/27/11

WO 6241

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-053 –B | PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	AIR QUALITY: ☐	DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days/15 Days MMM 9/27/11	
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #37	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil	SAF NO.: F11-159	
ICE CHEST NO.: GWS-107	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: G-1'	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL		
SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL MMM 9/27/11	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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SDG #W06241
LOT # JI270478

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B2FXF4 4	SOIL MMRAA	SEP 13 2011	1012

VB 9/26/11

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall	SEP 13 2011 1450		SEP 13 2011 1400
	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	9-27-11 1015		9-27-11 1015
	9-27-11 1415	TARL	9-27-11 1415

SPECIAL INSTRUCTIONS: SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

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

PRINTED ON 7/25/2011 A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-053 – B

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #37	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-107	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL MVM 9/27/11	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01

AIR QUALITY: ☐

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days/15 Days MVM 9/27/11

ORIGINAL

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.~~ MVM 9/27/11

~~(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury};~~ Chromium Hex - 7196; MVM 9/27/11 MVM 9/27/11

~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~ MVM 9/27/11

~~(3) Gross Alpha - {Gross alpha}; Gross Beta - {Gross beta}; Strontium 89,90 - Total Sr;~~ MVM 9/27/11

WQ6241

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-050 – B

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	AIR QUALITY: ☐	DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days / 15 Days	
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #34	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil	SAF NO.: F11-159	
ICE CHEST NO.: GWS-107	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL		
SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL	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)

113177

SPECIAL HANDLING AND/OR STORAGE

SDG #W06241
LOT# JJI270178

PRESERVATION	Cool~4C	None	None
HOLDING TIME	6 Months	6 Months	6 Months
TYPE OF CONTAINER	G/P	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXF1	SOIL MMRAF	SEP 13 2011	0927	✓	✓	✓

CHAIN OF POSSESSION	DATE/TIME	SIGN/ PRINT NAMES	DATE/TIME
RELINQUISHED BY/REMOVED FROM: FM Hall	SEP 13 2011 1400	RECEIVED BY/STORED IN:	SEP 13 2011 1400
RELINQUISHED BY/REMOVED FROM: CHPRC	9/26/11 1315	RECEIVED BY/STORED IN: L.D. Wall CHPRC	9/26/11 1315
RELINQUISHED BY/REMOVED FROM: L.D. Wall	SEP 26 2011 1400	RECEIVED BY/STORED IN: SSU-1	SEP 26 2011 1400
RELINQUISHED BY/REMOVED FROM: SSU-1	9-27-11 1015	RECEIVED BY/STORED IN:	9-27-11 1015
RELINQUISHED BY/REMOVED FROM:	9-27-11 1415	RECEIVED BY/STORED IN: TARL	9-27-11 1415
RELINQUISHED BY/REMOVED FROM:	DATE/TIME	RECEIVED BY/STORED IN:	DATE/TIME
RELINQUISHED BY/REMOVED FROM:	DATE/TIME	RECEIVED BY/STORED IN:	DATE/TIME

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

Please email copies of chain of custody, Sample receipt form, and Final report to Marisol Avila (marisol_avila@rl.gov) and Heather Medley (Heather_A_Medley@rl.gov) W&F project managers

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

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-050 – B

COLLECTOR	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN	**PRICE CODE** C01	**DATA TURNAROUND** ~~12 Days / 12 Days~~ MVM 9/27/11 15 Days / 15 Days **ORIGINAL**
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #34	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		**SAF NO.** F11-159	**AIR QUALITY** ☐	
ICE CHEST NO. GWS-107	**FIELD LOGBOOK NO.** HNF-N-507-23	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 302676ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO MVM 9/27/11 ~~Waste Sampling & Characterization~~ TARL	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.~~ ☐☐ ~~** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.~~ MVM 9/27/11

~~(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic,~~ MVM 9/27/11 ~~Beryllium, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury};~~ Chromium Hex - 7196; MVM 9/27/11

~~(2) Gamma Spectroscopy {Cesium 137, Cobalt 60, Europium 152, Europium 154, Europium 155};~~ MVM 9/27/11

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;~~ MVM 9/27/11

W06241

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-051 -B | PAGE 1 OF 2

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #35	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		**SAF NO.** F11-159
ICE CHEST NO. GWS-107	**FIELD LOGBOOK NO.** HNF-N-507-23	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 302676ES10
SHIPPED TO ~~Waste Sampling & Characterization~~ TARL	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

PRICE CODE C01 | **DATA TURNAROUND** ~~12 Days / 12 Days~~ 15 Days / 15 Days

AIR QUALITY ☐ | **METHOD OF SHIPMENT** GOVERNMENT VEHICLE | **ORIGINAL**

SDG # W06241
LOT # JI270478

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXF2 2	SOIL MMRAK	SEP 13 2011	0940	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 13 2011 1400		SEP 13 2011 1400
	9/26/11 1315	L.D. Wall CHPRC	1315 9/26/11
L.D. Wall CHPRC	SEP 26 2011 1400	SSU- 1	SEP 26 2011 1400
SSU- 1	9-27-11 1015		9-27-11 1015
	9-27-11 1415	TARL	9-27-11 1415

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

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

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-051 – B

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #35	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		**SAF NO.** F11-159
ICE CHEST NO. GWS-107	**FIELD LOGBOOK NO.** HNF-N-607-23	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 302676ES10
SHIPPED TO ~~Waste Sampling & Characterization~~ TARL mmm 9/27/14	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

PRICE CODE C01

AIR QUALITY ☐

METHOD OF SHIPMENT GOVERNMENT VEHICLE

DATA TURNAROUND ~~12 Days / 12 Days~~ mmm 9/27/14 15 Days/15 Days

ORIGINAL

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.~~ mmm 9/27/14

~~(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury};~~ mmm 9/27/14 Chromium Hex - 7196;

~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~ mmm 9/27/14

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ Strontium-89,90 -- Total Sr; mmm 9/27/14

WO6241

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-075 – B

COLLECTOR: FM Hall CHPRC

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #57

ICE CHEST NO.: GWS-106

SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

FIELD LOGBOOK NO.: HNF-N-507-23

ACTUAL SAMPLE DEPTH: 0-1'

OFFSITE PROPERTY NO.: N/A

PROJECT COORDINATOR: LUKE, SN

SAF NO.: F11-159

COA: 302676ES10

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

PRICE CODE: C01

AIR QUALITY: ☐

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days / 15 Days

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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
B2FXJ6 9	SOIL MMRAV	SEP 14 2011	1000

SDG# W06241
LOT# JI270478
Report:

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall	SEP 14 2011 1450		SEP 14 2011 1450
M. Nelson	9/26/11 1315	L.D. Wall	9/26/11 1315
L.D. Wall	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 26 2011 9-27-11 1015	C. Fulton	9-27-11 1015
C. Fulton	9-27-11 1415	J. Bach TARL	9-27-11 1415

SPECIAL INSTRUCTIONS: SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-075 – B

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #57	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-106	FIELD LOGBOOK NO.: HNF ~~N-507~~-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL (mm 9/27/11)	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01

AIR QUALITY: ☐

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days/15 Days (mm 9/27/11)

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.~~ ~~** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.~~ mm 9/27/11

~~(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury};~~ Chromium Hex - 7196; (mm 9/27/11) mm 9/27/11

~~(2) Gamma Spectroscopy {Cesium 137, Cobalt 60, Europium 152, Europium 154, Europium 155};~~ mm 9/27/11

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ Strontium-89,90 -- Total Sr; mm 9/27/11

W06241

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-076 -B PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #58	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-006	FIELD LOGBOOK NO.: ~~HNF-N-507-23~~	ACTUAL SAMPLE DEPTH: N/A	COA: 302676ES10
SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01

AIR QUALITY: ☐

DATA TURNAROUND: ~~13 Days / 12 Days~~ 15 Days/15 Days

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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

SDG# W06241
LOT# JII270478

PRESERVATION	Cool~4C	None	None
HOLDING TIME	6 Months	6 Months	6 Months
TYPE OF CONTAINER	G/P	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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	[redacted]		
B2FXJ7 ID	SOIL MMRAO	SEP 14 2011	0830	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 14 2011 1450	M. Nelson	SEP 14 2011 1450
M. Nelson	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	9-27-11 1015	CFulton	9-27-11 1015
CFulton	9-27-11 1415	J Stack TARL	9-27-11 1415

SPECIAL INSTRUCTIONS: SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION — RECEIVED BY | TITLE | DATE/TIME

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-076 – B

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #58	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		**SAF NO.** F11-159
ICE CHEST NO. GWS-006	**FIELD LOGBOOK NO.** HNF-N-507-23	**ACTUAL SAMPLE DEPTH** N/A	**COA** 302676ES10
SHIPPED TO ~~Waste Sampling & Characterization~~ TARL	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

PRICE CODE C01

AIR QUALITY ☐

METHOD OF SHIPMENT GOVERNMENT VEHICLE

DATA TURNAROUND ~~12 Days / 12 Days~~ 15 Days/15 Days

ORIGINAL

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury};~~ Chromium Hex - 7196;

~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium 154, Europium 155};~~

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross Beta}; Strontium-89,90 -- Total Sr;~~

W06241

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-065 -B

COLLECTOR: FM Hall CHPRC

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #48

ICE CHEST NO.: GWS-106

SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

FIELD LOGBOOK NO.: HNF-N-507-23

ACTUAL SAMPLE DEPTH: 0-1'

OFFSITE PROPERTY NO.: N/A

PROJECT COORDINATOR: LUKE, SN

SAF NO.: F11-159

COA: 302676ES10

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

PRICE CODE: C01

AIR QUALITY: ☐

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days / 15 Days

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SDG # W06241
LOT # JJI270478

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B2FXH6 5	SOIL MMRA4	SEP 14 2011	0942

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 14 2011 1450	M. Nelson	SEP 14 2011 1450
M. Nelson	9/20/11 1315	L.D. Wall	9/20/11 1315
L.D. Wall	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	9-27-11 1015	C.F. Hon	9-27-11 1015
C.F. Hon	9-27-11 1415	J. Sok / Tech Tech	9-27-11 1415

SPECIAL INSTRUCTIONS: SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION: RECEIVED BY | TITLE | DATE/TIME

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

PRINTED ON 7/25/2011

A-6002-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-065 – B

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #48	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		**SAF NO.** F11-159
ICE CHEST NO. GWS-106	**FIELD LOGBOOK NO.** HNF ~~N-507-23~~	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 302676ES10
SHIPPED TO ~~Waste Sampling & Characterization~~ TARL	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

PRICE CODE C01

AIR QUALITY ☐

DATA TURNAROUND ~~12 Days / 12 Days~~ 15 Days/15 Days

METHOD OF SHIPMENT GOVERNMENT VEHICLE

ORIGINAL

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.~~ ☐☐ ~~** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury};~~ Chromium Hex - 7196;

~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 + Total Sr;~~

W06241

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-066 -B

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days/15 Days 9/27/11		
AIR QUALITY: ☐			
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #49	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil	SAF NO.: F11-159	
ICE CHEST NO.: GWS-106	FIELD LOGBOOK NO.: HNF-N-507-23.	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE			
SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL 9/27/11	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

ORIGINAL

SDG# W06241
LOT # ~~JI#~~ JI270478 LV 9/27/11

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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	[redacted]		
B2FXH7 L0	SOIL MMRA5	SEP 14 2011	1000	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 14 2011 1450	M. Nelson	SEP 14 2011 1450
M. Nelson	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	9-27-11 1015	C.E. Hon	9-27-11 1015
C.E. Hon	9-27-11 1415	J. Stock / Stock TARL	9-27-11 1415

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-066 – B	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT LUKE, SN	TELEPHONE NO. 372-1667	PROJECT COORDINATOR LUKE, SN	PRICE CODE C01	DATA TURNAROUND ~~12 Days / 12 Days~~ 15 Days / 15 Days 9/27/11
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #49	PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO. F11-159	AIR QUALITY ☐	ORIGINAL
ICE CHEST NO. GWS-106	FIELD LOGBOOK NO. HNF-~~N-507~~-23	ACTUAL SAMPLE DEPTH 0-1'	COA 302676ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	
SHIPPED TO ~~Waste Sampling & Characterization~~ TARL 9/27/11	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A		

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.~~ ☐☐ ~~** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.~~ 9/27/11
~~(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic,~~ 9/27/11
~~Beryllium, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8 HG - ICPMS {Mercury};~~ Chromium Hex - 7196; 9/27/11
~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~ 9/27/11
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;~~ 9/27/11

WO 6241

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-068 – B | PAGE 1 OF 2

COLLECTOR: FM Hall ~~CHPRC~~	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #50	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-106	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01 | AIR QUALITY: ☐ | DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days / 15 Days | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B2FXH9	SOIL	SEP 14 2011	1012

SDG # W06211
LOT # JI270478

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall ~~CHPRC~~	SEP 14 2011 1450		SEP 14 2011 1450
N. Nelson	9/20/11 1315	L.D. Wall CHPRC	9/20/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	9-27-11 1015		9-27-11 1015
	9-27-11 1415	TALE	9-27-11 1415

SPECIAL INSTRUCTIONS: SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

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

PRINTED ON 7/25/2011 | A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-068 – B

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #50	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-106	FIELD LOGBOOK NO.: HNF-~~N-507~~-23.	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL (mm 9/22/11)	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01

AIR QUALITY: ☐

DATA TURNAROUND: ~~12 Days / 12 Days~~ (mm 9/27) 15 Days / 15 Days

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.~~ mm 9/22/11

~~(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic,~~ mm 9/27/11 (mm 9/27/11) ~~Beryllium, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8 HG - ICPMS {Mercury};~~ Chromium Hex - 7196;

~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~ mm 9/27/11

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium 89,90 - Total Sr;~~ mm 9/27/11

