CHPRC - REVIEW COMMENT RECORD (RCR)

1. Date	2. Review No.
7/23/12	RCR-VSR12-018
3. Project No. 100-K	Page 1 of 1

5. Document Number(s)/Title(s)	6. Program/Project/Building Number	7. Reviewer	8. Organization/Group	9. Location/Phone
VSR12-018, 183.2KE Sampling (Soil) Project 100-K	SGRP	SL Huggins	SGRP QA	MO-2216E/A101 373-3630

17. Comment Submittal Approval	10. Agreement With Indicated Comment Disposition(s)	11. CLOSED
7/23/12 Date; SL Huggins Organization Manager (optional) (print and sign)	Date; Reviewer/Point of Contact (print and sign); Author/Originator (print and sign)	7/23/12 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 issues noted.					

CHPRC - REVIEW COMMENT RECORD (RCR)

1. Date	2. Review No.
07/19/2012	
3. Project No.	Page 1 of 1

5. Document Number(s)/Title(s)	6. Program/Project/Building Number	7. Reviewer	8. Organization/Group	9. Location/Phone
VSR12-018		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) 07/19/2012 Date Author/Originator (print and sign)	Scot Fitzgerald Reviewer/Point of Contact (print and sign) 07/19/2012 Date Author/Originator (print and sign)

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

REVIEW COMMENT RECORD (RCR)

1. Date	2. Review No.
07/19/2012	
3. Project No.	Page 1 of 1

5. Document Number(s)/Title(s)	6. Program/Project/Building Number	7. Reviewer	8. Organization/Group	9. Location/Phone
Data Validation Report for CH2M Hill Plateau Remediation Company: VSR12-018,183.2 KE Sampling (Soil), 100-K Project	183.2 KE Building/100-K 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): ____	Date: 07/19/2012 Reviewer/Point of Contact (print and sign): Deanna L. Klages Author/Originator (print and sign): Deanna L. Klages	Date: 07/19/2012 Reviewer/Point of Contact (print and sign): Deanna L. Klages Author/Originator (print and sign): Deanna L. Klages

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 on this report.					

ANALYTICAL QUALITY ASSOCIATES, INC.
616 Maxine NE
Albuquerque, NM 87123
505-299-5201
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Data Validation Report for CH2M Hill
Plateau Remediation Company

VSR12-018
183.2KE Sampling (Soil)
Project 100-K

Chemical & Radiochemical Validation - Level C

Validation Performed By: Eyda Hergenreder Eyda Hergenreder ***Date: 07-13-12***

Validation reviewed by: *Marcia Hilchey* ***Date: 07-16-12***

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Date: 13 July 2012
To: CH2M Hill (technical representative)
From: Analytical Quality Associates, Inc.
Project: 100-K
Subject: PCBs - Sample Data Group (SDG) SL1272, SL1278, WSCF120661, WSCF120665 and WSCF120809

INTRODUCTION

This memorandum presents the results of data validation for SDGs SL1272 and SL1278 prepared by TestAmerica Laboratories, Inc. and SDGs WSCF120661, WSCF120665 and WSCF120809 prepared by WSCF Analytical Laboratory. A list of samples validated along with the analytical methods is provided in the following table.

Sample ID	Sample Date	Media	Validation Level	Analytical Method
B2L1R5	05/20/12	Soil	C	8082
B2L1T0	06/20/12	Soil	C	8082
B2H1J3	05/20/12	Soil	C	8082
B2L1M2	05/20/12	Soil	C	8082
B2H1D5	05/20/12	Soil	C	8082
B2H1H5	05/20/12	Soil	C	8082
B2L1P6	05/20/12	Soil	C	8082
B2H1C3	05/20/12	Soil	C	8082
B2H1D9	05/20/12	Soil	C	8082
B2L1L8	05/20/12	Soil	C	8082
B2H1F7	05/20/12	Soil	C	8082
B2H1J7	05/20/12	Soil	C	8082
B2H1H1	05/20/12	Soil	C	8082
B2H1D1	05/20/12	Soil	C	8082
B2L1M6	05/20/12	Soil	C	8082
B2H1F3	05/20/12	Soil	C	8082
B2L1L4	05/20/12	Soil	C	8082
B2L1T4	05/20/12	Soil	C	8082
B2H1B9	05/20/12	Soil	C	8082
B2H1H9	05/20/12	Soil	C	8082
B2L1T7	06/20/12	Soil	C	8082
B2H1K1	06/20/12	Soil	C	8082
B2L1K2	06/20/12	Soil	C	8082
B2H1K5	06/20/12	Soil	C	8082
B2L1K6	06/20/12	Soil	C	8082
B2H1K9	06/20/12	Soil	C	8082
B2L1J0	06/20/12	Soil	C	8082
B2L1J4	06/20/12	Soil	C	8082
B2L1J8	06/20/12	Soil	C	8082
B2L1N0	06/20/12	Soil	C	8082

B2L1N4	06/20/12	Soil	C	8082
B2L1N8	06/20/12	Soil	C	8082
B2L1P2	06/20/12	Soil	C	8082
B2L1L0	06/20/12	Soil	C	8082
B2H1L3	06/20/12	Soil	C	8082
B2H1L7	06/20/12	Soil	C	8082
B2H1M1	06/20/12	Soil	C	8082
B2L1R0	06/20/12	Soil	C	8082

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

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

DATA QUALITY OBJECTIVES

- **Holding Times and Sample Preservation**

Holding times are calculated from Chain-of-Custody forms to determine the validity of the results. The holding time requirements for PCBs are extraction within one year of sample collection and analysis within one year of sample 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 surrogate results, matrix spike sample results and laboratory control sample results. According to the SAP, the matrix spike and laboratory control sample accuracy limits are 50% to 150%.

Surrogates

All surrogate recoveries were acceptable.

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

All MS/MSD recoveries were acceptable. It should be noted that for SDGs WSCF120661, WSCF120665 and WSCF120809, aroclor-1254 was the only analyte reported for the MS/MSD. Method 8082A guidance specifies aroclor-1016 and aroclor-1260 for MS/MSD analyses. No sample data are qualified as a result.

Laboratory Control Samples (LCSs)

All LCS recoveries were acceptable. It should be noted that for SDGs WSCF120661, WSCF120665 and WSCF120809, aroclor-1254 was the only analyte reported for the LCS. Method 8082A guidance specifies aroclor-1016 and aroclor-1260 for LCS analyses. No sample data are qualified as a result.

- **Precision**

Precision is evaluated by reviewing MS/MSD results, field duplicate sample results and field split sample results. These QC results provide information on the laboratory reproducibility and whether sampling activities are adequate to acquire consistent sample results. According to the SAP, the relative percent difference (RPD) limits are ±30%.

MS/MSD Samples

All MS/MSD RPD values were acceptable.

Field Duplicate Samples

All field duplicate results were acceptable.

Field Split Samples

All field split results were acceptable.

- **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 above the requested calculated action level.

- **Completeness**

SDGs SL1272, SL1278, WSCF120661, WSCF120665 and WSCF120809 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

None found.

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.

- **C** — This qualifier applies to pesticide and Aroclor results when the identification has been confirmed by Gas Chromatograph/Mass Spectrometer (GC/MS).

- **X** — This qualifier applies to pesticide and Aroclor results when GC/MS analysis was attempted but was unsuccessful. The data should be considered unusable 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

PCB Data Qualification Summary			
SDG: SL1272, SL1278, WSCF120661, WSCF120665, WSCF120809	Reviewer: AQA	Project: 100-K	Page 1 of 1
Analyte(s)	**Qualifier**	**Samples Affected**	**Reason**
PCBs	None	N/A	N/A

Comments: None

Appendix 3

Annotated Laboratory Reports

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2L1R5

GC Semivolatiles

Lot-Sample #...: F2E250455-001 **Work Order #...:** MTTL11AD **Matrix.....:** SOLID
Date Sampled...: 05/20/12 **Date Received..:** 05/25/12
Prep Date.....: 05/30/12 **Analysis Date..:** 06/04/12
Prep Batch #...: 2151038
Dilution Factor: 1
% Moisture.....: 6.0 **Method.....:** SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	18	ug/kg	9.3
Aroclor 1221	ND	18	ug/kg	9.3
Aroclor 1232	ND	18	ug/kg	9.3
Aroclor 1242	ND	18	ug/kg	9.3
Aroclor 1248	ND	18	ug/kg	9.3
Aroclor 1254	ND	18	ug/kg	5.8
Aroclor 1260	ND	18	ug/kg	5.8

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	103	(54 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2L1T0

GC Semivolatiles

Lot-Sample #...: F2F260421-001 **Work Order #...:** MVART1AC **Matrix.....:** SOLID
Date Sampled...: 06/20/12 **Date Received..:** 06/26/12
Prep Date.....: 06/28/12 **Analysis Date..:** 07/05/12
Prep Batch #...: 2180117
Dilution Factor: 1
% Moisture.....: 2.1 **Method.....:** SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	17	ug/kg	8.9
Aroclor 1221	ND	17	ug/kg	8.9
Aroclor 1232	ND	17	ug/kg	8.9
Aroclor 1242	ND	17	ug/kg	8.9
Aroclor 1248	ND	17	ug/kg	8.9
Aroclor 1254	ND	17	ug/kg	5.6
Aroclor 1260	ND	17	ug/kg	5.6

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	110	(54 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF120661

Sample # 120661001
SAF# F11-095
Sample ID B2H1J3

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
PCB Prep Solids										**05/22/12**
PCBs										
Aroclor-1016	12674-11-2	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1221	11104-28-2	LA-523-427	U	<8		ug/kg	1	8	20	06/01/12
Aroclor-1232	11141-16-5	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1242	53469-21-9	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1248	12672-29-6	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1254	11097-69-1	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1260	11096-82-5	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12

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

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

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

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF120661

Sample # 120661002
SAF# F11-095
Sample ID B2L1M2

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
PCB Prep Solids										**05/22/12**
PCBs										
Aroclor-1016	12674-11-2	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1221	11104-28-2	LA-523-427	U	<8		ug/kg	1	8	20	06/01/12
Aroclor-1232	11141-16-5	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1242	53469-21-9	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1248	12672-29-6	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1254	11097-69-1	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1260	11096-82-5	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12

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

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

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

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF120661

Sample # 120661003
SAF# F11-095
Sample ID B2H1D5

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
PCB Prep Solids										**05/22/12**
PCBs										
Aroclor-1016	12674-11-2	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1221	11104-28-2	LA-523-427	U	<8		ug/kg	1	8	20	06/01/12
Aroclor-1232	11141-16-5	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1242	53469-21-9	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1248	12672-29-6	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1254	11097-69-1	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1260	11096-82-5	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12

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

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

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

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF120661

Sample # 120661004
SAF# F11-095
Sample ID B2H1H5

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
PCB Prep Solids										**05/22/12**
PCBs										
Aroclor-1016	12674-11-2	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1221	11104-28-2	LA-523-427	U	<8		ug/kg	1	8	20	06/01/12
Aroclor-1232	11141-16-5	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1242	53469-21-9	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1248	12672-29-6	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1254	11097-69-1	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1260	11096-82-5	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12

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

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

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

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF120661

Sample # 120661005
SAF# F11-095
Sample ID B2L1P6

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
PCB Prep Solids										**05/22/12**
PCBs										
Aroclor-1016	12674-11-2	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1221	11104-28-2	LA-523-427	U	<8		ug/kg	1	8	20	06/01/12
Aroclor-1232	11141-16-5	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1242	53469-21-9	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1248	12672-29-6	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1254	11097-69-1	LA-523-427		110		ug/kg	1	4	8	06/01/12
Aroclor-1260	11096-82-5	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12

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

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

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

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF120661

Sample # 120661006
SAF# F11-095
Sample ID B2H1C3

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
PCB Prep Solids										**05/22/12**
PCBs										
Aroclor-1016	12674-11-2	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1221	11104-28-2	LA-523-427	U	<8		ug/kg	1	8	20	06/01/12
Aroclor-1232	11141-16-5	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1242	53469-21-9	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1248	12672-29-6	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1254	11097-69-1	LA-523-427		120		ug/kg	1	4	8	06/01/12
Aroclor-1260	11096-82-5	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12

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

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

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

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF120661

Sample # 120661007
SAF# F11-095
Sample ID B2H1D9

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
PCB Prep Solids										**05/22/12**
PCBs										
Aroclor-1016	12674-11-2	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1221	11104-28-2	LA-523-427	U	<8		ug/kg	1	8	20	06/01/12
Aroclor-1232	11141-16-5	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1242	53469-21-9	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1248	12672-29-6	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1254	11097-69-1	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1260	11096-82-5	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12

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

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

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

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF120661

Sample # 120661008
SAF# F11-095
Sample ID B2L1L8

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
PCB Prep Solids										**05/22/12**
PCBs										
Aroclor-1016	12674-11-2	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1221	11104-28-2	LA-523-427	U	<8		ug/kg	1	8	20	06/01/12
Aroclor-1232	11141-16-5	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1242	53469-21-9	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1248	12672-29-6	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1254	11097-69-1	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1260	11096-82-5	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12

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

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

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

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF120661

Sample # 120661009
SAF# F11-095
Sample ID B2H1F7

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
PCB Prep Solids										**05/22/12**
PCBs										
Aroclor-1016	12674-11-2	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1221	11104-28-2	LA-523-427	U	<8		ug/kg	1	8	20	06/01/12
Aroclor-1232	11141-16-5	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1242	53469-21-9	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1248	12672-29-6	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1254	11097-69-1	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1260	11096-82-5	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12

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

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

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

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF120661

Sample # 120661010
SAF# F11-095
Sample ID B2H1J7

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
PCB Prep Solids										**05/22/12**
PCBs										
Aroclor-1016	12674-11-2	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1221	11104-28-2	LA-523-427	U	<8		ug/kg	1	8	20	06/01/12
Aroclor-1232	11141-16-5	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1242	53469-21-9	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1248	12672-29-6	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1254	11097-69-1	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1260	11096-82-5	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12

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

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

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

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF120665

Sample # 120665001
SAF# F11-095
Sample ID B2H1H1

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
PCB Prep Solids										**05/22/12**
PCBs										
Aroclor-1016	12674-11-2	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1221	11104-28-2	LA-523-427	U	<8		ug/kg	1	8	20	06/01/12
Aroclor-1232	11141-16-5	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1242	53469-21-9	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1248	12672-29-6	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1254	11097-69-1	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1260	11096-82-5	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12

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

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

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

REVISED

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF120665

Sample # 120665002
SAF# F11-095
Sample ID B2H1D1

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
PCB Prep Solids										**05/22/12**
PCBs										
Aroclor-1016	12674-11-2	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1221	11104-28-2	LA-523-427	U	<8		ug/kg	1	8	20	06/01/12
Aroclor-1232	11141-16-5	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1242	53469-21-9	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1248	12672-29-6	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1254	11097-69-1	LA-523-427		76		ug/kg	1	4	8	06/01/12
Aroclor-1260	11096-82-5	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12

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

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

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

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WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF120665

Sample # 120665003
SAF# F11-095
Sample ID B2L1M6

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
PCB Prep Solids										**05/22/12**
PCBs										
Aroclor-1016	12674-11-2	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1221	11104-28-2	LA-523-427	U	<8		ug/kg	1	8	20	06/01/12
Aroclor-1232	11141-16-5	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1242	53469-21-9	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1248	12672-29-6	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1254	11097-69-1	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1260	11096-82-5	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12

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

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

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

REVISED

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF120665

Sample # 120665004
SAF# F11-095
Sample ID B2H1F3

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
PCB Prep Solids										**05/22/12**
PCBs										
Aroclor-1016	12674-11-2	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1221	11104-28-2	LA-523-427	U	<8		ug/kg	1	8	20	06/01/12
Aroclor-1232	11141-16-5	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1242	53469-21-9	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1248	12672-29-6	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1254	11097-69-1	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1260	11096-82-5	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12

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

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

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

REVISED

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF120665

Sample # 120665005
SAF# F11-095
Sample ID B2L1L4

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
PCB Prep Solids										**05/22/12**
PCBs										
Aroclor-1016	12674-11-2	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1221	11104-28-2	LA-523-427	U	<8		ug/kg	1	8	20	06/01/12
Aroclor-1232	11141-16-5	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1242	53469-21-9	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1248	12672-29-6	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1254	11097-69-1	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1260	11096-82-5	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12

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

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

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

REVISED

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF120665

Sample # 120665006
SAF# F11-095
Sample ID B2L1T4

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
PCB Prep Solids										**05/22/12**
PCBs										
Aroclor-1016	12674-11-2	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1221	11104-28-2	LA-523-427	U	<8		ug/kg	1	8	20	06/01/12
Aroclor-1232	11141-16-5	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1242	53469-21-9	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1248	12672-29-6	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1254	11097-69-1	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1260	11096-82-5	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12

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

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

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

REVISED

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF120665

Sample # 120665007
SAF# F11-095
Sample ID B2H1B9

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
PCB Prep Solids										**05/22/12**
PCBs										
Aroclor-1016	12674-11-2	LA-523-427	UD	<20		ug/kg	4	20	30	06/04/12
Aroclor-1221	11104-28-2	LA-523-427	UD	<30		ug/kg	4	30	60	06/04/12
Aroclor-1232	11141-16-5	LA-523-427	UD	<20		ug/kg	4	20	30	06/04/12
Aroclor-1242	53469-21-9	LA-523-427	UD	<20		ug/kg	4	20	30	06/04/12
Aroclor-1248	12672-29-6	LA-523-427	UD	<20		ug/kg	4	20	30	06/04/12
Aroclor-1254	11097-69-1	LA-523-427	D	180		ug/kg	4	20	30	06/04/12
Aroclor-1260	11096-82-5	LA-523-427	UD	<20		ug/kg	4	20	30	06/04/12

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

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

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

REVISED

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF120665

Sample # 120665008
SAF# F11-095
Sample ID B2H1H9

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
PCB Prep Solids										**05/22/12**
PCBs										
Aroclor-1016	12674-11-2	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1221	11104-28-2	LA-523-427	U	<8		ug/kg	1	8	20	06/01/12
Aroclor-1232	11141-16-5	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1242	53469-21-9	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1248	12672-29-6	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1254	11097-69-1	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12
Aroclor-1260	11096-82-5	LA-523-427	U	<4		ug/kg	1	4	8	06/01/12

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

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

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

REVISED

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF120809

Sample # 120809001
SAF# F11-095
Sample ID B2L1T7

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Preparation for 8082 (S) ASE										**06/21/12**
PCBs by EPA SW-846 Method 8082										
Aroclor-1016	12674-11-2	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1221	11104-28-2	LA-523-427	U	<8		ug/kg	1	8	20	06/26/12
Aroclor-1232	11141-16-5	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1242	53469-21-9	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1248	12672-29-6	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1254	11097-69-1	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1260	11096-82-5	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12

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

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

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

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF120809

Sample # 120809002
SAF# F11-095
Sample ID B2H1K1

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Preparation for 8082 (S) ASE										**06/21/12**
PCBs by EPA SW-846 Method 8082										
Aroclor-1016	12674-11-2	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1221	11104-28-2	LA-523-427	U	<8		ug/kg	1	8	20	06/26/12
Aroclor-1232	11141-16-5	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1242	53469-21-9	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1248	12672-29-6	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1254	11097-69-1	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1260	11096-82-5	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12

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

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

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

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF120809

Sample # 120809003
SAF# F11-095
Sample ID B2L1K2

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Preparation for 8082 (S) ASE										**06/21/12**
PCBs by EPA SW-846 Method 8082										
Aroclor-1016	12674-11-2	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1221	11104-28-2	LA-523-427	U	<8		ug/kg	1	8	20	06/26/12
Aroclor-1232	11141-16-5	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1242	53469-21-9	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1248	12672-29-6	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1254	11097-69-1	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1260	11096-82-5	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12

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

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

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

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF120809

Sample # 120809004
SAF# F11-095
Sample ID B2H1K5

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Preparation for 8082 (S) ASE										**06/21/12**
PCBs by EPA SW-846 Method 8082										
Aroclor-1016	12674-11-2	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1221	11104-28-2	LA-523-427	U	<8		ug/kg	1	8	20	06/26/12
Aroclor-1232	11141-16-5	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1242	53469-21-9	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1248	12672-29-6	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1254	11097-69-1	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1260	11096-82-5	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12

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

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

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

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF120809

Sample # 120809005
SAF# F11-095
Sample ID B2L1K6

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Preparation for 8082 (S) ASE										**06/21/12**
PCBs by EPA SW-846 Method 8082										
Aroclor-1016	12674-11-2	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1221	11104-28-2	LA-523-427	U	<8		ug/kg	1	8	20	06/26/12
Aroclor-1232	11141-16-5	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1242	53469-21-9	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1248	12672-29-6	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1254	11097-69-1	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1260	11096-82-5	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12

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

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

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

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF120809

Sample # 120809006
SAF# F11-095
Sample ID B2H1K9

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Preparation for 8082 (S) ASE										**06/21/12**
PCBs by EPA SW-846 Method 8082										
Aroclor-1016	12674-11-2	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1221	11104-28-2	LA-523-427	U	<8		ug/kg	1	8	20	06/26/12
Aroclor-1232	11141-16-5	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1242	53469-21-9	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1248	12672-29-6	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1254	11097-69-1	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1260	11096-82-5	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12

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

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

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

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF120809

Sample # 120809007
SAF# F11-095
Sample ID B2L1J0

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Preparation for 8082 (S) ASE										**06/21/12**
PCBs by EPA SW-846 Method 8082										
Aroclor-1016	12674-11-2	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1221	11104-28-2	LA-523-427	U	<8		ug/kg	1	8	20	06/26/12
Aroclor-1232	11141-16-5	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1242	53469-21-9	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1248	12672-29-6	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1254	11097-69-1	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1260	11096-82-5	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12

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

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

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

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF120809

Sample # 120809008
SAF# F11-095
Sample ID B2L1J4

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Preparation for 8082 (S) ASE										**06/21/12**
PCBs by EPA SW-846 Method 8082										
Aroclor-1016	12674-11-2	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1221	11104-28-2	LA-523-427	U	<8		ug/kg	1	8	20	06/26/12
Aroclor-1232	11141-16-5	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1242	53469-21-9	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1248	12672-29-6	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1254	11097-69-1	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1260	11096-82-5	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12

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

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

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

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF120809

Sample # 120809009
SAF# F11-095
Sample ID B2L1J8

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Preparation for 8082 (S) ASE										**06/21/12**
PCBs by EPA SW-846 Method 8082										
Aroclor-1016	12674-11-2	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1221	11104-28-2	LA-523-427	U	<8		ug/kg	1	8	20	06/26/12
Aroclor-1232	11141-16-5	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1242	53469-21-9	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1248	12672-29-6	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1254	11097-69-1	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1260	11096-82-5	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12

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

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

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

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF120809

Sample # 120809010
SAF# F11-095
Sample ID B2L1N0

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Preparation for 8082 (S) ASE										**06/21/12**
PCBs by EPA SW-846 Method 8082										
Aroclor-1016	12674-11-2	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1221	11104-28-2	LA-523-427	U	<8		ug/kg	1	8	20	06/26/12
Aroclor-1232	11141-16-5	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1242	53469-21-9	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1248	12672-29-6	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1254	11097-69-1	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1260	11096-82-5	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12

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

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

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

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF120809

Sample # 120809011
SAF# F11-095
Sample ID B2L1N4

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Preparation for 8082 (S) ASE										**06/21/12**
PCBs by EPA SW-846 Method 8082										
Aroclor-1016	12674-11-2	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1221	11104-28-2	LA-523-427	U	<8		ug/kg	1	8	20	06/26/12
Aroclor-1232	11141-16-5	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1242	53469-21-9	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1248	12672-29-6	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1254	11097-69-1	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1260	11096-82-5	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12

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

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

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

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF120809

Sample # 120809012
SAF# F11-095
Sample ID B2L1N8

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Preparation for 8082 (S) ASE										**06/21/12**
PCBs by EPA SW-846 Method 8082										
Aroclor-1016	12674-11-2	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1221	11104-28-2	LA-523-427	U	<8		ug/kg	1	8	20	06/26/12
Aroclor-1232	11141-16-5	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1242	53469-21-9	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1248	12672-29-6	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1254	11097-69-1	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1260	11096-82-5	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12

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

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

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

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF120809

Sample # 120809013
SAF# F11-095
Sample ID B2L1P2

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Preparation for 8082 (S) ASE										**06/21/12**
PCBs by EPA SW-846 Method 8082										
Aroclor-1016	12674-11-2	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1221	11104-28-2	LA-523-427	U	<8		ug/kg	1	8	20	06/26/12
Aroclor-1232	11141-16-5	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1242	53469-21-9	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1248	12672-29-6	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1254	11097-69-1	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1260	11096-82-5	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12

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

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

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

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF120809

Sample # 120809014
SAF# F11-095
Sample ID B2L1L0

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Preparation for 8082 (S) ASE										**06/21/12**
PCBs by EPA SW-846 Method 8082										
Aroclor-1016	12674-11-2	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1221	11104-28-2	LA-523-427	U	<8		ug/kg	1	8	20	06/26/12
Aroclor-1232	11141-16-5	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1242	53469-21-9	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1248	12672-29-6	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1254	11097-69-1	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1260	11096-82-5	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12

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

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

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

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF120809

Sample # 120809015
SAF# F11-095
Sample ID B2H1L3

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Preparation for 8082 (S) ASE										**06/21/12**
PCBs by EPA SW-846 Method 8082										
Aroclor-1016	12674-11-2	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1221	11104-28-2	LA-523-427	U	<8		ug/kg	1	8	20	06/26/12
Aroclor-1232	11141-16-5	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1242	53469-21-9	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1248	12672-29-6	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1254	11097-69-1	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1260	11096-82-5	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12

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

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

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

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF120809

Sample # 120809016
SAF# F11-095
Sample ID B2H1L7

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Preparation for 8082 (S) ASE										**06/21/12**
PCBs by EPA SW-846 Method 8082										
Aroclor-1016	12674-11-2	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1221	11104-28-2	LA-523-427	U	<8		ug/kg	1	8	20	06/26/12
Aroclor-1232	11141-16-5	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1242	53469-21-9	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1248	12672-29-6	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1254	11097-69-1	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1260	11096-82-5	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12

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

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

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

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF120809

Sample # 120809017
SAF# F11-095
Sample ID B2H1M1

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Preparation for 8082 (S) ASE										**06/21/12**
PCBs by EPA SW-846 Method 8082										
Aroclor-1016	12674-11-2	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1221	11104-28-2	LA-523-427	U	<8		ug/kg	1	8	20	06/26/12
Aroclor-1232	11141-16-5	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1242	53469-21-9	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1248	12672-29-6	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1254	11097-69-1	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1260	11096-82-5	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12

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

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

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

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF120809

Sample # 120809018
SAF# F11-095
Sample ID B2L1R0

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Preparation for 8082 (S) ASE										**06/21/12**
PCBs by EPA SW-846 Method 8082										
Aroclor-1016	12674-11-2	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1221	11104-28-2	LA-523-427	U	<8		ug/kg	1	8	20	06/26/12
Aroclor-1232	11141-16-5	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1242	53469-21-9	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1248	12672-29-6	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1254	11097-69-1	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12
Aroclor-1260	11096-82-5	LA-523-427	U	<4		ug/kg	1	4	8	06/26/12

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

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

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

Appendix 4

Laboratory Narrative and Chain-of-Custody Documentation

CASE NARRATIVE

CH2MHill Plateau Remediation Company
P.O. Box 1600
MS B3-60
Richland, Washington 99352
June 8, 2012
Attention: Scot Fitzgerald

SDG	: SL1272
Number of Samples	: sample
Sample Matrix	: Soil
Data Deliverable	: Summary
Date SDG Closed	: May 25, 2012

II. Introduction

On May 25, 2012, a soil sample was received by TestAmerica - St. Louis for chemical analysis. The sample was received within temperature criteria. See the COC and CUR forms for documentation of any variations on receipt conditions and temperature. Upon receipt, the sample was given a laboratory Id to correspond with specific client Id. 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: F11-095.

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.

CH2M Hill Plateau Remediation Company

June 8, 2012
SDG: SL1272

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.

ICP Metals

Batch: 2150029

The MS (MSD) recoveries for Copper and Manganese are outside the established QC limits. The RPD values are within method acceptance criteria indicating possible matrix interference. Method performance is demonstrated by acceptable LCS recovery. These analytes have been qualified with an "N" flag in the associated sample.
Affected Samples:
F2E250455 (1): B2L1R5

The CCV bracketing the initial QC (ICSA, ICSAB, and LLC) was outside acceptable QC limits for Boron indicating a potential bias. The initial QC all passed within acceptable limits. The samples were bracketed by acceptable CCV/CCBs. Results are reported.
Affected Samples:
F2E250455 (1): B2L1R5

There were no observations or nonconformances for the following methods: Ion Chromatography, PCBs, and Mercury.

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:

Chenise Y. Lambert-Sykes
St. Louis Project Manager

SL1272

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-533	PAGE 1 OF 1
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 183KE Pothole Soil Sample 35	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO. GWS-248	FIELD LOGBOOK NO. HNF-N-507-24	ACTUAL SAMPLE DEPTH 5ft.	COA 302548ES10	METHOD OF SHIPMENT FEDERAL EXPRESS	ORIGINAL
SHIPPED TO TestAmerica St. Louis	OFFSITE PROPERTY NO. SEE PTR		BILL OF LADING/AIR BILL NO. SEE PTR 7984 3403 4749		

SDG: SL1272

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

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool~4C	Cool~4C	Cool~4C
HOLDING TIME	1 yr/1 yr	6 Months	28 Days/48 Hours
TYPE OF CONTAINER	aG	G/P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	120mL	60mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	IC Anions - 300.0 {Chloride, Sulfate};

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2L1R5	SOIL	MAY 2 0 2012	1152	✓	✓	✓

TFVL 12- 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM FM Hall CHPRC	DATE/TIME MAY 2 0 2012	RECEIVED BY/STORED IN SSU #1	DATE/TIME MAY 2 0 2012
RELINQUISHED BY/REMOVED FROM SSU #1	DATE/TIME 5-24-12 0820	RECEIVED BY/STORED IN MaWhite	DATE/TIME 5-24-12 0820
RELINQUISHED BY/REMOVED FROM MaWhite	DATE/TIME 5-24-12 1400	RECEIVED BY/STORED IN FEDEX	DATE/TIME
RELINQUISHED BY/REMOVED FROM FED EX	DATE/TIME	RECEIVED BY/STORED IN Swilson	DATE/TIME 5-25-12 0920
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};
(2) ICP Metals - 6020 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP Metals - 6020 (Add-on) {Arsenic, Beryllium, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; Mercury - 7471 - (CV);

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

PRINTED ON 4/2/2012

A-6003-618 (REV 2)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

CASE NARRATIVE

CH2MHill Plateau Remediation Company
P.O. Box 1600
MS B3-60
Richland, Washington 99352
July 06, 2012
Attention: Scot Fitzgerald

TestAmerica Laboratories, Inc.