WQ6241

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-069 – B | PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #51	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-106	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL (mm 7/26/11)	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01 | AIR QUALITY: ☐ | DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days / 15 Days (mm 7/27/11) | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXJ0 8	SOIL MMRA7	SEP 14 2011	1030	✓	—	—

SDG# W06241
LOT# J1I270178

CHAIN OF POSSESSION	DATE/TIME	SIGN/ PRINT NAMES	DATE/TIME
RELINQUISHED BY/REMOVED FROM: FM Hall, CHPRC	SEP 14 2011 1450	RECEIVED BY/STORED IN: Cheryl Berg	SEP 14 2011 1450
RELINQUISHED BY/REMOVED FROM: H. Nelson H. Nelson	9/26/11 1315	RECEIVED BY/STORED IN: L.D. Wall, CHPRC	9/26/11 1315
RELINQUISHED BY/REMOVED FROM: L.D. Wall	SEP 26 2011 1400	RECEIVED BY/STORED IN: SSU-1	SEP 26 2011 1400
RELINQUISHED BY/REMOVED FROM: SSU-1	9-27-11 1015	RECEIVED BY/STORED IN: CFulton	9-27-11 1015
RELINQUISHED BY/REMOVED FROM: CFulton	9-27-11 1415	RECEIVED BY/STORED IN: J.Sack TARL	9-27-11 1415
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-069 – B

COLLECTOR: FM Hall ~~CHPRC~~	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #51	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-106	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01

AIR QUALITY: ☐

DATA TURNAROUND: ~~12 Days / 12 Days~~ 9/27/11 15 Days / 15 Days

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.~~ 9/27/11

~~(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury};~~ 9/27/11 Chromium Hex - 7196;

~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~ 9/27/11

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 - Total Sr;~~ 9/27/11

WO 6241

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-061-B

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #44	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-106	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL (mmm 9/22/11)	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01

AIR QUALITY: ☐

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days/15 Days (mmm 9/22/11)

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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)

113192

SPECIAL HANDLING AND/OR STORAGE

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

SDG # LD6241
LOT # JII270478

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXH2	SOIL MMRA8	SEP 14 2011	0854	✓	✓ (9/22/11)	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall	SEP 14 2011 1450	M. Nelson	SEP 14 2011 1450
[illegible]	9/22/11 1315	L.D. Wall CHPRC	9/22/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	9-23-11 1015	C Fulton	9-23-11 1015
C Fulton	9-23-11 1415	J Beck TARL	9-23-11 1415

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

Please email copies of chain of custodies, Sample receipt form, and final report to Marisol Avila (Marisol_Avila@rlsgov) and Heather Medley (Heather_A_Medley@rlsgov)

WSCF project managers

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-061 – B

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #44	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-106	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL mm 9/27/11	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01

AIR QUALITY: ☐

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

DATA TURNAROUND: ~~12 Days / 12 Days~~ mm 9/27/11 15 Days/15 Days

ORIGINAL

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.~~ ☐☐ ~~** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.~~ mm 9/27/11

~~(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic,~~ mm 9/27/11 ~~Beryllium, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury};~~ mm 9/27/11 Chromium Hex - 7196;

~~(2) Gamma Spectroscopy {Cesium 137, Cobalt 60, Europium 152, Europium 154, Europium 155};~~ mm 9/27/11

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium 89,90 - Total Sr;~~ mm 9/27/11

W06241

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-062 – B

COLLECTOR: FM Hall ~~CHPRC~~	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #45	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-106	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL 9/27/11	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01

AIR QUALITY: ☐

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days/15 Days 9/27/11

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SDG# W062411
LOT# JII270478

SAMPLE NO.		MATRIX*	SAMPLE DATE	SAMPLE TIME	[redacted]
B2FXH3	2	SOIL MMRAG	SEP 14 2011	0910	

9/26/11

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall	SEP 14 2011 1450	M. Nelson M. Nelson	SEP 14 2011 1450
L.D. Wall	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU- 1	SEP 26 2011 1400
SSU- 1	9-27-11 1015	C.F. Hon	9-27-11 1015
C.F. Hon	9-27-11 1415	J. Tack	9-27-11 1415

SPECIAL INSTRUCTIONS: SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-062 – B

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #45	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-106	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL (mm 9/27/11)	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01

AIR QUALITY: ☐

DATA TURNAROUND: ~~12 Days / 12 Days~~ (mm 9/27/11) 15 Days/15 Days

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.~~ mm 9/27/11

~~(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}, 200.8_HG - ICPMS {Mercury};~~ Chromium Hex - 7196; (mm 9/27/11) mm 9/27/11

~~(2) Gamma Spectroscopy {Cesium 137, Cobalt-60, Europium-152, Europium 154, Europium-155};~~ mm 9/27/11

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium 89,90 -- Total Sr;~~ mm 9/27/11

WO6241

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-063 – B

COLLECTOR: FM Hall ~~CHPRC~~	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #46	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-106	FIELD LOGBOOK NO.: HNF-N-507-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01

AIR QUALITY: ☐

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days/15 Days

ORIGINAL

LOT # W06241
SDG # JJI270478

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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
B2FXH4 3	SOIL MMRCA	SEP 14 2011	0920

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall ~~CHPRC~~	SEP 14 2011 1450	M. Nelson	SEP 14 2011 1450
M. Nelson	9/26/11 1315	L.D. Wall ~~CHPRC~~	9/26/11 1315
L.D. Wall ~~CHPRC~~	SEP 26 2011 1400	SSU- 1	SEP 26 2011 1400
SSU- 1	9-27-11 1015	C Fulton	9-27-11 1015
C Fulton	9-27-11 1415	S. Beck / Beck TRACK	9-27-11 1415

SPECIAL INSTRUCTIONS: SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-063 — B

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #46	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-106	FIELD LOGBOOK NO.: HNF ~~N-507~~-23	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL (mmm 9/27/11)	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01

AIR QUALITY: ☐

DATA TURNAROUND: ~~12 Days / 12 Days~~ mmm 9/27/11 15 Days/15 Days

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.~~ mmm 9/27/11

~~(1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP/MS - 200.8 (Add on) {Arsenic,~~ mmm 9/27/11 ~~Beryllium, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8 HG - ICPMS {Mercury};~~ Chromium Hex - 7196; mmm 9/27/11

~~(2) Gamma Spectroscopy {Cesium 137, Cobalt 60, Europium 152, Europium 154, Europium 155};~~ mmm 9/27/11

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium 89,90 -- Total Sr;~~ mmm 9/27/11

W06241

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-060 – B

COLLECTOR: FM Hall CHPRC

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #43

ICE CHEST NO.: GWS-107

SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL (MVM 9/27/11)

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

FIELD LOGBOOK NO.: HNF-N-507-23

ACTUAL SAMPLE DEPTH: 0-1'

COA: 302676ES10

OFFSITE PROPERTY NO.: N/A

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

PRICE CODE: C01

AIR QUALITY: ☐

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days/15 Days (MVM 9/27/11)

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

LOT# W06241
SDG# JJI270478

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXH1	10	SOIL ~~MMQ9R~~ MMRCC LV 9/27/11	SEP 13 2011	1219	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 13 2011 1450	TA FRAZIER	SEP 13 2011 1450
	9/26/11 1315	L.D. Wall CHPRC	1315 9/26/11
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	9-27-11 1015	C.F. Hon	9-27-11 1015
C.F. Hon	9-27-11 1415	J. Lock / Lock TALL	9-27-11 1415

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

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

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-060 – B	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT LUKE, SN	TELEPHONE NO. 372-1667	PROJECT COORDINATOR LUKE, SN	PRICE CODE C01	DATA TURNAROUND
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #43	PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO. F11-159	AIR QUALITY ☐	~~12 Days / 12 Days~~ MVM 9/27/11 15 Days / 15 Days
ICE CHEST NO. GWS – 107	FIELD LOGBOOK NO. HNF-~~N-507~~-23.	ACTUAL SAMPLE DEPTH 0 – 1'	COA 302676ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	ORIGINAL
SHIPPED TO MVM 9/27/11 ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A		

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.~~ ~~** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.~~ MVM 9/27/11

MVM 9/27/11 ~~(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury};~~ Chromium Hex - 7196; MVM 9/27/11

~~(2) Gamma Spectroscopy {Cesium 137, Cobalt-60, Europium 152, Europium 154, Europium 155};~~ MVM 9/27/11

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 – Total Sr;~~ MVM 9/27/11

WQ6241

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-064 – B

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #47	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		**SAF NO.** F11-159
ICE CHEST NO. GWS-106	**FIELD LOGBOOK NO.** ~~HNF-N-507~~ 23	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 302676ES10
SHIPPED TO ~~Waste Sampling & Characterization~~ TARL	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

PRICE CODE C01

AIR QUALITY ☐

DATA TURNAROUND ~~12 Days / 12 Days~~ 15 Days/15 Days 9/22/11

METHOD OF SHIPMENT GOVERNMENT VEHICLE

ORIGINAL

SDG# WD6241
LOT# JJI270478

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXH5	4	SOIL MMRCD	SEP 14 2011	0935	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall	SEP 14 2011 1450	M. Nelson	SEP 14 2011 1450
M. Nelson	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall	SEP 26 2011 1402	SSU-1	SEP 26 2011 1402
SSU-1	9-27-11 1015	C Fulton	9-27-11 1015
C Fulton	9-27-11 1415	J Bock	9-27-11 1415

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

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

PRINTED ON 7/25/2011

4-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-064 – B

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #47	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		**SAF NO.** F11-159
ICE CHEST NO. GWS-106	**FIELD LOGBOOK NO.** HNF-N-507-23.	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 302676ES10
SHIPPED TO ~~Waste Sampling & Characterization~~ TARL	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

PRICE CODE C01

AIR QUALITY ☐

METHOD OF SHIPMENT GOVERNMENT VEHICLE

DATA TURNAROUND ~~12 Days / 12 Days~~ 15 Days/15 Days

ORIGINAL

SPECIAL INSTRUCTIONS

~~** The CACN for WSCF Analytical is 402579ES20.☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8 HG - ICPMS {Mercury};~~ Chromium Hex - 7196; ~~(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};~~ ~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;~~

WO6241

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Certificate of Analysis

TestAmerica Laboratories, Inc.

CH2M Hill Plateau Remediation Company
P.O. Box 1600
Mail Stop – R3-60
Richland, WA 99352

October 12, 2011

Attention: Scot Fitzgerald

SAF Number	:	F11-159
Date SDG Closed	:	September 27, 2011
Number of Samples	:	Sixteen (16)
Sample Type	:	Soil
SDG Number	:	W06242
Data Deliverable	:	15 Day Summary

CASE NARRATIVE

I. Introduction

On September 27, 2011 sixteen soil samples were received at TestAmerica (TARL). Upon receipt, the samples were assigned the following laboratory ID numbers to correspond with the CH2M specific ID:

CH2M ID#	TARL ID#	MATRIX	DATE OF RECEIPT
B2FXJ5	MMRCE	SOIL	9/27/11
B2FXJ4	MMRCG	SOIL	9/27/11
B2FXC9	MMRCH	SOIL	9/27/11
B2FXC8	MMRCJ	SOIL	9/27/11
B2FXC7	MMRCK	SOIL	9/27/11
B2FXC6	MMRCL	SOIL	9/27/11
B2FXD4	MMRCM	SOIL	9/27/11
B2FXD3	MMRCN	SOIL	9/27/11
B2FXD2	MMRCQ	SOIL	9/27/11
B2FXD1	MMRCX	SOIL	9/27/11
B2FXD0	MMRC1	SOIL	9/27/11
B2FXD9	MMRC2	SOIL	9/27/11
B2FXD8	MMRC3	SOIL	9/27/11

B2FXD7	MMRC4	SOIL	9/27/11
B2FXD5	MMRC5	SOIL	9/27/11
B2FXF0	MMRC6	SOIL	9/27/11

II. Sample Receipt

The samples were received in good condition and no anomalies were noted during check-in.

On September 28, 2011 TestAmerica received instructions (via phone call) to analyze all the samples in this SDG for alpha, beta, total strontium and hexavalent chromium even though the COCs only request hexavalent chromium. TARL received an SIR on October 11, 2011. TARL accepted the proposed resolution included in the SIR (CHPRC Tracking Number: SDR12-016) on October 11, 2011.

III. Analytical Results/Methodology

The analytical results for this report are presented by laboratory sample ID. Each set of data includes sample identification information, analytical results and the appropriate associated statistical errors.

The requested analyses were:

Gas Proportional Counting
Gross Alpha by method RL-GPC-001
Gross Beta by method RL-GPC-001
Strontium-90 by method RL-GPC-003
Chemical Analysis
Hexavalent Chromium by EPA method 7196A

IV. Quality Control

The analytical results for each analysis performed includes a minimum of one laboratory control sample (LCS), one method (reagent) blank, and one duplicate sample analysis. Any exceptions have been noted in the "Comments" section.

QC and sample results are reported in the same units.

CH2M Hill Plateau Remediation Company
October 12, 2011

V. Comments

Gas Proportional Counting

Gross Alpha by method RL-GPC-001:
The LCS, batch blank, samples and sample duplicate (B2FXJ5) results are within contractual requirements.

Gross Beta by method RL-GPC-001:
The LCS, batch blank, samples and sample duplicate (B2FXJ4) results are within contractual requirements..

Strontium-90 by method RL-GPC-003:
The LCS, batch blank, samples and sample duplicate (B2FXC9) results are within contractual requirements.

Chemical Analysis

Hexavalent Chromium by EPA method 7196A
The LCS, batch blank, samples, sample duplicate (B2FXJ5) and sample matrix spike (B2FXJ5) results are within contractual requirements.

I certify that this Certificate of Analysis 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 hard copy data package has been authorized by the Laboratory Manager, or a designee as verified by the following signature.