SDG	: SL1278
Number of Samples	: sample
Sample Matrix	: Soil
Data Deliverable	: Summary
Date SDG Closed	: June 26, 2012

II. Introduction

On June 26, 2012, a soil sample was received by TestAmerica - St. Louis for chemical analysis. The sample was 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: F11-095

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.

13715 Rider Trail North Earth City, MO 63045 **tel** 314.298.8566 **fax** 314.298.8757 **www.testamericainc.com**

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CH2M Hill Plateau Remediation Company
July 6, 2012
SDG: SL1278

TestAmerica Laboratories, Inc.

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.

PCBs

Batch: 2180117

The CCV recovery is outside the QC limits of greater than 20%D. The CCV excursion occurred in the secondary column which is only used for confirmation, and no data is reported from it.
Affected Samples:
F2F260421 (1): B2L1T0

ICPMS Metals

Batch: 2179022

Boron and Silver were detected in the Method Blank at a concentration above the MDL but below the RL. These analytes have been qualified with a "C" flag in the associated sample.
Affected Samples:
F2F260421 (1): B2L1T0

The MS (MSD) recovery for Manganese is outside the established QC limits. The RPD is within method acceptance criteria indicating possible matrix interference. Method performance is demonstrated by acceptable LCS recovery. This analytes has been qualified with an "N" flag in the associated sample.
Affected Samples:
F2F260421 (1): B2L1T0

The CCV recovery was outside the upper QC limit (greater than 110%) for Boron indicating a potential high bias for this analyte in the samples associated with this CCV. This analytes was not detected above the reporting limit in the associated sample.
Affected Samples:
F2F260421 (1): B2L1T0

13715 Rider Trail North Earth City, MO 63045 **tel** 314.298.8566 **fax** 314.298.8757 **www.testamericainc.com**

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

CH2M Hill Plateau Remediation Company

July 6, 2012

SDG: SL1278

TestAmerica Laboratories, Inc.

There were no observations or nonconformances for the following methods: Anions and Mercury

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:

Chenise Y. Lambert-Sykes
St. Louis Project Manager

13715 Rider Trail North Earth City, MO 63045 **tel** 314.298.8566 **fax** 314.298.8757 **www.testamericainc.com**

SL1278

SL1278 CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-095-538

PAGE 1 OF 1

COLLECTOR CUL179 Frank Hall	**COMPANY CONTACT** TRENT, SJ	**TELEPHONE NO.** 373-5869	**PROJECT COORDINATOR** TRENT, SJ
SAMPLING LOCATION 183.2KE Pothole Soil Sample 36	**PROJECT DESIGNATION** 183 KE/KW Water Treatment Plant - Soil		**SAF NO.** F11-095
ICE CHEST NO. GWS-098	**FIELD LOGBOOK NO.** HNF-N-507-25	**ACTUAL SAMPLE DEPTH** 10'	**COA** 302548ES10
SHIPPED TO TestAmerica St. Louis	**OFFSITE PROPERTY NO.** SEE PTR		**BILL OF LADING/AIR BILL NO.** ~~SEE PTR~~ 7985 4820 0995

PRICE CODE 8C

AIR QUALITY ☐

DATA TURNAROUND 15 Days / 15 Days

METHOD OF SHIPMENT FEDERAL EXPRESS

ORIGINAL

SDG# SL1278

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

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool~4C	Cool~4C	Cool~4C
HOLDING TIME	1 yr/1 yr	6 Months	28 Days/48 Hours
TYPE OF CONTAINER	aG	G/P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	120mL	60mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	IC Anions - 300.0 {Chloride, Sulfate};

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2L1T0	SOIL	JUN 20 2012	0925	✓	✓	✓

RW 6/25/12

FA-12-039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM Frank Hall	DATE/TIME JUN 20 2012 1300	RECEIVED BY/STORED IN SSU #1	DATE/TIME JUN 20 2012 1300
RELINQUISHED BY/REMOVED FROM SSU #1	DATE/TIME JUN 25 2012 0815	RECEIVED BY/STORED IN L.D. Wall CHPRC	DATE/TIME JUN 25 2012 0815
RELINQUISHED BY/REMOVED FROM L.D. Wall CHPRC	DATE/TIME JUN 25 2012 1400	RECEIVED BY/STORED IN FEDEX	DATE/TIME
RELINQUISHED BY/REMOVED FROM FED EX	DATE/TIME	RECEIVED BY/STORED IN Nicholas Owens	DATE/TIME 6/26/12 0940
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};
(2) ICP Metals - 6020 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP Metals - 6020 (Add-on) {Arsenic, Beryllium, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; Mercury - 7471 - (CV);

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

PRINTED ON 4/2/2012

A-6003-618 (REV 2)

TestAmerica St. Louis

Attachment 2
Narrative
WSCF120661

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), Master Contract 39818, Revision 3, "Laboratory Analytical Services to CHPRC Soil and Groundwater Remediation Project."*

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. In addition, Sample Discrepancy Report 12-268 is attached regarding a metal QC 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

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

- All applicable QC controls are within the established limits.

Attachment 2
Narrative
WSCF120661

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.

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 SDR12-268 regarding Strontium LCS failure is attached to this report.
- All other applicable QC controls are within the established limits.

Organic Comments

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

- All applicable QC controls are within the established limits.

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

Attachment 2
Narrative
WSCF120661

SAMPLE ISSUE RESOLUTION

SIR NUM	SDR12-268
REV NUM	0
DATE INITIATED	5/30/2012

SAMPLE EVENT INFORMATION

SAF NUM(S)	F11-095, F10-255
OPERABLE UNIT(S)	100-KR-2
PROJECT(S)	183 KE/KW, 100 K RA
SAMPLE EVENT TITLE(S)	100 K Remedial Action, 183 KE/KW WTP
LABORATORY	Waste Sampling & Characterization

SAMPLING INFORMATION

NUMBER OF SAMPLES	20
SAMPLE NUMBERS	B2F188, B2F189, B2F190, B2F191, B2H1C3, B2H1D1, B2H1D5, B2H1D9, B2H1F3, B2H1F7, B2H1H1, B2H1H5, B2H1J3, B2H1J7, B2L1L4, B2L1L8, B2L1M2, B2L1M6, B2L1P6, B2L1T4
SAMPLE MATRIX	SOIL
COLLECTION DATE	5/20/2012 - 5/20/2012
SDG NUM	WSCF120665, WSCF120662, WSCF120661

ISSUE BACKGROUND

CLASS	Laboratory Issue
TYPE	Quality Control Failure
DESCRIPTION	Strontium LCS was slightly low at 74.2% with control limits of 78-119%. The MS (98.3) and MSD (95.7) were both within the control limits of 70-130%. The blank was non-detect.

DISPOSITION

DESCRIPTION	PROPOSED DISPOSITION: Report the data as-is and note the QC failures in the case narrative.
JUSTIFICATION	ACCEPTED DISPOSITION: Accept proposed resolution.

SUBMITTED BY: Heather Medley/WSCF DATE: 5/30/12

ACCEPTED BY: Steve Trent/CHPRC DATE: 5/30/12
Jennifer Hammons/CHPRC DATE: 5/30/12

A-6003-640 (03/30)

PAGE 1 of 1

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-436	PAGE 1 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 4 Soil Sample 2	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: N/A	FIELD LOGBOOK NO.: HNF-N-507-24	ACTUAL SAMPLE DEPTH: 5 ft.	COA: 302548ES10	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: 120661

PRESERVATION	Cool~4C	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS PCB	SEE ITEM (2) IN SPECIAL INSTRUCTIONS 2008	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2H1J3	SOIL	MAY 2 0 2012	1214	✓	✓	✓	✓	

SH 5/18/12

TRVL- 12- 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: FM Hall, CHPRC	DATE/TIME: MAY 2 0 2012 1430	RECEIVED BY/STORED IN: SJ#1	DATE/TIME: MAY 2 0 2012 1430	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: SJ#1	DATE/TIME: MAY 2 1 2012 0830	RECEIVED BY/STORED IN: CW Brotherton, Jr, CHPRC	DATE/TIME: MAY 2 1 2012 0830	
RELINQUISHED BY/REMOVED FROM: CW Brotherton, Jr, CHPRC	DATE/TIME: MAY 2 1 2012 0900	RECEIVED BY/STORED IN: TA Frazier	DATE/TIME: MAY 2 1 2012 0900	
RELINQUISHED BY/REMOVED FROM: CHPRC	DATE/TIME:	RECEIVED BY/STORED IN:	DATE/TIME:	
RELINQUISHED BY/REMOVED FROM	DATE/TIME:	RECEIVED BY/STORED IN	DATE/TIME:	
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 3/14/2012

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-436	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 183.2KE Pothole 4 Soil Sample 2	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO. N/A	FIELD LOGBOOK NO. HNF-N-507-24	ACTUAL SAMPLE DEPTH 5 ft.	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ 3/15/12

TRVL- 12- 039

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A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-500	PAGE 1 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 10 Soil Sample 1	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: N/A	FIELD LOGBOOK NO.: HNF-N-507-24	ACTUAL SAMPLE DEPTH: Surface	COA: 302548E510	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS;	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2L1M2	2 SOIL	MAY 2 0 2012	1240	✓	✓	✓	✓	

DH 5/18/12

TRVL- 12- 039

CHAIN OF POSSESSION	DATE/TIME	SIGN/ PRINT NAMES	DATE/TIME	SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	MAY 2 0 2012 1430	RECEIVED BY/STORED IN: SSV#1	MAY 2 0 2012 1430	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: SSV #1	MAY 2 1 2012 0830	RECEIVED BY/STORED IN: DW Brotherton, Jr CHPRC	MAY 2 1 2012 0830	
RELINQUISHED BY/REMOVED FROM: DW Brotherton, Jr CHPRC	MAY 2 1 2012 0900	RECEIVED BY/STORED IN: TA Brown	MAY 2 1 2012 0900	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

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

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-500	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 183.2KE Pothole 10 Soil Sample 1	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO. N/A	FIELD LOGBOOK NO. HNF-N-507-24-	ACTUAL SAMPLE DEPTH Surface	COA 302548E510	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ JJ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha - {Gross alpha}; Gross Beta - {Gross beta};~~ GH 5/18/12

TRVL- 12- 039

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A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-408	PAGE 1 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 2 Soil Sample 1	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: N/A	FIELD LOGBOOK NO.: HNF-N-507-24	ACTUAL SAMPLE DEPTH: Surface	COA: 302548ES10	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; SE=Sediment; T=Tissue; V=Vegetation; W=Water; WI=Wipe; X=Other

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool~4C	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2H1D5 3	SOIL	5/20/12	1148	✓	✓	✓	✓	

TRVL- 12- 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: FM Hall, CHPRC	DATE/TIME: MAY 20 2012 1430	RECEIVED BY/STORED IN: SSU#1	DATE/TIME: MAY 20 2012 1430	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: SSU#1	DATE/TIME: MAY 21 2012 0830	RECEIVED BY/STORED IN: DW Brotherton, Jr, CHPRC	DATE/TIME: MAY 21 2012 0830	
RELINQUISHED BY/REMOVED FROM: DW Brotherton, Jr, CHPRC	DATE/TIME: MAY 21 2012 0900	RECEIVED BY/STORED IN: TA Franzin	DATE/TIME: MAY 21 2012 0900	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

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

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-408	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 183.2KE Pothole 2 Soil Sample 1	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO. n/a	FIELD LOGBOOK NO. HNF-N-507-24	ACTUAL SAMPLE DEPTH Surface	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100 K Facility until it is determined if any additional analyses are needed.~~ ☐ 162 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha - {Gross alpha}; - Gross Beta - {Gross beta}~~; 3/19/12

TR-L- 12- 039

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A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-428	PAGE 1 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 3 Soil Sample 3	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: 1/2	FIELD LOGBOOK NO.: HNF -N-507-24	ACTUAL SAMPLE DEPTH: 10 ft.	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2H1H5 4	SOIL	MAY 2 0 2012	1232	✓	✓	✓	✓	

QH 5/18/12

TRL 12 - 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: FM Hall, CHPRC	DATE/TIME: MAY 2 0 2012 1430	RECEIVED BY/STORED IN: SSLL#1	DATE/TIME: MAY 2 0 2012 1430	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: SSLL#1	DATE/TIME: MAY 2 1 2012 0830	RECEIVED BY/STORED IN: DW Brotherton, CHPRC	DATE/TIME: MAY 2 1 2012 0830	
RELINQUISHED BY/REMOVED FROM: DW Brotherton, CHPRC	DATE/TIME: MAY 2 1 2012 0900	RECEIVED BY/STORED IN: TA Frazier	DATE/TIME: MAY 2 1 2012 0900	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

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

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-428	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 3 Soil Sample 3	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	
ICE CHEST NO.	FIELD LOGBOOK NO. HNF -N-507-24-	ACTUAL SAMPLE DEPTH 10 ft	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ AJJ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}~~; 9K 5/13/12

TRVL- 12- 039

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A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F11-095-524	PAGE 1 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C; AIR QUALITY: ☐	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole Soil Sample 33	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	
ICE CHEST NO.: N/A	FIELD LOGBOOK NO.: HNF-N-507 24	ACTUAL SAMPLE DEPTH: 5 ft.	COA: 302548E510	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	BG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2L1P6 5	SOIL	MAY 2 0 2012	1115	✓	✓	✓	✓	

TRVL-12-039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: FM Hall, CHPRC	DATE/TIME: MAY 2 0 2012 1430	RECEIVED BY/STORED IN:	DATE/TIME: MAY 2 0 2012 1430	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM:	DATE/TIME: MAY 2 1 2012 0830	RECEIVED BY/STORED IN: DW Brotherton, CHPRC	DATE/TIME: MAY 2 1 2012 0830	
RELINQUISHED BY/REMOVED FROM: DW Brotherton, CHPRC	DATE/TIME: MAY 2 1 2012 0900	RECEIVED BY/STORED IN: TA Frazin	DATE/TIME: MAY 2 1 2012 0900	
RELINQUISHED BY/REMOVED FROM:	DATE/TIME:	RECEIVED BY/STORED IN:	DATE/TIME:	
RELINQUISHED BY/REMOVED FROM:	DATE/TIME:	RECEIVED BY/STORED IN:	DATE/TIME:	
RELINQUISHED BY/REMOVED FROM:	DATE/TIME:	RECEIVED BY/STORED IN:	DATE/TIME:	
RELINQUISHED BY/REMOVED FROM:	DATE/TIME:	RECEIVED BY/STORED IN:	DATE/TIME:	

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

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-524	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 183.2KE Pothole Soil Sample 33	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO. N/A	FIELD LOGBOOK NO. HNF-N-507 24	ACTUAL SAMPLE DEPTH 5 ft.	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ 5/23/12

TR-VL- 12 - 039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-400	PAGE 1 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 1 Soil Sample 2	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: N/A	FIELD LOGBOOK NO.: HNF-N-507 24	ACTUAL SAMPLE DEPTH: 5 ft	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None	
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months	
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P	
NO. OF CONTAINER(S)	1	1	1	1	1	
VOLUME	250mL	120mL	60mL	60mL	120mL	
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196,	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS	

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2H1C3 6	SOIL	MAY 2 0 2012	1115	✓	✓	✓	✓	

JH 5/13/12

TRVL- 12- 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: MAY 2 0 2012 1430	RECEIVED BY/STORED IN: SSU #1	DATE/TIME: MAY 2 0 2012 1430	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: SSU #1	DATE/TIME: MAY 2 1 2012 0830	RECEIVED BY/STORED IN: DW Brotherton, Jr CHPRC	DATE/TIME: MAY 2 1 2012 0830	
RELINQUISHED BY/REMOVED FROM: DW Brotherton, Jr CHPRC	DATE/TIME: MAY 2 1 2012 0900	RECEIVED BY/STORED IN: TA Environmental Quality	DATE/TIME: MAY 2 1 2012 0900	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

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

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-400	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 1 Soil Sample 2	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	
ICE CHEST NO. N/A	FIELD LOGBOOK NO. HNF-N-507 24	ACTUAL SAMPLE DEPTH 5 ft.	COA 302548E510	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ KDZ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ JK 5/3/12

TRVL- 12 - 039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-412	PAGE 1 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 2 Soil Sample 2	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	
ICE CHEST NO. N/A	FIELD LOGBOOK NO. HNF-N-507-24	ACTUAL SAMPLE DEPTH 5ft	COA 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.		MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2H1D9	7	SOIL	MAY 2 0 2012	1152	✓	✓	✓	✓	

JH 3/19/12

TRVL- 12- 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM FM Hall CHPRC	DATE/TIME MAY 2 0 2012 1430	RECEIVED BY/STORED IN SSU #1	DATE/TIME MAY 2 0 2012 1430	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM SSU #1	DATE/TIME MAY 2 1 2012 0830	RECEIVED BY/STORED IN DW Brotherton, Jr CHPRC	DATE/TIME MAY 2 1 2012 0830	
RELINQUISHED BY/REMOVED FROM DW Brotherton, Jr CHPRC	DATE/TIME MAY 2 1 2012 0900	RECEIVED BY/STORED IN TA Frazier	DATE/TIME MAY 2 1 2012 0900	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

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

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-412	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 2 Soil Sample 2	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	
ICE CHEST NO. n/a	FIELD LOGBOOK NO. HNF-N-507-24	ACTUAL SAMPLE DEPTH 5 ft	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ 3/28/12

TRVL-12-039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-496	PAGE 1 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 9 Soil Sample 2	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: N/A	FIELD LOGBOOK NO.: HNF-N-507-24	ACTUAL SAMPLE DEPTH: 10'	COA: 302548ES10	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	Cool--4C	Cool--4C	Cool--4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	50mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2L1L8 8	SOIL	5/20/12	1254	✓	✓	✓	✓	

24 5/18/12

039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: FM Hall, CHPRC	DATE/TIME: MAY 2 0 2012 1430	RECEIVED BY/STORED IN: SSU #1	DATE/TIME: MAY 2 0 2012 1430	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: SSU #1	DATE/TIME: MAY 2 1 2012 0830	RECEIVED BY/STORED IN: DW Brotherton, Jr, CHPRC	DATE/TIME: MAY 2 1 2012 0830	
RELINQUISHED BY/REMOVED FROM: DW Brotherton, Jr, CHPRC	DATE/TIME: MAY 2 1 2012 0900	RECEIVED BY/STORED IN: TA Brazin	DATE/TIME: MAY 2 1 2012 0900	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

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

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-496	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 9 Sol Sample 2	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	
ICE CHEST NO. N/A	FIELD LOGBOOK NO. HNF-N-507-24	ACTUAL SAMPLE DEPTH 10'	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed.~~ ☐ ~~—~~ DJR 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~

9K 5/18/12

TRVL- 12- 039

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A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-420	PAGE 1 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 3 Soil Sample 1	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: n/a	FIELD LOGBOOK NO.: HNF-N-507-24	ACTUAL SAMPLE DEPTH: Surface	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2H1F7 9	SOIL	MAY 2 0 2012	1228	✓	✓	✓	✓	

94 5/18/12

TR-12-039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: FM Hall, CHPRC	DATE/TIME: MAY 2 0 2012 1430	RECEIVED BY/STORED IN: SSW #1	DATE/TIME: MAY 2 0 2012 1430	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: SSW #1	DATE/TIME: MAY 2 1 2012 0830	RECEIVED BY/STORED IN: CW Brotherton, Jr, CHPRC	DATE/TIME: MAY 2 1 2012 0830	
RELINQUISHED BY/REMOVED FROM: CW Brotherton, Jr, CHPRC	DATE/TIME: MAY 2 1 2012 0900	RECEIVED BY/STORED IN: TA Frazier	DATE/TIME: MAY 2 1 2012 0900	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

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

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-420	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 183.2KE Pothole 3 Soil Sample 1	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO. N/A	FIELD LOGBOOK NO. HNF-N-507-24	ACTUAL SAMPLE DEPTH Surface	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ AJ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ JK 3/19/12

TRVL-12-039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-440	PAGE 1 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 4 Soil Sample 3	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: N/A	FIELD LOGBOOK NO.: HNF-N-507-24-	ACTUAL SAMPLE DEPTH: 10 ft.	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2H1J7 10	SOIL	MAY 2 0 2012	1216	✓	✓	✓	✓	

JH 5/18/12

TRVL- 12- 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: MAY 2 0 2012 1430	RECEIVED BY/STORED IN: SSU#1	DATE/TIME: MAY 2 0 2012 1430	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: SSU#1	DATE/TIME: MAY 2 1 2012 0830	RECEIVED BY/STORED IN: DW Brotherton, Jr CHPRC	DATE/TIME: MAY 2 1 2012 0830	
RELINQUISHED BY/REMOVED FROM: DW Brotherton, Jr CHPRC	DATE/TIME: MAY 2 1 2012 0900	RECEIVED BY/STORED IN: TA Frazier	DATE/TIME: MAY 2 1 2012 0900	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

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

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-440	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 183.2KE Pothole 4 Soil Sample 3	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO. N/A	FIELD LOGBOOK NO. HNF-N-507-24	ACTUAL SAMPLE DEPTH 10ft.	COA 302548ES10	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

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(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};
(2) 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};
~~(3) Gross Alpha - {Gross alpha}; Gross Beta - {Gross beta};~~
G# 5/19/12

TRVL- 12- 039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

Attachment 2
Narrative Rev1
WSCF120665

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

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), Master Contract 39818, Revision 3, "Laboratory Analytical Services to CHPRC Soil and Groundwater Remediation Project."*

The narrative (Attachment 2) will address sample characteristics, analyses requested and general information in performance of the analytical methods. Additionally, a copy of the completed P&D # WSCF120665 is included with this case narrative. 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. In addition, Sample Discrepancy Report 12-268 is attached regarding a metal QC 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

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

Attachment 2
Narrative Rev1
WSCF120665

- All applicable QC controls are within the established limits.

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

- All applicable QC controls are within the established limits.

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

- Batch QC 201896
  - Sample Issue Resolution Form SDR12-268 regarding 200.8 LCS failure is attached to this report.
- Batch QC 202257
  - Copper – Detected in the Blank and evaluated. No sample results in this batch were affected. "C" Flags not required.
  - Manganese – Exceeded spiking levels by a factor of 4. Spike recoveries and associated RPDs are not valid.
  - All other applicable QC controls are within the established limits.

Organic Comments

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

- 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.

Narrative

Attachment 2
Narrative Rev1
WSCF120665

SAMPLE ISSUE RESOLUTION

SIR NUM	SDR12-268
REV NUM	0
DATE INITIATED	5/30/2012

SAMPLE EVENT INFORMATION

SAF NUM(S)	F11-095, F10-255
OPERABLE UNIT(S)	100-KR-2
PROJECT(S)	183 KE/KW, 100 K RA
SAMPLE EVENT TITLE(S)	100 K Remedial Action, 183 KE/KW WTP
LABORATORY	Waste Sampling & Characterization

SAMPLING INFORMATION

NUMBER OF SAMPLES	20
SAMPLE NUMBERS	B2F188, B2F189, B2F190, B2F191, B2H1C3, B2H1D1, B2H1D5, B2H1D9, B2H1F3, B2H1F7, B2H1H1, B2H1H5, B2H1J3, B2H1J7, B2L1L4, B2L1L8, B2L1M2, B2L1M6, B2L1P6, B2L1T4
SAMPLE MATRIX	SOIL
COLLECTION DATE	5/20/2012 - 5/20/2012
SDG NUM	WSCF120665, WSCF120662, WSCF120661

ISSUE BACKGROUND

CLASS	Laboratory Issue
TYPE	Quality Control Failure
DESCRIPTION	Strontium LCS was slightly low at 74.2% with control limits of 78-119%. The MS (98.3) and MSD (95.7) were both within the control limits of 70-130%. The blank was non-detect.

DISPOSITION

DESCRIPTION	PROPOSED DISPOSITION: Report the data as-is and note the QC failures in the case narrative.
JUSTIFICATION	ACCEPTED DISPOSITION: Accept proposed resolution.

SUBMITTED BY: Heather Medley/WSCF DATE: 5/30/12

ACCEPTED BY: Steve Trent/CHPRC DATE: 5/30/12
Jennifer Hammons/CHPRC DATE: 5/30/12

A-6003-640 (03/30)

PAGE 1 of 1

Attachment 2
Narrative Rev1
WSCF120665

Problem and Discrepancy Report

WSCF

SDG WSCF120665

06/14/2012

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1. The data package has the following issues:

a) ICP-MS, beryllium was requested for samples B2H1B9, B2H1D1, B2H1F3, B2H1H1, B2H1H9, B2L1L4, and B2L1M6 but was not reported. (HC/E)

Resolution: *Provide appropriate correction*

Lab Response: **Beryllium has now been added.**

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-424	PAGE 1 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND
SAMPLING LOCATION: 183.2KE Pothole 3 Soil Sample 2	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	15 Days / 15 Days
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-507-34-	ACTUAL SAMPLE DEPTH: 5 ft	COA: 302548E510	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: 120665

PRESERVATION	Cool~4C	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2H1H1	SOIL	MAY 2 0 2012	1230	✓	✓	✓	✓	

TR-VL- 12- 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: MAY 2 0 2012 1430	RECEIVED BY/STORED IN: SSU#1	DATE/TIME: MAY 2 0 2012 1430	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: SSU-1 5/21/12	DATE/TIME: 0830	RECEIVED BY/STORED IN: R Ellingsworth 5/21/12	DATE/TIME: 0830	
RELINQUISHED BY/REMOVED FROM: R Ellingsworth 5/21/12	DATE/TIME: 0900	RECEIVED BY/STORED IN: TA Frazier 5/21/12	DATE/TIME: 0900	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

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

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-424	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 3 Soil Sample 2	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-507-24	ACTUAL SAMPLE DEPTH 5 ft.	COA 302548ES10	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

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(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ 4/18/12

TR-L-12-039

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A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-404	PAGE 1 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 1 Soil Sample 3	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-507 24	ACTUAL SAMPLE DEPTH: 10 ft.	COA: 302548ES10	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	Cool<4C	Cool<4C	Cool<4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2H1D1 2	SOIL	MAY 2 0 2012	1112	✓	✓	✓	✓	

OK 5/13/12

TRVL- 12- 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: FM Hall, CHPRC	DATE/TIME: MAY 2 0 2012 1430	RECEIVED BY/STORED IN: SSU#1	DATE/TIME: MAY 2 0 2012 1430	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: SSU-1	DATE/TIME: 5/21/12 0830	RECEIVED BY/STORED IN: Z Ellingsworth	DATE/TIME: 5/21/12 0830	
RELINQUISHED BY/REMOVED FROM: R Ellingsworth	DATE/TIME: 5/21/12 0900	RECEIVED BY/STORED IN: TA Frazier	DATE/TIME: 5/21/12 0900	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

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)

REVISED

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-404	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 1 Sol Sample 3	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-507 24	ACTUAL SAMPLE DEPTH 10 ft.	COA 302548ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	ORIGINAL
SHIPPED TO Waste Sampling & Characterization	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A		

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(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ 5/3/12

TRVL 12- 039

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A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-504	PAGE 1 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 10 Soil Sample 2	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-507-24	ACTUAL SAMPLE DEPTH: 10 ft	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2L1M6 3	SOIL	MAY 2 0 2012	1242	✓	✓	✓	✓	

94 5/18/12

TRVL- 12- 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: MAY 2 0 2012 1430	RECEIVED BY/STORED IN: SSU #1	DATE/TIME: MAY 2 0 2012 1430	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: SSU-1	DATE/TIME: 5/21/12 0830	RECEIVED BY/STORED IN: R Ellingsworth	DATE/TIME: 5/21/12 0830	
RELINQUISHED BY/REMOVED FROM: R Ellingsworth	DATE/TIME: 5/21/12 0900	RECEIVED BY/STORED IN: TA Ramazin	DATE/TIME: 5/21/12 0900	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

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

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-504	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 10 Soil Sample 2	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-507-24-	ACTUAL SAMPLE DEPTH 10 ft.	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed.~~ ☐ AJ 2 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~

9th 3/16/12

TR-NL-12-039

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A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-416	PAGE 1 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 2 Soil Sample 3	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-507-24	ACTUAL SAMPLE DEPTH: 10 ft.	COA: 302548ES10	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, SE=Sediment, T=Tissue, V=Vegetation, W=Water, WI=Wipe, X=Other

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool~4C	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2H1F3 4	SOIL	MAY 2 0 2012	1150	✓	✓	✓	✓	

JH 5/18/12

TRVL- 12 - 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: FM Hall, CHPRC	DATE/TIME: MAY 2 0 2012 1430	RECEIVED BY/STORED IN: SJU #1	DATE/TIME: MAY 2 0 2012 1430	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: SJU-1	DATE/TIME: 5/21/12 0830	RECEIVED BY/STORED IN: R Ellingsworth	DATE/TIME: 5/21/12 0830	
RELINQUISHED BY/REMOVED FROM: R Ellingsworth	DATE/TIME: 5/21/12 0900	RECEIVED BY/STORED IN: TA Frazier	DATE/TIME: 5/21/12 0900	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

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

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-416	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C AIR QUALITY ☐	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 2 Soil Sample 3	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095		
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-507-24-	ACTUAL SAMPLE DEPTH 10 ft	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ 173 5/15/12
(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};
(2) 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};
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ 9145/13/12

TR-AL- 12- 039

PRINTED ON 3/14/2012 A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-492	PAGE 1 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 9 Soil Sample 1	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-507-24	ACTUAL SAMPLE DEPTH: Surface	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7195;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2L1L4 5	SOIL	MAY 2 0 2012	1252	✓	✓	✓	✓	

RH 5/18/12

TFVL- 12- 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: MAY 2 0 2012 1430	RECEIVED BY/STORED IN: SSG #1	DATE/TIME: MAY 2 0 2012 1430	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: SSG-1	DATE/TIME: 5/21/12 0830	RECEIVED BY/STORED IN: R Ellingsworth	DATE/TIME: 5/21/12 0830	
RELINQUISHED BY/REMOVED FROM: R Ellingsworth	DATE/TIME: 5/21/12 0900	RECEIVED BY/STORED IN: TA Frazier	DATE/TIME: 5/21/12 0900	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

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

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-492	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 9 Soil Sample 1	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-507-24	ACTUAL SAMPLE DEPTH Surface	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100 K Facility until it is determined if any additional analyses are needed. ☐~~ SJE 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ SH 3/18/12

TRL 12- 039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-542	PAGE 1 OF 1
COLLECTOR: L.D. Wall CHPRC; FM Hall CHPRC	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole Soil Sample 37	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY:	
ICE CHEST NO.:	FIELD LOGBOOK NO.: HNF-N-507-24	ACTUAL SAMPLE DEPTH: N/A	COA: 302548ES10	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	Cool<4C	Cool<4C	Cool<4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2L1T4 6	SOIL	5/20/12	1055	X	X	X	X	

5/21/12

12- 039

CHAIN OF POSSESSION — SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
L.D. Wall CHPRC; FM Hall CHPRC	MAY 20 2012 1430	SSLC #1	MAY 20 2012 1430
SSLC-1	5/21/12 0830	R Ellingsworth	5/21/12 0830
R Ellingsworth	5/21/12 0900	TA Frazier	5/21/12 0900

SPECIAL INSTRUCTIONS

** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};
(2) 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};
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ 5/31/12

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

PRINTED ON 4/2/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-396	PAGE 1 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 1 Soil Sample 1	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-507 24	ACTUAL SAMPLE DEPTH: Surface	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2H1B9	SOIL	MAY 2 0 2012	1110	✓	✓	✓	✓	

94 5/21/12

TRVL- 12- 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: MAY 2 0 2012 1430	RECEIVED BY/STORED IN: SSLee	DATE/TIME: MAY 2 0 2012 1430	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: SSLee	DATE/TIME: 5/21/12 0830	RECEIVED BY/STORED IN: R Ellingsworth	DATE/TIME: 5/21/12 0830	
RELINQUISHED BY/REMOVED FROM: R Ellingsworth	DATE/TIME: 5/21/12 0900	RECEIVED BY/STORED IN: TA Endozian	DATE/TIME: 5/21/12 0900	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

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

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

REVISED

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-396	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 1 Soil Sample 1	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-507 24	ACTUAL SAMPLE DEPTH Surface	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed.~~ ☐ 112 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ 9# 5/3/12

TRVL- 12- 039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-432	PAGE 1 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 183.2KE Pothole 4 Soil Sample 1	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-507-24	ACTUAL SAMPLE DEPTH Surface	COA 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2H1H9	SOIL	MAY 2 0 2012	1210	✓	✓	✓	✓	

JH 5/18/12

TRVL- 12- 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM FM Hall CHPRC	DATE/TIME MAY 2 0 2012 1430	RECEIVED BY/STORED IN SSU#1	DATE/TIME MAY 2 0 2012 1430	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM SSU-1	DATE/TIME 5/21/12 0830	RECEIVED BY/STORED IN R Ellingsworth	DATE/TIME 5/21/12 0830	
RELINQUISHED BY/REMOVED FROM R Ellingsworth	DATE/TIME 5/21/12 0900	RECEIVED BY/STORED IN TAF-Fedex	DATE/TIME 5/21/12 0900	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

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

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-432	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 4 Soil Sample 1	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-507-24	ACTUAL SAMPLE DEPTH Surface	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~

5/10/12

TRVL 12 - 039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

Attachment 2
Narrative
WSCF120809

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), Master Contract 39818, Revision 3, "Laboratory Analytical Services to CHPRC Soil and Groundwater Remediation Project."*

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

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

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

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

Analytical Methodology for Requested Analyses

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

Inorganic Comments

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

- All applicable QC controls are within the established limits.