Reviewed and approved:

Sandra Seger
Project Manager

SAMPLE ISSUE RESOLUTION

SIR NUM	SDR12-016
REV NUM	0
DATE INITIATED	10/11/2011

SAMPLE EVENT INFORMATION

SAF NUM(S)	F11-159
OPERABLE UNIT(S)	100-KR-2
PROJECT(S)	KW Floodplain
SAMPLE EVENT TITLE(S)	100-K-63 KW Floodplain
LABORATORY	TestAmerica Incorporated, Richland

SAMPLING INFORMATION

NUMBER OF SAMPLES	16
SAMPLE NUMBERS	B2FXC6, B2FXC7, B2FXC8, B2FXC9, B2FXD0, B2FXD1, B2FXD2, B2FXD3, B2FXD4, B2FXD5, B2FXD7, B2FXD8, B2FXD9, B2FXF0, B2FXJ4, B2FXJ5
SAMPLE MATRIX	SOIL
COLLECTION DATE	8/31/2011 - 9/12/2011
SDG NUM	W06242

ISSUE BACKGROUND

CLASS	General Laboratory Direction
TYPE	Addition of Analysis
DESCRIPTION	Hexavalent chromium was the only analysis requested on the COCs of samples diverted to TestAmerica Richland. The CHPRC customer is requesting the addition of total alpha, total beta, and total strontium analyses for the listed samples. Steve Trent of CHPRC made original customer request by telephone on 9/28/2011.

DISPOSITION

DESCRIPTION	Proposed Disposition: Add the additional requested analyses for the listed samples.
JUSTIFICATION	Accepted Disposition: Accept proposed disposition.

Submitted by:	Steve Trent / CHPRC	Date: 10/11/2011
Accepted by:	Sandra Seger / TARL	Date: 10/11/2011

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-074-B | PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: Sal 9/27/11 ~~12 Days / 12 Days~~ 15 Days

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #56

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

AIR QUALITY: ☐

ICE CHEST NO.: 6WS-023

FIELD LOGBOOK NO.: HNF-N-507-23. N/A

ACTUAL SAMPLE DEPTH: 0 – 1'

COA: 302676ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

SHIPPED TO: Sal 9/27/11 ~~Waste Sampling & Characterization~~ TARL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

KB 9/26/11

MG 9-27-11

SDG# W06242
LOT# J1I270481
~~Report: 11/7/11~~ Due 10/12/11
SKS 9/28/11

J1I270481

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXJ5 //	SOIL MMRCE	AUG 3 1 2011	0730	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 3 1 2011 / 1300	M01109SSU #1	AUG 3 1 2011 / 1300
M01109 #1 SSU	9-7-11 / 1230	FM Hall	9-7-11 / 1230
FM Hall	9-7-11 / 1415	M. Nelson Mnels	9-7-11 / 1415
	9/26/11 / 1315	L.D. Wall CHPRC	9/26/11 / 1315
L.D. Wall CHPRC	SEP 2 6 2011 / 1400	SSU- 1	SEP 2 6 2011 / 1400
SSU- 1	SEP 2 7 2011 / 1000	L.D. Wall CHPRC	SEP 2 7 2011 / 1000
L.D. Wall CHPRC	SEP 2 7 2011 / 1415	J. Beck TARL	SEP 2 7 2011 / 1415

SPECIAL INSTRUCTIONS: SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION: RECEIVED BY | TITLE | DATE/TIME

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-074 — B

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #56	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-023	FIELD LOGBOOK NO.: HNF-~~N-507~~-23. N/A	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: Sal 9/27/11 ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01

AIR QUALITY: ☐

DATA TURNAROUND: Sal 9/27/11 ~~12 Days / 12 Days~~ 15 Days

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

SPECIAL INSTRUCTIONS

** ~~The CACN for WSCF Analytical is 402579ES20.~~ ☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8-HG - ICPMS {Mercury}~~; Chromium Hex - 7196; Sal 9/27/11

(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};

(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

WØ6042

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-073-B | PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: Sal 9/27/11 ~~12 Days / 12 Days~~ 15 Days

AIR QUALITY: ☐

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #55

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

ICE CHEST NO.: N/A

FIELD LOGBOOK NO.: N/A

ACTUAL SAMPLE DEPTH: SURFACE

COA: 302676ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

SHIPPED TO: Sal 9/27/11 ~~Waste Sampling & Characterization~~ TARL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

9/27/11 9/26/11

W06042

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXJ4 / 0	SOIL MMRCG	SEP 07 2011	0940	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall, CHPRC	1415 SEP 07 2011	M. Nelson	SEP 07 2011 1415
		L.D. Wall, CHPRC	9/26/11 1315
L.D. Wall, CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1000	L.D. Wall, CHPRC	SEP 27 2011 1000
L.D. Wall, CHPRC	SEP 27 2011 1415	J. Sauk / Sal TARL	SEP 27 2011 1415

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-073 - B	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT LUKE, SN	TELEPHONE NO. 372-1667	PROJECT COORDINATOR LUKE, SN	PRICE CODE C01	DATA TURNAROUND
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #55	PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO. F11-159	AIR QUALITY ☐ Sal 9/27/11	~~12 Days / 12 Days~~ 15 Days
ICE CHEST NO. N/A	FIELD LOGBOOK NO. N/A	ACTUAL SAMPLE DEPTH SURFACE	COA 302676ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	ORIGINAL
SHIPPED TO Sal 9/27/11 ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A		

SPECIAL INSTRUCTIONS

** ~~The CACN for WSCF Analytical is 402579ES20.~~ ☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8 HG - ICPMS {Mercury};~~ Chromium Hex - 7196; Sal 9/27/11
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

WO6042

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-038 -B

COLLECTOR	FM Hall CHPRC
SAMPLING LOCATION	100-K-63 Grubbed Area Sample #23
ICE CHEST NO.	GWS-023
SHIPPED TO	Sal 9/27/11 ~~Waste Sampling & Characterization~~ TARL
COMPANY CONTACT	LUKE, SN
TELEPHONE NO.	372-1667
PROJECT DESIGNATION	100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil
FIELD LOGBOOK NO.	~~HNF-N-507~~ 23. N/A
ACTUAL SAMPLE DEPTH	0-1'
OFFSITE PROPERTY NO.	N/A
PROJECT COORDINATOR	LUKE, SN
SAF NO.	F11-159
COA	302676ES10
BILL OF LADING/AIR BILL NO.	N/A
PRICE CODE	C01
AIR QUALITY	☐
DATA TURNAROUND	Sal 9/27/11 ~~12 Days / 12 Days~~ 15 Days
METHOD OF SHIPMENT	GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXC9	SOIL MMRCH	8/31/11	1030	✓	✓	✓

WO 6042

CHAIN OF POSSESSION	DATE/TIME	SIGN/ PRINT NAMES	DATE/TIME
RELINQUISHED BY/REMOVED FROM FM Hall CHPRC	AUG 31 2011 1300	RECEIVED BY/STORED IN MO1109SSU #1	AUG 31 2011 1300
RELINQUISHED BY/REMOVED FROM MO1109 SSU #1	9-7-11 1230	RECEIVED BY/STORED IN FM HALL	9-7-11 1230
RELINQUISHED BY/REMOVED FROM FM HALL	9-7-11 1415	RECEIVED BY/STORED IN M. Nelson	9-7-11 1415
RELINQUISHED BY/REMOVED FROM	9/26/11 1315	RECEIVED BY/STORED IN L.D. Wall CHPRC	9/26/11 1315
RELINQUISHED BY/REMOVED FROM CHPRC	SEP 26 2011 1400	RECEIVED BY/STORED IN SSU-1	SEP 26 2011 1400
RELINQUISHED BY/REMOVED FROM SSU-1	SEP 27 2011 1000	RECEIVED BY/STORED IN L.D. Wall CHPRC	SEP 27 2011 1000
RELINQUISHED BY/REMOVED FROM L.D. Wall CHPRC	SEP 27 2011 1415	RECEIVED BY/STORED IN TARL	SEP 27 2011 1415

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-038 -B	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01 Sal 9/27/11	DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #23	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: GWS - 023	FIELD LOGBOOK NO.: HNF-~~N-507-23~~ N/A	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
SHIPPED TO: Sal 9-27-11 ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

SPECIAL INSTRUCTIONS

** ~~The CACN for WSCF Analytical is 402579ES20.~~ ☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. Sal 9/27/11

(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}~~; Chromium Hex - 7196;

(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};

(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

W06042

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-037 - B | PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01	DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days	AIR QUALITY: ☐ Sal 9/27/11	
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #22	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil	SAF NO.: F11-159	
ICE CHEST NO.: GWS-023	FIELD LOGBOOK NO.: HNF-N-607-23 . N/A	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL		
SHIPPED TO: Sal 9/27/11 ~~Waste Sampling & Characterization~~ TARL	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 KB 9/26/11	6 Months
TYPE OF CONTAINER	G/P	G	G/P
NO. OF CONTAINER(S)	1 KB 9-27-11	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SDG#
LOT#

WQ6042

SAMPLE NO.		MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXC8	8	SOIL MNRCJ	8/31/11	1010	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall ~~CHPRC~~	AUG 3 1 2011 / 1300	M01109SSU #1	AUG 3 1 2011 / 1300
M01109 SSU #1	9-7-11 1230	FM HALL	9-7-11 1230
FM HALL	9-7-11 1415	M. Nelson M. Nels	9-7-11 1415
Bream	9/26/11 1315	L.D. Wall CHPRC L.D. Wall	9/26/11 1315
CHPRC L.D. Wall	SEP 2 6 2011 1400	SSU-1	SEP 2 6 2011 1400
SSU-1	SEP 2 7 2011 1000	L.D. Wall CHPRC L.D. Wall	SEP 2 7 2011 1000
L.D. Wall CHPRC L.D. Wall	SEP 2 7 2011 1415	Stock Stock THL	SEP 2 7 2011 1415

LABORATORY SECTION: RECEIVED BY | TITLE | DATE/TIME

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

SPECIAL INSTRUCTIONS: SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

PRINTED ON 7/25/2011 | A-6003-618 (REV. 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-037-B	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT LUKE, SN	TELEPHONE NO. 372-1667	PROJECT COORDINATOR LUKE, SN	PRICE CODE C01	DATA TURNAROUND ~~12 Days / 12 Days~~ 15 Days
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #22	PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO. F11-159	AIR QUALITY ☐ Sal 9/27/11	
ICE CHEST NO. GWS-023	FIELD LOGBOOK NO. ~~HNF-N-507-~~23 . N/A	ACTUAL SAMPLE DEPTH 0-1'	COA 302676ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	ORIGINAL
SHIPPED TO Sal 9/27/11 ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A		

SPECIAL INSTRUCTIONS

** ~~The CACN for WSCF Analytical is 402579ES20.~~ ☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury};~~ Chromium Hex - 7196; Sal 9/27/11

(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};

(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

WQ6042

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

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

F11-159-036-B — PAGE 1 OF 2

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #21	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		**SAF NO.** F11-159
ICE CHEST NO. GWS-023	**FIELD LOGBOOK NO.** HNF-N-507-23-N/A	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 302676ES10
SHIPPED TO Sal 9/27/11 ~~Waste Sampling & Characterization~~ TARC	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

PRICE CODE C01 — **DATA TURNAROUND** Sal 9/27/11 ~~12 Days / 12 Days~~ 15 Days

AIR QUALITY ☐

METHOD OF SHIPMENT GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

9-27-11 — 9/27/11

WQ6042

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXC7	SOIL	8/31/11	0950	✓	✓	✓

MMRCK

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 31 2011 / 1300	MO1109SSU #1	AUG 31 2011 / 1300
MO1109 SSU #1	9-7-11 / 230	FM HALL	9-7-11 / 230
FM HALL	9-7-11 / 1415	M. Nelson	9-7-11 / 1415
	9/22/11 / 1315	L.D. Wall CHPRC	9/22/11 / 1315
L.D. Wall CHPRC	SEP 26 2011 / 1400	SSU-1	SEP 26 2011 / 1400
SSU-1	SEP 27 2011 / 1000	L.D. Wall CHPRC	SEP 27 2011 / 1000
L.D. Wall CHPRC	SEP 27 2011 / 1415	TARC	SEP 27 2011 / 1415

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
Please email copies of chain of custody, Sample receipt Form, and final report to Marisol Avila (Marisol_Avila@rl.gov) and Heather Medley (Heather_A_Medley@rl.gov) WSCF project mangers

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

PRINTED ON 7/25/2011 — 6-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-036-B	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01 Sal 9/27/11	DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #21	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	ORIGINAL
ICE CHEST NO.: GWS-023	FIELD LOGBOOK NO.: HNF-N-507-23 - N/A	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: Sal 9/27/11 ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

SPECIAL INSTRUCTIONS

** ~~The CACN for WSCF Analytical is 402579ES20.~~ ☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. Sal 9/27/11

(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8 HG - ICPMS {Mercury}~~; Chromium Hex - 7196;

(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};

(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

W06042

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-035 - B | PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #20	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area A3)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-023	FIELD LOGBOOK NO.: HNF-N-507-23 - N/A	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: Sal 9/27/11 ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01 Sal 9/27/11 | DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days

AIR QUALITY: ☐

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

LOT # 9-27-11 9/26/11

Report # WQ6042

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXC6 6	SOIL MMRCL	8/31/11	0930	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 3 1 2011 / 1300	M01109SSU #1	AUG 3 1 2011 / 1300
M01109 SSU #1	9-7-11 1230	FM HALL	9-7-11 1230
FM HALL	9-7-11 1415	M. Nelson M.Nelson	9-7-11 1415
[illegible]	9/26/11 1315	L.D. Wall CHPRC L.D. Wall	9/26/11 1315
L.D. Wall CHPRC L.D. Wall	SEP 2 6 2011 1400	SSU-1	SEP 2 6 2011 1400
SSU-1	SEP 2 7 2011 1000	CHPRC L.D. Wall	SEP 2 7 2011 1000
L.D. Wall CHPRC L.D. Wall	SEP 2 7 2011 1415	J. Book TARL	SEP 2 7 2011 1415