Attachment 2
Narrative
WSCF120809

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.

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

- Batch QC 203697
  - Vanadium and Copper – Detected in the Blank and evaluated. Affected sample results in this batch were "C" Flagged.
- Batch QC 203871
  - Vanadium, Nickel, Chromium and Copper – Detected in the Blank and evaluated. Affected sample results in this batch were "C" Flagged.
  - Manganese – Exceeded spiking levels by a factor of 4. Spike recoveries and associated RPDs are not valid.
  - All other applicable QC controls are within the established limits.

Organic Comments

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

- 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			F11-095-545	PAGE 1 OF 1
COLLECTOR: Frank Hall	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole Soil Sample 38	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: (N/A)	FIELD LOGBOOK NO.: HNF-N-507-24	ACTUAL SAMPLE DEPTH: N/A	COA: 302548ES10	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: 120809

PRESERVATION	Cool<4C	Cool<4C	Cool<4C	Cool<4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - /196; ✓	IC Anions - 300.0 (Chloride, Sulfate); ✓	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2L1T7	SOIL	JUN 20 2012	1025	✓	✓	✓	✓	

12-039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: Frank Hall	DATE/TIME: JUN 20 2012 1310	RECEIVED BY/STORED IN: C Johnson	DATE/TIME: JUN 20 2012 1310
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};
(2) 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};
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~
DA 5/3/12

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

PRINTED ON 4/2/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-444	PAGE 1 OF 2
COLLECTOR: Frank Hall	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 5 Soil Sample 1	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: (N/A)	FIELD LOGBOOK NO.: HNF-N-507-25	ACTUAL SAMPLE DEPTH: SURFACE	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - /10%;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2H1K1	SOIL	JUN 20 2012	1025	✓	✓	✓	✓	

9K 6/14/12

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: Frank Hall	DATE/TIME: JUN 20 2012 1310	RECEIVED BY/STORED IN: C Johnson	DATE/TIME: JUN 20 2012 1310
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
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

TPVL-12-039

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

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-444	PAGE 2 OF 2
COLLECTOR Frank Hall	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 183.2KE Pothole 5 Soil Sample 1	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY [ ]	15 Days / 15 Days
ICE CHEST NO. (N/A)	FIELD LOGBOOK NO. HNF-N-507-25	ACTUAL SAMPLE DEPTH SURFACE	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ 039 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ 9K 6/14/12

TRVL- 12 - 039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-480	PAGE 1 OF 2
COLLECTOR: Frank Hall	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 8 Soil Sample 1	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: (N/A)	FIELD LOGBOOK NO.: HNF-N-507-25	ACTUAL SAMPLE DEPTH: Surface	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2L1K2	SOIL	JUN 20 2012	0940	✓	✓	✓		

6/14/12

TRVL-12-039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: Frank Hall	DATE/TIME: JUN 20 2012 1310	RECEIVED BY/STORED IN: C Jones	DATE/TIME: JUN 20 2012 1310	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 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-480	PAGE 2 OF 2
COLLECTOR Frank Hall	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 183.2KE Pothole 8 Soil Sample 1	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO. (N/A)	FIELD LOGBOOK NO. HNF-N-507-25	ACTUAL SAMPLE DEPTH SURFACE	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ DST 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha - {Gross alpha}; Gross Beta - {Gross beta};~~ 94 6/14/12

IRVL 12- 039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-448	PAGE 1 OF 2
COLLECTOR: Frank Hall	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 5 Soil Sample 2	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: (N/A)	FIELD LOGBOOK NO.: ~~BNF-N-~~ 50725	ACTUAL SAMPLE DEPTH: 5'	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2H1K5 4	SOIL	JUN 20 2012	1030	✓	✓	✓	✓	

9H 6/14/12

TRVL-12-039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: Frank Hall	DATE/TIME: JUN 20 2012 1310	RECEIVED BY/STORED IN: C Jilhrw	DATE/TIME: JUN 20 2012 1310	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 3/14/2012

A-6003-618 (REV 7)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-448	PAGE 2 OF 2
COLLECTOR Frank Hall	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C AIR QUALITY ☐	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 5 Soil Sample 2	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095		
ICE CHEST NO. (N/A)	FIELD LOGBOOK NO. HNF-N-507-25	ACTUAL SAMPLE DEPTH 5'	COA 302548FS10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};
(2) 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};
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ 0.H 6/14/12

TR-VL-12-039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	F11-095-484	PAGE 1 OF 2
COLLECTOR: Frank Hall	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ
PRICE CODE: 8C	AIR QUALITY: ☐	DATA TURNAROUND: 15 Days / 15 Days	
SAMPLING LOCATION: 183.2KE Pothole 8 Soil Sample 2	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil	SAF NO.: F11-095	
ICE CHEST NO.: (N/A)	FIELD LOGBOOK NO.: HNF-N-502-25	ACTUAL SAMPLE DEPTH: 5'	COA: 302548ES10
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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2L1K6 5	SOIL	JUN 2 0 2012	0944	✓	✓	✓	✓	

TRVL- 12- 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM	DATE/TIME JUN 2 0 2012 1310	RECEIVED BY/STORED IN C. Johnson	DATE/TIME JUN 2 0 2012 1310	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 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-484	PAGE 2 OF 2
COLLECTOR Frank Hall	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C AIR QUALITY ☐	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 8 Soil Sample 2	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095		
ICE CHEST NO. (N/A)	FIELD LOGBOOK NO. HNF-N-507 25	ACTUAL SAMPLE DEPTH 5'	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ SJT 2/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ GH 6/14/12

TRVL 12- 039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-452	PAGE 1 OF 2
COLLECTOR: Frank Hall	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 5 Soil Sample 3	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: (N/A)	FIELD LOGBOOK NO.: HNF-N-507-25	ACTUAL SAMPLE DEPTH: 10'	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME				1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER				aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)				1	1	1	1	1
VOLUME				250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS				SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS
SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2H1K9	SOIL	JUN 2 0 2012	1033	✓	✓	✓	✓	

JH 6/14/12

TRVL- 12 - 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: Frank Hall	DATE/TIME: JUN 2 0 2012 1310	RECEIVED BY/STORED IN: C Jurnn	DATE/TIME: JUN 2 0 2012 1310	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 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-452	PAGE 2 OF 2
COLLECTOR Frank Hall	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 183.2KE Pothole 5 Soil Sample 3	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO. (N/A)	FIELD LOGBOOK NO. HNF-N-507-25	ACTUAL SAMPLE DEPTH 10'	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ AJS 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~

9K 6/14/12

CR-12-039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-468	PAGE 1 OF 2
COLLECTOR: Frank Hall	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 7 Soil Sample 1	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: (N/A)	FIELD LOGBOOK NO.: FINF-N-5075	ACTUAL SAMPLE DEPTH: SURFACE	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2L1J0	SOIL	JUN 20 2012	1003	✓	✓	✓	✓	

QA 6/14/12

IPVL- 1 - 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: Frank Hall	DATE/TIME: JUN 20 2012 1310	RECEIVED BY/STORED IN: C Johnson	DATE/TIME: JUN 20 2012 1310	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 3/14/2012

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-468	PAGE 2 OF 2
COLLECTOR Frank Hall	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 183.2KE Pothole 7 Soil Sample 1	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO. (N/A)	FIELD LOGBOOK NO. HNF-N- 507-25	ACTUAL SAMPLE DEPTH SURFACE	COA 302548FS10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};
(2) 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};
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~

6/14/12

IPL-12-039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-472	PAGE 1 OF 2
COLLECTOR: Frank Hall	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 7 Soil Sample 2	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-507-25	ACTUAL SAMPLE DEPTH: 5'	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None		
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months		
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P		
NO. OF CONTAINER(S)	1	1	1	1	1		
VOLUME	250mL	120mL	60mL	60mL	120mL		
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS		
SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	[redacted]			
B2L1J4	SOIL	JUN 20 2012	1005	✓	✓	✓	✓

6/14/12
TRVL- 12 - 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: Frank Hall	DATE/TIME: JUN 20 2012 1310	RECEIVED BY/STORED IN: C Johnson	DATE/TIME: JUN 20 2012 1310	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 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-472	PAGE 2 OF 2
COLLECTOR Frank Hall	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C AIR QUALITY ☐	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 7 Soil Sample 2	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095		
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N- 30225	ACTUAL SAMPLE DEPTH 5'	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed.~~ ☐ AJB 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};
(2) 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};
~~(3) Gross Alpha - {Gross alpha}; Gross Beta - {Gross beta};~~

GH 4/14/12

FRL- 039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-476	PAGE 1 OF 2
COLLECTOR: Frank Hall	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C / AIR QUALITY: ☐	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 7 Soil Sample 3	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095		
ICE CHEST NO.: (N/A)	FIELD LOGBOOK NO.: INF-N 507 25	ACTUAL SAMPLE DEPTH: 10'	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 Yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2L1J8	SOIL	JUN 2 0 2012	1008	✓	✓	✓	✓	

06/14/12

TRVL 12- 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: Frank Hall	DATE/TIME: JUN 2 0 2012 1310	RECEIVED BY/STORED IN: C Johnson	DATE/TIME: JUN 2 0 2012 1310	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 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-476	PAGE 2 OF 2
COLLECTOR Frank Hall	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 183.2KE Pothole 7 Soil Sample 3	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO. (N/A)	FIELD LOGBOOK NO. HNF-N 507-25	ACTUAL SAMPLE DEPTH 10'	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500-mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ AJR 3/15/12
(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};
(2) 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};
~~(3) Gross Alpha - {Gross alpha}; Gross Beta - {Gross beta};~~ 9K 6/14/12

TPVL- 14 - 039

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A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-508	PAGE 1 OF 2
COLLECTOR: Frank Hall	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: BC	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 11 Soil Sample 1	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: (N/A)	FIELD LOGBOOK NO.: HNF-N-507-25	ACTUAL SAMPLE DEPTH: SURFACE	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME			1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER			aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)			1	1	1	1	1
VOLUME			250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS			SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS
SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME				
B2L1N0 10	SOIL	JUN 20 2012	0835	✓	✓	✓	✓

TRVL 12 - 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: Frank Hall	DATE/TIME: JUN 20 2012 1310	RECEIVED BY/STORED IN: C Johnson	DATE/TIME: JUN 20 2012 1310	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 3/14/2012

A-6003-616 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-508	PAGE 2 OF 2
COLLECTOR	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION Frank Hall 183.2KE Pothole 11 Soil Sample 1	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO. (N/A)	FIELD LOGBOOK NO. HNF-N-507-25	ACTUAL SAMPLE DEPTH SURFACE	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};
(2) 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};
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}~~; 6/14/12

TRVL-12-039

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A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-512	PAGE 1 OF 2
COLLECTOR: Frank Hall	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 11 Soil Sample 2	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-507-25	ACTUAL SAMPLE DEPTH: SURFACE	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2L1N4	SOIL	~~6/20/12~~ 6/20/12	0839	✓	✓	✓	✓	

TRVL-12-039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: Frank Hall	DATE/TIME: JUN 20 2012 1310	RECEIVED BY/STORED IN: C Johnson	DATE/TIME: JUN 20 2012 1310	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 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-512	PAGE 2 OF 2
COLLECTOR Frank Hall	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C AIR QUALITY ☐	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 11 Soil Sample 2	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095		
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-507-25	ACTUAL SAMPLE DEPTH SURFACE	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};
(2) 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};
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~

3/15/12

TRVL- 12- 039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-516	PAGE 1 OF 2
COLLECTOR: Frank Hall	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 12 Soil Sample 1	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: (N/A)	FIELD LOGBOOK NO.: HNF-N-507-25	ACTUAL SAMPLE DEPTH: SURFACE	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.		MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2L1N8	2	SOIL	JUN 20 2012	0857	✓	✓	✓	✓	

TRVL- 12- 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: Frank Hall	DATE/TIME: JUN 20 2012 1310	RECEIVED BY/STORED IN: C Johnson	DATE/TIME: JUN 20 2012 1310	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 3/14/2012

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-516	PAGE 2 OF 2
COLLECTOR Frank Hall	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C AIR QUALITY ☐	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 12 Soil Sample 1	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095		
ICE CHEST NO. (N/A)	FIELD LOGBOOK NO. HNF-N-507-25	ACTUAL SAMPLE DEPTH SURFACE	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ AJJ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};
(2) 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};
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~

24 Gamma

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A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-520	PAGE 1 OF 2
COLLECTOR: Frank Hell	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 12 Soil Sample 2	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: (N/A)	FIELD LOGBOOK NO.: HNF-N-507-25	ACTUAL SAMPLE DEPTH: 5'	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME			1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER			aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)			1	1	1	1	1
VOLUME			250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS			SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS
SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME				
B2L1P2 13	SOIL	JUN 20 2012	0900	✓	✓	✓	✓

TRVL- 12- 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: Frank Hell	DATE/TIME: JUN 20 2012 1310	RECEIVED BY/STORED IN: C Johnson	DATE/TIME: JUN 20 2012 1310	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 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-520	PAGE 2 OF 2
COLLECTOR Frank Hall	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C AIR QUALITY ☐	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 12 Soil Sample 2	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095		
ICE CHEST NO. (N/A)	FIELD LOGBOOK NO. HNF-N-507-25	ACTUAL SAMPLE DEPTH 5'	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};
(2) 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};
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~

3/14/12

TRVL- 12- 039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-488	PAGE 1 OF 2
COLLECTOR: Frank Hall	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 8 Soil Sample 3	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: (N/A)	FIELD LOGBOOK NO.: INF-N 507.25	ACTUAL SAMPLE DEPTH: 101	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2L1L0 14	SOIL	JUN 20 2012	0948	✓	✓	✓	✓	

DH 6/14/12

TRVL 12- 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: Frank Hall	DATE/TIME: JUN 20 2012 1310	RECEIVED BY/STORED IN: C Johnson	DATE/TIME: JUN 20 2012 1310	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 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-488	PAGE 2 OF 2
COLLECTOR Frank Hall	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C AIR QUALITY ☐	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 8 Soil Sample 3	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095		
ICE CHEST NO. (N/A)	FIELD LOGBOOK NO. HNF-N-507-25	ACTUAL SAMPLE DEPTH 10'	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ AJR 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};
(2) 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};
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~

JR 03/14/12

TR-L 12- 039

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A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-456	PAGE 1 OF 2
COLLECTOR: Frank Hall	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 6 Soil Sample 1	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: (N/A)	FIELD LOGBOOK NO.: HNF-N-507-25	ACTUAL SAMPLE DEPTH: SURFACE	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None		
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months		
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P		
NO. OF CONTAINER(S)	1	1	1	1	1		
VOLUME	250mL	120mL	60mL	60mL	120mL		
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS		
SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	[redacted]			
B2H1L3	SOIL	JUN 20 2012	0912	✓	✓	✓	✓

9H 6/14/12

TRVL-12-039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: Frank Hall	DATE/TIME: JUN 20 2012 1310	RECEIVED BY/STORED IN: C Johnson	DATE/TIME: JUN 20 2012 1310	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 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-456	PAGE 2 OF 2
COLLECTOR Frank Hall	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C AIR QUALITY ☐	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 6 Soil Sample 1	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095		
ICE CHEST NO. (N/A)	FIELD LOGBOOK NO. INF-N- 50125	ACTUAL SAMPLE DEPTH SURFACE	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};
(2) 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};
~~(3) Gross Alpha- {Gross alpha}; Gross Beta- {Gross beta};~~

6/14/12

TRVL-12-039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-460	PAGE 1 OF 2
COLLECTOR: Frank Hall	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 6 Soil Sample 2	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: (N/A)	FIELD LOGBOOK NO.: HNF-N-502-25	ACTUAL SAMPLE DEPTH: 5'	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None	
HOLDING TIME	1 Yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months	
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P	
NO. OF CONTAINER(S)	1	1	1	1	1	
VOLUME	250mL	120mL	60mL	60mL	120mL	
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS	

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2H1L7 14	SOIL	JUN 20 2012	0918	✓	✓	✓	✓	

9H 6/14/12

TRVL-12-039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: Frank Hall	DATE/TIME: JUN 7 7 2012 1310	RECEIVED BY/STORED IN: C Johns	DATE/TIME: JUN 20 2012 1310	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 3/14/2012

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-460	PAGE 2 OF 2
COLLECTOR Frank Hell	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE BC AIR QUALITY ☐	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 6 Soil Sample 2	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095		
ICE CHEST NO. (N/A)	FIELD LOGBOOK NO. HNF-N-507-25	ACTUAL SAMPLE DEPTH 5'	COA 302548FS10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed.~~ ☐ ~~SJ~~ 3 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ GH 6/14/12

TRVL-12-039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-464	PAGE 1 OF 2
COLLECTOR: Frank Hall	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 6 Soil Sample 3	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-507 25	ACTUAL SAMPLE DEPTH: 10'	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2H1M1 17	SOIL	JUN 2 0 2012	0925	✓	✓	✓	✓	

6/14/12

TR-L- 1 - 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: Frank Hall	DATE/TIME: JUN 2 0 2012 1310	RECEIVED BY/STORED IN: C Johnson	DATE/TIME: JUN 2 0 2012 1310	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 3/14/2012

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-464	PAGE 2 OF 2
COLLECTOR Frank Hall	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C AIR QUALITY ☐	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 6 Soil Sample 3	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095		
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-507-25	ACTUAL SAMPLE DEPTH 10'	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ AJZ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ QH 6/14/12

TRAL- 12- 039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-528	PAGE 1 OF .
COLLECTOR: Frank Hall	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole Soil Sample 34	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: (N/A)	FIELD LOGBOOK NO.: FNF-N-50725	ACTUAL SAMPLE DEPTH: Surface	COA: 302S48ES10	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	Cool-4C	Cool-4C	Cool-4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.		MATRIX*	SAMPLE DATE	SAMPLE TIME
B2L1R0	18	SOIL	JUN 20 2012	0940

9/6/2012

FRVL 12 - 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: Frank Hall	DATE/TIME: JUN 20 2012 1310	RECEIVED BY/STORED IN: C. Johnson	DATE/TIME: JUN 20 2012 1310	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 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-528	PAGE 2 OF 2
COLLECTOR Frank Hall	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C AIR QUALITY ☐	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole Soil Sample 34	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095		
ICE CHEST NO. (N/A)	FIELD LOGBOOK NO. INF-N-507-25	ACTUAL SAMPLE DEPTH SURFACE	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ ~~ORP~~ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ 24 6/14/12

TFAL-12-039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

Appendix 5

Data Validation Supporting Documentation

VALIDATION LEVEL:	A	B	(C)	D	E
PROJECT: 100-K			DATA PACKAGE: VSR12-018		
VALIDATOR: Eyda Hergenreder		LAB: TestAmerica, WSCF		DATE: 07-13-2012	
			SDG: SL1272, SL1278, WSCF120661, WSCF120665, WSCF120809		
ANALYSES PERFORMED					
SW-846 8081	SW-846 8081 (TCLP)	SW-846 8082 X	SW-846 8081 (TCLP)	SW-846 8310	

SAMPLES/MATRIX Soil samples

SDG SL1272: B2L1R5
SDG SL1278: B2L1T0
SDG WSCF120661: B2H1J3, B2L1M2, B2H1D5, B2H1H5, B2L1P6, B2H1C3, B2H1D9, B2L1L8, B2H1F7, B2H1J7
SDG WSCF120665: B2H1H1, B2H1D1, B2L1M6, B2H1F3, B2L1L4, B2L1T4, B2H1B9, B2H1H9
SDG WSCF120809: B2L1T7, B2H1K1, B2L1K2, B2H1K5, B2L1K6, B2H1K9, B2L1J0, B2L1J4, B2L1J8, B2L1N0, B2L1N4, B2L1N8, B2L1P2, B2L1L0, B2H1L3, B2H1L7, B2H1M1, B2L1R0

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

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

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

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

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

DDT and endrin breakdowns acceptable? ..... Yes No N/A

Comments:

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

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

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

Field/trip 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)

Surrogates analyzed? ..... Yes No N/A

Surrogate recoveries acceptable? ..... Yes No N/A

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

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

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:

Aroclor-1254 was the only analyte in MS standard and LCS standard.

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. SYSTEM PERFORMANCE (Levels D and E)

Chromatographic performance acceptable?..... Yes No N/A

Positive results resolved acceptably?..... Yes No N/A

Comments:

7. HOLDING TIMES (all levels)

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

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

Comments: None

8. COMPOUND IDENTIFICATION, QUANTITATION, AND DETECTION LIMITS (all levels)

Compound identification acceptable? (Levels D, E) ..... Yes No N/A

Compound quantitation acceptable? (Levels D, E) ..... Yes No N/A

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:
Reported MDLs were above the requested calculated action level

9. SAMPLE CLEANUP (Levels D and E)

Fluorisil ® (or other absorbent) cleanup performed? ..... Yes No N/A

Lot check performed? ..... Yes No N/A

Check recoveries acceptable? ..... Yes No N/A

GPC cleanup performed? ..... Yes No N/A

GPC check performed? ..... Yes No N/A

GPC check recoveries acceptable? ..... Yes No N/A

GPC calibration performed? ..... Yes No N/A

GPC calibration check performed? ..... Yes No N/A

GPC calibration check retention times acceptable? ..... Yes No N/A

Check/calibration materials traceable? ..... Yes No N/A

Check/calibration materials Expired? ..... Yes No N/A

Analytical batch QC given similar cleanup? ..... Yes No N/A

Transcription/Calculation Errors? ..... Yes No N/A

Comments:

Comments:

Appendix 6

Additional Documentation Requested By Client

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: SL1272 **Work Order #...:** MTVTF1AA **Matrix.....:** SOLID
MB Lot-Sample #: F2E300000-038

Prep Date.....: 05/30/12
Analysis Date..: 06/04/12 **Prep Batch #...:** 2151038
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Aroclor 1016	ND	17	ug/kg	SW846 8082
Aroclor 1221	ND	17	ug/kg	SW846 8082
Aroclor 1232	ND	17	ug/kg	SW846 8082
Aroclor 1242	ND	17	ug/kg	SW846 8082
Aroclor 1248	ND	17	ug/kg	SW846 8082
Aroclor 1254	ND	17	ug/kg	SW846 8082
Aroclor 1260	ND	17	ug/kg	SW846 8082

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	112	(54 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: SL1272 **Work Order #...:** MTVTF1AC **Matrix.....:** SOLID
LCS Lot-Sample#: F2E300000-038
Prep Date.....: 05/30/12 **Analysis Date..:** 06/04/12
Prep Batch #...: 2151038
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
Aroclor 1016	**167**	**174**	**ug/kg**	**104**	**SW846 8082**
Aroclor 1260	**167**	**172**	**ug/kg**	**103**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	100	(74 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: SL1272 **Work Order #...:** MTTL11CK-MS **Matrix.....:** SOLID
MS Lot-Sample #: F2E250455-001 MTTL11CL-MSD
Date Sampled...: 05/20/12 **Date Received..:** 05/25/12
Prep Date.....: 05/30/12 **Analysis Date..:** 06/04/12
Prep Batch #...: 2151038
Dilution Factor: 1 **% Moisture.....:** 6.0

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Aroclor 1016	**ND**	**177**	**178**	**ug/kg**	**100**		**SW846 8082**
	ND	**176**	**174**	**ug/kg**	**99**	**2.2**	**SW846 8082**
Aroclor 1260	**ND**	**177**	**195**	**ug/kg**	**110**		**SW846 8082**
	ND	**176**	**175**	**ug/kg**	**99**	**11**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	114	(54 - 150)
	99	(54 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Results and reporting limits have been adjusted for dry weight.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: SL1278 **Work Order #...:** MVDA61AA **Matrix.....:** SOLID
MB Lot-Sample #: F2F280000-117

Prep Date.....: 06/28/12
Analysis Date..: 07/05/12 **Prep Batch #...:** 2180117
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Aroclor 1016	ND	17	ug/kg	SW846 8082
Aroclor 1221	ND	17	ug/kg	SW846 8082
Aroclor 1232	ND	17	ug/kg	SW846 8082
Aroclor 1242	ND	17	ug/kg	SW846 8082
Aroclor 1248	ND	17	ug/kg	SW846 8082
Aroclor 1254	ND	17	ug/kg	SW846 8082
Aroclor 1260	ND	17	ug/kg	SW846 8082

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	131	(54 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: SL1278 **Work Order #...:** MVDA61AC **Matrix.....:** SOLID
LCS Lot-Sample#: F2F280000-117
Prep Date.....: 06/28/12 **Analysis Date..:** 07/05/12
Prep Batch #...: 2180117
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
Aroclor 1016	**167**	**154**	**ug/kg**	**92**	**SW846 8082**
Aroclor 1260	**167**	**160**	**ug/kg**	**96**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	114	(74 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: SL1278 **Work Order #...:** MVART1DJ-MS **Matrix.....:** SOLID
MS Lot-Sample #: F2F260421-001 MVART1DK-MSD
Date Sampled...: 06/20/12 **Date Received..:** 06/26/12
Prep Date.....: 06/28/12 **Analysis Date..:** 07/05/12
Prep Batch #...: 2180117
Dilution Factor: 1 **% Moisture.....:** 2.1

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Aroclor 1016	**ND**	**170**	**138**	**ug/kg**	**81**		**SW846 8082**
	ND	**170**	**129**	**ug/kg**	**76**	**6.5**	**SW846 8082**
Aroclor 1260	**ND**	**170**	**150**	**ug/kg**	**88**		**SW846 8082**
	ND	**170**	**157**	**ug/kg**	**92**	**5.0**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	105	(54 - 150)
	113	(54 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Results and reporting limits have been adjusted for dry weight.