LABORATORY SECTION: RECEIVED BY | TITLE | DATE/TIME

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

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

Please email copies of chain of custody, sample receipt form, and final report to Marisol Avila (Marisol_Avila@rl.gov) and Heather Medley (Heather_A_Medley@rl.gov) WSCF project managers

PRINTED ON 7/25/2011 | A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-035 -B	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01	DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #20	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐ Sal 9/27/11	
ICE CHEST NO.: GWS-023	FIELD LOGBOOK NO.: HNF-N-507-23 - N/A	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
SHIPPED TO: Sal 9/27/11 ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

SPECIAL INSTRUCTIONS

** ~~The CACN for WSCF Analytical is 402579ES20.~~ ☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. Sal 9/27/11

(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8-HG - ICPMS {Mercury}~~; Chromium Hex - 7196;

(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};

(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

WO6042

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | F11-159-043 - B | PAGE 1 OF 2

COLLECTOR FM Hall	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN
SAMPLING LOCATION CHPRC 100-K-63 Grubbed Area Sample #28	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		**SAF NO.** F11-159
ICE CHEST NO.	**FIELD LOGBOOK NO.** N/A	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 302676ES10
SHIPPED TO Sal 9/27/11 ~~Waste Sampling & Characterization~~ TARL	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

PRICE CODE C01 Sal 9/27/11 | **AIR QUALITY** ☐ | **DATA TURNAROUND** ~~12 Days / 12 Days~~ 15 Days | **METHOD OF SHIPMENT** GOVERNMENT VEHICLE | **ORIGINAL**

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SDG#
LOT#

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXD4	SOIL	SEP 07 2011	1624	[redacted]		

WQ6042

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 07 2011 1415	M. Nelson CHPRC	SEP 07 2011 1415
Bearcat Hacom 9/26/11	1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1000	L.D. Wall CHPRC	SEP 27 2011 1000
L.D. Wall CHPRC	SEP 27 2011 1415	J. Bock / Bock TARL	SEP 27 2011 1415

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

Please email copies of chain of custody, sample receipt form, and final report to Marisol Arila (marisol_arila@rl.gov) and Heather Medley (heather_d_medley@rl.gov) WSLF project managers

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

PRINTED ON 7/25/2011 | A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-043 - B	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT LUKE, SN	TELEPHONE NO. 372-1667	PROJECT COORDINATOR LUKE, SN	PRICE CODE C01	DATA TURNAROUND
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #28	PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO. F11-159	AIR QUALITY ☐ Sal 9/27/11 ~~12 Days / 12 Days~~	15 Days
ICE CHEST NO. N/A	FIELD LOGBOOK NO. N/A	ACTUAL SAMPLE DEPTH 0-1'	COA 302676ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	ORIGINAL
SHIPPED TO Sal 9/27/11 ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A		

SPECIAL INSTRUCTIONS

** ~~The CACN for WSCF Analytical is 402579ES20.~~ ☐☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. Sal 9/27/11

(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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury};~~ Chromium Hex - 7196;

(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};

(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

W06042

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-042 - B | PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #27	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: N/A	FIELD LOGBOOK NO.: N/A	ACTUAL SAMPLE DEPTH: SURFACE	COA: 302676ES10
SHIPPED TO: Sal 9/27/11 TARL ~~Waste Sampling & Characterization~~	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01 Sal 9/27/11 | DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days

AIR QUALITY: ☐

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXD3	SOIL	SEP 07 2011	1014	✓	✓	✓

WQ6042

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall, CHPRC	SEP 07 2011 1415	M. Nelson M. Nelson	SEP 07 2011 1415
Vbernal Vbernal	9/26/11 1315	L.D. Wall, CHPRC	9/26/11 1315
L.D. Wall, CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1000	L.D. Wall, CHPRC	SEP 27 2011 1000
L.D. Wall, CHPRC	SEP 27 2011 1415	Stock Stock TARL	SEP 27 2011 1415

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

Please email copies of chain of custody, sample receipt form, and final report to Marisol Avila (Marisol_Avila@rl.gov) and Heather Medley (Heather_A_Medley@rl.gov) WSCF project managers.

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-042 - B	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT LUKE, SN	TELEPHONE NO. 372-1667	PROJECT COORDINATOR LUKE, SN	PRICE CODE C01	DATA TURNAROUND
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #27	PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO. F11-159	AIR QUALITY ☐ Sal 9/27/11 ~~12 Days / 12 Days~~ 15 Days	
ICE CHEST NO. N/A	FIELD LOGBOOK NO. N/A	ACTUAL SAMPLE DEPTH SURFACE	COA 302676ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	ORIGINAL
SHIPPED TO Sal 9/27/11 TARL ~~Waste Sampling & Characterization~~	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A		

SPECIAL INSTRUCTIONS

** ~~The CACN for WSCF Analytical is 402579ES20.~~ ** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}~~; Chromium Hex - 7196; Sal 9/27/11

(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};

(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

WO #6042

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F11-159-041 - B — PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #26	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: N/A	FIELD LOGBOOK NO.: N/A	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: 9/27/11 SAL ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01 — AIR QUALITY: ☐ Sal 9/27/11 — DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days — METHOD OF SHIPMENT: GOVERNMENT VEHICLE — **ORIGINAL**

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SDG#
LOT#

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXD2 3	SOIL MMRLQ	SEP 07 2011	0940	✓	✓	✓

WO#6042

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall, CHPRC	SEP 07 2011 1415	M. Nelson M. Nelson	SEP 07 2011 1415
L.D. Wall, CHPRC	9/26/11 1315	L.D. Wall, CHPRC	9/26/11 1315
L.D. Wall, CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1000	L.D. Wall, CHPRC	SEP 27 2011 1000
L.D. Wall, CHPRC	SEP 27 2011 1415	J Stock / Stock TARL	SEP 27 2011 1415
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

Please email copies of chain of custody, Sample Receipt Form, and final report to marisol avila (marisol_avila@rl.gov) and Heather Medley (Heather_A_Medley@rl.gov)

WSLF project managers

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

PRINTED ON: 7/25/2011 — A-6002-618 (REV. 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-041-B

COLLECTOR FM Hall	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN
SAMPLING LOCATION CHPRC 100-K-63 Grubbed Area Sample #26	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		**SAF NO.** F11-159
ICE CHEST NO. N/A	**FIELD LOGBOOK NO.** N/A	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 302676ES10
SHIPPED TO ~~Waste Sampling & Characterization~~ Sal 9/27/11 TARL	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

PRICE CODE C01 Sal 9/27/11

AIR QUALITY ☐

DATA TURNAROUND ~~12 Days / 12 Days~~ 15 Days

METHOD OF SHIPMENT GOVERNMENT VEHICLE

ORIGINAL

SPECIAL INSTRUCTIONS

** ~~The CACN for WSCF Analytical is 402579ES20.~~ ** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8 HG - ICPMS {Mercury};~~ Chromium Hex - 7196;

(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};

(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

Sal 9/27/11

WD6042

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-040 -B | PAGE 1 OF 2

COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #25	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: N/A	FIELD LOGBOOK NO.: N/A	ACTUAL SAMPLE DEPTH: SURFACE	COA: 302676ES10
SHIPPED TO: Sal 9/27/11 TARL ~~Waste Sampling & Characterization~~	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01 | AIR QUALITY: ☐ Sal 9/27/11 | DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | **ORIGINAL**

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXD1	SOIL	SEP 0 7 2011	0930	✓	✓	✓

9-27-11 9/26/11

WO 6042

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: FM Hall, CHPRC	DATE/TIME: SEP 0 7 2011 1415	RECEIVED BY/STORED IN: M. Nelson	DATE/TIME: SEP 0 7 2011 1415
RELINQUISHED BY/REMOVED FROM: L.Bierzal-Brown	DATE/TIME: 9/26/11 1315	RECEIVED BY/STORED IN: L.D. Wall, CHPRC	DATE/TIME: 9/26/11 1315
RELINQUISHED BY/REMOVED FROM: L.D. Wall, CHPRC	DATE/TIME: SEP 2 6 2011 1400	RECEIVED BY/STORED IN: SSU-1	DATE/TIME: SEP 2 6 2011 1400
RELINQUISHED BY/REMOVED FROM: SSU-1	DATE/TIME: SEP 2 7 2011 1000	RECEIVED BY/STORED IN: L.D. Wall, CHPRC	DATE/TIME: SEP 2 7 2011 1000
RELINQUISHED BY/REMOVED FROM: L.D. Wall, CHPRC	DATE/TIME: SEP 2 7 2011 1415	RECEIVED BY/STORED IN: J. Bock, TARL	DATE/TIME: SEP 2 7 2011 1415
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

Please email copies of chain of custody, sample receipt form, and Final report to Marisol Anila (Marisol_Anila@rl.gov) and Heather Medley (Heather_A_Medley@rl.gov) ~~WCF~~ WSCF Project Managers

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

PRINTED ON 7/25/2011 A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-040 -B	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT LUKE, SN	TELEPHONE NO. 372-1667	PROJECT COORDINATOR LUKE, SN	PRICE CODE C01 Sal 9/27/11	DATA TURNAROUND ~~12 Days / 12 Days~~ 15 Days
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #25	PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO. F11-159	AIR QUALITY ☐	ORIGINAL
ICE CHEST NO. N/A	FIELD LOGBOOK NO. N/A	ACTUAL SAMPLE DEPTH SURFACE	COA 302676ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	
SHIPPED TO Sal 9/27/11 ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A		

SPECIAL INSTRUCTIONS

** ~~The CACN for WSCF Analytical is 402579ES20.~~ ☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury};~~ Chromium Hex - 7196; Sal 9/27/11
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

W06042

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-039 - B | PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #24	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-023	FIELD LOGBOOK NO.: ~~HNF-N-507-23~~ N/A	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: Sat 9/27/11 TARL ~~Waste Sampling & Characterization~~	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01 Sal 9/27/11 | AIR QUALITY: ☐ | DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | ORIGINAL

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)

13116

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool~4C	None	None
HOLDING TIME	6 Months	6 Months	6 Months
TYPE OF CONTAINER	G/P	P VB 9/26/11	G/P
NO. OF CONTAINER(S)	1 9-27-11	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SDG#
LOT#

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXD0	SOIL	8/31/11	1056	✓	✓	✓

WD6042

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	AUG 3 1 2011 1300	M01109 SSU #1	AUG 3 1 2011 1300
M01109 SSU #1	9-7-11 1230	FM Hall	9-7-11 1230
FM Hall	9-7-11 1415	M. Nelson	9-7-11 1415
	9/26/11 1315	L.D. Wall CHPRC	9/26/11 1315
L.D. Wall CHPRC	SEP 2 6 2011 1400	SSU-1	SEP 2 6 2011 1400
SSU-1	SEP 2 7 2011 1000	L.D. Wall CHPRC	SEP 2 7 2011 1000
L.D. Wall CHPRC	SEP 2 7 2011 1415	TARL	SEP 2 7 2011 1415

LABORATORY SECTION: RECEIVED BY | TITLE | DATE/TIME

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

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

* Please email chain of custodies, Sample Receipt Forms, and Final Report to Marisol Avila (marisol_Avila@rl.gov) and Heather Medley (Heather_A_Medley@rl.gov), WSCF Project Managers

PRINTED ON 7/25/2011 | A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-039 - B	PAGE 2 OF 2
COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE C01 Sal	DATA TURNAROUND
FM Hall	LUKE, SN	372-1667	LUKE, SN	AIR QUALITY ☐ 9/27/11	~~12 Days / 12 Days~~ 15 Days
SAMPLING LOCATION CHPRC	PROJECT DESIGNATION		SAF NO.		
100-K-63 Grubbed Area Sample #24	100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		F11-159		
ICE CHEST NO. GWS - 023	FIELD LOGBOOK NO. HNF-N-507-23 . N/A	ACTUAL SAMPLE DEPTH 0 - 1'	COA 302676ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	ORIGINAL
SHIPPED TO Sal 9/27/11 TARL ~~Waste Sampling & Characterization~~	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A		

SPECIAL INSTRUCTIONS

** ~~The CACN for WSCF Analytical is 402579ES20.~~ ☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury};~~ Chromium Hex - 7196; Sal 9/27/11
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

WQ6042

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-048 PAGE 1 OF 2

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #32	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: ~~GWS-001~~ ~~HNF-N-507~~ N/A	FIELD LOGBOOK NO.: HNF-N-507-23 - N/A	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01 DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days

AIR QUALITY: ☐

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

Sal 9/27/11

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SDG# WQ6042
LOT#

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXD9 5	SOIL MMRL2	SEP 12 2011	1107	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 12 2011 1450	JA Brazier Jas. Z.	SEP 12 2011 1450
		L.D. Wall CHPRC	9/26/11 1315
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1000	L.D. Wall CHPRC	SEP 27 2011 1000
L.D. Wall CHPRC	SEP 27 2011 1415	J. Stock TARL	SEP 27 2011 1415

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

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

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-048-B

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #32	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		**SAF NO.** F11-159
ICE CHEST NO. GW5-001	**FIELD LOGBOOK NO.** HNF-N-507-23	**ACTUAL SAMPLE DEPTH** 0 - 1'	**COA** 302676ES10
SHIPPED TO ~~Waste Sampling & Characterization~~ TARL	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

PRICE CODE C01 Sal 9/27/11 **DATA TURNAROUND** ~~12 Days / 12 Days~~ 15 Days

AIR QUALITY ☐

METHOD OF SHIPMENT GOVERNMENT VEHICLE

ORIGINAL

SPECIAL INSTRUCTIONS

** ~~The CACN for WSCF Analytical is 402579ES20.~~ ☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury}~~; Chromium Hex - 7196;

(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};

(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

Sal 9/27/11

W46042

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-047-B

COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
PRICE CODE: C01 Sol 9/27/11	DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days		
AIR QUALITY: ☐			
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #31	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: ~~GWS-001~~ LW. 9/27/11	FIELD LOGBOOK NO.: HNF-N-507-23. N/A	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE			ORIGINAL
SHIPPED TO: Sol 9/27/11 ~~Waste Sampling & Characterization~~ TARL	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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SDG# W46042
LOT#

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXD8 4	SOIL MMRL3	SEP 12 2011	1040	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall	SEP 12 2011 1450	TA Frazier	SEP 12 2011 1450
CHPRC	9/26/11 1315	L.D. Wall CHPRC	1315 9/26/11
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1000	L.D. Wall CHPRC	SEP 27 2011 1000
L.D. Wall CHPRC	SEP 27 2011 1415	J. Beck TARL	1415 SEP 27 2011
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

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

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-047-B PAGE 2 OF 2

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #31	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		**SAF NO.** F11-159
ICE CHEST NO. GW.9/27/11 GWS-001	**FIELD LOGBOOK NO.** HNF-N-507-23.N/A	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 302676ES10
SHIPPED TO Sal 9/27/11 ~~Waste Sampling & Characterization~~ TARL	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

PRICE CODE C01 Sal 9/27/11 **AIR QUALITY** ☐

DATA TURNAROUND ~~12 Days / 12 Days~~ 15 Days

METHOD OF SHIPMENT GOVERNMENT VEHICLE

ORIGINAL

SPECIAL INSTRUCTIONS

** ~~The CACN for WSCF Analytical is 402579ES20.~~ ☐☐** 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~~, Boron, Lead, ~~Molybdenum, Selenium, Strontium, Tin, Uranium~~}; 200.8_HG - ~~ICPMS - {Mercury}~~; Chromium Hex - 7196; Sal 9/27/11

(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};

(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

W46042

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A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-046 - B	PAGE 1 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01 Sal 9/27/11	DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #30	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: ~~GWS-001~~ LW. 9/27/11	FIELD LOGBOOK NO.: HNF-N-507-23. N/A	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
SHIPPED TO: Sal 9/27/11 ~~Waste Sampling & Characterization~~ TARL	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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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	[redacted]		
B2FXD7 3	SOIL MMRCY	SEP 12 2011	1010	✓	✓	✓

W46042

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
FM Hall	SEP 12 2011 1450	TA Pratzer	SEP 12 2011 1450	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
Bierwal Horan	9/26/11 1315	L.D. Wall CHPRC	1315 9/26/11	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
SSU-1	SEP 27 2011 1000	L.D. Wall CHPRC	SEP 27 2011 1000	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
L.D. Wall	SEP 27 2011 1415	J. Bock TARL	1415 SEP 27 2011	
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	

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-046-B

COLLECTOR FM Hall CHPRC	**COMPANY CONTACT** LUKE, SN	**TELEPHONE NO.** 372-1667	**PROJECT COORDINATOR** LUKE, SN
PRICE CODE C01	**DATA TURNAROUND** ~~12 Days / 12 Days~~ 15 Days		
AIR QUALITY ☐	Sal 9/27/11		
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #30	**PROJECT DESIGNATION** 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		**SAF NO.** F11-159
ICE CHEST NO. ~~GWS-001~~ LW. 9/27/11	**FIELD LOGBOOK NO.** HNF-N-507-23 -N/A	**ACTUAL SAMPLE DEPTH** 0-1'	**COA** 302676ES10
METHOD OF SHIPMENT GOVERNMENT VEHICLE	**ORIGINAL**		
SHIPPED TO ~~Waste Sampling & Characterization~~ Sal 9/27/11 TARL	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

SPECIAL INSTRUCTIONS

** ~~The CACN for WSCF Analytical is 402579ES20.~~ ☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8 HG - ICPMS {Mercury};~~ Chromium Hex - 7196;

(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};

(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

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CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-044 B

COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #29	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159
ICE CHEST NO.: GWS-001 LW 9/27/11	FIELD LOGBOOK NO.: HNF-N-507-23-N/A	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10
SHIPPED TO: Sal 9/27/11 ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: C01 Sal 9/27/11

AIR QUALITY: ☐

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

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	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

9/27/11 9/26/11

W# 6042

SAMPLE NO.		MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2FXD5	2	SOIL MTRC5	SEP 12 2011	0940	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall CHPRC	SEP 12 2011 1450	TA Frazier	SEP 12 2011 1450
CHPRC	9/26/11 1315	L.D. Wall CHPRC	1315 9/26/11
L.D. Wall CHPRC	SEP 26 2011 1400	SSU-1	SEP 26 2011 1400
SSU-1	SEP 27 2011 1000	L.D. Wall CHPRC	SEP 27 2011 1000
L.D. Wall CHPRC	SEP 27 2011 1415	J. Bock TARL	1415 SEP 27 2011
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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-044-B	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT LUKE, SN	TELEPHONE NO. 372-1667	PROJECT COORDINATOR LUKE, SN	PRICE CODE C01 Sal 9/27/11	DATA TURNAROUND ~~12 Days / 12 Days~~ 15 Days
SAMPLING LOCATION 100-K-63 Grubbed Area Sample #29	PROJECT DESIGNATION 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO. F11-159	AIR QUALITY ☐	
ICE CHEST NO. GW: 9/27/11 GW3-001	FIELD LOGBOOK NO. HNF-N-507-23 . N/A	ACTUAL SAMPLE DEPTH 0-1'	COA 302676ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	ORIGINAL
SHIPPED TO Sal 9/27/11 ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A		

SPECIAL INSTRUCTIONS

** ~~The CACN for WSCF Analytical is 402579ES20.~~ ☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury};~~ Chromium Hex - 7196;
(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

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A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-159-049 ~ B

COLLECTOR: FM Hall, CHPRC

COMPANY CONTACT: LUKE, SN

TELEPHONE NO.: 372-1667

PROJECT COORDINATOR: LUKE, SN

PRICE CODE: C01

DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days

AIR QUALITY: ☐ 9/27/11

SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #33

PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil

SAF NO.: F11-159

ICE CHEST NO.: LW. 9/27/11 ~~GWS-001~~

FIELD LOGBOOK NO.: HNF-N-507-23. N/A

ACTUAL SAMPLE DEPTH: 0 - 1'

COA: 302676ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ORIGINAL

SHIPPED TO: Sal 9/27/11 ~~Waste Sampling & Characterization~~ TARL

OFFSITE PROPERTY NO.: N/A

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

SDG # W46042
LOT #

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)

113156

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool~4C	None	None
HOLDING TIME	6 Months	6 Months	6 Months
TYPE OF CONTAINER	G/P	P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	500mL	250mL
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			
B2FXF0	SOIL ~~MMRC6~~ MMRC6 SKS 10/11/11	SEP 12 2011	1149	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall, CHPRC	SEP 12 2011 1450	TA Pinazin	SEP 12 2011 1450
Bearcat Broom	9/26/11 1315	L.D. Wall, CHPRC	9/26/11 1315
L.D. Wall, CHPRC	SEP 26 2011 1100	SSU-1	SEP 26 2011 1100
SSU-1	SEP 27 2011 1000	L.D. Wall, CHPRC	SEP 27 2011 1000
L.D. Wall, CHPRC	SEP 27 2011 1415	J. Bock, TARL	SEP 27 2011 1415

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

* Please email copies of chain of custodies, Sample receipt Forms, and Final Report to Marisol Avila (marisol_Avila@rl.gov) and Heather Medley (Heather_A_Medley@rl.gov) WSCF Project Managers

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

PRINTED ON 7/25/2011

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-159-049-B	PAGE 2 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: LUKE, SN	TELEPHONE NO.: 372-1667	PROJECT COORDINATOR: LUKE, SN	PRICE CODE: C01 Sal 9/27/11	DATA TURNAROUND: ~~12 Days / 12 Days~~ 15 Days
SAMPLING LOCATION: 100-K-63 Grubbed Area Sample #33	PROJECT DESIGNATION: 100-K-63 KW Floodplain Verification Sampling (Waste Area AJ)- Soil		SAF NO.: F11-159	AIR QUALITY: ☐	
ICE CHEST NO.: ~~SW.9/27/11~~ C6U5-001	FIELD LOGBOOK NO.: HNF-~~N-507~~-23.	ACTUAL SAMPLE DEPTH: 0-1'	COA: 302676ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
SHIPPED TO: Sal 9/27/11 ~~Waste Sampling & Characterization~~ TARL	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

SPECIAL INSTRUCTIONS

** ~~The CACN for WSCF Analytical is 402579ES20.~~ ☐☐** 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, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury};~~ Chromium Hex - 7196;

(2) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};

(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}; Strontium-89,90 -- Total Sr;

Sal 9/27/11

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Appendix 5

Data Validation Supporting Documentation

Appendix B - Radiochemical Data Validation Checklist

RADIOCHEMICAL DATA VALIDATION CHECKLIST

VALIDATION LEVEL:	A	B	(C)	D	E
PROJECT: KW Floodplain			DATA PACKAGE: VSR12-003		
VALIDATOR: Eyda Hergenreder		LAB: WSCF, TestAmerica		DATE: 11-04-2011	
SDG: WSCF113205, W06240, W06241, W06242			SDG: WSCF113047, WSCF113057, WSCF113116, WSCF113156, WSCF113177, WSCF113192		
ANALYSES PERFORMED					
Gross Alpha/Beta X	Strontium-90 X	Technetium-99	Alpha Spectroscopy	Gamma Spectroscopy X	
Total Uranium	Radium-22	Tritium	C-14	I-129	

SAMPLES/MATRIX Soil samples

SDG WSCF113047: B2FXJ2, B2FXJ3, B2FXF7, B2FXH8, B2FXB4, B2FXC5, B2FXD6
SDG WSCF113057: B2FXJ8, B2FXJ9, B2FXK0, B2FXK1, B2FXB5, B2FXB6, B2FXB7, B2FXB8, B2FXB9, B2FXC0, B2FXC1, B2FXC2, B2FXC3, B2FXC4
SDG WSCF113116: B2FXD0, B2FXD1, B2FXD2, B2FXD3, B2FXD4, B2FXC6, B2FXC7, B2FXC8, B2FXC9, B2FXJ4, B2FXJ5,
SDG WSCF113156: B2FXF0, B2FXD5, B2FXD7, B2FXD8, B2FXD9,
SDG WSCF113177: B2FXF1, B2FXF2, B2FXF3, B2FXF4, B2FXF5, B2FXF6, B2FXF8, B2FXF9, B2FXH0, B2FXH1
SDG WSCF113192: B2FXH2, B2FXH3, B2FXH4, B2FXH5, B2FXH6, B2FXH7, B2FXH9, B2FXJ0, B2FXJ6, B2FXJ7

(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:

WSCF113047: MB Sr-89/90 0.80 pCi/g
WSCF113057: MB (batch 189037) gross alpha 0.37 pCi/g; (batch 189039); Sr-89/90 0.65 pCi/g
W06241: MB gross beta 4.18 pCi/g

EB sample B2FXJ3: gross alpha 0.50 pCI/g; Sr-89/90 0.52 pCi/g
EB sample B2FXJ7: gross alpha 6.68 pCi/g; gross beta 8.78 pCi/g
EB sample B2FXJ5: gross beta 14.4 pCi/g

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: None

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:

Samples B2FXJ2/B2FXF7: Sr-89/90 difference >2X MDC
Samples B2FXJ6/B2FXH7: Cs-137 difference >2X MDC

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:

<u>MDCs > CRDLs for associated non-detect sample results</u>

WSCF113047: Eu-155 CRDL 0.1: B2FXF7 0.15; B2FXH8 0.20; B2FXB4 0.30; B2FXC5 0.16
WSCF113057: Eu-155 CRDL 0.1: B2FXK1 0.15; B2FXB5 0.18; B2FXB6 0.15; B2FXB9 0.17; B2FXC0 0.16; B2FXC1 0.18; B2FXC2 0.55
WSCF113116: Eu-152 CRDL 0.1: B2FXC8 0.23
Eu-155 CRDL 0.1: B2FXC8 0.29
Eu-154 CRDL 0.1: B2FXC8 0.19
WSCF113177: Eu-155 CRDL 0.1: B2FXF2 0.15; B2FXF4 0.16; B2FXF8 0.16;

(Continue last page)

Comments:

SAMPLES/MATRIX (continued) Soils Samples
SDG WSCF113205: B2FXJ1, B2H560, B2H561, B2H562, B2H563
SDG W06240: B2FXJ1, B2H560, B2H561, B2H562, B2H563,
SDG W06241: B2FXF1, B2FXF2, B2FXF3, B2FXF4, B2FXF5, B2FXF6, B2FXF8, B2FXF9, B2FXH0, B2FXH1, B2FXH2, B2FXH3, B2FXH4, B2FXH5, B2FXH6, B2FXH7, B2FXH9, B2FXJ0, B2FXJ6, B2FXJ7
SDG W06242: B2FXC6, B2FXC7, B2FXC8, B2FXC9, B2FXD0, B2FXD1, B2FXD2, B2FXD3, B2FXD4, B2FXD5, B2FXD7, B2FXD8, B2FXD9, B2FXF0, B2FXJ4, B2FXJ5

MDCs > CRDLs for associated non-detect sample results (continued)
SDG WSCF113192: Eu-155 CRDL 0.1: B2FXH3 0.18; B2FXH4 0.17; B2FXJ0 0.15;
SDG WSCF113205: Eu-155 CRDL 0.1: B2H562 0.15;

Appendix 6

Additional Documentation Requested By Client

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF113047

QC Batch 188999 **Test** Gamma Energy Analysis-general
Associated Samples 113047001, 113047002, 113047003, 113047004, 113047005, 113047006, 113047007