Batch QC List

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF120661

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
201869	202160	1	BLANK	75538	BLANK		PCBs by EPA SW-846 Method 8082
201869	202160	2	LCS	75539	LCS		PCBs by EPA SW-846 Method 8082
201869	202160	3	MS	75540	B2H1J3(120661001MS)	120661001	PCBs by EPA SW-846 Method 8082
201869	202160	4	MSD	75541	B2H1J3(120661001MSD)	120661001	PCBs by EPA SW-846 Method 8082
201869	202160	5	SAMPLE	120661001	B2H1J3		PCBs by EPA SW-846 Method 8082
201869	202160	6	SAMPLE	120661002	B2L1M2		PCBs by EPA SW-846 Method 8082
201869	202160	7	SAMPLE	120661003	B2H1D5		PCBs by EPA SW-846 Method 8082
201869	202160	8	SAMPLE	120661004	B2H1H5		PCBs by EPA SW-846 Method 8082
201869	202160	9	SAMPLE	120661005	B2L1P6		PCBs by EPA SW-846 Method 8082
201869	202160	10	SAMPLE	120661006	B2H1C3		PCBs by EPA SW-846 Method 8082
201869	202160	11	SAMPLE	120661007	B2H1D9		PCBs by EPA SW-846 Method 8082
201869	202160	12	SAMPLE	120661008	B2L1L8		PCBs by EPA SW-846 Method 8082
201869	202160	13	SAMPLE	120661009	B2H1F7		PCBs by EPA SW-846 Method 8082
201869	202160	14	SAMPLE	120661010	B2H1J7		PCBs by EPA SW-846 Method 8082

Quality Control Report

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF120661

QC Batch 201869 **Test** PCBs by EPA SW-846 Method 8082
Associated Samples 120661001, 120661002, 120661003, 120661004, 120661005, 120661006, 120661007, 120661008, 120661009, 120661010

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #75538**							
Aroclor-1016	12674-11-2		<4	ug/kg					U	06/01/12
Aroclor-1221	11104-28-2		<8	ug/kg					U	06/01/12
Aroclor-1232	11141-16-5		<4	ug/kg					U	06/01/12
Aroclor-1242	53469-21-9		<4	ug/kg					U	06/01/12
Aroclor-1248	12672-29-6		<4	ug/kg					U	06/01/12
Aroclor-1254	11097-69-1		<4	ug/kg					U	06/01/12
Aroclor-1260	11096-82-5		<4	ug/kg					U	06/01/12
LCS			**QC Sample #75539**							
Aroclor-1254	11097-69-1		76	ug/kg	95.1	75 - 128				06/01/12
MS			**QC Sample #75540**							
			Original 120661001							
Aroclor-1254	11097-69-1	<4	75	ug/kg	96	62 - 140				06/01/12
MSD			**QC Sample #75541**							
			Original 120661001					**Paired 75540**		
Aroclor-1254	11097-69-1	<4	69	ug/kg	89.5	62 - 140	8.30	30		06/01/12

Quality Control Report

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF120661

QC Batch 201869 **Test** PCBs by EPA SW-846 Method 8082
Associated Samples 120661001, 120661002, 120661003, 120661004, 120661005, 120661006, 120661007, 120661008, 120661009, 120661010

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE			**Sample #120661001**							
Tetrachloro-m-xylene	877-09-8				94.6	60 - 140				06/01/12
Decachlorobiphenyl	2051-24-3				95.4	60 - 140				06/01/12
SAMPLE			**Sample #120661002**							
Tetrachloro-m-xylene	877-09-8				97.4	60 - 140				06/01/12
Decachlorobiphenyl	2051-24-3				97.1	60 - 140				06/01/12
SAMPLE			**Sample #120661003**							
Tetrachloro-m-xylene	877-09-8				82.8	60 - 140				06/01/12
Decachlorobiphenyl	2051-24-3				86.5	60 - 140				06/01/12
SAMPLE			**Sample #120661004**							
Tetrachloro-m-xylene	877-09-8				97	60 - 140				06/01/12
Decachlorobiphenyl	2051-24-3				95.9	60 - 140				06/01/12
SAMPLE			**Sample #120661005**							
Tetrachloro-m-xylene	877-09-8				95.4	60 - 140				06/01/12
Decachlorobiphenyl	2051-24-3				95.3	60 - 140				06/01/12
SAMPLE			**Sample #120661006**							

Quality Control Report

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF120661

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Tetrachloro-m-xylene	877-09-8				95.7	60 - 140				06/01/12
Decachlorobiphenyl	2051-24-3				95.8	60 - 140				06/01/12
SAMPLE			**Sample #120661007**							
Tetrachloro-m-xylene	877-09-8				93.7	60 - 140				06/01/12
Decachlorobiphenyl	2051-24-3				89	60 - 140				06/01/12
SAMPLE			**Sample #120661008**							
Tetrachloro-m-xylene	877-09-8				91.9	60 - 140				06/01/12
Decachlorobiphenyl	2051-24-3				89.4	60 - 140				06/01/12
SAMPLE			**Sample #120661009**							
Tetrachloro-m-xylene	877-09-8				95.5	60 - 140				06/01/12
Decachlorobiphenyl	2051-24-3				90.4	60 - 140				06/01/12
SAMPLE			**Sample #120661010**							
Tetrachloro-m-xylene	877-09-8				90.4	60 - 140				06/01/12
Decachlorobiphenyl	2051-24-3				90.2	60 - 140				06/01/12
BLANK			**QC Sample #75538**							
Tetrachloro-m-xylene	877-09-8				95.6	60 - 140				06/01/12
Decachlorobiphenyl	2051-24-3				98.5	60 - 140				06/01/12
LCS			**QC Sample #75539**							
Tetrachloro-m-xylene	877-09-8				100.9	60 - 124				06/01/12
Decachlorobiphenyl	2051-24-3				100.8	72 - 125				06/01/12

Quality Control Report

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF120661

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
MS			**QC Sample #75540**							
			Original 120661001							
Tetrachloro-m-xylene	877-09-8				96	51 - 120				06/01/12
Decachlorobiphenyl	2051-24-3				98.1	66 - 126				06/01/12
MSD			**QC Sample #75541**							
			Original 120661001					**Paired**	**75540**	
Tetrachloro-m-xylene	877-09-8				100.8	51 - 120	n/a			06/01/12
Decachlorobiphenyl	2051-24-3				100.5	66 - 126	n/a			06/01/12

Batch QC List

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF120665

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
201870	202161	1	BLANK	75542	BLANK		PCBs by EPA SW-846 Method 8082
201870	202161	2	LCS	75543	LCS		PCBs by EPA SW-846 Method 8082
201870	202161	3	MS	75544	B2H1H1(120665001MS)	120665001	PCBs by EPA SW-846 Method 8082
201870	202161	4	MSD	75545	B2H1H1(120665001MSD)	120665001	PCBs by EPA SW-846 Method 8082
201870	202161	6	SAMPLE	120665001	B2H1H1		PCBs by EPA SW-846 Method 8082
201870	202161	7	SAMPLE	120665002	B2H1D1		PCBs by EPA SW-846 Method 8082
201870	202161	8	SAMPLE	120665003	B2L1M6		PCBs by EPA SW-846 Method 8082
201870	202161	9	SAMPLE	120665004	B2H1F3		PCBs by EPA SW-846 Method 8082
201870	202161	10	SAMPLE	120665005	B2L1L4		PCBs by EPA SW-846 Method 8082
201870	202161	11	SAMPLE	120665006	B2L1T4		PCBs by EPA SW-846 Method 8082
201870	202161	12	SAMPLE	120665007	B2H1B9		PCBs by EPA SW-846 Method 8082
201870	202161	13	SAMPLE	120665008	B2H1H9		PCBs by EPA SW-846 Method 8082

Quality Control Report

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF120665

QC Batch 201870 **Test** PCBs by EPA SW-846 Method 8082
Associated Samples 120665001, 120665002, 120665003, 120665004, 120665005, 120665006, 120665007, 120665008

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #75542**							
Aroclor-1016	12674-11-2		<4	ug/kg					U	06/01/12
Aroclor-1221	11104-28-2		<8	ug/kg					U	06/01/12
Aroclor-1232	11141-16-5		<4	ug/kg					U	06/01/12
Aroclor-1242	53469-21-9		<4	ug/kg					U	06/01/12
Aroclor-1248	12672-29-6		<4	ug/kg					U	06/01/12
Aroclor-1254	11097-69-1		<4	ug/kg					U	06/01/12
Aroclor-1260	11096-82-5		<4	ug/kg					U	06/01/12
LCS			**QC Sample #75543**							
Aroclor-1254	11097-69-1		68	ug/kg	84.5	75 - 128				06/01/12
MS			**QC Sample #75544**							
			Original 120665001							
Aroclor-1254	11097-69-1	<4	66	ug/kg	82.8	62 - 140				06/01/12
MSD			**QC Sample #75545**							
			Original 120665001					**Paired 75544**		
Aroclor-1254	11097-69-1	<4	60	ug/kg	75.8	62 - 140	9.50	30		06/01/12

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Quality Control Report

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF120665

QC Batch 201870 **Test** PCBs by EPA SW-846 Method 8082
Associated Samples 120665001, 120665002, 120665003, 120665004, 120665005, 120665006, 120665007, 120665008

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE			**Sample #120665001**							
Tetrachloro-m-xylene	877-09-8				82.5	60 - 140				06/01/12
Decachlorobiphenyl	2051-24-3				85.2	60 - 140				06/01/12
SAMPLE			**Sample #120665002**							
Tetrachloro-m-xylene	877-09-8				81.9	60 - 140				06/01/12
Decachlorobiphenyl	2051-24-3				76.7	60 - 140				06/01/12
SAMPLE			**Sample #120665003**							
Tetrachloro-m-xylene	877-09-8				76.1	60 - 140				06/01/12
Decachlorobiphenyl	2051-24-3				75.7	60 - 140				06/01/12
SAMPLE			**Sample #120665004**							
Tetrachloro-m-xylene	877-09-8				75.6	60 - 140				06/01/12
Decachlorobiphenyl	2051-24-3				75.3	60 - 140				06/01/12
SAMPLE			**Sample #120665005**							
Tetrachloro-m-xylene	877-09-8				80.6	60 - 140				06/01/12
Decachlorobiphenyl	2051-24-3				75	60 - 140				06/01/12
SAMPLE			**Sample #120665006**							

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Quality Control Report

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF120665

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Tetrachloro-m-xylene	877-09-8				80.3	60 - 140				06/01/12
Decachlorobiphenyl	2051-24-3				82.6	60 - 140				06/01/12
SAMPLE			**Sample #120665007**							
Tetrachloro-m-xylene	877-09-8				75	60 - 140				06/04/12
Decachlorobiphenyl	2051-24-3				87.2	60 - 140				06/04/12
SAMPLE			**Sample #120665008**							
Tetrachloro-m-xylene	877-09-8				79.6	60 - 140				06/01/12
Decachlorobiphenyl	2051-24-3				77.6	60 - 140				06/01/12
BLANK			**QC Sample #75542**							
Tetrachloro-m-xylene	877-09-8				83.6	60 - 140				06/01/12
Decachlorobiphenyl	2051-24-3				89.1	60 - 140				06/01/12
LCS			**QC Sample #75543**							
Tetrachloro-m-xylene	877-09-8				81.8	60 - 124				06/01/12
Decachlorobiphenyl	2051-24-3				85.8	72 - 125				06/01/12
MS			**QC Sample #75544**							
			Original 120665001							
Tetrachloro-m-xylene	877-09-8				75.9	51 - 120				06/01/12
Decachlorobiphenyl	2051-24-3				76.4	66 - 126				06/01/12
MSD			**QC Sample #75545**							
			Original 120665001					**Paired**	**75544**	
Tetrachloro-m-xylene	877-09-8				87.9	51 - 120	n/a			06/01/12
Decachlorobiphenyl	2051-24-3				87.3	66 - 126	n/a			06/01/12

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Batch QC List

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF120809

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
203676	203852	1	BLANK	77290	BLANK		PCBs by EPA SW-846 Method 8082
203676	203852	2	LCS	77291	LCS		PCBs by EPA SW-846 Method 8082
203676	203852	3	MS	77292	B2JDD8(120788001MS)	120788001	PCBs by EPA SW-846 Method 8082
203676	203852	4	MSD	77293	B2JDD8(120788001MSD)	120788001	PCBs by EPA SW-846 Method 8082
203676	203852	6	SAMPLE	120809001	B2L1T7		PCBs by EPA SW-846 Method 8082
203676	203852	7	SAMPLE	120809002	B2H1K1		PCBs by EPA SW-846 Method 8082
203676	203852	8	SAMPLE	120809003	B2L1K2		PCBs by EPA SW-846 Method 8082
203676	203852	9	SAMPLE	120809004	B2H1K5		PCBs by EPA SW-846 Method 8082
203676	203852	10	SAMPLE	120809005	B2L1K6		PCBs by EPA SW-846 Method 8082
203676	203852	11	SAMPLE	120809006	B2H1K9		PCBs by EPA SW-846 Method 8082
203676	203852	12	SAMPLE	120809007	B2L1J0		PCBs by EPA SW-846 Method 8082
203676	203852	13	SAMPLE	120809008	B2L1J4		PCBs by EPA SW-846 Method 8082
203676	203852	14	SAMPLE	120809009	B2L1J8		PCBs by EPA SW-846 Method 8082
203676	203852	15	SAMPLE	120809010	B2L1N0		PCBs by EPA SW-846 Method 8082
203676	203852	16	SAMPLE	120809011	B2L1N4		PCBs by EPA SW-846 Method 8082
203676	203852	17	SAMPLE	120809012	B2L1N8		PCBs by EPA SW-846 Method 8082
203676	203852	18	SAMPLE	120809013	B2L1P2		PCBs by EPA SW-846 Method 8082
203676	203852	19	SAMPLE	120809014	B2L1L0		PCBs by EPA SW-846 Method 8082
203676	203852	20	SAMPLE	120809015	B2H1L3		PCBs by EPA SW-846 Method 8082
203676	203852	21	SAMPLE	120809016	B2H1L7		PCBs by EPA SW-846 Method 8082
203676	203852	22	SAMPLE	120809017	B2H1M1		PCBs by EPA SW-846 Method 8082
203676	203852	23	SAMPLE	120809018	B2L1R0		PCBs by EPA SW-846 Method 8082

Quality Control Report

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF120809

Analytical Batch 203852 (QC Batch: 203676) **Test** PCBs by EPA SW-846 Method 8082
Associated Samples 120809001, 120809002, 120809003, 120809004, 120809005, 120809006, 120809007, 120809008, 120809009, 120809010, 120809011, 120809012, 120809013, 120809014, 120809015, 120809016, 120809017, 120809018

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #77290**							
Aroclor-1016	12674-11-2		<4	ug/kg					U	06/26/12
Aroclor-1221	11104-28-2		<8	ug/kg					U	06/26/12
Aroclor-1232	11141-16-5		<4	ug/kg					U	06/26/12
Aroclor-1242	53469-21-9		<4	ug/kg					U	06/26/12
Aroclor-1248	12672-29-6		<4	ug/kg					U	06/26/12
Aroclor-1254	11097-69-1		<4	ug/kg					U	06/26/12
Aroclor-1260	11096-82-5		<4	ug/kg					U	06/26/12
LCS			**QC Sample #77291**							
Aroclor-1254	11097-69-1		65	ug/kg	81.1	75 - 128				06/26/12
MS			**QC Sample #77292**							
			Original 120788001							
Aroclor-1254	11097-69-1		61	ug/kg	76.5	62 - 140				06/26/12
MSD			**QC Sample #77293**							
			Original 120788001					**Paired 77292**		
Aroclor-1254	11097-69-1		64	ug/kg	82.7	62 - 140	4.00	30		06/26/12

Quality Control Report

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF120809

Analytical Batch 203852 (QC Batch: 203676) **Test** PCBs by EPA SW-846 Method 8082
Associated Samples 120809001, 120809002, 120809003, 120809004, 120809005, 120809006, 120809007, 120809008, 120809009, 120809010, 120809011, 120809012, 120809013, 120809014, 120809015, 120809016, 120809017, 120809018

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE			**Sample #120809001**							
Tetrachloro-m-xylene	877-09-8				85.1	60 - 140				06/26/12
Decachlorobiphenyl	2051-24-3				89.9	60 - 140				06/26/12
SAMPLE			**Sample #120809002**							
Tetrachloro-m-xylene	877-09-8				87.8	60 - 140				06/26/12
Decachlorobiphenyl	2051-24-3				91.1	60 - 140				06/26/12
SAMPLE			**Sample #120809003**							
Tetrachloro-m-xylene	877-09-8				88	60 - 140				06/26/12
Decachlorobiphenyl	2051-24-3				90.8	60 - 140				06/26/12
SAMPLE			**Sample #120809004**							
Tetrachloro-m-xylene	877-09-8				85.8	60 - 140				06/26/12
Decachlorobiphenyl	2051-24-3				92.6	60 - 140				06/26/12
SAMPLE			**Sample #120809005**							
Tetrachloro-m-xylene	877-09-8				84.7	60 - 140				06/26/12
Decachlorobiphenyl	2051-24-3				84.5	60 - 140				06/26/12

Quality Control Report

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF120809

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE			**Sample #120809006**							
Tetrachloro-m-xylene	877-09-8				85.2	60 - 140				06/26/12
Decachlorobiphenyl	2051-24-3				90.6	60 - 140				06/26/12
SAMPLE			**Sample #120809007**							
Tetrachloro-m-xylene	877-09-8				87.5	60 - 140				06/26/12
Decachlorobiphenyl	2051-24-3				90.2	60 - 140				06/26/12
SAMPLE			**Sample #120809008**							
Tetrachloro-m-xylene	877-09-8				84.8	60 - 140				06/26/12
Decachlorobiphenyl	2051-24-3				85	60 - 140				06/26/12
SAMPLE			**Sample #120809009**							
Tetrachloro-m-xylene	877-09-8				90	60 - 140				06/26/12
Decachlorobiphenyl	2051-24-3				90.6	60 - 140				06/26/12
SAMPLE			**Sample #120809010**							
Tetrachloro-m-xylene	877-09-8				87.9	60 - 140				06/26/12
Decachlorobiphenyl	2051-24-3				90.4	60 - 140				06/26/12
SAMPLE			**Sample #120809011**							
Tetrachloro-m-xylene	877-09-8				86.9	60 - 140				06/26/12
Decachlorobiphenyl	2051-24-3				103.5	60 - 140				06/26/12
SAMPLE			**Sample #120809012**							

Quality Control Report

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF120809

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Tetrachloro-m-xylene	877-09-8				86.8	60 - 140				06/26/12
Decachlorobiphenyl	2051-24-3				89.6	60 - 140				06/26/12
SAMPLE			**Sample #120809013**							
Tetrachloro-m-xylene	877-09-8				95	60 - 140				06/26/12
Decachlorobiphenyl	2051-24-3				91.2	60 - 140				06/26/12
SAMPLE			**Sample #120809014**							
Tetrachloro-m-xylene	877-09-8				90.5	60 - 140				06/26/12
Decachlorobiphenyl	2051-24-3				89.5	60 - 140				06/26/12
SAMPLE			**Sample #120809015**							
Tetrachloro-m-xylene	877-09-8				92.9	60 - 140				06/26/12
Decachlorobiphenyl	2051-24-3				91.6	60 - 140				06/26/12
SAMPLE			**Sample #120809016**							
Tetrachloro-m-xylene	877-09-8				93.8	60 - 140				06/26/12
Decachlorobiphenyl	2051-24-3				96.7	60 - 140				06/26/12
SAMPLE			**Sample #120809017**							
Tetrachloro-m-xylene	877-09-8				89.3	60 - 140				06/26/12
Decachlorobiphenyl	2051-24-3				84.4	60 - 140				06/26/12
SAMPLE			**Sample #120809018**							
Tetrachloro-m-xylene	877-09-8				91.6	60 - 140				06/26/12
Decachlorobiphenyl	2051-24-3				88.3	60 - 140				06/26/12

Quality Control Report

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF120809

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #77290**							
Tetrachloro-m-xylene	877-09-8				84.8	60 - 140				06/26/12
Decachlorobiphenyl	2051-24-3				78.4	60 - 140				06/26/12
LCS			**QC Sample #77291**							
Tetrachloro-m-xylene	877-09-8				91	60 - 124				06/26/12
Decachlorobiphenyl	2051-24-3				86.3	72 - 125				06/26/12
MS			**QC Sample #77292**							
			Original	**120788001**						
Tetrachloro-m-xylene	877-09-8				87.1	51 - 120				06/26/12
Decachlorobiphenyl	2051-24-3				80	66 - 126				06/26/12
MSD			**QC Sample #77293**							
			Original	**120788001**				**Paired**	**77292**	
Tetrachloro-m-xylene	877-09-8				84.7	51 - 120	n/a			06/26/12
Decachlorobiphenyl	2051-24-3				82.6	66 - 126	n/a			06/26/12

Date: 13 July 2012
To: CH2M Hill (technical representative)
From: Analytical Quality Associates, Inc.
Project: 100-K
Subject: Inorganics - Sample Data Groups (SDGs) SL1272, SL1278, WSCF120661, WSCF120665 and WSCF120809

INTRODUCTION

This memorandum presents the results of data validation for SDGs SL1272 and SL1278 prepared by TestAmerica Laboratories, Inc. and SDGs WSCF120661, WSCF120665 and WSCF120809 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
B2L1R5	05/20/12	Soil	C	6020 & 7471A
B2L1T0	06/20/12	Soil	C	6020 & 7471A
B2H1J3	05/20/12	Soil	C	200.8
B2L1M2	05/20/12	Soil	C	200.8
B2H1D5	05/20/12	Soil	C	200.8
B2H1H5	05/20/12	Soil	C	200.8
B2L1P6	05/20/12	Soil	C	200.8
B2H1C3	05/20/12	Soil	C	200.8
B2H1D9	05/20/12	Soil	C	200.8
B2L1L8	05/20/12	Soil	C	200.8
B2H1F7	05/20/12	Soil	C	200.8
B2H1J7	05/20/12	Soil	C	200.8
B2H1H1	05/20/12	Soil	C	200.8
B2H1D1	05/20/12	Soil	C	200.8
B2L1M6	05/20/12	Soil	C	200.8
B2H1F3	05/20/12	Soil	C	200.8
B2L1L4	05/20/12	Soil	C	200.8
B2L1T4	05/20/12	Soil	C	200.8
B2H1B9	05/20/12	Soil	C	200.8
B2H1H9	05/20/12	Soil	C	200.8
B2L1T7	06/20/12	Soil	C	200.8
B2H1K1	06/20/12	Soil	C	200.8
B2L1K2	06/20/12	Soil	C	200.8
B2H1K5	06/20/12	Soil	C	200.8
B2L1K6	06/20/12	Soil	C	200.8
B2H1K9	06/20/12	Soil	C	200.8
B2L1J0	06/20/12	Soil	C	200.8
B2L1J4	06/20/12	Soil	C	200.8
B2L1J8	06/20/12	Soil	C	200.8
B2L1N0	06/20/12	Soil	C	200.8

B2L1N4	06/20/12	Soil	C	200.8
B2L1N8	06/20/12	Soil	C	200.8
B2L1P2	06/20/12	Soil	C	200.8
B2L1L0	06/20/12	Soil	C	200.8
B2H1L3	06/20/12	Soil	C	200.8
B2L1L7	06/20/12	Soil	C	200.8
B2H1M1	06/20/12	Soil	C	200.8
B2L1R0	06/20/12	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 (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 all analytes requires chilling to 4 degrees Celsius.

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

- **Blanks**

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

Laboratory Blanks

All laboratory blank results were acceptable with the following exceptions.

For SDG SL1278, the B and Ag laboratory blank results were > the method detection limits (MDLs) but < the reporting limits (RLs). The Ag result for sample B2L1T0 was non-detect and should not be qualified; however, the B result for the sample was detect < the RL and should be qualified as non-detect at the RL (10.2 mg/kg) and flagged "U."
For SDG WSCF120665, the Cu laboratory blank result (batch 202257) was > the MDL but < the RL. The associated Cu sample results were detects > the RL and should not be qualified.

For SDG WSCF120809, the laboratory blank results for Cu and V (batch 203662) and the Ni, Cr, Cu and V (batch 203697) were > the MDLs but < the RLs. The Cu and V results for sample B2L1T7 were detects < the RL and should be qualified as non-detects at the RLs (0.50 mg/kg for Cu and 1.0 mg/kg for V) and flagged "U." The Cr results for samples B2L1N8 and B2L1P2 were detects > the RL but ≤10X the blank value and based on professional judgment should be qualified as estimates and flagged "J." All other associated sample results for these analytes were detects > the RLs and >10X the blank values 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. Mn, Ba, Co, Pb, Sr and U were detected in equipment blank B2L1T4. Mn, Ni, Ba, Be, Cr, Co, Cu, V, Zn, Pb, Mo, Sr, Sn, U and As were detected in equipment blank B2L1T7. The Cu and V results have been flagged "U" due to laboratory blank contamination.

- **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 and laboratory control sample accuracy limits are 70% to 130%. The limits for reported analytes not listed in the SAP are specified by the DV procedure. 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 exceptions.

For SDG SL1272, the MS recovery for Cu was < the lower acceptance limit but ≥30% and the MSD recovery for Mn was > the upper acceptance limit. The Cu result for sample B2L1R5 was detect and should be qualified as estimate and flagged "J-." The Mn result for sample B2L1R5 was detect and should be qualified as estimates and flagged "J+."

For SDG SL1278, the MS recovery for Mn was > the upper acceptance limit and the MSD recovery was < the lower acceptance limit but ≥30%. The Mn result for sample B2L1T0 was detect and should be qualified as an estimate and based on professional judgment should be flagged "J" due to both low and high matrix spike recoveries.

For SDG WSCF120809, the MSD recovery for Cu was > 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 a listed of all affected sample results.

Laboratory Control Samples (LCSs)

All LCS recoveries were acceptable.

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 (or <5X the laboratory reporting limits for analytes not listed in the SAP) 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.

Field Duplicate Samples

All field duplicate results were acceptable.

Field Split Samples

All field split results were acceptable with the following exceptions. Samples B2L1R5/B2H1D9 had Mn 43%; Ni 44%; Ba 42%; Cr 40%; Co 41%; Cu 99%; Sr 44%.

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 SL1272, SL1278, WSCF120661, WSCF120665 and WSCF120809 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 infractions for B, Cu and V and matrix spike infraction for Mn and Cu. See the table in Appendix 2 for a listing of all affected sample results.

REFERENCES

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

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

Appendix 1

Glossary of Data Reporting Qualifiers

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

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

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

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

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

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

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

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

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

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

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

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

Appendix 2

Summary of Data Qualification

Inorganic Data Qualification Summary			
SDGs: SL1272, SL1278, WSCF120661, WSCF120665, WSCF120809	Reviewer: AQA	Project: 100-K	Page 1 of 1
Analyte(s)	**Qualifier**	**Samples Affected**	**Reason**
B	10.2U	B2L1T0	Laboratory blank contamination
Cu	0.5U	B2L1T7	Laboratory blank contamination
V	1.0U	B2L1T7	Laboratory blank contamination
Cr	J	B2L1N8, B2L1P2	Laboratory blank contamination
Cu	J-	B2L1R5	Low matrix spike recovery
Mn	J+	B2L1R5	High matrix spike recovery
Mn	J	B2L1T0	Low and high matrix spike recoveries
Cu	J+	B2L1N4, B2L1N8, B2L1P2, B2L1L0, B2H1L3, B2H1L7, B2H1M1, B2L1R0	High matrix spike recovery

Comments: None

Appendix 3

Annotated Laboratory Reports

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2L1R5

TOTAL Metals

Lot-Sample #...: F2E250455-001 Matrix.....: SOLID
Date Sampled...: 05/20/12 Date Received..: 05/25/12
% Moisture.....: 6.0

PARAMETER		RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 2150029							
Silver		0.14 B	0.21	mg/kg	SW846 6020	05/29-06/06/12	MTTL11AV
			Dilution Factor: 1		MDL.....: 0.026		
Arsenic		4.6	1.1	mg/kg	SW846 6020	05/29-06/04/12	MTTL11AG
			Dilution Factor: 1		MDL.....: 0.28		
Barium		73.9	2.1	mg/kg	SW846 6020	05/29-06/04/12	MTTL11AH
			Dilution Factor: 1		MDL.....: 0.10		
Beryllium		0.36	0.11	mg/kg	SW846 6020	05/29-06/04/12	MTTL11AJ
			Dilution Factor: 1		MDL.....: 0.028		
Boron		ND	10.6	mg/kg	SW846 6020	05/29-06/04/12	MTTL11AK
			Dilution Factor: 1		MDL.....: 3.6		
Cadmium		0.080	0.053	mg/kg	SW846 6020	05/29-06/04/12	MTTL11AL
			Dilution Factor: 1		MDL.....: 0.017		
Cobalt		10.2	0.21	mg/kg	SW846 6020	05/29-06/04/12	MTTL11AM
			Dilution Factor: 1		MDL.....: 0.046		
Chromium		7.6	1.1	mg/kg	SW846 6020	05/29-06/04/12	MTTL11A2
			Dilution Factor: 1		MDL.....: 0.48		
Copper	J-	37.7 N	1.1	mg/kg	SW846 6020	05/29-06/04/12	MTTL11AN
			Dilution Factor: 1		MDL.....: 0.11		
Manganese	J+	351 N	0.53	mg/kg	SW846 6020	05/29-06/04/12	MTTL11AQ
			Dilution Factor: 1		MDL.....: 0.082		
Molybdenum		0.41 B	0.53	mg/kg	SW846 6020	05/29-06/04/12	MTTL11AR
			Dilution Factor: 1		MDL.....: 0.13		
Nickel		11.3	0.53	mg/kg	SW846 6020	05/29-06/04/12	MTTL11AT
			Dilution Factor: 1		MDL.....: 0.11		
Lead		5.6	0.32	mg/kg	SW846 6020	05/29-06/04/12	MTTL11AP
			Dilution Factor: 1		MDL.....: 0.11		
Selenium		0.41 B	0.53	mg/kg	SW846 6020	05/29-06/04/12	MTTL11AU
			Dilution Factor: 1		MDL.....: 0.17		

(Continued on next page)

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2L1R5

TOTAL Metals

Lot-Sample #...: F2E250455-001 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Tin	2.3	0.21	mg/kg	SW846 6020	05/29-06/04/12	MTTL11AX
		Dilution Factor: 1		MDL.....: 0.11		
Strontium	37.3	0.53	mg/kg	SW846 6020	05/29-06/04/12	MTTL11AW
		Dilution Factor: 1		MDL.....: 0.23		
Uranium	0.61	0.11	mg/kg	SW846 6020	05/29-06/04/12	MTTL11A3
		Dilution Factor: 1		MDL.....: 0.021		
Vanadium	44.4	1.1	mg/kg	SW846 6020	05/29-06/04/12	MTTL11A0
		Dilution Factor: 1		MDL.....: 0.78		
Zinc	48.4	5.3	mg/kg	SW846 6020	05/29-06/04/12	MTTL11A1
		Dilution Factor: 1		MDL.....: 1.4		
Prep Batch #...: 2152022						
Antimony	0.67	0.53	mg/kg	SW846 6020	05/31-06/04/12	MTTL11A4
		Dilution Factor: 1		MDL.....: 0.069		
Prep Batch #...: 2157023						
Mercury	0.029 B	0.033	mg/kg	SW846 7471A	06/05/12	MTTL11A5
		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.

N Spiked analyte recovery is outside stated control limits.

TestAmerica St. Louis

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2L1T0

TOTAL Metals

Lot-Sample #...: F2F260421-001 Matrix.....: SOLID
Date Sampled...: 06/20/12 Date Received..: 06/26/12
% Moisture.....: 2.1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 2179022						
Silver	0.29 C	0.20	mg/kg	SW846 6020	06/27-06/29/12	MVART1AR
		Dilution Factor: 1		MDL.....: 0.025		
Arsenic	2.0	1.0	mg/kg	SW846 6020	06/27-06/29/12	MVART1AD
		Dilution Factor: 1		MDL.....: 0.27		
Barium	57.3	2.0	mg/kg	SW846 6020	06/27-06/29/12	MVART1AE
		Dilution Factor: 1		MDL.....: 0.096		
Beryllium	0.35	0.10	mg/kg	SW846 6020	06/27-06/29/12	MVART1AF
		Dilution Factor: 1		MDL.....: 0.027		
Boron 10.2U	6.7 B,C	10.2	mg/kg	SW846 6020	06/27-06/29/12	MVART1AG
		Dilution Factor: 1		MDL.....: 3.4		
Cadmium	0.088	0.051	mg/kg	SW846 6020	06/27-06/29/12	MVART1AH
		Dilution Factor: 1		MDL.....: 0.016		
Cobalt	11.0	0.20	mg/kg	SW846 6020	06/27-06/29/12	MVART1AJ
		Dilution Factor: 1		MDL.....: 0.044		
Chromium	4.5	1.0	mg/kg	SW846 6020	06/27-06/29/12	MVART1AX
		Dilution Factor: 1		MDL.....: 0.46		
Copper	16.0	1.0	mg/kg	SW846 6020	06/27-06/29/12	MVART1AK
		Dilution Factor: 1		MDL.....: 0.10		
Manganese J	354 N	0.51	mg/kg	SW846 6020	06/27-06/29/12	MVART1AM
		Dilution Factor: 1		MDL.....: 0.079		
Molybdenum	0.45 B	0.51	mg/kg	SW846 6020	06/27-06/29/12	MVART1AN
		Dilution Factor: 1		MDL.....: 0.13		
Nickel	8.0	0.51	mg/kg	SW846 6020	06/27-06/29/12	MVART1AP
		Dilution Factor: 1		MDL.....: 0.11		
Lead	3.4	0.31	mg/kg	SW846 6020	06/27-06/29/12	MVART1AL
		Dilution Factor: 1		MDL.....: 0.10		
Selenium	2.0	0.51	mg/kg	SW846 6020	06/27-06/29/12	MVART1AQ
		Dilution Factor: 1		MDL.....: 0.16		

(Continued on next page)

EH
07/13/12

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2L1T0

TOTAL Metals

Lot-Sample #...: F2F260421-001 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Tin	0.60	0.20	mg/kg	SW846 6020	06/27-06/29/12	MVART1AU
		Dilution Factor: 1		MDL.....: 0.10		
Strontium	22.2	0.51	mg/kg	SW846 6020	06/27-06/29/12	MVART1AT
		Dilution Factor: 1		MDL.....: 0.22		
Uranium	0.46	0.10	mg/kg	SW846 6020	06/27-06/29/12	MVART1A0
		Dilution Factor: 1		MDL.....: 0.020		
Vanadium	70.1	1.0	mg/kg	SW846 6020	06/27-06/29/12	MVART1AV
		Dilution Factor: 1		MDL.....: 0.75		
Zinc	48.8	5.1	mg/kg	SW846 6020	06/27-06/29/12	MVART1AW
		Dilution Factor: 1		MDL.....: 1.4		
Prep Batch #...: 2179025						
Antimony	0.071 B	0.51	mg/kg	SW846 6020	06/27-06/28/12	MVART1A1
		Dilution Factor: 1		MDL.....: 0.066		
Prep Batch #...: 2181016						
Mercury	ND	0.033	mg/kg	SW846 7471A	06/29/12	MVART1A2
		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.

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.

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120661

Sample # 120661001
SAF# F11-095
Sample ID B2H1J3

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**05/22/12**
Anions by IC										
Chloride	16887-00-6	LA-533-410	U	<3.0		mg/kg	1	3.0	21	05/23/12
Sulfate	14808-79-8	LA-533-410	B	23.3		mg/kg	1	5.7	55	05/23/12
Cr(VI) Prep										**05/23/12**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.51	05/24/12
ICPMS Prep										**05/23/12**
ICP-MS										
Manganese	7439-96-5	LA-505-412		263		mg/kg	1	0.11	1.1	05/24/12
Nickel	7440-02-0	LA-505-412		6.90		mg/kg	1	0.11	1.1	05/24/12
Silver	7440-22-4	LA-505-412	U	<0.054		mg/kg	1	0.054	0.54	05/24/12
Antimony	7440-36-0	LA-505-412	U	<0.33		mg/kg	1	0.33	3.3	05/24/12
Barium	7440-39-3	LA-505-412		56.2		mg/kg	1	0.22	2.2	05/24/12
Beryllium	7440-41-7	LA-505-412	B	0.196		mg/kg	1	0.11	1.1	05/24/12
Cadmium	7440-43-9	LA-505-412	B	0.0762		mg/kg	1	0.054	0.54	05/24/12
Chromium	7440-47-3	LA-505-412		3.55		mg/kg	1	0.11	1.1	05/24/12
Cobalt	7440-48-4	LA-505-412		8.37		mg/kg	1	0.054	0.27	05/24/12
Copper	7440-50-8	LA-505-412		16.3		mg/kg	1	0.11	1.1	05/24/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120661

Sample # 120661001
SAF# F11-095
Sample ID B2H1J3

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Vanadium	7440-62-2	LA-505-412		36.9		mg/kg	1	0.22	2.2	05/24/12
Zinc	7440-66-6	LA-505-412		37.6		mg/kg	1	1.1	11	05/24/12
Lead	7439-92-1	LA-505-412		3.59		mg/kg	1	0.054	0.54	05/24/12
Mercury	7439-97-6	LA-505-412	U	<0.054		mg/kg	1	0.054	0.22	05/24/12
Molybdenum	7439-98-7	LA-505-412	B	0.326		mg/kg	1	0.054	0.54	05/24/12
Strontium	7440-24-6	LA-505-412	X	27.2		mg/kg	1	0.11	1.1	05/24/12
Tin	7440-31-5	LA-505-412	B	0.449		mg/kg	1	0.054	0.54	05/24/12
Uranium	7440-61-1	LA-505-412		0.466		mg/kg	1	0.054	0.27	05/24/12
Arsenic	7440-38-2	LA-505-412		2.33		mg/kg	1	0.22	2.2	05/24/12
Selenium	7782-49-2	LA-505-412	U	<0.27		mg/kg	0.5	0.27	2.7	05/29/12
Boron	7440-42-8	LA-505-412	U	<0.54		mg/kg	1	0.54	5.4	05/24/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120661

Sample # 120661002
SAF# F11-095
Sample ID B2L1M2

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**05/22/12**
Anions by IC										
Chloride	16887-00-6	LA-533-410	U	<3.0		mg/kg	1	3.0	21	05/23/12
Sulfate	14808-79-8	LA-533-410	B	17.6		mg/kg	1	5.6	53	05/23/12
Cr(VI) Prep										**05/23/12**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.51	05/24/12
ICPMS Prep										**05/23/12**
ICP-MS										
Manganese	7439-96-5	LA-505-412		311		mg/kg	1	0.095	0.95	05/24/12
Nickel	7440-02-0	LA-505-412		6.70		mg/kg	1	0.095	0.95	05/24/12
Silver	7440-22-4	LA-505-412	U	<0.048		mg/kg	1	0.048	0.48	05/24/12
Antimony	7440-36-0	LA-505-412	U	<0.29		mg/kg	1	0.29	2.9	05/24/12
Barium	7440-39-3	LA-505-412		67.8		mg/kg	1	0.19	1.9	05/24/12
Beryllium	7440-41-7	LA-505-412	B	0.242		mg/kg	1	0.095	0.95	05/24/12
Cadmium	7440-43-9	LA-505-412	B	0.0639		mg/kg	1	0.048	0.48	05/24/12
Chromium	7440-47-3	LA-505-412		2.07		mg/kg	1	0.095	0.95	05/24/12
Cobalt	7440-48-4	LA-505-412		9.24		mg/kg	1	0.048	0.24	05/24/12
Copper	7440-50-8	LA-505-412		14.0		mg/kg	1	0.095	0.95	05/24/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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)

EH
07/13/12

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120661

Sample # 120661002
SAF# F11-095
Sample ID B2L1M2

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Vanadium	7440-62-2	LA-505-412		46.9		mg/kg	1	0.19	1.9	05/24/12
Zinc	7440-66-6	LA-505-412		38.6		mg/kg	1	0.95	9.5	05/24/12
Lead	7439-92-1	LA-505-412		2.39		mg/kg	1	0.048	0.48	05/24/12
Mercury	7439-97-6	LA-505-412	U	<0.048		mg/kg	1	0.048	0.19	05/24/12
Molybdenum	7439-98-7	LA-505-412	B	0.472		mg/kg	1	0.048	0.48	05/24/12
Strontium	7440-24-6	LA-505-412	X	20.1		mg/kg	1	0.095	0.95	05/24/12
Tin	7440-31-5	LA-505-412	B	0.458		mg/kg	1	0.048	0.48	05/24/12
Uranium	7440-61-1	LA-505-412		0.401		mg/kg	1	0.048	0.24	05/24/12
Arsenic	7440-38-2	LA-505-412	B	1.25		mg/kg	1	0.19	1.9	05/24/12
Selenium	7782-49-2	LA-505-412	B	0.268		mg/kg	0.5	0.24	2.4	05/29/12
Boron	7440-42-8	LA-505-412	B	0.503		mg/kg	1	0.48	4.8	05/24/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120661

Sample # 120661003
SAF# F11-095
Sample ID B2H1D5

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**05/22/12**
Anions by IC										
Chloride	16887-00-6	LA-533-410	B	3.71		mg/kg	1	3.0	21	05/23/12
Sulfate	14808-79-8	LA-533-410	B	34.0		mg/kg	1	5.6	54	05/23/12
Cr(VI) Prep										**05/23/12**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.52	05/24/12
ICPMS Prep										**05/23/12**
ICP-MS										
Manganese	7439-96-5	LA-505-412		249		mg/kg	1	0.10	1.0	05/24/12
Nickel	7440-02-0	LA-505-412		7.29		mg/kg	1	0.10	1.0	05/24/12
Silver	7440-22-4	LA-505-412	U	<0.051		mg/kg	1	0.051	0.51	05/24/12
Antimony	7440-36-0	LA-505-412	U	<0.30		mg/kg	1	0.30	3.0	05/24/12
Barium	7440-39-3	LA-505-412		49.2		mg/kg	1	0.20	2.0	05/24/12
Beryllium	7440-41-7	LA-505-412	B	0.200		mg/kg	1	0.10	1.0	05/24/12
Cadmium	7440-43-9	LA-505-412	B	0.0651		mg/kg	1	0.051	0.51	05/24/12
Chromium	7440-47-3	LA-505-412		4.47		mg/kg	1	0.10	1.0	05/24/12
Cobalt	7440-48-4	LA-505-412		7.74		mg/kg	1	0.051	0.25	05/24/12
Copper	7440-50-8	LA-505-412		14.3		mg/kg	1	0.10	1.0	05/24/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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)

EH
07/13/12

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120661

Sample # 120661003
SAF# F11-095
Sample ID B2H1D5

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Vanadium	7440-62-2	LA-505-412		35.0		mg/kg	1	0.20	2.0	05/24/12
Zinc	7440-66-6	LA-505-412		37.3		mg/kg	1	1.0	10	05/24/12
Lead	7439-92-1	LA-505-412		3.87		mg/kg	1	0.051	0.51	05/24/12
Mercury	7439-97-6	LA-505-412	U	<0.051		mg/kg	1	0.051	0.20	05/24/12
Molybdenum	7439-98-7	LA-505-412	B	0.309		mg/kg	1	0.051	0.51	05/24/12
Strontium	7440-24-6	LA-505-412	X	23.2		mg/kg	1	0.10	1.0	05/24/12
Tin	7440-31-5	LA-505-412	B	0.441		mg/kg	1	0.051	0.51	05/24/12
Uranium	7440-61-1	LA-505-412		0.441		mg/kg	1	0.051	0.25	05/24/12
Arsenic	7440-38-2	LA-505-412		2.44		mg/kg	1	0.20	2.0	05/24/12
Selenium	7782-49-2	LA-505-412	U	<0.25		mg/kg	0.5	0.25	2.5	05/29/12
Boron	7440-42-8	LA-505-412	B	0.565		mg/kg	1	0.51	5.1	05/24/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120661

Sample # 120661004
SAF# F11-095
Sample ID B2H1H5

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**05/22/12**
Anions by IC										
Chloride	16887-00-6	LA-533-410	U	<3.0		mg/kg	1	3.0	21	05/23/12
Sulfate	14808-79-8	LA-533-410	B	9.63		mg/kg	1	5.6	53	05/23/12
Cr(VI) Prep										**05/23/12**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.51	05/24/12
ICPMS Prep										**05/23/12**
ICP-MS										
Manganese	7439-96-5	LA-505-412		311		mg/kg	1	0.096	0.96	05/24/12
Nickel	7440-02-0	LA-505-412		6.08		mg/kg	1	0.096	0.96	05/24/12
Silver	7440-22-4	LA-505-412	U	<0.048		mg/kg	1	0.048	0.48	05/24/12
Antimony	7440-36-0	LA-505-412	U	<0.29		mg/kg	1	0.29	2.9	05/24/12
Barium	7440-39-3	LA-505-412		53.8		mg/kg	1	0.19	1.9	05/24/12
Beryllium	7440-41-7	LA-505-412	B	0.172		mg/kg	1	0.096	0.96	05/24/12
Cadmium	7440-43-9	LA-505-412	B	0.0491		mg/kg	1	0.048	0.48	05/24/12
Chromium	7440-47-3	LA-505-412		2.16		mg/kg	1	0.096	0.96	05/24/12
Cobalt	7440-48-4	LA-505-412		9.03		mg/kg	1	0.048	0.24	05/24/12
Copper	7440-50-8	LA-505-412		13.0		mg/kg	1	0.096	0.96	05/24/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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)

EH
07/13/12

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120661

Sample # 120661004
SAF# F11-095
Sample ID B2H1H5

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Vanadium	7440-62-2	LA-505-412		49.7		mg/kg	1	0.19	1.9	05/24/12
Zinc	7440-66-6	LA-505-412		38.7		mg/kg	1	0.96	9.6	05/24/12
Lead	7439-92-1	LA-505-412		2.01		mg/kg	1	0.048	0.48	05/24/12
Mercury	7439-97-6	LA-505-412	U	<0.048		mg/kg	1	0.048	0.19	05/24/12
Molybdenum	7439-98-7	LA-505-412	B	0.363		mg/kg	1	0.048	0.48	05/24/12
Strontium	7440-24-6	LA-505-412	X	20.2		mg/kg	1	0.096	0.96	05/24/12
Tin	7440-31-5	LA-505-412	B	0.352		mg/kg	1	0.048	0.48	05/24/12
Uranium	7440-61-1	LA-505-412		0.352		mg/kg	1	0.048	0.24	05/24/12
Arsenic	7440-38-2	LA-505-412	B	1.26		mg/kg	1	0.19	1.9	05/24/12
Selenium	7782-49-2	LA-505-412	B	0.251		mg/kg	0.5	0.24	2.4	05/29/12
Boron	7440-42-8	LA-505-412	U	<0.48		mg/kg	1	0.48	4.8	05/24/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120661

Sample # 120661005
SAF# F11-095
Sample ID B2L1P6

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**05/22/12**
Anions by IC										
Chloride	16887-00-6	LA-533-410	U	<2.9		mg/kg	1	2.9	20	05/23/12
Sulfate	14808-79-8	LA-533-410	B	15.5		mg/kg	1	5.5	53	05/23/12
Cr(VI) Prep										**05/23/12**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.51	05/24/12
ICPMS Prep										**05/23/12**
ICP-MS										
Manganese	7439-96-5	LA-505-412		280		mg/kg	1	0.11	1.1	05/24/12
Nickel	7440-02-0	LA-505-412		5.22		mg/kg	1	0.11	1.1	05/24/12
Silver	7440-22-4	LA-505-412	U	<0.053		mg/kg	1	0.053	0.53	05/24/12
Antimony	7440-36-0	LA-505-412	U	<0.32		mg/kg	1	0.32	3.2	05/24/12
Barium	7440-39-3	LA-505-412		42.5		mg/kg	1	0.21	2.1	05/24/12
Beryllium	7440-41-7	LA-505-412	B	0.174		mg/kg	1	0.11	1.1	05/24/12
Cadmium	7440-43-9	LA-505-412	B	0.0554		mg/kg	1	0.053	0.53	05/24/12
Chromium	7440-47-3	LA-505-412		2.49		mg/kg	1	0.11	1.1	05/24/12
Cobalt	7440-48-4	LA-505-412		8.84		mg/kg	1	0.053	0.27	05/24/12
Copper	7440-50-8	LA-505-412		12.4		mg/kg	1	0.11	1.1	05/24/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120661

Sample # 120661005
SAF# F11-095
Sample ID B2L1P6

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Vanadium	7440-62-2	LA-505-412		51.3		mg/kg	1	0.21	2.1	05/24/12
Zinc	7440-66-6	LA-505-412		38.1		mg/kg	1	1.1	11	05/24/12
Lead	7439-92-1	LA-505-412		2.58		mg/kg	1	0.053	0.53	05/24/12
Mercury	7439-97-6	LA-505-412	U	<0.053		mg/kg	1	0.053	0.21	05/24/12
Molybdenum	7439-98-7	LA-505-412	B	0.362		mg/kg	1	0.053	0.53	05/24/12
Strontium	7440-24-6	LA-505-412	X	18.9		mg/kg	1	0.11	1.1	05/24/12
Tin	7440-31-5	LA-505-412	B	0.335		mg/kg	1	0.053	0.53	05/24/12
Uranium	7440-61-1	LA-505-412		0.361		mg/kg	1	0.053	0.27	05/24/12
Arsenic	7440-38-2	LA-505-412	B	1.31		mg/kg	1	0.21	2.1	05/24/12
Selenium	7782-49-2	LA-505-412	U	<0.27		mg/kg	0.5	0.27	2.7	05/29/12
Boron	7440-42-8	LA-505-412	U	<0.53		mg/kg	1	0.53	5.3	05/24/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120661

Sample # 120661006
SAF# F11-095
Sample ID B2H1C3

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**05/22/12**
Anions by IC										
Chloride	16887-00-6	LA-533-410	U	<2.9		mg/kg	1	2.9	20	05/23/12
Sulfate	14808-79-8	LA-533-410	B	16.6		mg/kg	1	5.5	53	05/23/12
Cr(VI) Prep										**05/23/12**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.51	05/24/12
ICPMS Prep										**05/23/12**
ICP-MS										
Manganese	7439-96-5	LA-505-412		233		mg/kg	1	0.10	1.0	05/24/12
Nickel	7440-02-0	LA-505-412		4.65		mg/kg	1	0.10	1.0	05/24/12
Silver	7440-22-4	LA-505-412	U	<0.051		mg/kg	1	0.051	0.51	05/24/12
Antimony	7440-36-0	LA-505-412	U	<0.31		mg/kg	1	0.31	3.1	05/24/12
Barium	7440-39-3	LA-505-412		39.4		mg/kg	1	0.20	2.0	05/24/12
Beryllium	7440-41-7	LA-505-412	B	0.232		mg/kg	1	0.10	1.0	05/24/12
Cadmium	7440-43-9	LA-505-412	B	0.0539		mg/kg	1	0.051	0.51	05/24/12
Chromium	7440-47-3	LA-505-412		1.76		mg/kg	1	0.10	1.0	05/24/12
Cobalt	7440-48-4	LA-505-412		7.87		mg/kg	1	0.051	0.25	05/24/12
Copper	7440-50-8	LA-505-412		11.7		mg/kg	1	0.10	1.0	05/24/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120661

Sample # 120661006
SAF# F11-095
Sample ID B2H1C3

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Vanadium	7440-62-2	LA-505-412		53.0		mg/kg	1	0.20	2.0	05/24/12
Zinc	7440-66-6	LA-505-412		37.0		mg/kg	1	1.0	10	05/24/12
Lead	7439-92-1	LA-505-412		2.21		mg/kg	1	0.051	0.51	05/24/12
Mercury	7439-97-6	LA-505-412	U	<0.051		mg/kg	1	0.051	0.20	05/24/12
Molybdenum	7439-98-7	LA-505-412	B	0.360		mg/kg	1	0.051	0.51	05/24/12
Strontium	7440-24-6	LA-505-412	X	18.1		mg/kg	1	0.10	1.0	05/24/12
Tin	7440-31-5	LA-505-412	B	0.316		mg/kg	1	0.051	0.51	05/24/12
Uranium	7440-61-1	LA-505-412		0.343		mg/kg	1	0.051	0.25	05/24/12
Arsenic	7440-38-2	LA-505-412	B	1.01		mg/kg	1	0.20	2.0	05/24/12
Selenium	7782-49-2	LA-505-412	U	<0.25		mg/kg	0.5	0.25	2.5	05/29/12
Boron	7440-42-8	LA-505-412	U	<0.51		mg/kg	1	0.51	5.1	05/24/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120661

Sample # 120661007
SAF# F11-095
Sample ID B2H1D9

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**05/22/12**
Anions by IC										
~~Chloride~~	~~16887-00-6~~	~~LA-533-410~~	~~B~~	~~5.46~~		~~mg/kg~~	~~1~~	~~3.1~~	~~22~~	~~05/23/12~~
Sulfate	14808-79-8	LA-533-410		70.0		mg/kg	1	5.8	55	05/23/12
Cr(VI) Prep										**05/23/12**
Cr(VI)										
~~Hexavalent chromium~~	~~18540-29-9~~	~~LA-265-403~~	~~B~~	~~0.123~~		~~ug/g~~	~~1~~	~~0.11~~	~~0.53~~	~~05/24/12~~
ICPMS Prep										**05/23/12**
ICP-MS										
Manganese	7439-96-5	LA-505-412		226		mg/kg	1	0.11	1.1	05/24/12
Nickel	7440-02-0	LA-505-412		7.17		mg/kg	1	0.11	1.1	05/24/12
Silver	7440-22-4	LA-505-412	U	<0.055		mg/kg	1	0.055	0.55	05/24/12
Antimony	7440-36-0	LA-505-412	B	0.383		mg/kg	1	0.33	3.3	05/24/12
Barium	7440-39-3	LA-505-412		48.3		mg/kg	1	0.22	2.2	05/24/12
Beryllium	7440-41-7	LA-505-412	B	0.277		mg/kg	1	0.11	1.1	05/24/12
Cadmium	7440-43-9	LA-505-412	B	0.0653		mg/kg	1	0.055	0.55	05/24/12
Chromium	7440-47-3	LA-505-412		5.06		mg/kg	1	0.11	1.1	05/24/12
Cobalt	7440-48-4	LA-505-412		6.72		mg/kg	1	0.055	0.28	05/24/12
Copper	7440-50-8	LA-505-412		12.7		mg/kg	1	0.11	1.1	05/24/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120661

Sample # 120661007
SAF# F11-095
Sample ID B2H1D9

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Vanadium	7440-62-2	LA-505-412		32.1		mg/kg	1	0.22	2.2	05/24/12
Zinc	7440-66-6	LA-505-412		36.8		mg/kg	1	1.1	11	05/24/12
Lead	7439-92-1	LA-505-412		4.03		mg/kg	1	0.055	0.55	05/24/12
Mercury	7439-97-6	LA-505-412	U	<0.055		mg/kg	1	0.055	0.22	05/24/12
Molybdenum	7439-98-7	LA-505-412	B	0.283		mg/kg	1	0.055	0.55	05/24/12
Strontium	7440-24-6	LA-505-412	X	23.8		mg/kg	1	0.11	1.1	05/24/12
Tin	7440-31-5	LA-505-412	B	0.425		mg/kg	1	0.055	0.55	05/24/12
Uranium	7440-61-1	LA-505-412		0.416		mg/kg	1	0.055	0.28	05/24/12
Arsenic	7440-38-2	LA-505-412		3.39		mg/kg	1	0.22	2.2	05/24/12
Selenium	7782-49-2	LA-505-412	U	<0.28		mg/kg	0.5	0.28	2.8	05/29/12
Boron	7440-42-8	LA-505-412	U	<0.55		mg/kg	1	0.55	5.5	05/24/12

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

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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 Scot Fitzgerald
Department Inorganic

Group # WSCF120661

Sample # 120661008
SAF# F11-095
Sample ID B2L1L8

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**05/22/12**
Anions by IC										
Chloride	16887-00-6	LA-533-410	U	<2.9		mg/kg	1	2.9	20	05/23/12
Sulfate	14808-79-8	LA-533-410	U	<5.5		mg/kg	1	5.5	52	05/23/12
Cr(VI) Prep										**05/23/12**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.50	05/24/12
ICPMS Prep										**05/23/12**
ICP-MS										
Manganese	7439-96-5	LA-505-412		252		mg/kg	1	0.092	0.92	05/24/12
Nickel	7440-02-0	LA-505-412		5.46		mg/kg	1	0.092	0.92	05/24/12
Silver	7440-22-4	LA-505-412	U	<0.046		mg/kg	1	0.046	0.46	05/24/12
Antimony	7440-36-0	LA-505-412	U	<0.28		mg/kg	1	0.28	2.8	05/24/12
Barium	7440-39-3	LA-505-412		42.9		mg/kg	1	0.18	1.8	05/24/12
Beryllium	7440-41-7	LA-505-412	B	0.234		mg/kg	1	0.092	0.92	05/24/12
Cadmium	7440-43-9	LA-505-412	B	0.0462		mg/kg	1	0.046	0.46	05/24/12
Chromium	7440-47-3	LA-505-412		1.58		mg/kg	1	0.092	0.92	05/24/12
Cobalt	7440-48-4	LA-505-412		8.09		mg/kg	1	0.046	0.23	05/24/12
Copper	7440-50-8	LA-505-412		12.1		mg/kg	1	0.092	0.92	05/24/12

MDL = Minimum Detection Limit
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E - Analyte is an estimate, see comment section.
N - MS and/or MSD recovery outside control limits.