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
IBLANK			**QC Sample #63921**								
Cesium-137	10045-97-3		-2.3E-4	pCi/g						U	09/01/11
Cobalt-60	10198-40-0		-2.6E-3	pCi/g						U	09/01/11
Europium-152	14683-23-9		-5.4E-4	pCi/g						U	09/01/11
Europium-154	15585-10-1		2.4E-3	pCi/g						U	09/01/11
Europium-155	14391-16-3		3.8E-3	pCi/g						U	09/01/11
LCS			**QC Sample #63922**								
Cesium-137	10045-97-3		6400	pCi/sample	106	80 - 120					08/30/11
Cobalt-60	10198-40-0		10000	pCi/sample	102.3	80 - 120					08/30/11
DUP			**QC Sample #63923**								
			Original 113047001								
Cesium-137	10045-97-3	0.35	0.37	pCi/g			5.70	30			08/30/11
Cobalt-60	10198-40-0	-6.8E-4	-0.013	pCi/g			-178.80	30	*	U	08/30/11
Europium-152	14683-23-9	0.15	0.082	pCi/g			59.70	30	*	X	08/30/11
Europium-154	15585-10-1	-0.011	4.6E-5	pCi/g			-201.70	30	*	U	08/30/11
Europium-155	14391-16-3	3.9E-3	0.15	pCi/g			189.90	30	*	U	08/30/11

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF113047

QC Batch 189001 **Test** Gross Alpha/Gross Beta
Associated Samples 113047001, 113047002, 113047003, 113047004, 113047005, 113047006, 113047007

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
BLANK			**QC Sample #63924**								
Gross Alpha	12587-46-1		0.29	pCi/g						U	09/09/11
Gross Beta	12587-47-2		0.22	pCi/g						U	09/09/11
LCS			**QC Sample #63925**								
Gross Alpha	12587-46-1		7.3	pCi/g	90.1	80 - 120					09/09/11
Gross Beta	12587-47-2		25	pCi/g	113.4	80 - 120					09/09/11
DUP			**QC Sample #63926**								
			Original 113047001								
Gross Alpha	12587-46-1	3.0	2.6	pCi/g			18.20	30			09/09/11
Gross Beta	12587-47-2	5.3	4.0	pCi/g			30.40	30	*	X	09/09/11

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF113047

QC Batch 189013 **Test** Strontium 89/90 (GPC/GEA)
Associated Samples 113047001, 113047002, 113047003, 113047004, 113047005, 113047006, 113047007

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
BLANK			**QC Sample #63937**								
Strontium-89/90	SR-RAD		0.80	pCi/g						X	09/07/11
LCS			**QC Sample #63938**								
Strontium-89/90	SR-RAD		26	pCi/g	119.7	80 - 120					09/07/11
DUP			**QC Sample #63939**								
			Original 113047001								
Strontium-89/90	SR-RAD	0.61	0.94	pCi/g			41.60	30	*	X	09/07/11

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF113047

QC Batch 189013 **Test** Strontium 89/90 (GPC/GEA)
Associated Samples 113047001, 113047002, 113047003, 113047004, 113047005, 113047006, 113047007

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE			**Sample #113047001**							
Strontium-85	13967-73-2				64.8	25 - 105				09/07/11
SAMPLE			**Sample #113047002**							
Strontium-85	13967-73-2				72	25 - 105				09/07/11
SAMPLE			**Sample #113047003**							
Strontium-85	13967-73-2				69.1	25 - 105				09/07/11
SAMPLE			**Sample #113047004**							
Strontium-85	13967-73-2				67	25 - 105				09/07/11
SAMPLE			**Sample #113047005**							
Strontium-85	13967-73-2				64.4	25 - 105				09/07/11
SAMPLE			**Sample #113047006**							
Strontium-85	13967-73-2				77.9	25 - 105				09/07/11
SAMPLE			**Sample #113047007**							
Strontium-85	13967-73-2				67.6	25 - 105				09/07/11

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF113047

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #63937**							
Strontium-85	13967-73-2				67.4	25 - 105				09/07/11
LCS			**QC Sample #63938**							
Strontium-85	13967-73-2				71.7	25 - 105				09/07/11
DUP			**QC Sample #63939**							
			Original 113047001							
Strontium-85	13967-73-2				68.5	25 - 105	n/a			09/07/11

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF113057

QC Batch 189020 **Test** Gamma Energy Analysis-general
Associated Samples 113057001, 113057002, 113057003, 113057004, 113057005, 113057006, 113057007

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
IBLANK			**QC Sample #63940**								
Cesium-137	10045-97-3		<-3.5E-3	pCi/g						U	08/31/11
Cobalt-60	10198-40-0		<-5.3E-3	pCi/g						U	08/31/11
Europium-152	14683-23-9		<-0.011	pCi/g						U	08/31/11
Europium-154	15585-10-1		<-0.012	pCi/g						U	08/31/11
Europium-155	14391-16-3		<-0.012	pCi/g						U	08/31/11
LCS			**QC Sample #63941**								
Cesium-137	10045-97-3		6400	pCi/sample	106.6	80 - 120					08/31/11
Cobalt-60	10198-40-0		10000	pCi/sample	104.5	80 - 120					08/31/11
DUP			**QC Sample #63942**								
			Original 113057001								
Cesium-137	10045-97-3	0.13	0.14	pCi/g			8.00	30			08/31/11
Cobalt-60	10198-40-0	0.020	<-5.2E-3	pCi/g			346.80	30	*	U	08/31/11
Europium-152	14683-23-9	0.014	<0.010	pCi/g			26.10	30		U	08/31/11
Europium-154	15585-10-1	0.040	<-6.1E-3	pCi/g			270.60	30	*	U	08/31/11
Europium-155	14391-16-3	0.023	0.26	pCi/g			166.30	30	*	U	08/31/11

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF113057

QC Batch 189022 **Test** Gamma Energy Analysis-general
Associated Samples 113057008, 113057009, 113057010, 113057011, 113057012, 113057013, 113057014

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
IBLANK			**QC Sample #63949**								
Cesium-137	10045-97-3		<4.7E-3	pCi/g						U	08/31/11
Cobalt-60	10198-40-0		<-1.7E-3	pCi/g						U	08/31/11
Europium-152	14683-23-9		<0.019	pCi/g						U	08/31/11
Europium-154	15585-10-1		<-4.3E-3	pCi/g						U	08/31/11
Europium-155	14391-16-3		<-0.045	pCi/g						U	08/31/11
LCS			**QC Sample #63950**								
Cesium-137	10045-97-3		6500	pCi/sample	107.5	80 - 120					08/31/11
Cobalt-60	10198-40-0		10000	pCi/sample	103.6	80 - 120					08/31/11
DUP			**QC Sample #63951**								
			Original 113057008								
Cesium-137	10045-97-3	0.21	0.20	pCi/g			10.00	30			08/31/11
Cobalt-60	10198-40-0	0.013	<0.016	pCi/g			28.60	30		U	08/31/11
Europium-152	14683-23-9	0.13	0.21	pCi/g			54.50	30	*	X	08/31/11
Europium-154	15585-10-1	0.015	<-0.022	pCi/g			-900.00	30	*	U	08/31/11
Europium-155	14391-16-3	-0.024	0.11	pCi/g			326.30	30	*	U	08/31/11

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF113057

QC Batch 189037 **Test** Gross Alpha/Gross Beta
Associated Samples 113057001, 113057002, 113057003, 113057004, 113057005, 113057006, 113057007

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
BLANK			**QC Sample #63995**								
Gross Alpha	12587-46-1		0.37	pCi/g						X	09/09/11
Gross Beta	12587-47-2		<-0.20	pCi/g						U	09/09/11
LCS			**QC Sample #63996**								
Gross Alpha	12587-46-1		4.8	pCi/g	80	80 - 120					09/09/11
Gross Beta	12587-47-2		27	pCi/g	103.1	80 - 120					09/09/11
DUP			**QC Sample #63997**								
			Original 113057001								
Gross Alpha	12587-46-1	1.6	2.0	pCi/g			22.20	30			09/09/11
Gross Beta	12587-47-2	4.9	3.6	pCi/g			31.30	30	*	X	09/09/11

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF113057

QC Batch 189038 **Test** Gross Alpha/Gross Beta
Associated Samples 113057008, 113057009, 113057010, 113057011, 113057012, 113057013, 113057014

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #63998**							
Gross Alpha	12587-46-1		<1.7E-3	pCi/g					U	09/09/11
Gross Beta	12587-47-2		<1.1	pCi/g					U	09/09/11
LCS			**QC Sample #63999**							
Gross Alpha	12587-46-1		5.1	pCi/g	85.4	80 - 120				09/09/11
Gross Beta	12587-47-2		25	pCi/g	97.7	80 - 120				09/09/11
DUP			**QC Sample #64000**							
			Original 113057008							
Gross Alpha	12587-46-1	1.9	1.6	pCi/g			17.10	30		09/09/11
Gross Beta	12587-47-2	2.8	3.7	pCi/g			27.70	30		09/09/11

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF113057

QC Batch 189039 **Test** Strontium 89/90 (GPC/GEA)
Associated Samples 113057001, 113057002, 113057003, 113057004, 113057005, 113057006, 113057007

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #64001**							
Strontium-89/90	SR-RAD		0.65	pCi/g					X	09/09/11
LCS			**QC Sample #64002**							
Strontium-89/90	SR-RAD		24	pCi/g	111.1	80 - 120				09/09/11
DUP			**QC Sample #64003**							
			Original 113057001							
Strontium-89/90	SR-RAD	-0.27	<0.26	pCi/g					U	09/09/11

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF113057

QC Batch 189040 **Test** Strontium 89/90 (GPC/GEA)
Associated Samples 113057008, 113057009, 113057010, 113057011, 113057012, 113057013, 113057014

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
BLANK			**QC Sample #64004**								
Strontium-89/90	SR-RAD		<-0.044	pCi/g						U	09/13/11
LCS			**QC Sample #64005**								
Strontium-89/90	SR-RAD		24	pCi/g	113.9	80 - 120					09/13/11
DUP			**QC Sample #64006**								
			Original 113057008								
Strontium-89/90	SR-RAD	0.42	<0.26	pCi/g			48.50	30	*	U	09/13/11

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF113057

QC Batch 189039 **Test** Strontium 89/90 (GPC/GEA)
Associated Samples 113057001, 113057002, 113057003, 113057004, 113057005, 113057006, 113057007

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE			**Sample #113057001**							
Strontium-85	13967-73-2				74.5	25 - 105				09/09/11
SAMPLE			**Sample #113057002**							
Strontium-85	13967-73-2				74.5	25 - 105				09/09/11
SAMPLE			**Sample #113057003**							
Strontium-85	13967-73-2				74.9	25 - 105				09/09/11
SAMPLE			**Sample #113057004**							
Strontium-85	13967-73-2				75.2	25 - 105				09/09/11
SAMPLE			**Sample #113057005**							
Strontium-85	13967-73-2				75.8	25 - 105				09/09/11
SAMPLE			**Sample #113057006**							
Strontium-85	13967-73-2				70.1	25 - 105				09/09/11
SAMPLE			**Sample #113057007**							
Strontium-85	13967-73-2				77.3	25 - 105				09/09/11

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF113057

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #64001**							
Strontium-85	13967-73-2				65.9	25 - 105				09/09/11
LCS			**QC Sample #64002**							
Strontium-85	13967-73-2				69.3	25 - 105				09/09/11
DUP			**QC Sample #64003**							
			Original 113057001							
Strontium-85	13967-73-2				72.9	25 - 105	n/a			09/09/11

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF113057

QC Batch 189040 **Test** Strontium 89/90 (GPC/GEA)
Associated Samples 113057008, 113057009, 113057010, 113057011, 113057012, 113057013, 113057014

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE			**Sample #113057008**							
Strontium-85	13967-73-2				71.1	25 - 105				09/13/11
SAMPLE			**Sample #113057009**							
Strontium-85	13967-73-2				65.9	25 - 105				09/13/11
SAMPLE			**Sample #113057010**							
Strontium-85	13967-73-2				71.3	25 - 105				09/13/11
SAMPLE			**Sample #113057011**							
Strontium-85	13967-73-2				78.2	25 - 105				09/13/11
SAMPLE			**Sample #113057012**							
Strontium-85	13967-73-2				67.1	25 - 105				09/13/11
SAMPLE			**Sample #113057013**							
Strontium-85	13967-73-2				72.1	25 - 105				09/13/11
SAMPLE			**Sample #113057014**							
Strontium-85	13967-73-2				73	25 - 105				09/13/11

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF113057

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #64004**							
Strontium-85	13967-73-2				71.5	25 - 105				09/13/11
LCS			**QC Sample #64005**							
Strontium-85	13967-73-2				74.3	25 - 105				09/13/11
DUP			**QC Sample #64006**							
			Original 113057008							
Strontium-85	13967-73-2				74.7	25 - 105	n/a			09/13/11

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF113116

QC Batch 189383 **Test** Gamma Energy Analysis-general
Associated Samples 113116001, 113116002, 113116003, 113116004, 113116005, 113116006, 113116007, 113116008, 113116009, 113116010, 113116011

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
IBLANK			**QC Sample #64477**								
Cesium-137	10045-97-3		6.5E-3	pCi/g						U	09/09/11
Cobalt-60	10198-40-0		2.5E-3	pCi/g						U	09/09/11
Europium-152	14683-23-9		-2.4E-3	pCi/g						U	09/09/11
Europium-154	15585-10-1		-0.015	pCi/g						U	09/09/11
Europium-155	14391-16-3		-2.6E-4	pCi/g						U	09/09/11
LCS			**QC Sample #64478**								
Cesium-137	10045-97-3		6400	pCi/sample	106.4	80 - 120					09/08/11
Cobalt-60	10198-40-0		11000	pCi/sample	107.8	80 - 120					09/08/11
DUP			**QC Sample #64479**								
			Original 113116001								
Cesium-137	10045-97-3	0.61	0.60	pCi/g			1.70	30			09/09/11
Cobalt-60	10198-40-0	5.9E-3	0.014	pCi/g			81.40	30	*	U	09/09/11
Europium-152	14683-23-9	0.22	0.18	pCi/g			20.00	30			09/09/11
Europium-154	15585-10-1	6.1E-4	0.031	pCi/g			192.40	30	*	U	09/09/11
Europium-155	14391-16-3	-8.3E-4	0.0020	pCi/g			503.70	30	*	U	09/09/11