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

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120661

Sample # 120661008
SAF# F11-095
Sample ID B2L1L8

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Vanadium	7440-62-2	LA-505-412		46.3		mg/kg	1	0.18	1.8	05/24/12
Zinc	7440-66-6	LA-505-412		33.7		mg/kg	1	0.92	9.2	05/24/12
Lead	7439-92-1	LA-505-412		1.66		mg/kg	1	0.046	0.46	05/24/12
Mercury	7439-97-6	LA-505-412	U	<0.046		mg/kg	1	0.046	0.18	05/24/12
Molybdenum	7439-98-7	LA-505-412	B	0.285		mg/kg	1	0.046	0.46	05/24/12
Strontium	7440-24-6	LA-505-412	X	17.4		mg/kg	1	0.092	0.92	05/24/12
Tin	7440-31-5	LA-505-412	B	0.316		mg/kg	1	0.046	0.46	05/24/12
Uranium	7440-61-1	LA-505-412		0.304		mg/kg	1	0.046	0.23	05/24/12
Arsenic	7440-38-2	LA-505-412	B	1.29		mg/kg	1	0.18	1.8	05/24/12
Selenium	7782-49-2	LA-505-412	U	<0.23		mg/kg	0.5	0.23	2.3	05/29/12
Boron	7440-42-8	LA-505-412	U	<0.46		mg/kg	1	0.46	4.6	05/24/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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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 Scot Fitzgerald
Department Inorganic

Group # WSCF120661

Sample # 120661009
SAF# F11-095
Sample ID B2H1F7

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**05/22/12**
Anions by IC										
Chloride	16887-00-6	LA-533-410	B	3.33		mg/kg	1	2.8	19	05/23/12
Sulfate	14808-79-8	LA-533-410		63.6		mg/kg	1	5.2	50	05/23/12
Cr(VI) Prep										**05/23/12**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.51	05/24/12
ICPMS Prep										**05/23/12**
ICP-MS										
Manganese	7439-96-5	LA-505-412		224		mg/kg	1	0.099	0.99	05/24/12
Nickel	7440-02-0	LA-505-412		4.45		mg/kg	1	0.099	0.99	05/24/12
Silver	7440-22-4	LA-505-412	U	<0.049		mg/kg	1	0.049	0.49	05/24/12
Antimony	7440-36-0	LA-505-412	U	<0.30		mg/kg	1	0.30	3.0	05/24/12
Barium	7440-39-3	LA-505-412		35.4		mg/kg	1	0.20	2.0	05/24/12
Beryllium	7440-41-7	LA-505-412	B	0.179		mg/kg	1	0.099	0.99	05/24/12
Cadmium	7440-43-9	LA-505-412	B	0.0533		mg/kg	1	0.049	0.49	05/24/12
Chromium	7440-47-3	LA-505-412		1.47		mg/kg	1	0.099	0.99	05/24/12
Cobalt	7440-48-4	LA-505-412		7.09		mg/kg	1	0.049	0.25	05/24/12
Copper	7440-50-8	LA-505-412		10.5		mg/kg	1	0.099	0.99	05/24/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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)

EH
07/13/12

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120661

Sample # 120661009
SAF# F11-095
Sample ID B2H1F7

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Vanadium	7440-62-2	LA-505-412		36.9		mg/kg	1	0.20	2.0	05/24/12
Zinc	7440-66-6	LA-505-412		30.8		mg/kg	1	0.99	9.9	05/24/12
Lead	7439-92-1	LA-505-412		1.55		mg/kg	1	0.049	0.49	05/24/12
Mercury	7439-97-6	LA-505-412	U	<0.049		mg/kg	1	0.049	0.20	05/24/12
Molybdenum	7439-98-7	LA-505-412	B	0.283		mg/kg	1	0.049	0.49	05/24/12
Strontium	7440-24-6	LA-505-412	X	17.1		mg/kg	1	0.099	0.99	05/24/12
Tin	7440-31-5	LA-505-412	B	0.251		mg/kg	1	0.049	0.49	05/24/12
Uranium	7440-61-1	LA-505-412		0.277		mg/kg	1	0.049	0.25	05/24/12
Arsenic	7440-38-2	LA-505-412	B	1.03		mg/kg	1	0.20	2.0	05/24/12
Selenium	7782-49-2	LA-505-412	U	<0.25		mg/kg	0.5	0.25	2.5	05/29/12
Boron	7440-42-8	LA-505-412	U	<0.49		mg/kg	1	0.49	4.9	05/24/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120661

Sample # 120661010
SAF# F11-095
Sample ID B2H1J7

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**05/22/12**
Anions by IC										
Chloride	16887-00-6	LA-533-410	U	<2.9		mg/kg	1	2.9	21	05/23/12
Sulfate	14808-79-8	LA-533-410	B	23.1		mg/kg	1	5.6	53	05/23/12
Cr(VI) Prep										**05/23/12**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.51	05/24/12
ICPMS Prep										**05/23/12**
ICP-MS										
Manganese	7439-96-5	LA-505-412		297		mg/kg	1	0.11	1.1	05/24/12
Nickel	7440-02-0	LA-505-412		6.92		mg/kg	1	0.11	1.1	05/24/12
Silver	7440-22-4	LA-505-412	U	<0.056		mg/kg	1	0.056	0.56	05/24/12
Antimony	7440-36-0	LA-505-412	U	<0.34		mg/kg	1	0.34	3.4	05/24/12
Barium	7440-39-3	LA-505-412		50.7		mg/kg	1	0.23	2.3	05/24/12
Beryllium	7440-41-7	LA-505-412	B	0.260		mg/kg	1	0.11	1.1	05/24/12
Cadmium	7440-43-9	LA-505-412	B	0.0564		mg/kg	1	0.056	0.56	05/24/12
Chromium	7440-47-3	LA-505-412		3.42		mg/kg	1	0.11	1.1	05/24/12
Cobalt	7440-48-4	LA-505-412		9.42		mg/kg	1	0.056	0.28	05/24/12
Copper	7440-50-8	LA-505-412		14.6		mg/kg	1	0.11	1.1	05/24/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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)

EH
07/13/12

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120661

Sample # 120661010
SAF# F11-095
Sample ID B2H1J7

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Vanadium	7440-62-2	LA-505-412		51.6		mg/kg	1	0.23	2.3	05/24/12
Zinc	7440-66-6	LA-505-412		42.9		mg/kg	1	1.1	11	05/24/12
Lead	7439-92-1	LA-505-412		3.65		mg/kg	1	0.056	0.56	05/24/12
Mercury	7439-97-6	LA-505-412	U	<0.056		mg/kg	1	0.056	0.23	05/24/12
Molybdenum	7439-98-7	LA-505-412	B	0.344		mg/kg	1	0.056	0.56	05/24/12
Strontium	7440-24-6	LA-505-412	X	23.7		mg/kg	1	0.11	1.1	05/24/12
Tin	7440-31-5	LA-505-412	B	0.404		mg/kg	1	0.056	0.56	05/24/12
Uranium	7440-61-1	LA-505-412		0.428		mg/kg	1	0.056	0.28	05/24/12
Arsenic	7440-38-2	LA-505-412		2.41		mg/kg	1	0.23	2.3	05/24/12
Selenium	7782-49-2	LA-505-412	U	<0.28		mg/kg	0.5	0.28	2.8	05/29/12
Boron	7440-42-8	LA-505-412	U	<0.56		mg/kg	1	0.56	5.6	05/24/12

MDL = Minimum Detection Limit
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TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120665

Sample # 120665001
SAF# F11-095
Sample ID B2H1H1

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**05/22/12**
Anions by IC										
Chloride	16887-00-6	LA-533-410	U	<2.9		mg/kg	1	2.9	20	05/23/12
Sulfate	14808-79-8	LA-533-410	B	25.2		mg/kg	1	5.5	52	05/23/12
Cr(VI) Prep										**05/23/12**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.50	05/24/12
ICPMS Prep										**05/23/12**
ICP-MS										
Manganese	7439-96-5	LA-505-412		267		mg/kg	1	0.10	1.0	05/24/12
Nickel	7440-02-0	LA-505-412		5.58		mg/kg	1	0.10	1.0	05/24/12
Silver	7440-22-4	LA-505-412	U	<0.051		mg/kg	1	0.051	0.51	05/24/12
Antimony	7440-36-0	LA-505-412	U	<0.31		mg/kg	1	0.31	3.1	05/24/12
Barium	7440-39-3	LA-505-412		49.9		mg/kg	1	0.20	2.0	05/24/12
Beryllium	7440-41-7	LA-505-412	B	0.130		mg/kg	1	0.10	1.0	05/24/12
Cadmium	7440-43-9	LA-505-412	U	<0.051		mg/kg	1	0.051	0.51	05/24/12
Chromium	7440-47-3	LA-505-412		1.50		mg/kg	1	0.10	1.0	05/24/12
Cobalt	7440-48-4	LA-505-412		8.41		mg/kg	1	0.051	0.25	05/24/12
Copper	7440-50-8	LA-505-412		11.1		mg/kg	1	0.10	1.0	05/24/12

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

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

REVISED

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120665

Sample # 120665001
SAF# F11-095
Sample ID B2H1H1

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Vanadium	7440-62-2	LA-505-412		39.6		mg/kg	1	0.20	2.0	05/24/12
Zinc	7440-66-6	LA-505-412		31.6		mg/kg	1	1.0	10	05/24/12
Lead	7439-92-1	LA-505-412		1.60		mg/kg	1	0.051	0.51	05/24/12
Mercury	7439-97-6	LA-505-412	U	<0.051		mg/kg	1	0.051	0.20	05/24/12
Molybdenum	7439-98-7	LA-505-412	B	0.251		mg/kg	1	0.051	0.51	05/24/12
Strontium	7440-24-6	LA-505-412	X	16.3		mg/kg	1	0.10	1.0	05/24/12
Tin	7440-31-5	LA-505-412	B	0.276		mg/kg	1	0.051	0.51	05/24/12
Uranium	7440-61-1	LA-505-412		0.287		mg/kg	1	0.051	0.25	05/24/12
Arsenic	7440-38-2	LA-505-412	B	1.70		mg/kg	1	0.20	2.0	05/24/12
Selenium	7782-49-2	LA-505-412	U	<0.25		mg/kg	0.5	0.25	2.5	05/29/12
Boron	7440-42-8	LA-505-412	U	<0.51		mg/kg	1	0.51	5.1	05/24/12

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

REVISED

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120665

Sample # 120665002
SAF# F11-095
Sample ID B2H1D1

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**05/22/12**
Anions by IC										
Chloride	16887-00-6	LA-533-410	U	<2.9		mg/kg	1	2.9	20	05/23/12
Sulfate	14808-79-8	LA-533-410	B	14.7		mg/kg	1	5.4	52	05/23/12
Cr(VI) Prep										**05/23/12**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.51	05/24/12
ICPMS Prep										**05/23/12**
ICP-MS										
Manganese	7439-96-5	LA-505-412		289		mg/kg	1	0.11	1.1	05/24/12
Nickel	7440-02-0	LA-505-412		5.83		mg/kg	1	0.11	1.1	05/24/12
Silver	7440-22-4	LA-505-412	U	<0.055		mg/kg	1	0.055	0.55	05/24/12
Antimony	7440-36-0	LA-505-412	U	<0.33		mg/kg	1	0.33	3.3	05/24/12
Barium	7440-39-3	LA-505-412		45.6		mg/kg	1	0.22	2.2	05/24/12
Beryllium	7440-41-7	LA-505-412	B	0.152		mg/kg	1	0.11	1.1	05/24/12
Cadmium	7440-43-9	LA-505-412	B	0.0569		mg/kg	1	0.055	0.55	05/24/12
Chromium	7440-47-3	LA-505-412		2.04		mg/kg	1	0.11	1.1	05/24/12
Cobalt	7440-48-4	LA-505-412		9.34		mg/kg	1	0.055	0.27	05/24/12
Copper	7440-50-8	LA-505-412		14.8		mg/kg	1	0.11	1.1	05/24/12

MDL = Minimum Detection Limit
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TP Err = Total Propagated Error
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E - Analyte is an estimate, see comment section.
N - MS and/or MSD recovery outside control limits.

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

REVISED

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120665

Sample # 120665002
SAF# F11-095
Sample ID B2H1D1

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Vanadium	7440-62-2	LA-505-412		43.6		mg/kg	1	0.22	2.2	05/24/12
Zinc	7440-66-6	LA-505-412		38.1		mg/kg	1	1.1	11	05/24/12
Lead	7439-92-1	LA-505-412		2.98		mg/kg	1	0.055	0.55	05/24/12
Mercury	7439-97-6	LA-505-412	U	<0.055		mg/kg	1	0.055	0.22	05/24/12
Molybdenum	7439-98-7	LA-505-412	B	0.279		mg/kg	1	0.055	0.55	05/24/12
Strontium	7440-24-6	LA-505-412	X	22.3		mg/kg	1	0.11	1.1	05/24/12
Tin	7440-31-5	LA-505-412	B	0.330		mg/kg	1	0.055	0.55	05/24/12
Uranium	7440-61-1	LA-505-412		0.407		mg/kg	1	0.055	0.27	05/24/12
Arsenic	7440-38-2	LA-505-412	B	1.60		mg/kg	1	0.22	2.2	05/24/12
Selenium	7782-49-2	LA-505-412	U	<0.27		mg/kg	0.5	0.27	2.7	05/29/12
Boron	7440-42-8	LA-505-412	U	<0.55		mg/kg	1	0.55	5.5	05/24/12

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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)

REVISED

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120665

Sample # 120665003
SAF# F11-095
Sample ID B2L1M6

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**05/22/12**
Anions by IC										
~~Chloride~~	~~16887-00-6~~	~~LA-533-410~~	~~U~~	~~<3.0~~		~~mg/kg~~	~~1~~	~~3.0~~	~~21~~	~~05/23/12~~
Sulfate	14808-79-8	LA-533-410	B	14.7		mg/kg	1	5.6	53	05/23/12
Cr(VI) Prep										**05/23/12**
Cr(VI)										
~~Hexavalent chromium~~	~~18540-29-9~~	~~LA-265-403~~	~~U~~	~~<0.10~~		~~ug/g~~	~~1~~	~~0.10~~	~~0.51~~	~~05/24/12~~
ICPMS Prep										**05/23/12**
ICP-MS										
Manganese	7439-96-5	LA-505-412		355		mg/kg	1	0.11	1.1	05/24/12
Nickel	7440-02-0	LA-505-412		6.19		mg/kg	1	0.11	1.1	05/24/12
Silver	7440-22-4	LA-505-412	U	<0.055		mg/kg	1	0.055	0.55	05/24/12
Antimony	7440-36-0	LA-505-412	U	<0.33		mg/kg	1	0.33	3.3	05/24/12
Barium	7440-39-3	LA-505-412		67.8		mg/kg	1	0.22	2.2	05/24/12
Beryllium	7440-41-7	LA-505-412	B	0.249		mg/kg	1	0.11	1.1	05/24/12
Cadmium	7440-43-9	LA-505-412	B	0.0716		mg/kg	1	0.055	0.55	05/24/12
Chromium	7440-47-3	LA-505-412		2.48		mg/kg	1	0.11	1.1	05/24/12
Cobalt	7440-48-4	LA-505-412		10.8		mg/kg	1	0.055	0.28	05/24/12
Copper	7440-50-8	LA-505-412		15.3		mg/kg	1	0.11	1.1	05/24/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
DF = Dilution Factor
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X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)

REVISED

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120665

Sample # 120665003
SAF# F11-095
Sample ID B2L1M6

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Vanadium	7440-62-2	LA-505-412		58.2		mg/kg	1	0.22	2.2	05/24/12
Zinc	7440-66-6	LA-505-412		42.3		mg/kg	1	1.1	11	05/24/12
Lead	7439-92-1	LA-505-412		2.41		mg/kg	1	0.055	0.55	05/24/12
Mercury	7439-97-6	LA-505-412	U	<0.055		mg/kg	1	0.055	0.22	05/24/12
Molybdenum	7439-98-7	LA-505-412	B	0.353		mg/kg	1	0.055	0.55	05/24/12
Strontium	7440-24-6	LA-505-412	X	22.2		mg/kg	1	0.11	1.1	05/24/12
Tin	7440-31-5	LA-505-412	B	0.346		mg/kg	1	0.055	0.55	05/24/12
Uranium	7440-61-1	LA-505-412		0.359		mg/kg	1	0.055	0.28	05/24/12
Arsenic	7440-38-2	LA-505-412	B	1.37		mg/kg	1	0.22	2.2	05/24/12
Selenium	7782-49-2	LA-505-412	U	<0.28		mg/kg	0.5	0.28	2.8	05/29/12
Boron	7440-42-8	LA-505-412	U	<0.55		mg/kg	1	0.55	5.5	05/24/12

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RQ = Result Qualifier
TP Err = Total Propagated Error
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E - Analyte is an estimate, see comment section.
N - MS and/or MSD recovery outside control limits.

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

REVISED

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120665

Sample # 120665004
SAF# F11-095
Sample ID B2H1F3

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**05/22/12**
Anions by IC										
Chloride	16887-00-6	LA-533-410	B	3.06		mg/kg	1	3.0	21	05/23/12
Sulfate	14808-79-8	LA-533-410	B	20.0		mg/kg	1	5.6	54	05/23/12
Cr(VI) Prep										**05/23/12**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.51	05/24/12
ICPMS Prep										**05/23/12**
ICP-MS										
Manganese	7439-96-5	LA-505-412		321		mg/kg	1	0.10	1.0	05/24/12
Nickel	7440-02-0	LA-505-412		7.12		mg/kg	1	0.10	1.0	05/24/12
Silver	7440-22-4	LA-505-412	U	<0.050		mg/kg	1	0.050	0.50	05/24/12
Antimony	7440-36-0	LA-505-412	U	<0.30		mg/kg	1	0.30	3.0	05/24/12
Barium	7440-39-3	LA-505-412		63.4		mg/kg	1	0.20	2.0	05/24/12
Beryllium	7440-41-7	LA-505-412	B	0.282		mg/kg	1	0.10	1.0	05/24/12
Cadmium	7440-43-9	LA-505-412	B	0.0635		mg/kg	1	0.050	0.50	05/24/12
Chromium	7440-47-3	LA-505-412		2.96		mg/kg	1	0.10	1.0	05/24/12
Cobalt	7440-48-4	LA-505-412		9.67		mg/kg	1	0.050	0.25	05/24/12
Copper	7440-50-8	LA-505-412		16.0		mg/kg	1	0.10	1.0	05/24/12

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

REVISED

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120665

Sample # 120665004
SAF# F11-095
Sample ID B2H1F3

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Vanadium	7440-62-2	LA-505-412		31.9		mg/kg	1	0.20	2.0	05/24/12
Zinc	7440-66-6	LA-505-412		37.8		mg/kg	1	1.0	10	05/24/12
Lead	7439-92-1	LA-505-412		3.37		mg/kg	1	0.050	0.50	05/24/12
Mercury	7439-97-6	LA-505-412	U	<0.050		mg/kg	1	0.050	0.20	05/24/12
Molybdenum	7439-98-7	LA-505-412	B	0.220		mg/kg	1	0.050	0.50	05/24/12
Strontium	7440-24-6	LA-505-412	X	26.7		mg/kg	1	0.10	1.0	05/24/12
Tin	7440-31-5	LA-505-412	B	0.345		mg/kg	1	0.050	0.50	05/24/12
Uranium	7440-61-1	LA-505-412		0.453		mg/kg	1	0.050	0.25	05/24/12
Arsenic	7440-38-2	LA-505-412	B	1.89		mg/kg	1	0.20	2.0	05/24/12
Selenium	7782-49-2	LA-505-412	B	0.257		mg/kg	0.5	0.25	2.5	05/29/12
Boron	7440-42-8	LA-505-412	U	<0.50		mg/kg	1	0.50	5.0	05/24/12

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

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

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

REVISED

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120665

Sample # 120665005
SAF# F11-095
Sample ID B2L1L4

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**05/22/12**
Anions by IC										
~~Chloride~~	~~16887-00-6~~	~~LA-533-410~~	~~U~~	~~<2.9~~		~~mg/kg~~	~~1~~	~~2.9~~	~~20~~	~~05/23/12~~
Sulfate	14808-79-8	LA-533-410	B	33.9		mg/kg	1	5.5	52	05/23/12
Cr(VI) Prep										**05/23/12**
Cr(VI)										
~~Hexavalent chromium~~	~~18540-29-9~~	~~LA-265-403~~	~~U~~	~~<0.10~~		~~ug/g~~	~~1~~	~~0.10~~	~~0.51~~	~~05/24/12~~
ICPMS Prep										**05/23/12**
ICP-MS										
Manganese	7439-96-5	LA-505-412		307		mg/kg	1	0.11	1.1	05/24/12
Nickel	7440-02-0	LA-505-412		7.49		mg/kg	1	0.11	1.1	05/24/12
Silver	7440-22-4	LA-505-412	U	<0.055		mg/kg	1	0.055	0.55	05/24/12
Antimony	7440-36-0	LA-505-412	U	<0.33		mg/kg	1	0.33	3.3	05/24/12
Barium	7440-39-3	LA-505-412		56.8		mg/kg	1	0.22	2.2	05/24/12
Beryllium	7440-41-7	LA-505-412	B	0.166		mg/kg	1	0.11	1.1	05/24/12
Cadmium	7440-43-9	LA-505-412	B	0.0643		mg/kg	1	0.055	0.55	05/24/12
Chromium	7440-47-3	LA-505-412		2.63		mg/kg	1	0.11	1.1	05/24/12
Cobalt	7440-48-4	LA-505-412		9.98		mg/kg	1	0.055	0.27	05/24/12
Copper	7440-50-8	LA-505-412		16.5		mg/kg	1	0.11	1.1	05/24/12

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

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

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

REVISED

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120665

Sample # 120665005
SAF# F11-095
Sample ID B2L1L4

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Vanadium	7440-62-2	LA-505-412		42.0		mg/kg	1	0.22	2.2	05/24/12
Zinc	7440-66-6	LA-505-412		40.4		mg/kg	1	1.1	11	05/24/12
Lead	7439-92-1	LA-505-412		3.68		mg/kg	1	0.055	0.55	05/24/12
Mercury	7439-97-6	LA-505-412	U	<0.055		mg/kg	1	0.055	0.22	05/24/12
Molybdenum	7439-98-7	LA-505-412	B	0.272		mg/kg	1	0.055	0.55	05/24/12
Strontium	7440-24-6	LA-505-412	X	29.0		mg/kg	1	0.11	1.1	05/24/12
Tin	7440-31-5	LA-505-412	B	0.371		mg/kg	1	0.055	0.55	05/24/12
Uranium	7440-61-1	LA-505-412		0.434		mg/kg	1	0.055	0.27	05/24/12
Arsenic	7440-38-2	LA-505-412	B	2.17		mg/kg	1	0.22	2.2	05/24/12
Selenium	7782-49-2	LA-505-412	U	<0.27		mg/kg	0.5	0.27	2.7	05/29/12
Boron	7440-42-8	LA-505-412	U	<0.55		mg/kg	1	0.55	5.5	05/24/12

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

REVISED

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120665

Sample # 120665006
SAF# F11-095
Sample ID B2L1T4

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**05/22/12**
Anions by IC										
Chloride	16887-00-6	LA-533-410	U	<2.9		mg/kg	1	2.9	20	05/23/12
Sulfate	14808-79-8	LA-533-410	U	<5.5		mg/kg	1	5.5	52	05/23/12
Cr(VI) Prep										**05/30/12**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	B	0.0970		ug/g	1	0.097	0.48	05/31/12
ICPMS Prep										**05/23/12**
ICP-MS										
Manganese	7439-96-5	LA-505-412		6.41		mg/kg	1	0.099	0.99	05/24/12
Nickel	7440-02-0	LA-505-412	U	<0.099		mg/kg	1	0.099	0.99	05/24/12
Silver	7440-22-4	LA-505-412	U	<0.050		mg/kg	1	0.050	0.50	05/24/12
Antimony	7440-36-0	LA-505-412	U	<0.30		mg/kg	1	0.30	3.0	05/24/12
Barium	7440-39-3	LA-505-412		2.52		mg/kg	1	0.20	2.0	05/24/12
Beryllium	7440-41-7	LA-505-412	U	<0.099		mg/kg	1	0.099	0.99	05/24/12
Cadmium	7440-43-9	LA-505-412	U	<0.050		mg/kg	1	0.050	0.50	05/24/12
Chromium	7440-47-3	LA-505-412	U	<0.099		mg/kg	1	0.099	0.99	05/24/12
Cobalt	7440-48-4	LA-505-412	B	0.0974		mg/kg	1	0.050	0.25	05/24/12
Copper	7440-50-8	LA-505-412	U	<0.099		mg/kg	1	0.099	0.99	05/24/12

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

REVISED

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120665

Sample # 120665006
SAF# F11-095
Sample ID B2L1T4

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Vanadium	7440-62-2	LA-505-412	U	<0.20		mg/kg	1	0.20	2.0	05/24/12
Zinc	7440-66-6	LA-505-412	U	<0.99		mg/kg	1	0.99	9.9	05/24/12
Lead	7439-92-1	LA-505-412	B	0.449		mg/kg	1	0.050	0.50	05/24/12
Mercury	7439-97-6	LA-505-412	U	<0.050		mg/kg	1	0.050	0.20	05/24/12
Molybdenum	7439-98-7	LA-505-412	U	<0.050		mg/kg	1	0.050	0.50	05/24/12
Strontium	7440-24-6	LA-505-412	BX	0.589		mg/kg	1	0.099	0.99	05/24/12
Tin	7440-31-5	LA-505-412	U	<0.050		mg/kg	1	0.050	0.50	05/24/12
Uranium	7440-61-1	LA-505-412	B	0.0904		mg/kg	1	0.050	0.25	05/24/12
Arsenic	7440-38-2	LA-505-412	U	<0.20		mg/kg	1	0.20	2.0	05/24/12
Selenium	7782-49-2	LA-505-412	U	<0.25		mg/kg	0.5	0.25	2.5	05/29/12
Boron	7440-42-8	LA-505-412	U	<0.50		mg/kg	1	0.50	5.0	05/24/12

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D - Analyte was reported at a secondary diltution factor.
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N - MS and/or MSD recovery outside control limits.

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

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WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120665

Sample # 120665007
SAF# F11-095
Sample ID B2H1B9

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**05/22/12**
Anions by IC										
~~Chloride~~	~~16887-00-6~~	~~LA-533-410~~	~~U~~	~~<2.7~~		~~mg/kg~~	~~1~~	~~2.7~~	~~19~~	~~05/23/12~~
Sulfate	14808-79-8	LA-533-410	B	18.2		mg/kg	1	5.2	50	05/23/12
Cr(VI) Prep										**05/30/12**
Cr(VI)										
~~Hexavalent chromium~~	~~18540-29-9~~	~~LA-265-403~~	~~U~~	~~<0.099~~		~~ug/g~~	~~1~~	~~0.099~~	~~0.50~~	~~05/31/12~~
ICPMS Prep										**05/30/12**
ICP-MS										
Manganese	7439-96-5	LA-505-412		275		mg/kg	0.5	0.051	0.51	05/30/12
Nickel	7440-02-0	LA-505-412		5.23		mg/kg	0.5	0.051	0.51	05/30/12
Silver	7440-22-4	LA-505-412	U	<0.026		mg/kg	0.5	0.026	0.26	05/30/12
Antimony	7440-36-0	LA-505-412	U	<0.15		mg/kg	0.5	0.15	1.5	05/30/12
Barium	7440-39-3	LA-505-412		43.9		mg/kg	0.5	0.10	1.0	05/30/12
Beryllium	7440-41-7	LA-505-412	B	0.136		mg/kg	0.5	0.051	0.51	05/30/12
Cadmium	7440-43-9	LA-505-412	B	0.0533		mg/kg	0.5	0.026	0.26	05/30/12
Chromium	7440-47-3	LA-505-412		1.87		mg/kg	0.5	0.051	0.51	05/30/12
Cobalt	7440-48-4	LA-505-412		8.12		mg/kg	0.5	0.026	0.13	05/30/12
Copper	7440-50-8	LA-505-412		13.5		mg/kg	0.5	0.051	0.51	05/30/12

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

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EH
07/13/12

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120665

Sample # 120665007
SAF# F11-095
Sample ID B2H1B9

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Vanadium	7440-62-2	LA-505-412		34.7		mg/kg	0.5	0.10	1.0	05/30/12
Zinc	7440-66-6	LA-505-412		32.1		mg/kg	0.5	0.51	5.1	05/30/12
Lead	7439-92-1	LA-505-412		2.87		mg/kg	0.5	0.026	0.26	05/30/12
Mercury	7439-97-6	LA-505-412	U	<0.026		mg/kg	0.5	0.026	0.10	05/30/12
Molybdenum	7439-98-7	LA-505-412		0.311		mg/kg	0.5	0.026	0.26	05/30/12
Strontium	7440-24-6	LA-505-412		20.8		mg/kg	0.5	0.051	0.51	05/30/12
Tin	7440-31-5	LA-505-412		0.352		mg/kg	0.5	0.026	0.26	05/30/12
Uranium	7440-61-1	LA-505-412		0.409		mg/kg	0.5	0.026	0.13	05/30/12
Arsenic	7440-38-2	LA-505-412		1.37		mg/kg	0.5	0.10	1.0	05/30/12
Selenium	7782-49-2	LA-505-412	U	<0.26		mg/kg	0.5	0.26	2.6	05/30/12
Boron	7440-42-8	LA-505-412	B	0.695		mg/kg	0.5	0.26	2.6	05/30/12

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

REVISED

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120665

Sample # 120665008
SAF# F11-095
Sample ID B2H1H9

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**05/22/12**
Anions by IC										
Chloride	16887-00-6	LA-533-410	U	<2.9		mg/kg	1	2.9	21	05/23/12
Sulfate	14808-79-8	LA-533-410	B	18.2		mg/kg	1	5.6	53	05/23/12
Cr(VI) Prep										**05/30/12**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.50	05/31/12
ICPMS Prep										**05/30/12**
ICP-MS										
Manganese	7439-96-5	LA-505-412		294		mg/kg	0.5	0.054	0.54	05/30/12
Nickel	7440-02-0	LA-505-412		8.32		mg/kg	0.5	0.054	0.54	05/30/12
Silver	7440-22-4	LA-505-412	B	0.0877		mg/kg	0.5	0.027	0.27	05/30/12
Antimony	7440-36-0	LA-505-412	U	<0.16		mg/kg	0.5	0.16	1.6	05/30/12
Barium	7440-39-3	LA-505-412		60.8		mg/kg	0.5	0.11	1.1	05/30/12
Beryllium	7440-41-7	LA-505-412	B	0.276		mg/kg	0.5	0.054	0.54	05/30/12
Cadmium	7440-43-9	LA-505-412	B	0.0692		mg/kg	0.5	0.027	0.27	05/30/12
Chromium	7440-47-3	LA-505-412		4.89		mg/kg	0.5	0.054	0.54	05/30/12
Cobalt	7440-48-4	LA-505-412		9.44		mg/kg	0.5	0.027	0.14	05/30/12
Copper	7440-50-8	LA-505-412		17.3		mg/kg	0.5	0.054	0.54	05/30/12

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

REVISED

EH
07/13/12

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120665

Sample # 120665008
SAF# F11-095
Sample ID B2H1H9

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Vanadium	7440-62-2	LA-505-412		36.9		mg/kg	0.5	0.11	1.1	05/30/12
Zinc	7440-66-6	LA-505-412		39.5		mg/kg	0.5	0.54	5.4	05/30/12
Lead	7439-92-1	LA-505-412		4.52		mg/kg	0.5	0.027	0.27	05/30/12
Mercury	7439-97-6	LA-505-412	U	<0.027		mg/kg	0.5	0.027	0.11	05/30/12
Molybdenum	7439-98-7	LA-505-412		0.462		mg/kg	0.5	0.027	0.27	05/30/12
Strontium	7440-24-6	LA-505-412		30.4		mg/kg	0.5	0.054	0.54	05/30/12
Tin	7440-31-5	LA-505-412		0.534		mg/kg	0.5	0.027	0.27	05/30/12
Uranium	7440-61-1	LA-505-412		0.550		mg/kg	0.5	0.027	0.14	05/30/12
Arsenic	7440-38-2	LA-505-412		2.90		mg/kg	0.5	0.11	1.1	05/30/12
Selenium	7782-49-2	LA-505-412	U	<0.27		mg/kg	0.5	0.27	2.7	05/30/12
Boron	7440-42-8	LA-505-412	B	1.12		mg/kg	0.5	0.27	2.7	05/30/12

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TP Err = Total Propagated Error
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D - Analyte was reported at a secondary diltution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD recovery outside control limits.