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF113156

QC Batch 189547 **Test** Gamma Energy Analysis-general
Associated Samples 113156001, 113156002, 113156003, 113156004, 113156005

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
IBLANK			**QC Sample #64671**								
Cesium-137	10045-97-3		1.2E-3	pCi/g						U	09/21/11
Cobalt-60	10198-40-0		1.8E-3	pCi/g						U	09/21/11
Europium-152	14683-23-9		0.015	pCi/g						U	09/21/11
Europium-154	15585-10-1		0.030	pCi/g						U	09/21/11
Europium-155	14391-16-3		0.054	pCi/g						U	09/21/11
LCS			**QC Sample #64672**								
Cesium-137	10045-97-3		6300	pCi/sample	105.1	80 - 120					09/20/11
Cobalt-60	10198-40-0		10000	pCi/sample	105.1	80 - 120					09/20/11
DUP			**QC Sample #64673**								
			Original 113156001								
Cesium-137	10045-97-3	0.13	0.15	pCi/g			14.30	30			09/21/11
Cobalt-60	10198-40-0	-5.2E-3	-4.1E-3	pCi/g			-26.10	30		U	09/21/11
Europium-152	14683-23-9	0.023	0.064	pCi/g			93.00	30	*	U	09/21/11
Europium-154	15585-10-1	0.040	9.6E-3	pCi/g			121.60	30	*	U	09/21/11
Europium-155	14391-16-3	0.094	0.095	pCi/g			1.10	30		U	09/21/11

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF113177

QC Batch 189574 **Test** Gamma Energy Analysis-general
Associated Samples 113177001, 113177002, 113177003, 113177004, 113177005

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
IBLANK			**QC Sample #64769**								
Cesium-137	10045-97-3		6.2E-3	pCi/g						U	09/21/11
Cobalt-60	10198-40-0		2.7E-3	pCi/g						U	09/21/11
Europium-152	14683-23-9		9.7E-3	pCi/g						U	09/21/11
Europium-154	15585-10-1		-2.3E-3	pCi/g						U	09/21/11
Europium-155	14391-16-3		5.3E-3	pCi/g						U	09/21/11
LCS			**QC Sample #64770**								
Cesium-137	10045-97-3		6500	pCi/sample	107.2	80 - 120					09/21/11
Cobalt-60	10198-40-0		10000	pCi/sample	102.7	80 - 120					09/21/11
DUP			**QC Sample #64771**								
			Original 113177001								
Cesium-137	10045-97-3	0.20	0.23	pCi/g			14.00	30			09/21/11
Cobalt-60	10198-40-0	2.1E-3	-1.4E-3	pCi/g			1000.00	30	*	U	09/21/11
Europium-152	14683-23-9	0.081	0.11	pCi/g			31.60	30	*	X	09/21/11
Europium-154	15585-10-1	0.020	-8.8E-3	pCi/g			508.00	30	*	U	09/21/11
Europium-155	14391-16-3	0.036	0.031	pCi/g			14.90	30		U	09/21/11

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF113177

QC Batch 189647 **Test** Gamma Energy Analysis-general
Associated Samples 113177006, 113177007, 113177008, 113177009, 113177010

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
IBLANK			**QC Sample #64909**								
Cesium-137	10045-97-3		0.0020	pCi/g						U	09/20/11
Cobalt-60	10198-40-0		0.011	pCi/g						U	09/20/11
Europium-152	14683-23-9		0.022	pCi/g						U	09/20/11
Europium-154	15585-10-1		-0.010	pCi/g						U	09/20/11
Europium-155	14391-16-3		0.017	pCi/g						U	09/20/11
LCS			**QC Sample #64910**								
Cesium-137	10045-97-3		6400	pCi/sample	106	80 - 120					09/20/11
Cobalt-60	10198-40-0		11000	pCi/sample	106.3	80 - 120					09/20/11
DUP			**QC Sample #64911**								
			Original 113177006								
Cesium-137	10045-97-3	0.16	0.18	pCi/g			12.50	30			09/20/11
Cobalt-60	10198-40-0	6.8E-3	5.3E-3	pCi/g			25.60	30		U	09/20/11
Europium-152	14683-23-9	0.29	0.29	pCi/g			0.00	30			09/20/11
Europium-154	15585-10-1	-1.5E-3	4.5E-4	pCi/g			-366.00	30	*	U	09/20/11
Europium-155	14391-16-3	0.089	0.081	pCi/g			9.60	30		U	09/20/11

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF113192

QC Batch 189641 **Test** Gamma Energy Analysis-general
Associated Samples 113192001, 113192002, 113192003, 113192004, 113192005

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
IBLANK			**QC Sample #64895**								
Cesium-137	10045-97-3		-4.2E-3	pCi/g						U	09/21/11
Cobalt-60	10198-40-0		0.0020	pCi/g						U	09/21/11
Europium-152	14683-23-9		0.024	pCi/g						U	09/21/11
Europium-154	15585-10-1		-0.020	pCi/g						U	09/21/11
Europium-155	14391-16-3		-0.014	pCi/g						U	09/21/11
LCS			**QC Sample #64896**								
Cesium-137	10045-97-3		6500	pCi/sample	106.8	80 - 120					09/21/11
Cobalt-60	10198-40-0		11000	pCi/sample	106.5	80 - 120					09/21/11
DUP			**QC Sample #64897**								
			Original 113192001								
Cesium-137	10045-97-3	0.23	0.26	pCi/g			12.20	30			09/21/11
Cobalt-60	10198-40-0	0.016	0.010	pCi/g			46.20	30	*	U	09/21/11
Europium-152	14683-23-9	0.58	0.63	pCi/g			10.00	30			09/21/11
Europium-154	15585-10-1	0.058	0.046	pCi/g			21.40	30		U	09/21/11
Europium-155	14391-16-3	0.038	0.029	pCi/g			24.20	30		U	09/21/11

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF113192

QC Batch 189642 **Test** Gamma Energy Analysis-general
Associated Samples 113192006, 113192007, 113192008, 113192009, 113192010

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
IBLANK			**QC Sample #64898**								
Cesium-137	10045-97-3		-2.6E-3	pCi/g						U	09/21/11
Cobalt-60	10198-40-0		0.0060	pCi/g						U	09/21/11
Europium-152	14683-23-9		0.038	pCi/g						U	09/21/11
Europium-154	15585-10-1		-0.011	pCi/g						U	09/21/11
Europium-155	14391-16-3		-3.9E-3	pCi/g						U	09/21/11
LCS			**QC Sample #64899**								
Cesium-137	10045-97-3		6300	pCi/sample	103.5	80 - 120					09/21/11
Cobalt-60	10198-40-0		10000	pCi/sample	104.6	80 - 120					09/21/11
DUP			**QC Sample #64900**								
			Original 113192006								
Cesium-137	10045-97-3	0.26	0.23	pCi/g			8.30	30			09/21/11
Cobalt-60	10198-40-0	-0.012	-2.4E-3	pCi/g			-133.30	30	*	U	09/21/11
Europium-152	14683-23-9	0.038	0.039	pCi/g			5.30	30		U	09/21/11
Europium-154	15585-10-1	0.070	0.015	pCi/g			128.60	30	*	U	09/21/11
Europium-155	14391-16-3	0.068	0.045	pCi/g			39.30	30	*	U	09/21/11

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF113205

QC Batch 189739 **Test** Gamma Energy Analysis-general
Associated Samples 113205001, 113205002, 113205003, 113205004, 113205005

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
IBLANK			**QC Sample #64937**								
Cesium-137	10045-97-3		-1.1E-3	pCi/g						U	09/22/11
Cobalt-60	10198-40-0		-6.1E-3	pCi/g						U	09/22/11
Europium-152	14683-23-9		-2.8E-3	pCi/g						U	09/22/11
Europium-154	15585-10-1		-0.030	pCi/g						U	09/22/11
Europium-155	14391-16-3		0.0040	pCi/g						U	09/22/11
LCS			**QC Sample #64938**								
Cesium-137	10045-97-3		6500	pCi/sample	107.3	80 - 120					09/22/11
Cobalt-60	10198-40-0		10000	pCi/sample	103.6	80 - 120					09/22/11
DUP			**QC Sample #64939**								
			Original 113205001								
Cesium-137	10045-97-3	0.16	0.18	pCi/g			12.50	30			09/21/11
Cobalt-60	10198-40-0	6.7E-3	3.8E-4	pCi/g			178.80	30	*	U	09/21/11
Europium-152	14683-23-9	0.13	0.15	pCi/g			22.20	30			09/21/11
Europium-154	15585-10-1	1.9E-3	0.042	pCi/g			183.20	30	*	U	09/21/11
Europium-155	14391-16-3	-1.6E-3	0.088	pCi/g			207.50	30	*	U	09/21/11

FORM II

Date: 12-Oct-11

DUPLICATE RESULTS

Lab Name:	TestAmerica	**SDG:**	W06240	**Collection Date:**	9/15/2011 11:35:00 AM
Lot-Sample No.:	J1I270475-3	**Report No. :**	48753	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2H561 DUP	**COC No. :**	F11-159-082-	**Matrix:**	SOIL

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271147	SRTOT_SEP_PRECIP_GPC			**Work Order:** MMQ9F1AF		**Report DB ID:** MMQ9F1FR			**Orig Sa DB ID:** 9MMQ9F10			
STRONTIUM	3.92E-02	U	7.3E-02	7.3E-02	1.62E-01	pCi/g	53%	0.24	10/8/11 07:56 a		6.01	GPC31B
	1.13E-01	U	**RPD**	**96.6**				(1.1)			g	

No. of Results: 1 **Comments:**

TestAmerica
rptSTLRchDupV5.2
.15 A2002

RPD - Relative Percent Difference.
MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

FORM II

Date: 12-Oct-11

DUPLICATE RESULTS

Lab Name:	**TestAmerica**	**SDG:**	W06240	**Collection Date:**	9/15/2011 11:45:00 AM
Lot-Sample No.:	**J1I270475-2**	**Report No. :**	48753	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	**B2H562 DUP**	**COC No. :**	F11-159-083-	**Matrix:**	SOIL

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271145	9310_ALPHABETA_GPC			**Work Order:** MMQ9C1AF		**Report DB ID:** MMQ9C1FR			**Orig Sa DB ID:** 9MMQ9C10			
BETA	2.77E+01		4.2E+00	7.3E+00	4.96E+00	pCi/g	100%	(5.6)	10/6/11 03:30 p		0.2	GPC27C
	2.72E+01		**RPD**	**1.7**		1.50E+01		(7.6)			g	

No. of Results: 1 **Comments:**

RPD - Relative Percent Difference.

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.

FORM II

Date: 12-Oct-11

DUPLICATE RESULTS

Lab Name:	TestAmerica	**SDG:**	W06240	**Collection Date:**	9/15/2011 12:00:00 PM
Lot-Sample No.:	J1I270475-1	**Report No. :**	48753	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2H563	**COC No. :**	F11-159-084	**Matrix:**	SOIL

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271051	7196_CR6			**Work Order:** MMQ891AE		**Report DB ID:** MMQ891ER			**Orig Sa DB ID:** 9MMQ8910			
HEXCHROME	1.55E-01	U		0.0E+00	1.55E-01	mg/kg	N/A	(1.)	9/28/11 05:25 p		2.5039	
	1.55E-01	U	**RPD**	**0.0**				N/A			g	
Batch: 1271144	9310_ALPHABETA_GPC			**Work Order:** MMQ891AH		**Report DB ID:** MMQ891HR			**Orig Sa DB ID:** 9MMQ8910			
ALPHA	4.30E+00		2.9E+00	4.2E+00	3.82E+00	pCi/g	100%	(1.1)	10/10/11 11:58 p		0.0505	GPC10B
	6.47E+00		**RPD**	**40.2**		1.00E+01		(2.)			g	

No. of Results: 2 **Comments:**

RPD - Relative Percent Difference.
MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

FORM II

BLANK RESULTS

Date: 12-Oct-11

Lab Name: TestAmerica

Matrix: SOIL

SDG: W06240

Report No. : 48753

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA ,	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271051	7196_CR6			**Work Order:**	MMRHC1AA		**Report DB ID:**	MMRHC1AB				
HEXCHROME	1.55E-01	U		0.0E+00	1.55E-01	mg/kg	N/A	(1.)	9/28/11 05:25 p		2.5	
						1.55E-01		N/A			g	
Batch: 1271144	9310_ALPHABETA_GPC			**Work Order:**	MMR0R1AA		**Report DB ID:**	MMR0R1AB				
ALPHA	-9.36E-02	U	1.1E+00	1.1E+00	2.73E+00	pCi/g	100%	-0.03	10/11/11 06:43 a		0.0547	GPC10D
					1.11E+00	1.00E+01		-0.16			g	
Batch: 1271145	9310_ALPHABETA_GPC			**Work Order:**	MMR011AA		**Report DB ID:**	MMR011AB				
BETA	7.11E-01	U	1.5E+00	1.5E+00	3.41E+00	pCi/g	100%	0.21	10/6/11 03:30 p		0.2044	GPC31B
					1.57E+00	1.50E+01		0.94			g	
Batch: 1271147	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMR031AA		**Report DB ID:**	MMR031AB				
STRONTIUM	3.35E-02	U	5.1E-02	5.2E-02	1.12E-01	pCi/g	85%	0.3	10/8/11 07:56 a		6.03	GPC32C
					5.21E-02			(1.3)			g	

No. of Results: 4 Comments:

TestAmerica
rptSTLRchBlank
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

FORM II

LCS RESULTS

Date: 12-Oct-11

Lab Name: TestAmerica

Matrix: SOIL

SDG: W06240

Report No. : 48753

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA	Report Unit	Yield	Expected	Expected Uncert	Recovery, Bias	Analysis, Prep Date	Aliquot Size	Primary Detector
Batch: 1271051	7196_CR6			**Work Order:**	MMRHC1AC		**Report DB ID:**	MMRHC1AC					
HEXCHROME	1.89E+01			0.0E+00	1.55E-01	mg/kg	N/A	2.00E+01		95%	9/28/11 05:25 p	2.5	
							Rec Limits:	80	120	-0.1		g	
Batch: 1271144	9310_ALPHABETA_GPC			**Work Order:**	MMR0R1AC		**Report DB ID:**	MMR0R1CS					
ALPHA	6.68E+01		7.2E+00	4.6E+01	2.16E+00	pCi/g	100%	8.42E+01	8.51E-01	79%	10/11/11 08:42 a	0.0539	GPC10A
							Rec Limits:	70	130	-0.2		g	
Batch: 1271145	9310_ALPHABETA_GPC			**Work Order:**	MMR011AC		**Report DB ID:**	MMR011CS					
BETA	6.81E+01		5.3E+00	1.5E+01	3.61E+00	pCi/g	100%	6.61E+01	2.55E+00	103%	10/6/11 03:30 p	0.2047	GPC31C
							Rec Limits:	70	130	0.0		g	
Batch: 1271147	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMR031AC		**Report DB ID:**	MMR031CS					
STRONTIUM	1.10E+00		1.0E-01	3.0E-01	8.35E-02	pCi/g	87%	1.13E+00	1.33E-02	97%	10/10/11 01:49 a	6.03	GPC27A
							Rec Limits:	70	130	0.0		g	

No. of Results: 4 **Comments:**

FORM II

Date: 12-Oct-11

DUPLICATE RESULTS

Lab Name:	TestAmerica	**SDG:**	W06241	**Collection Date:**	9/13/2011 11:09:00 AM
Lot-Sample No.:	J1I270478-3	**Report No. :**	48754	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXF8 DUP	**COC No. :**	F11-159-057-	**Matrix:**	SOIL

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271140	SRTOT_SEP_PRECIP_GPC			**Work Order:** MMQ9X1AF		**Report DB ID:** MMQ9X1FR			**Orig Sa DB ID:** 9MMQ9X10			
STRONTIUM	4.71E-02	U	8.2E-02	8.3E-02	1.82E-01	pCi/g	48%	0.26	10/8/11 06:51 a		6.02	GPC26D
	3.72E-02	U	**RPD**	**23.3**				(1.1)			g	

No. of Results: 1 **Comments:**

RPD - Relative Percent Difference.
MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

FORM II

Date: 12-Oct-11

DUPLICATE RESULTS

Lab Name:	**TestAmerica**	**SDG:**	W06241	**Collection Date:**	9/13/2011 11:26:00 AM
Lot-Sample No.:	**J1I270478-1**	**Report No. :**	48754	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	**B2FXF9 DUP**	**COC No. :**	F11-159-058-	**Matrix:**	SOIL

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271138	9310_ALPHABETA_GPC			**Work Order:** MMQ9P1AF		**Report DB ID:** MMQ9P1FR			**Orig Sa DB ID:** 9MMQ9P10			
ALPHA	4.59E+00	U	3.4E+00	3.5E+00	5.01E+00	pCi/g	100%	0.92	10/5/11 02:36 p		0.0503	GPC10C
	6.57E+00		**RPD**	**35.5**		1.00E+01		(2.6)			g	

No. of Results: 1 **Comments:**

TestAmerica
rptSTLRchDupV5.2
.15 A2002

RPD - Relative Percent Difference.
MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

FORM II

Date: 12-Oct-11

DUPLICATE RESULTS

Lab Name:	TestAmerica	**SDG:**	W06241	**Collection Date:**	9/13/2011 11:50:00 AM
Lot-Sample No.:	J1I270478-2	**Report No. :**	48754	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXH0 DUP	**COC No. :**	F11-159-059	**Matrix:**	SOIL

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271139	9310_ALPHABETA_GPC			Work Order: MMQ9R1AF		Report DB ID: MMQ9R1FR			Orig Sa DB ID: 9MMQ9R10			
BETA	2.71E+01		4.1E+00	5.4E+00	4.60E+00	pCi/g	100%	(5.9)	10/5/11 09:24 p		0.2001	GPC31B
	2.77E+01		RPD 2.1			1.50E+01		(10.1)			g	

No. of Results: 1 Comments:

RPD - Relative Percent Difference.
MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.

FORM II

BLANK RESULTS

Date: 12-Oct-11

Lab Name: TestAmerica

Matrix: SOIL

SDG: W06241

Report No. : 48754

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA ,	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1277058	7196_CR6			**Work Order:**	MMXKK1AA		**Report DB ID:**	MMXKK1AB				
HEXCHROME	1.55E-01	U		0.0E+00	1.55E-01	mg/kg	N/A	(1.)	10/6/11 09:00 a		2.5	
						1.55E-01		N/A			g	
Batch: 1271138	9310_ALPHABETA_GPC			**Work Order:**	MMRX21AA		**Report DB ID:**	MMRX21AB				
ALPHA	3.05E-01	U	1.2E+00	1.2E+00	2.92E+00	pCi/g	100%	0.1	10/10/11 09:59 p		0.0538	GPC10D
					1.20E+00	1.00E+01		0.49			g	
Batch: 1271139	9310_ALPHABETA_GPC			**Work Order:**	MMRX71AA		**Report DB ID:**	MMRX71AB				
BETA	4.18E+00		2.1E+00	2.1E+00	3.82E+00	pCi/g	100%	(1.1)	10/6/11 02:08 p		0.2002	GPC28B
					1.77E+00	1.50E+01		(3.9)			g	
Batch: 1271140	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMR0A1AA		**Report DB ID:**	MMR0A1AB				
STRONTIUM	-1.59E-02	U	4.9E-02	4.9E-02	1.21E-01	pCi/g	89%	-0.13	10/8/11 07:56 a		6.01	GPC27C
					5.66E-02			-0.65			g	

No. of Results: 4 **Comments:**

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

FORM II

LCS RESULTS

Date: 12-Oct-11

Lab Name: TestAmerica

Matrix: SOIL

SDG: W06241

Report No. : 48754

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA	Report Unit	Yield	Expected	Expected Uncert	Recovery, Bias	Analysis, Prep Date	Aliquot Size	Primary Detector
Batch: 1277058	7196_CR6			**Work Order:**	MMXKK1AC		**Report DB ID:**	MMXKK1AS					
HEXCHROME	1.91E+01			0.0E+00	1.55E-01	mg/kg	N/A	2.00E+01		95%	10/6/11 09:00 a	2.5	
							Rec Limits:	80	120	0.0		g	
Batch: 1271138	9310_ALPHABETA_GPC			**Work Order:**	MMRX21AC		**Report DB ID:**	MMRX21CS					
ALPHA	8.90E+01		8.5E+00	2.0E+01	3.07E+00	pCi/g	100%	8.87E+01	8.97E-01	100%	10/10/11 11:58 p	0.0513	GPC10D
							Rec Limits:	70	130	0.0		g	
Batch: 1271139	9310_ALPHABETA_GPC			**Work Order:**	MMRX71AC		**Report DB ID:**	MMRX71CS					
BETA	6.95E+01		5.5E+00	1.1E+01	3.71E+00	pCi/g	100%	6.65E+01	2.56E+00	105%	10/6/11 02:08 p	0.2043	GPC28C
							Rec Limits:	70	130	0.0		g	
Batch: 1271140	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMR0A1AC		**Report DB ID:**	MMR0A1CS					
STRONTIUM	1.09E+00		1.2E-01	3.1E-01	1.13E-01	pCi/g	91%	1.14E+00	1.33E-02	96%	10/8/11 07:56 a	6.01	GPC28B
							Rec Limits:	70	130	0.0		g	

No. of Results: 4 **Comments:**

FORM II

Date: 12-Oct-11

DUPLICATE RESULTS

Lab Name:	TestAmerica	**SDG:**	W06242	**Collection Date:**	8/31/2011 10:30:00 AM
Lot-Sample No.:	J1I270481-3	**Report No. :**	48755	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	B2FXC9 DUP	**COC No. :**	F11-159-073-	**Matrix:**	SOIL

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271156	SRTOT_SEP_PRECIP_GPC			**Work Order:** MMRCH1AG		**Report DB ID:** MMRCH1GR			**Orig Sa DB ID:** 9MMRCH10			
STRONTIUM	7.02E-02	U	7.6E-02	7.9E-02	1.62E-01	pCi/g	61%	0.43	10/10/11 08:37 p		6.03	GPC26D
	6.63E-02	U	**RPD**	**5.8**				(1.8)			g	

No. of Results: 1 **Comments:**

RPD - Relative Percent Difference.
MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

FORM II

Date: 12-Oct-11

DUPLICATE RESULTS

Lab Name:	**TestAmerica**	**SDG:**	W06242	**Collection Date:**	9/7/2011 9:50:00 AM
Lot-Sample No.:	**J1I270481-2**	**Report No. :**	48755	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	**B2FXJ4 DUP**	**COC No. :**	F11-159-073	**Matrix:**	SOIL

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271149	9310_ALPHABETA_GPC			**Work Order:** MMRCG1AG		**Report DB ID:** MMRCG1GR			**Orig Sa DB ID:** 9MMRCG10			
BETA	2.34E+01		3.9E+00	6.4E+00	4.46E+00	pCi/g	100%	(5.2)	10/6/11 03:54 p		0.2005	GPC32C
	1.80E+01		**RPD**	**26.2**		1.50E+01		(7.3)			g	

No. of Results: 1 **Comments:**

RPD - Relative Percent Difference.

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.

FORM II

Date: 12-Oct-11

DUPLICATE RESULTS

Lab Name:	**TestAmerica**	**SDG:**	W06242	**Collection Date:**	8/31/2011 7:30:00 AM
Lot-Sample No.:	**J1I270481-1**	**Report No. :**	48755	**Received Date:**	9/27/2011 2:15:00 PM
Client Sample ID:	**B2FXJ5 DUP**	**COC No. :**	F11-159-074-	**Matrix:**	SOIL

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271148	9310_ALPHABETA_GPC			**Work Order:** MMRCE1AJ		**Report DB ID:** MMRCE1JR			**Orig Sa DB ID:** 9MMRCE10			
ALPHA	5.72E+00	U	4.0E+00	5.7E+00	6.05E+00	pCi/g	100%	0.95	10/11/11 10:55 a		0.0503	GPC10C
	2.95E+00	U	**RPD**	**64.0**		1.00E+01		(2.)			g	

No. of Results: 1 **Comments:**

RPD - Relative Percent Difference.

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.

U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

FORM II

BLANK RESULTS

Date: 12-Oct-11

Lab Name: TestAmerica

Matrix: SOIL

SDG: W06242

Report No. : 48755

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA ,	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1271112	7196_CR6			**Work Order:**	MMRR81AA		**Report DB ID:**	MMRR81AB				
HEXCHROME	1.55E-01	U		0.0E+00	1.55E-01	mg/kg	N/A	(1.)	9/29/11 11:00 a		2.5	
						1.55E-01		N/A			g	
Batch: 1271148	9310_ALPHABETA_GPC			**Work Order:**	MMR041AA		**Report DB ID:**	MMR041AB				
ALPHA	-5.89E-01	U	1.2E+00	1.3E+00	3.12E+00	pCi/g	100%	-0.19	10/11/11 07:20 p		0.0507	GPC10C
					1.29E+00	1.00E+01		-0.94			g	
Batch: 1271149	9310_ALPHABETA_GPC			**Work Order:**	MMR061AA		**Report DB ID:**	MMR061AB				
BETA	1.32E-01	U	1.6E+00	1.6E+00	3.89E+00	pCi/g	100%	0.03	10/6/11 04:56 p		0.2018	GPC32A
					1.81E+00	1.50E+01		0.16			g	
Batch: 1271156	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMR1J1AA		**Report DB ID:**	MMR1J1AB				
STRONTIUM	-3.51E-02	U	4.7E-02	4.8E-02	1.25E-01	pCi/g	89%	-0.28	10/10/11 09:30 p		6.01	GPC28C
					5.79E-02			-(1.5)			g	

No. of Results: 4 **Comments:**

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

FORM II

LCS RESULTS

Date: 12-Oct-11

Lab Name: TestAmerica

SDG: W06242

Matrix: SOIL

Report No. : 48755

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA	Report Unit	Yield	Expected	Expected Uncert	Recovery, Bias	Analysis, Prep Date	Aliquot Size	Primary Detector
Batch: 1271112	7196_CR6			**Work Order:**	MMRR81AC		**Report DB ID:**	MMRR81AS					
HEXCHROME	1.94E+01			0.0E+00	1.55E-01	mg/kg	N/A	2.00E+01		97%	9/29/11 11:00 a	2.5	
							Rec Limits:	80	120	0.0		g	
Batch: 1271148	9310_ALPHABETA_GPC			**Work Order:**	MMR041AC		**Report DB ID:**	MMR041CS					
ALPHA	9.67E+01		8.9E+00	6.9E+01	2.92E+00	pCi/g	100%	8.91E+01	9.00E-01	109%	10/11/11 07:20 p	0.0511	GPC10D
							Rec Limits:	70	130	0.1		g	
Batch: 1271149	9310_ALPHABETA_GPC			**Work Order:**	MMR061AC		**Report DB ID:**	MMR061CS					
BETA	6.49E+01		5.3E+00	1.5E+01	3.77E+00	pCi/g	100%	6.64E+01	2.56E+00	98%	10/6/11 04:56 p	0.203	GPC32B
							Rec Limits:	70	130	0.0		g	
Batch: 1271156	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MMR1J1AC		**Report DB ID:**	MMR1J1CS					
STRONTIUM	1.13E+00		1.3E-01	3.2E-01	1.24E-01	pCi/g	91%	1.13E+00	1.32E-02	100%	10/10/11 09:30 p	6.02	GPC28D
							Rec Limits:	70	130	0.0		g	

No. of Results: 4 **Comments:**