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

REVISED

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809001
SAF# F11-095
Sample ID B2L1T7

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ		Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anion Prep (S)											**06/21/12**
Anions by Ion Chromatography (Solid)											
~~Chloride~~	~~16887-00-6~~	~~LA-533-410~~	~~U~~		~~<2.9~~		~~mg/kg~~	~~1~~	~~2.9~~	~~20~~	~~06/21/12~~
~~Sulfate~~	~~14808-79-8~~	~~LA-533-410~~	~~U~~		~~<5.4~~		~~mg/kg~~	~~1~~	~~5.4~~	~~51~~	~~06/21/12~~
ICPMS Prep (S)											**06/25/12**
ICP-2008 MS All possible metal											
Manganese	7439-96-5	LA-505-412			6.28		mg/kg	0.5	0.050	0.50	06/26/12
Nickel	7440-02-0	LA-505-412	B		0.0746		mg/kg	0.5	0.050	0.50	06/26/12
Silver	7440-22-4	LA-505-412	U		<0.025		mg/kg	0.5	0.025	0.25	06/26/12
Antimony	7440-36-0	LA-505-412	U		<0.15		mg/kg	0.5	0.15	1.5	06/26/12
Barium	7440-39-3	LA-505-412			2.49		mg/kg	0.5	0.10	1.0	06/26/12
Beryllium	7440-41-7	LA-505-412	B		0.0550		mg/kg	0.5	0.050	0.50	06/26/12
Cadmium	7440-43-9	LA-505-412	U		<0.025		mg/kg	0.5	0.025	0.25	06/26/12
Chromium	7440-47-3	LA-505-412	B		0.0901		mg/kg	0.5	0.050	0.50	06/26/12
Cobalt	7440-48-4	LA-505-412	B		0.101		mg/kg	0.5	0.025	0.13	06/26/12
Copper	7440-50-8	LA-505-412	BC	0.50U	0.156		mg/kg	0.5	0.050	0.50	06/26/12
Vanadium	7440-62-2	LA-505-412	BC	1.0U	0.476		mg/kg	0.5	0.10	1.0	06/26/12
Zinc	7440-66-6	LA-505-412	B		1.08		mg/kg	0.5	0.50	5.0	06/26/12
Lead	7439-92-1	LA-505-412			0.360		mg/kg	0.5	0.025	0.25	06/26/12

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RQ = Result Qualifier
TP Err = Total Propagated Error
DF = Dilution Factor
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C - Analyte was found in the Associated Blank. (Inorganic)
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E - Analyte is an estimate, see comment section.
N - MS and/or MSD recovery outside control limits.

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

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809001
SAF# F11-095
Sample ID B2L1T7

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury	7439-97-6	LA-505-412	U	<0.025		mg/kg	0.5	0.025	0.10	06/26/12
Molybdenum	7439-98-7	LA-505-412	B	0.0370		mg/kg	0.5	0.025	0.25	06/26/12
Strontium	7440-24-6	LA-505-412		0.576		mg/kg	0.5	0.050	0.50	06/26/12
Tin	7440-31-5	LA-505-412	B	0.0636		mg/kg	0.5	0.025	0.25	06/26/12
Uranium	7440-61-1	LA-505-412	B	0.113		mg/kg	0.5	0.025	0.13	06/26/12
Arsenic	7440-38-2	LA-505-412	B	0.178		mg/kg	0.5	0.10	1.0	06/26/12
Selenium	7782-49-2	LA-505-412	U	<0.25		mg/kg	0.5	0.25	2.5	06/26/12
Boron	7440-42-8	LA-505-412	U	<0.25		mg/kg	0.5	0.25	2.5	06/26/12
Preparation for Cr6 (SO)										**06/26/12**
Hexavalent chromium										
~~Hexavalent chromium~~	~~18540-29-9~~	~~LA-265-403~~	~~U~~	~~<0.099~~		~~ug/g~~	~~1~~	~~0.099~~	~~0.50~~	~~06/26/12~~

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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)

EH
07/13/12

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809002
SAF# F11-095
Sample ID B2H1K1

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anion Prep (S)										**06/21/12**
Anions by Ion Chromatography (Solid)										
~~Chloride~~	~~16887-00-6~~	~~LA-533-410~~	~~U~~	~~<2.9~~		~~mg/kg~~	~~1~~	~~2.9~~	~~20~~	~~06/21/12~~
~~Sulfate~~	~~14808-79-8~~	~~LA-533-410~~	~~B~~	~~13.2~~		~~mg/kg~~	~~1~~	~~5.5~~	~~52~~	~~06/21/12~~
ICPMS Prep (S)										**06/25/12**
ICP-2008 MS All possible metal										
Manganese	7439-96-5	LA-505-412		261		mg/kg	0.5	0.046	0.46	06/26/12
Nickel	7440-02-0	LA-505-412		5.69		mg/kg	0.5	0.046	0.46	06/26/12
Silver	7440-22-4	LA-505-412	B	0.0283		mg/kg	0.5	0.023	0.23	06/26/12
Antimony	7440-36-0	LA-505-412	B	0.240		mg/kg	0.5	0.14	1.4	06/26/12
Barium	7440-39-3	LA-505-412		45.1		mg/kg	0.5	0.093	0.93	06/26/12
Beryllium	7440-41-7	LA-505-412	B	0.254		mg/kg	0.5	0.046	0.46	06/26/12
Cadmium	7440-43-9	LA-505-412	B	0.0696		mg/kg	0.5	0.023	0.23	06/26/12
Chromium	7440-47-3	LA-505-412		2.25		mg/kg	0.5	0.046	0.46	06/26/12
Cobalt	7440-48-4	LA-505-412		9.48		mg/kg	0.5	0.023	0.12	06/26/12
Copper	7440-50-8	LA-505-412		14.6		mg/kg	0.5	0.046	0.46	06/26/12
Vanadium	7440-62-2	LA-505-412		58.8		mg/kg	0.5	0.093	0.93	06/26/12
Zinc	7440-66-6	LA-505-412		39.3		mg/kg	0.5	0.46	4.6	06/26/12
Lead	7439-92-1	LA-505-412		2.41		mg/kg	0.5	0.023	0.23	06/26/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809002
SAF# F11-095
Sample ID B2H1K1

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury	7439-97-6	LA-505-412	U	<0.023		mg/kg	0.5	0.023	0.093	06/26/12
Molybdenum	7439-98-7	LA-505-412		0.403		mg/kg	0.5	0.023	0.23	06/26/12
Strontium	7440-24-6	LA-505-412		24.5		mg/kg	0.5	0.046	0.46	06/26/12
Tin	7440-31-5	LA-505-412		0.488		mg/kg	0.5	0.023	0.23	06/26/12
Uranium	7440-61-1	LA-505-412		0.458		mg/kg	0.5	0.023	0.12	06/26/12
Arsenic	7440-38-2	LA-505-412		1.73		mg/kg	0.5	0.093	0.93	06/26/12
Selenium	7782-49-2	LA-505-412	B	0.321		mg/kg	0.5	0.23	2.3	06/26/12
Boron	7440-42-8	LA-505-412	B	0.250		mg/kg	0.5	0.23	2.3	06/26/12
Preparation for Cr6 (SO)										**06/26/12**
Hexavalent chromium										
~~Hexavalent chromium~~	~~18540-29-9~~	~~LA-265-403~~	~~U~~	~~<0.10~~		~~ug/g~~	~~1~~	~~0.10~~	~~0.51~~	~~06/26/12~~

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809003
SAF# F11-095
Sample ID B2L1K2

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anion Prep (S)										**06/21/12**
Anions by Ion Chromatography (Solid)										
~~Chloride~~	~~16887-00-6~~	~~LA-533-410~~	~~U~~	~~<2.9~~		~~mg/kg~~	~~1~~	~~2.9~~	~~21~~	~~06/21/12~~
~~Sulfate~~	~~14808-79-8~~	~~LA-533-410~~	~~B~~	~~16.7~~		~~mg/kg~~	~~1~~	~~5.6~~	~~53~~	~~06/21/12~~
ICPMS Prep (S)										**06/25/12**
ICP-2008 MS All possible metal										
Manganese	7439-96-5	LA-505-412		309		mg/kg	0.5	0.047	0.47	06/26/12
Nickel	7440-02-0	LA-505-412		7.38		mg/kg	0.5	0.047	0.47	06/26/12
Silver	7440-22-4	LA-505-412	B	0.0259		mg/kg	0.5	0.024	0.24	06/26/12
Antimony	7440-36-0	LA-505-412	U	<0.14		mg/kg	0.5	0.14	1.4	06/26/12
Barium	7440-39-3	LA-505-412		51.4		mg/kg	0.5	0.094	0.94	06/26/12
Beryllium	7440-41-7	LA-505-412	B	0.294		mg/kg	0.5	0.047	0.47	06/26/12
Cadmium	7440-43-9	LA-505-412	B	0.0462		mg/kg	0.5	0.024	0.24	06/26/12
Chromium	7440-47-3	LA-505-412		2.43		mg/kg	0.5	0.047	0.47	06/26/12
Cobalt	7440-48-4	LA-505-412		10.6		mg/kg	0.5	0.024	0.12	06/26/12
Copper	7440-50-8	LA-505-412		13.5		mg/kg	0.5	0.047	0.47	06/26/12
Vanadium	7440-62-2	LA-505-412		69.8		mg/kg	0.5	0.094	0.94	06/26/12
Zinc	7440-66-6	LA-505-412		42.4		mg/kg	0.5	0.47	4.7	06/26/12
Lead	7439-92-1	LA-505-412		2.33		mg/kg	0.5	0.024	0.24	06/26/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809003
SAF# F11-095
Sample ID B2L1K2

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury	7439-97-6	LA-505-412	U	<0.024		mg/kg	0.5	0.024	0.094	06/26/12
Molybdenum	7439-98-7	LA-505-412		0.434		mg/kg	0.5	0.024	0.24	06/26/12
Strontium	7440-24-6	LA-505-412		25.3		mg/kg	0.5	0.047	0.47	06/26/12
Tin	7440-31-5	LA-505-412		0.407		mg/kg	0.5	0.024	0.24	06/26/12
Uranium	7440-61-1	LA-505-412		0.448		mg/kg	0.5	0.024	0.12	06/26/12
Arsenic	7440-38-2	LA-505-412		1.41		mg/kg	0.5	0.094	0.94	06/26/12
Selenium	7782-49-2	LA-505-412	B	0.329		mg/kg	0.5	0.24	2.4	06/26/12
Boron	7440-42-8	LA-505-412	U	<0.24		mg/kg	0.5	0.24	2.4	06/26/12
Preparation for Cr6 (SO)										**06/26/12**
Hexavalent chromium										
~~Hexavalent chromium~~	~~18540-29-9~~	~~LA-265-403~~	~~U~~	~~<0.10~~		~~ug/g~~	~~1~~	~~0.10~~	~~0.51~~	~~06/26/12~~

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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)

EH
07/13/12

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809004
SAF# F11-095
Sample ID B2H1K5

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anion Prep (S)										**06/21/12**
Anions by Ion Chromatography (Solid)										
~~Chloride~~	~~16887-00-6~~	~~LA-533-410~~	~~B~~	~~3.06~~		~~mg/kg~~	~~1~~	~~3.0~~	~~21~~	~~06/21/12~~
~~Sulfate~~	~~14808-79-8~~	~~LA-533-410~~	~~B~~	~~28.8~~		~~mg/kg~~	~~1~~	~~5.6~~	~~53~~	~~06/21/12~~
ICPMS Prep (S)										**06/25/12**
ICP-2008 MS All possible metal										
Manganese	7439-96-5	LA-505-412		269		mg/kg	0.5	0.050	0.50	06/26/12
Nickel	7440-02-0	LA-505-412		6.53		mg/kg	0.5	0.050	0.50	06/26/12
Silver	7440-22-4	LA-505-412	U	<0.025		mg/kg	0.5	0.025	0.25	06/26/12
Antimony	7440-36-0	LA-505-412	B	0.452		mg/kg	0.5	0.15	1.5	06/26/12
Barium	7440-39-3	LA-505-412		40.7		mg/kg	0.5	0.099	0.99	06/26/12
Beryllium	7440-41-7	LA-505-412	B	0.155		mg/kg	0.5	0.050	0.50	06/26/12
Cadmium	7440-43-9	LA-505-412	B	0.0407		mg/kg	0.5	0.025	0.25	06/26/12
Chromium	7440-47-3	LA-505-412		2.40		mg/kg	0.5	0.050	0.50	06/26/12
Cobalt	7440-48-4	LA-505-412		9.25		mg/kg	0.5	0.025	0.12	06/26/12
Copper	7440-50-8	LA-505-412		14.0		mg/kg	0.5	0.050	0.50	06/26/12
Vanadium	7440-62-2	LA-505-412		58.1		mg/kg	0.5	0.099	0.99	06/26/12
Zinc	7440-66-6	LA-505-412		38.4		mg/kg	0.5	0.50	5.0	06/26/12
Lead	7439-92-1	LA-505-412		2.35		mg/kg	0.5	0.025	0.25	06/26/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809004
SAF# F11-095
Sample ID B2H1K5

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury	7439-97-6	LA-505-412	U	<0.025		mg/kg	0.5	0.025	0.099	06/26/12
Molybdenum	7439-98-7	LA-505-412		0.387		mg/kg	0.5	0.025	0.25	06/26/12
Strontium	7440-24-6	LA-505-412		25.2		mg/kg	0.5	0.050	0.50	06/26/12
Tin	7440-31-5	LA-505-412		0.532		mg/kg	0.5	0.025	0.25	06/26/12
Uranium	7440-61-1	LA-505-412		0.426		mg/kg	0.5	0.025	0.12	06/26/12
Arsenic	7440-38-2	LA-505-412		2.31		mg/kg	0.5	0.099	0.99	06/26/12
Selenium	7782-49-2	LA-505-412	B	0.316		mg/kg	0.5	0.25	2.5	06/26/12
Boron	7440-42-8	LA-505-412	U	<0.25		mg/kg	0.5	0.25	2.5	06/26/12
Preparation for Cr6 (SO)										**06/26/12**
Hexavalent chromium										
~~Hexavalent chromium~~	~~18540-29-9~~	~~LA-265-403~~	~~U~~	~~<0.10~~		~~ug/g~~	~~1~~	~~0.10~~	~~0.50~~	~~06/26/12~~

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809005
SAF# F11-095
Sample ID B2L1K6

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anion Prep (S)										**06/21/12**
Anions by Ion Chromatography (Solid)										
~~Chloride~~	~~16887-00-6~~	~~LA-533-410~~	~~U~~	~~<2.9~~		~~mg/kg~~	~~1~~	~~2.9~~	~~21~~	~~06/21/12~~
~~Sulfate~~	~~14808-79-8~~	~~LA-533-410~~	~~B~~	~~16.6~~		~~mg/kg~~	~~1~~	~~5.6~~	~~53~~	~~06/21/12~~
ICPMS Prep (S)										**06/25/12**
ICP-2008 MS All possible metal										
Manganese	7439-96-5	LA-505-412		299		mg/kg	0.5	0.047	0.47	06/26/12
Nickel	7440-02-0	LA-505-412		15.1		mg/kg	0.5	0.047	0.47	06/26/12
Silver	7440-22-4	LA-505-412	B	0.0271		mg/kg	0.5	0.024	0.24	06/26/12
Antimony	7440-36-0	LA-505-412	U	<0.14		mg/kg	0.5	0.14	1.4	06/26/12
Barium	7440-39-3	LA-505-412		47.4		mg/kg	0.5	0.095	0.95	06/26/12
Beryllium	7440-41-7	LA-505-412	B	0.190		mg/kg	0.5	0.047	0.47	06/26/12
Cadmium	7440-43-9	LA-505-412	B	0.0503		mg/kg	0.5	0.024	0.24	06/26/12
Chromium	7440-47-3	LA-505-412		4.64		mg/kg	0.5	0.047	0.47	06/26/12
Cobalt	7440-48-4	LA-505-412		9.98		mg/kg	0.5	0.024	0.12	06/26/12
Copper	7440-50-8	LA-505-412		13.5		mg/kg	0.5	0.047	0.47	06/26/12
Vanadium	7440-62-2	LA-505-412		52.8		mg/kg	0.5	0.095	0.95	06/26/12
Zinc	7440-66-6	LA-505-412		39.1		mg/kg	0.5	0.47	4.7	06/26/12
Lead	7439-92-1	LA-505-412		2.79		mg/kg	0.5	0.024	0.24	06/26/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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)

EH
07/13/12

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809005
SAF# F11-095
Sample ID B2L1K6

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury	7439-97-6	LA-505-412	U	<0.024		mg/kg	0.5	0.024	0.095	06/26/12
Molybdenum	7439-98-7	LA-505-412		0.357		mg/kg	0.5	0.024	0.24	06/26/12
Strontium	7440-24-6	LA-505-412		24.9		mg/kg	0.5	0.047	0.47	06/26/12
Tin	7440-31-5	LA-505-412		0.383		mg/kg	0.5	0.024	0.24	06/26/12
Uranium	7440-61-1	LA-505-412		0.550		mg/kg	0.5	0.024	0.12	06/26/12
Arsenic	7440-38-2	LA-505-412		1.61		mg/kg	0.5	0.095	0.95	06/26/12
Selenium	7782-49-2	LA-505-412	B	0.312		mg/kg	0.5	0.24	2.4	06/26/12
Boron	7440-42-8	LA-505-412	B	0.490		mg/kg	0.5	0.24	2.4	06/26/12
Preparation for Cr6 (SO)										**06/26/12**
Hexavalent chromium										
~~Hexavalent chromium~~	~~18540-29-9~~	~~LA-265-403~~	~~U~~	~~<0.10~~		~~ug/g~~	~~1~~	~~0.10~~	~~0.51~~	~~06/26/12~~

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809006
SAF# F11-095
Sample ID B2H1K9

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anion Prep (S)										**06/21/12**
Anions by Ion Chromatography (Solid)										
~~Chloride~~	~~16887-00-6~~	~~LA-533-410~~	~~B~~	~~3.72~~		~~mg/kg~~	~~1~~	~~2.9~~	~~21~~	~~06/21/12~~
~~Sulfate~~	~~14808-79-8~~	~~LA-533-410~~	~~B~~	~~32.2~~		~~mg/kg~~	~~1~~	~~5.5~~	~~53~~	~~06/21/12~~
ICPMS Prep (S)										**06/25/12**
ICP-2008 MS All possible metal										
Manganese	7439-96-5	LA-505-412		290		mg/kg	0.5	0.048	0.48	06/26/12
Nickel	7440-02-0	LA-505-412		6.91		mg/kg	0.5	0.048	0.48	06/26/12
Silver	7440-22-4	LA-505-412	B	0.0270		mg/kg	0.5	0.024	0.24	06/26/12
Antimony	7440-36-0	LA-505-412	U	<0.14		mg/kg	0.5	0.14	1.4	06/26/12
Barium	7440-39-3	LA-505-412		43.4		mg/kg	0.5	0.097	0.97	06/26/12
Beryllium	7440-41-7	LA-505-412	B	0.182		mg/kg	0.5	0.048	0.48	06/26/12
Cadmium	7440-43-9	LA-505-412	B	0.0449		mg/kg	0.5	0.024	0.24	06/26/12
Chromium	7440-47-3	LA-505-412		2.85		mg/kg	0.5	0.048	0.48	06/26/12
Cobalt	7440-48-4	LA-505-412		10.0		mg/kg	0.5	0.024	0.12	06/26/12
Copper	7440-50-8	LA-505-412		13.4		mg/kg	0.5	0.048	0.48	06/26/12
Vanadium	7440-62-2	LA-505-412		67.2		mg/kg	0.5	0.097	0.97	06/26/12
Zinc	7440-66-6	LA-505-412		41.4		mg/kg	0.5	0.48	4.8	06/26/12
Lead	7439-92-1	LA-505-412		2.45		mg/kg	0.5	0.024	0.24	06/26/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809006
SAF# F11-095
Sample ID B2H1K9

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury	7439-97-6	LA-505-412	U	<0.024		mg/kg	0.5	0.024	0.097	06/26/12
Molybdenum	7439-98-7	LA-505-412		0.401		mg/kg	0.5	0.024	0.24	06/26/12
Strontium	7440-24-6	LA-505-412		22.9		mg/kg	0.5	0.048	0.48	06/26/12
Tin	7440-31-5	LA-505-412		0.446		mg/kg	0.5	0.024	0.24	06/26/12
Uranium	7440-61-1	LA-505-412		0.436		mg/kg	0.5	0.024	0.12	06/26/12
Arsenic	7440-38-2	LA-505-412		1.51		mg/kg	0.5	0.097	0.97	06/26/12
Selenium	7782-49-2	LA-505-412	B	0.315		mg/kg	0.5	0.24	2.4	06/26/12
Boron	7440-42-8	LA-505-412	B	0.362		mg/kg	0.5	0.24	2.4	06/26/12
Preparation for Cr6 (SO)										**06/26/12**
Hexavalent chromium										
~~Hexavalent chromium~~	~~18540-29-9~~	~~LA-265-403~~	~~U~~	~~<0.10~~		~~ug/g~~	~~1~~	~~0.10~~	~~0.50~~	~~06/26/12~~

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809007
SAF# F11-095
Sample ID B2L1J0

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anion Prep (S)										**06/21/12**
Anions by Ion Chromatography (Solid)										
~~Chloride~~	~~16887-00-6~~	~~LA-533-410~~	~~B~~	~~3.32~~		~~mg/kg~~	~~1~~	~~3.0~~	~~21~~	~~06/21/12~~
~~Sulfate~~	~~14808-79-8~~	~~LA-533-410~~		~~84.2~~		~~mg/kg~~	~~1~~	~~5.7~~	~~54~~	~~06/21/12~~
ICPMS Prep (S)										**06/25/12**
ICP-2008 MS All possible metal										
Manganese	7439-96-5	LA-505-412		276		mg/kg	0.5	0.053	0.53	06/26/12
Nickel	7440-02-0	LA-505-412		7.89		mg/kg	0.5	0.053	0.53	06/26/12
Silver	7440-22-4	LA-505-412	B	0.0356		mg/kg	0.5	0.027	0.27	06/26/12
Antimony	7440-36-0	LA-505-412		2.17		mg/kg	0.5	0.16	1.6	06/26/12
Barium	7440-39-3	LA-505-412		67.2		mg/kg	0.5	0.11	1.1	06/26/12
Beryllium	7440-41-7	LA-505-412	B	0.321		mg/kg	0.5	0.053	0.53	06/26/12
Cadmium	7440-43-9	LA-505-412	B	0.0765		mg/kg	0.5	0.027	0.27	06/26/12
Chromium	7440-47-3	LA-505-412		5.49		mg/kg	0.5	0.053	0.53	06/26/12
Cobalt	7440-48-4	LA-505-412		8.95		mg/kg	0.5	0.027	0.13	06/26/12
Copper	7440-50-8	LA-505-412		18.0		mg/kg	0.5	0.053	0.53	06/26/12
Vanadium	7440-62-2	LA-505-412		31.8		mg/kg	0.5	0.11	1.1	06/26/12
Zinc	7440-66-6	LA-505-412		46.1		mg/kg	0.5	0.53	5.3	06/26/12
Lead	7439-92-1	LA-505-412		4.36		mg/kg	0.5	0.027	0.27	06/26/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809007
SAF# F11-095
Sample ID B2L1J0

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury	7439-97-6	LA-505-412	U	<0.027		mg/kg	0.5	0.027	0.11	06/26/12
Molybdenum	7439-98-7	LA-505-412		0.325		mg/kg	0.5	0.027	0.27	06/26/12
Strontium	7440-24-6	LA-505-412		35.8		mg/kg	0.5	0.053	0.53	06/26/12
Tin	7440-31-5	LA-505-412		2.72		mg/kg	0.5	0.027	0.27	06/26/12
Uranium	7440-61-1	LA-505-412		0.577		mg/kg	0.5	0.027	0.13	06/26/12
Arsenic	7440-38-2	LA-505-412		9.11		mg/kg	0.5	0.11	1.1	06/26/12
Selenium	7782-49-2	LA-505-412	B	0.286		mg/kg	0.5	0.27	2.7	06/26/12
Boron	7440-42-8	LA-505-412	B	1.22		mg/kg	0.5	0.27	2.7	06/26/12
Preparation for Cr6 (SO)										**06/26/12**
Hexavalent chromium										
~~Hexavalent chromium~~	~~18540-29-9~~	~~LA-265-403~~	~~U~~	~~<0.10~~		~~ug/g~~	~~1~~	~~0.10~~	~~0.52~~	~~06/26/12~~

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809008
SAF# F11-095
Sample ID B2L1J4

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anion Prep (S)										**06/21/12**
Anions by Ion Chromatography (Solid)										
~~Chloride~~	~~16887-00-6~~	~~LA-533-410~~	~~B~~	~~4.22~~		~~mg/kg~~	~~1~~	~~3.0~~	~~21~~	~~06/21/12~~
~~Sulfate~~	~~14808-79-8~~	~~LA-533-410~~		~~76.7~~		~~mg/kg~~	~~1~~	~~5.7~~	~~54~~	~~06/21/12~~
ICPMS Prep (S)										**06/25/12**
ICP-2008 MS All possible metal										
Manganese	7439-96-5	LA-505-412		282		mg/kg	0.5	0.051	0.51	06/26/12
Nickel	7440-02-0	LA-505-412		8.59		mg/kg	0.5	0.051	0.51	06/26/12
Silver	7440-22-4	LA-505-412	B	0.0463		mg/kg	0.5	0.025	0.25	06/26/12
Antimony	7440-36-0	LA-505-412		2.53		mg/kg	0.5	0.15	1.5	06/26/12
Barium	7440-39-3	LA-505-412		67.5		mg/kg	0.5	0.10	1.0	06/26/12
Beryllium	7440-41-7	LA-505-412	B	0.404		mg/kg	0.5	0.051	0.51	06/26/12
Cadmium	7440-43-9	LA-505-412	B	0.0738		mg/kg	0.5	0.025	0.25	06/26/12
Chromium	7440-47-3	LA-505-412		6.62		mg/kg	0.5	0.051	0.51	06/26/12
Cobalt	7440-48-4	LA-505-412		8.60		mg/kg	0.5	0.025	0.13	06/26/12
Copper	7440-50-8	LA-505-412		18.5		mg/kg	0.5	0.051	0.51	06/26/12
Vanadium	7440-62-2	LA-505-412		42.8		mg/kg	0.5	0.10	1.0	06/26/12
Zinc	7440-66-6	LA-505-412		50.4		mg/kg	0.5	0.51	5.1	06/26/12
Lead	7439-92-1	LA-505-412		5.66		mg/kg	0.5	0.025	0.25	06/26/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809008
SAF# F11-095
Sample ID B2L1J4

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury	7439-97-6	LA-505-412	B	0.0316		mg/kg	0.5	0.025	0.10	06/26/12
Molybdenum	7439-98-7	LA-505-412		0.410		mg/kg	0.5	0.025	0.25	06/26/12
Strontium	7440-24-6	LA-505-412		39.8		mg/kg	0.5	0.051	0.51	06/26/12
Tin	7440-31-5	LA-505-412		1.44		mg/kg	0.5	0.025	0.25	06/26/12
Uranium	7440-61-1	LA-505-412		0.622		mg/kg	0.5	0.025	0.13	06/26/12
Arsenic	7440-38-2	LA-505-412		10.2		mg/kg	0.5	0.10	1.0	06/26/12
Selenium	7782-49-2	LA-505-412	B	0.261		mg/kg	0.5	0.25	2.5	06/26/12
Boron	7440-42-8	LA-505-412	B	1.63		mg/kg	0.5	0.25	2.5	06/26/12
Preparation for Cr6 (SO)										**06/26/12**
Hexavalent chromium										
~~Hexavalent chromium~~	~~18540-29-9~~	~~LA-265-403~~	~~U~~	~~<0.10~~		~~ug/g~~	~~1~~	~~0.10~~	~~0.51~~	~~06/26/12~~

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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)

EH
07/13/12

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809009
SAF# F11-095
Sample ID B2L1J8

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anion Prep (S)										**06/21/12**
Anions by Ion Chromatography (Solid)										
~~Chloride~~	~~16887-00-6~~	~~LA-533-410~~	~~U~~	~~<2.9~~		~~mg/kg~~	~~1~~	~~2.9~~	~~21~~	~~06/21/12~~
~~Sulfate~~	~~14808-79-8~~	~~LA-533-410~~	~~B~~	~~14.5~~		~~mg/kg~~	~~1~~	~~5.6~~	~~53~~	~~06/21/12~~
ICPMS Prep (S)										**06/25/12**
ICP-2008 MS All possible metal										
Manganese	7439-96-5	LA-505-412		297		mg/kg	0.5	0.056	0.56	06/26/12
Nickel	7440-02-0	LA-505-412		7.39		mg/kg	0.5	0.056	0.56	06/26/12
Silver	7440-22-4	LA-505-412	B	0.0289		mg/kg	0.5	0.028	0.28	06/26/12
Antimony	7440-36-0	LA-505-412	B	0.284		mg/kg	0.5	0.17	1.7	06/26/12
Barium	7440-39-3	LA-505-412		48.5		mg/kg	0.5	0.11	1.1	06/26/12
Beryllium	7440-41-7	LA-505-412	B	0.285		mg/kg	0.5	0.056	0.56	06/26/12
Cadmium	7440-43-9	LA-505-412	B	0.0362		mg/kg	0.5	0.028	0.28	06/26/12
Chromium	7440-47-3	LA-505-412		3.05		mg/kg	0.5	0.056	0.56	06/26/12
Cobalt	7440-48-4	LA-505-412		10.3		mg/kg	0.5	0.028	0.14	06/26/12
Copper	7440-50-8	LA-505-412		15.8		mg/kg	0.5	0.056	0.56	06/26/12
Vanadium	7440-62-2	LA-505-412		69.7		mg/kg	0.5	0.11	1.1	06/26/12
Zinc	7440-66-6	LA-505-412		44.7		mg/kg	0.5	0.56	5.6	06/26/12
Lead	7439-92-1	LA-505-412		2.58		mg/kg	0.5	0.028	0.28	06/26/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809009
SAF# F11-095
Sample ID B2L1J8

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury	7439-97-6	LA-505-412	U	<0.028		mg/kg	0.5	0.028	0.11	06/26/12
Molybdenum	7439-98-7	LA-505-412		0.423		mg/kg	0.5	0.028	0.28	06/26/12
Strontium	7440-24-6	LA-505-412		24.7		mg/kg	0.5	0.056	0.56	06/26/12
Tin	7440-31-5	LA-505-412		0.484		mg/kg	0.5	0.028	0.28	06/26/12
Uranium	7440-61-1	LA-505-412		0.439		mg/kg	0.5	0.028	0.14	06/26/12
Arsenic	7440-38-2	LA-505-412		2.38		mg/kg	0.5	0.11	1.1	06/26/12
Selenium	7782-49-2	LA-505-412	B	0.305		mg/kg	0.5	0.28	2.8	06/26/12
Boron	7440-42-8	LA-505-412	B	0.374		mg/kg	0.5	0.28	2.8	06/26/12
Preparation for Cr6 (SO)										**06/26/12**
Hexavalent chromium										
~~Hexavalent chromium~~	~~18540-29-9~~	~~LA-265-403~~	~~U~~	~~<0.10~~		~~ug/g~~	~~1~~	~~0.10~~	~~0.51~~	~~06/26/12~~

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809010
SAF# F11-095
Sample ID B2L1N0

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anion Prep (S)										**06/21/12**
Anions by Ion Chromatography (Solid)										
~~Chloride~~	~~16887-00-6~~	~~LA-533-410~~	~~U~~	~~<2.9~~		~~mg/kg~~	~~1~~	~~2.9~~	~~20~~	~~06/21/12~~
~~Sulfate~~	~~14808-79-8~~	~~LA-533-410~~	~~B~~	~~7.38~~		~~mg/kg~~	~~1~~	~~5.5~~	~~52~~	~~06/21/12~~
ICPMS Prep (S)										**06/25/12**
ICP-2008 MS All possible metal										
Manganese	7439-96-5	LA-505-412		307		mg/kg	0.5	0.050	0.50	06/26/12
Nickel	7440-02-0	LA-505-412		6.59		mg/kg	0.5	0.050	0.50	06/26/12
Silver	7440-22-4	LA-505-412	B	0.0335		mg/kg	0.5	0.025	0.25	06/26/12
Antimony	7440-36-0	LA-505-412	U	<0.15		mg/kg	0.5	0.15	1.5	06/26/12
Barium	7440-39-3	LA-505-412		49.6		mg/kg	0.5	0.10	1.0	06/26/12
Beryllium	7440-41-7	LA-505-412	B	0.244		mg/kg	0.5	0.050	0.50	06/26/12
Cadmium	7440-43-9	LA-505-412	B	0.0485		mg/kg	0.5	0.025	0.25	06/26/12
Chromium	7440-47-3	LA-505-412		2.56		mg/kg	0.5	0.050	0.50	06/26/12
Cobalt	7440-48-4	LA-505-412		10.8		mg/kg	0.5	0.025	0.13	06/26/12
Copper	7440-50-8	LA-505-412		14.0		mg/kg	0.5	0.050	0.50	06/26/12
Vanadium	7440-62-2	LA-505-412		68.0		mg/kg	0.5	0.10	1.0	06/26/12
Zinc	7440-66-6	LA-505-412		44.0		mg/kg	0.5	0.50	5.0	06/26/12
Lead	7439-92-1	LA-505-412		2.82		mg/kg	0.5	0.025	0.25	06/26/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809010
SAF# F11-095
Sample ID B2L1N0

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury	7439-97-6	LA-505-412	U	<0.025		mg/kg	0.5	0.025	0.10	06/26/12
Molybdenum	7439-98-7	LA-505-412		0.438		mg/kg	0.5	0.025	0.25	06/26/12
Strontium	7440-24-6	LA-505-412		22.6		mg/kg	0.5	0.050	0.50	06/26/12
Tin	7440-31-5	LA-505-412		0.449		mg/kg	0.5	0.025	0.25	06/26/12
Uranium	7440-61-1	LA-505-412		0.470		mg/kg	0.5	0.025	0.13	06/26/12
Arsenic	7440-38-2	LA-505-412		1.42		mg/kg	0.5	0.10	1.0	06/26/12
Selenium	7782-49-2	LA-505-412	B	0.324		mg/kg	0.5	0.25	2.5	06/26/12
Boron	7440-42-8	LA-505-412	U	<0.25		mg/kg	0.5	0.25	2.5	06/26/12
Preparation for Cr6 (SO)										**06/26/12**
Hexavalent chromium										
~~Hexavalent chromium~~	~~18540-29-9~~	~~LA-265-403~~	~~U~~	~~<0.10~~		~~ug/g~~	~~1~~	~~0.10~~	~~0.51~~	~~06/26/12~~

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809011
SAF# F11-095
Sample ID B2L1N4

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anion Prep (S)										**06/25/12**
Anions by Ion Chromatography (Solid)										
~~Chloride~~	~~16887-00-6~~	~~LA-533-410~~	~~B~~	~~3.67~~		~~mg/kg~~	~~1~~	~~2.9~~	~~20~~	~~06/25/12~~
~~Sulfate~~	~~14808-79-8~~	~~LA-533-410~~	~~B~~	~~26.7~~		~~mg/kg~~	~~1~~	~~5.5~~	~~52~~	~~06/25/12~~
ICPMS Prep (S)										**06/27/12**
ICP-2008 MS All possible metal										
Manganese	7439-96-5	LA-505-412		317		mg/kg	0.5	0.054	0.54	06/27/12
Nickel	7440-02-0	LA-505-412		6.43		mg/kg	0.5	0.054	0.54	06/27/12
Silver	7440-22-4	LA-505-412	B	0.0327		mg/kg	0.5	0.027	0.27	06/27/12
Antimony	7440-36-0	LA-505-412	B	0.200		mg/kg	0.5	0.16	1.6	06/27/12
Barium	7440-39-3	LA-505-412		48.2		mg/kg	0.5	0.11	1.1	06/27/12
Beryllium	7440-41-7	LA-505-412	B	0.179		mg/kg	0.5	0.054	0.54	06/27/12
Cadmium	7440-43-9	LA-505-412	B	0.0546		mg/kg	0.5	0.027	0.27	06/27/12
Chromium	7440-47-3	LA-505-412		3.00		mg/kg	0.5	0.054	0.54	06/27/12
Cobalt	7440-48-4	LA-505-412		10.7		mg/kg	0.5	0.027	0.13	06/27/12
Copper	7440-50-8	LA-505-412	J+	14.7		mg/kg	0.5	0.054	0.54	06/27/12
Vanadium	7440-62-2	LA-505-412		63.3		mg/kg	0.5	0.11	1.1	06/27/12
Zinc	7440-66-6	LA-505-412		43.7		mg/kg	0.5	0.54	5.4	06/27/12
Lead	7439-92-1	LA-505-412		2.58		mg/kg	0.5	0.027	0.27	06/27/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809011
SAF# F11-095
Sample ID B2L1N4

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury	7439-97-6	LA-505-412	U	<0.027		mg/kg	0.5	0.027	0.11	06/27/12
Molybdenum	7439-98-7	LA-505-412		0.498		mg/kg	0.5	0.027	0.27	06/27/12
Strontium	7440-24-6	LA-505-412		22.1		mg/kg	0.5	0.054	0.54	06/27/12
Tin	7440-31-5	LA-505-412		0.491		mg/kg	0.5	0.027	0.27	06/27/12
Uranium	7440-61-1	LA-505-412		0.481		mg/kg	0.5	0.027	0.13	06/27/12
Arsenic	7440-38-2	LA-505-412		1.77		mg/kg	0.5	0.11	1.1	06/27/12
Selenium	7782-49-2	LA-505-412	B	0.293		mg/kg	0.5	0.27	2.7	06/27/12
Boron	7440-42-8	LA-505-412	B	0.505		mg/kg	0.5	0.27	2.7	06/27/12
Preparation for Cr6 (SO)										**06/27/12**
Hexavalent chromium										
~~Hexavalent chromium~~	~~18540-29-9~~	~~LA-265-403~~	~~U~~	~~<0.10~~		~~ug/g~~	~~1~~	~~0.10~~	~~0.50~~	~~06/28/12~~

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809012
SAF# F11-095
Sample ID B2L1N8

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ		Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anion Prep (S)											**06/25/12**
Anions by Ion Chromatography (Solid)											
~~Chloride~~	~~16887-00-6~~	~~LA-533-410~~	~~U~~		~~<2.9~~		~~mg/kg~~	~~1~~	~~2.9~~	~~21~~	~~06/25/12~~
~~Sulfate~~	~~14808-79-8~~	~~LA-533-410~~	~~B~~		~~10.4~~		~~mg/kg~~	~~1~~	~~5.6~~	~~53~~	~~06/25/12~~
ICPMS Prep (S)											**06/27/12**
ICP-2008 MS All possible metal											
Manganese	7439-96-5	LA-505-412			163		mg/kg	0.5	0.052	0.52	06/27/12
Nickel	7440-02-0	LA-505-412			3.44		mg/kg	0.5	0.052	0.52	06/27/12
Silver	7440-22-4	LA-505-412	U		<0.026		mg/kg	0.5	0.026	0.26	06/27/12
Antimony	7440-36-0	LA-505-412	U		<0.16		mg/kg	0.5	0.16	1.6	06/27/12
Barium	7440-39-3	LA-505-412			24.4		mg/kg	0.5	0.10	1.0	06/27/12
Beryllium	7440-41-7	LA-505-412	B		0.138		mg/kg	0.5	0.052	0.52	06/27/12
Cadmium	7440-43-9	LA-505-412	B		0.0359		mg/kg	0.5	0.026	0.26	06/27/12
Chromium	7440-47-3	LA-505-412	C	J	1.28		mg/kg	0.5	0.052	0.52	06/27/12
Cobalt	7440-48-4	LA-505-412			5.88		mg/kg	0.5	0.026	0.13	06/27/12
Copper	7440-50-8	LA-505-412		J+	8.66		mg/kg	0.5	0.052	0.52	06/27/12
Vanadium	7440-62-2	LA-505-412			31.9		mg/kg	0.5	0.10	1.0	06/27/12
Zinc	7440-66-6	LA-505-412			23.6		mg/kg	0.5	0.52	5.2	06/27/12
Lead	7439-92-1	LA-505-412			1.28		mg/kg	0.5	0.026	0.26	06/27/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809012
SAF# F11-095
Sample ID B2L1N8

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury	7439-97-6	LA-505-412	U	<0.026		mg/kg	0.5	0.026	0.10	06/27/12
Molybdenum	7439-98-7	LA-505-412	B	0.231		mg/kg	0.5	0.026	0.26	06/27/12
Strontium	7440-24-6	LA-505-412		12.9		mg/kg	0.5	0.052	0.52	06/27/12
Tin	7440-31-5	LA-505-412	B	0.235		mg/kg	0.5	0.026	0.26	06/27/12
Uranium	7440-61-1	LA-505-412		0.239		mg/kg	0.5	0.026	0.13	06/27/12
Arsenic	7440-38-2	LA-505-412	B	0.781		mg/kg	0.5	0.10	1.0	06/27/12
Selenium	7782-49-2	LA-505-412	U	<0.26		mg/kg	0.5	0.26	2.6	06/27/12
Boron	7440-42-8	LA-505-412	B	0.277		mg/kg	0.5	0.26	2.6	06/27/12
Preparation for Cr6 (SO)										**06/27/12**
Hexavalent chromium										
~~Hexavalent chromium~~	~~18540-29-9~~	~~LA-265-403~~	~~U~~	~~<0.10~~		~~ug/g~~	~~1~~	~~0.10~~	~~0.50~~	~~06/28/12~~

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809013
SAF# F11-095
Sample ID B2L1P2

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ		Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anion Prep (S)											**06/25/12**
Anions by Ion Chromatography (Solid)											
~~Chloride~~	~~16887-00-6~~	~~LA-533-410~~	~~U~~		~~<3.0~~		~~mg/kg~~	~~1~~	~~3.0~~	~~21~~	~~06/25/12~~
~~Sulfate~~	~~14808-79-8~~	~~LA-533-410~~	~~B~~		~~10.4~~		~~mg/kg~~	~~1~~	~~5.6~~	~~53~~	~~06/25/12~~
ICPMS Prep (S)											**06/27/12**
ICP-2008 MS All possible metal											
Manganese	7439-96-5	LA-505-412			159		mg/kg	0.5	0.052	0.52	06/27/12
Nickel	7440-02-0	LA-505-412			3.44		mg/kg	0.5	0.052	0.52	06/27/12
Silver	7440-22-4	LA-505-412	U		<0.026		mg/kg	0.5	0.026	0.26	06/27/12
Antimony	7440-36-0	LA-505-412	U		<0.16		mg/kg	0.5	0.16	1.6	06/27/12
Barium	7440-39-3	LA-505-412			24.2		mg/kg	0.5	0.10	1.0	06/27/12
Beryllium	7440-41-7	LA-505-412	B		0.107		mg/kg	0.5	0.052	0.52	06/27/12
Cadmium	7440-43-9	LA-505-412	B		0.0330		mg/kg	0.5	0.026	0.26	06/27/12
Chromium	7440-47-3	LA-505-412	C	J	1.24		mg/kg	0.5	0.052	0.52	06/27/12
Cobalt	7440-48-4	LA-505-412			5.78		mg/kg	0.5	0.026	0.13	06/27/12
Copper	7440-50-8	LA-505-412		J+	8.50		mg/kg	0.5	0.052	0.52	06/27/12
Vanadium	7440-62-2	LA-505-412			31.3		mg/kg	0.5	0.10	1.0	06/27/12
Zinc	7440-66-6	LA-505-412			23.1		mg/kg	0.5	0.52	5.2	06/27/12
Lead	7439-92-1	LA-505-412			1.26		mg/kg	0.5	0.026	0.26	06/27/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809013
SAF# F11-095
Sample ID B2L1P2

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury	7439-97-6	LA-505-412	U	<0.026		mg/kg	0.5	0.026	0.10	06/27/12
Molybdenum	7439-98-7	LA-505-412	B	0.206		mg/kg	0.5	0.026	0.26	06/27/12
Strontium	7440-24-6	LA-505-412		12.9		mg/kg	0.5	0.052	0.52	06/27/12
Tin	7440-31-5	LA-505-412	B	0.219		mg/kg	0.5	0.026	0.26	06/27/12
Uranium	7440-61-1	LA-505-412		0.238		mg/kg	0.5	0.026	0.13	06/27/12
Arsenic	7440-38-2	LA-505-412	B	0.805		mg/kg	0.5	0.10	1.0	06/27/12
Selenium	7782-49-2	LA-505-412	U	<0.26		mg/kg	0.5	0.26	2.6	06/27/12
Boron	7440-42-8	LA-505-412	B	0.309		mg/kg	0.5	0.26	2.6	06/27/12
Preparation for Cr6 (SO)										**06/27/12**
Hexavalent chromium										
~~Hexavalent chromium~~	~~18540-29-9~~	~~LA-265-403~~	~~U~~	~~<0.10~~		~~ug/g~~	~~1~~	~~0.10~~	~~0.51~~	~~06/28/12~~

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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)

EH
07/13/12

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809014
SAF# F11-095
Sample ID B2L1L0

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anion Prep (S)										**06/25/12**
Anions by Ion Chromatography (Solid)										
~~Chloride~~	~~16887-00-6~~	~~LA-533-410~~	~~U~~	~~<3.0~~		~~mg/kg~~	~~1~~	~~3.0~~	~~21~~	~~06/25/12~~
~~Sulfate~~	~~14808-79-8~~	~~LA-533-410~~	~~B~~	~~10.2~~		~~mg/kg~~	~~1~~	~~5.6~~	~~54~~	~~06/25/12~~
ICPMS Prep (S)										**06/27/12**
ICP-2008 MS All possible metal										
Manganese	7439-96-5	LA-505-412		235		mg/kg	0.5	0.048	0.48	06/27/12
Nickel	7440-02-0	LA-505-412		5.52		mg/kg	0.5	0.048	0.48	06/27/12
Silver	7440-22-4	LA-505-412	B	0.0288		mg/kg	0.5	0.024	0.24	06/27/12
Antimony	7440-36-0	LA-505-412	U	<0.14		mg/kg	0.5	0.14	1.4	06/27/12
Barium	7440-39-3	LA-505-412		57.2		mg/kg	0.5	0.096	0.96	06/27/12
Beryllium	7440-41-7	LA-505-412	B	0.214		mg/kg	0.5	0.048	0.48	06/27/12
Cadmium	7440-43-9	LA-505-412	B	0.0668		mg/kg	0.5	0.024	0.24	06/27/12
Chromium	7440-47-3	LA-505-412		1.89		mg/kg	0.5	0.048	0.48	06/27/12
Cobalt	7440-48-4	LA-505-412		8.92		mg/kg	0.5	0.024	0.12	06/27/12
Copper	7440-50-8	LA-505-412		14.2	J+	mg/kg	0.5	0.048	0.48	06/27/12
Vanadium	7440-62-2	LA-505-412		38.9		mg/kg	0.5	0.096	0.96	06/27/12
Zinc	7440-66-6	LA-505-412		32.1		mg/kg	0.5	0.48	4.8	06/27/12
Lead	7439-92-1	LA-505-412		2.41		mg/kg	0.5	0.024	0.24	06/27/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809014
SAF# F11-095
Sample ID B2L1L0

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury	7439-97-6	LA-505-412	U	<0.024		mg/kg	0.5	0.024	0.096	06/27/12
Molybdenum	7439-98-7	LA-505-412		0.272		mg/kg	0.5	0.024	0.24	06/27/12
Strontium	7440-24-6	LA-505-412		24.8		mg/kg	0.5	0.048	0.48	06/27/12
Tin	7440-31-5	LA-505-412		0.359		mg/kg	0.5	0.024	0.24	06/27/12
Uranium	7440-61-1	LA-505-412		0.441		mg/kg	0.5	0.024	0.12	06/27/12
Arsenic	7440-38-2	LA-505-412		2.11		mg/kg	0.5	0.096	0.96	06/27/12
Selenium	7782-49-2	LA-505-412	B	0.332		mg/kg	0.5	0.24	2.4	06/27/12
Boron	7440-42-8	LA-505-412	B	0.338		mg/kg	0.5	0.24	2.4	06/27/12
Preparation for Cr6 (SO)										**06/27/12**
Hexavalent chromium										
~~Hexavalent chromium~~	~~18540-29-9~~	~~LA-265-403~~	~~U~~	~~<0.10~~		~~ug/g~~	~~1~~	~~0.10~~	~~0.51~~	~~06/28/12~~

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809015
SAF# F11-095
Sample ID B2H1L3

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anion Prep (S)										**06/25/12**
Anions by Ion Chromatography (Solid)										
~~Chloride~~	~~16887-00-6~~	~~LA-533-410~~	~~U~~	~~<3.0~~		~~mg/kg~~	~~1~~	~~3.0~~	~~21~~	~~06/25/12~~
~~Sulfate~~	~~14808-79-8~~	~~LA-533-410~~	~~B~~	~~14.2~~		~~mg/kg~~	~~1~~	~~5.6~~	~~53~~	~~06/25/12~~
ICPMS Prep (S)										**06/27/12**
ICP-2008 MS All possible metal										
Manganese	7439-96-5	LA-505-412		247		mg/kg	0.5	0.054	0.54	06/27/12
Nickel	7440-02-0	LA-505-412		5.54		mg/kg	0.5	0.054	0.54	06/27/12
Silver	7440-22-4	LA-505-412	B	0.0329		mg/kg	0.5	0.027	0.27	06/27/12
Antimony	7440-36-0	LA-505-412	U	<0.16		mg/kg	0.5	0.16	1.6	06/27/12
Barium	7440-39-3	LA-505-412		46.8		mg/kg	0.5	0.11	1.1	06/27/12
Beryllium	7440-41-7	LA-505-412	B	0.229		mg/kg	0.5	0.054	0.54	06/27/12
Cadmium	7440-43-9	LA-505-412	B	0.0588		mg/kg	0.5	0.027	0.27	06/27/12
Chromium	7440-47-3	LA-505-412		2.13		mg/kg	0.5	0.054	0.54	06/27/12
Cobalt	7440-48-4	LA-505-412		9.43		mg/kg	0.5	0.027	0.13	06/27/12
Copper	7440-50-8	LA-505-412	J+	14.5		mg/kg	0.5	0.054	0.54	06/27/12
Vanadium	7440-62-2	LA-505-412		45.4		mg/kg	0.5	0.11	1.1	06/27/12
Zinc	7440-66-6	LA-505-412		37.4		mg/kg	0.5	0.54	5.4	06/27/12
Lead	7439-92-1	LA-505-412		2.18		mg/kg	0.5	0.027	0.27	06/27/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809015
SAF# F11-095
Sample ID B2H1L3

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury	7439-97-6	LA-505-412	U	<0.027		mg/kg	0.5	0.027	0.11	06/27/12
Molybdenum	7439-98-7	LA-505-412		0.301		mg/kg	0.5	0.027	0.27	06/27/12
Strontium	7440-24-6	LA-505-412		22.1		mg/kg	0.5	0.054	0.54	06/27/12
Tin	7440-31-5	LA-505-412		0.359		mg/kg	0.5	0.027	0.27	06/27/12
Uranium	7440-61-1	LA-505-412		0.424		mg/kg	0.5	0.027	0.13	06/27/12
Arsenic	7440-38-2	LA-505-412		1.19		mg/kg	0.5	0.11	1.1	06/27/12
Selenium	7782-49-2	LA-505-412	B	0.293		mg/kg	0.5	0.27	2.7	06/27/12
Boron	7440-42-8	LA-505-412	B	0.457		mg/kg	0.5	0.27	2.7	06/27/12
Preparation for Cr6 (SO)										**06/27/12**
Hexavalent chromium										
~~Hexavalent chromium~~	~~18540-29-9~~	~~LA-265-403~~	~~U~~	~~<0.10~~		~~ug/g~~	~~1~~	~~0.10~~	~~0.51~~	~~06/28/12~~

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809016
SAF# F11-095
Sample ID B2H1L7

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anion Prep (S)										**06/25/12**
Anions by Ion Chromatography (Solid)										
~~Chloride~~	~~16887-00-6~~	~~LA-533-410~~	~~U~~	~~<2.9~~		~~mg/kg~~	~~1~~	~~2.9~~	~~20~~	~~06/25/12~~
~~Sulfate~~	~~14808-79-8~~	~~LA-533-410~~	~~B~~	~~6.32~~		~~mg/kg~~	~~1~~	~~5.5~~	~~53~~	~~06/25/12~~
ICPMS Prep (S)										**06/27/12**
ICP-2008 MS All possible metal										
Manganese	7439-96-5	LA-505-412		252		mg/kg	0.5	0.052	0.52	06/27/12
Nickel	7440-02-0	LA-505-412		5.39		mg/kg	0.5	0.052	0.52	06/27/12
Silver	7440-22-4	LA-505-412	U	<0.026		mg/kg	0.5	0.026	0.26	06/27/12
Antimony	7440-36-0	LA-505-412	U	<0.16		mg/kg	0.5	0.16	1.6	06/27/12
Barium	7440-39-3	LA-505-412		43.9		mg/kg	0.5	0.10	1.0	06/27/12
Beryllium	7440-41-7	LA-505-412	B	0.263		mg/kg	0.5	0.052	0.52	06/27/12
Cadmium	7440-43-9	LA-505-412	B	0.0464		mg/kg	0.5	0.026	0.26	06/27/12
Chromium	7440-47-3	LA-505-412		1.97		mg/kg	0.5	0.052	0.52	06/27/12
Cobalt	7440-48-4	LA-505-412		9.37		mg/kg	0.5	0.026	0.13	06/27/12
Copper	7440-50-8	LA-505-412	J+	13.7		mg/kg	0.5	0.052	0.52	06/27/12
Vanadium	7440-62-2	LA-505-412		49.9		mg/kg	0.5	0.10	1.0	06/27/12
Zinc	7440-66-6	LA-505-412		36.7		mg/kg	0.5	0.52	5.2	06/27/12
Lead	7439-92-1	LA-505-412		2.16		mg/kg	0.5	0.026	0.26	06/27/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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)

EH
07/13/12

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809016
SAF# F11-095
Sample ID B2H1L7

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury	7439-97-6	LA-505-412	U	<0.026		mg/kg	0.5	0.026	0.10	06/27/12
Molybdenum	7439-98-7	LA-505-412		0.331		mg/kg	0.5	0.026	0.26	06/27/12
Strontium	7440-24-6	LA-505-412		21.8		mg/kg	0.5	0.052	0.52	06/27/12
Tin	7440-31-5	LA-505-412		0.363		mg/kg	0.5	0.026	0.26	06/27/12
Uranium	7440-61-1	LA-505-412		0.402		mg/kg	0.5	0.026	0.13	06/27/12
Arsenic	7440-38-2	LA-505-412		1.22		mg/kg	0.5	0.10	1.0	06/27/12
Selenium	7782-49-2	LA-505-412	U	<0.26		mg/kg	0.5	0.26	2.6	06/27/12
Boron	7440-42-8	LA-505-412	B	0.403		mg/kg	0.5	0.26	2.6	06/27/12
Preparation for Cr6 (SO)										**06/27/12**
Hexavalent chromium										
~~Hexavalent chromium~~	~~18540-29-9~~	~~LA-265-403~~	~~U~~	~~<0.10~~		~~ug/g~~	~~1~~	~~0.10~~	~~0.51~~	~~06/28/12~~

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809017
SAF# F11-095
Sample ID B2H1M1

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anion Prep (S)										**06/25/12**
Anions by Ion Chromatography (Solid)										
~~Chloride~~	~~16887-00-6~~	~~LA-533-410~~	~~U~~	~~<2.9~~		~~mg/kg~~	~~1~~	~~2.9~~	~~20~~	~~06/25/12~~
~~Sulfate~~	~~14808-79-8~~	~~LA-533-410~~	~~B~~	~~12.9~~		~~mg/kg~~	~~1~~	~~5.5~~	~~52~~	~~06/25/12~~
ICPMS Prep (S)										**06/27/12**
ICP-2008 MS All possible metal										
Manganese	7439-96-5	LA-505-412		362		mg/kg	0.5	0.051	0.51	06/27/12
Nickel	7440-02-0	LA-505-412		8.45		mg/kg	0.5	0.051	0.51	06/27/12
Silver	7440-22-4	LA-505-412	B	0.0333		mg/kg	0.5	0.026	0.26	06/27/12
Antimony	7440-36-0	LA-505-412	U	<0.15		mg/kg	0.5	0.15	1.5	06/27/12
Barium	7440-39-3	LA-505-412		59.7		mg/kg	0.5	0.10	1.0	06/27/12
Beryllium	7440-41-7	LA-505-412	B	0.237		mg/kg	0.5	0.051	0.51	06/27/12
Cadmium	7440-43-9	LA-505-412	B	0.0636		mg/kg	0.5	0.026	0.26	06/27/12
Chromium	7440-47-3	LA-505-412		4.28		mg/kg	0.5	0.051	0.51	06/27/12
Cobalt	7440-48-4	LA-505-412		12.1		mg/kg	0.5	0.026	0.13	06/27/12
Copper	7440-50-8	LA-505-412	J+	16.8		mg/kg	0.5	0.051	0.51	06/27/12
Vanadium	7440-62-2	LA-505-412		60.7		mg/kg	0.5	0.10	1.0	06/27/12
Zinc	7440-66-6	LA-505-412		46.9		mg/kg	0.5	0.51	5.1	06/27/12
Lead	7439-92-1	LA-505-412		3.84		mg/kg	0.5	0.026	0.26	06/27/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809017
SAF# F11-095
Sample ID B2H1M1

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury	7439-97-6	LA-505-412	U	<0.026		mg/kg	0.5	0.026	0.10	06/27/12
Molybdenum	7439-98-7	LA-505-412		0.400		mg/kg	0.5	0.026	0.26	06/27/12
Strontium	7440-24-6	LA-505-412		27.0		mg/kg	0.5	0.051	0.51	06/27/12
Tin	7440-31-5	LA-505-412		0.528		mg/kg	0.5	0.026	0.26	06/27/12
Uranium	7440-61-1	LA-505-412		0.546		mg/kg	0.5	0.026	0.13	06/27/12
Arsenic	7440-38-2	LA-505-412		2.20		mg/kg	0.5	0.10	1.0	06/27/12
Selenium	7782-49-2	LA-505-412	B	0.353		mg/kg	0.5	0.26	2.6	06/27/12
Boron	7440-42-8	LA-505-412	B	0.429		mg/kg	0.5	0.26	2.6	06/27/12
Preparation for Cr6 (SO)										**06/27/12**
Hexavalent chromium										
~~Hexavalent chromium~~	~~18540-29-9~~	~~LA-265-403~~	~~U~~	~~<0.10~~		~~ug/g~~	~~1~~	~~0.10~~	~~0.51~~	~~06/28/12~~

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809018
SAF# F11-095
Sample ID B2L1R0

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anion Prep (S)										**06/25/12**
Anions by Ion Chromatography (Solid)										
~~Chloride~~	~~16887-00-6~~	~~LA-533-410~~	~~U~~	~~<3.0~~		~~mg/kg~~	~~1~~	~~3.0~~	~~21~~	~~06/25/12~~
~~Sulfate~~	~~14808-79-8~~	~~LA-533-410~~	~~B~~	~~14.9~~		~~mg/kg~~	~~1~~	~~5.6~~	~~53~~	~~06/25/12~~
ICPMS Prep (S)										**06/27/12**
ICP-2008 MS All possible metal										
Manganese	7439-96-5	LA-505-412		290		mg/kg	0.5	0.056	0.56	06/27/12
Nickel	7440-02-0	LA-505-412		5.86		mg/kg	0.5	0.056	0.56	06/27/12
Silver	7440-22-4	LA-505-412	U	<0.028		mg/kg	0.5	0.028	0.28	06/27/12
Antimony	7440-36-0	LA-505-412	U	<0.17		mg/kg	0.5	0.17	1.7	06/27/12
Barium	7440-39-3	LA-505-412		58.3		mg/kg	0.5	0.11	1.1	06/27/12
Beryllium	7440-41-7	LA-505-412	B	0.198		mg/kg	0.5	0.056	0.56	06/27/12
Cadmium	7440-43-9	LA-505-412	B	0.0802		mg/kg	0.5	0.028	0.28	06/27/12
Chromium	7440-47-3	LA-505-412		2.41		mg/kg	0.5	0.056	0.56	06/27/12
Cobalt	7440-48-4	LA-505-412		10.4		mg/kg	0.5	0.028	0.14	06/27/12
Copper	7440-50-8	LA-505-412	J+	15.8		mg/kg	0.5	0.056	0.56	06/27/12
Vanadium	7440-62-2	LA-505-412		57.4		mg/kg	0.5	0.11	1.1	06/27/12
Zinc	7440-66-6	LA-505-412		41.1		mg/kg	0.5	0.56	5.6	06/27/12
Lead	7439-92-1	LA-505-412		2.54		mg/kg	0.5	0.028	0.28	06/27/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809018
SAF# F11-095
Sample ID B2L1R0

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury	7439-97-6	LA-505-412	U	<0.028		mg/kg	0.5	0.028	0.11	06/27/12
Molybdenum	7439-98-7	LA-505-412		0.383		mg/kg	0.5	0.028	0.28	06/27/12
Strontium	7440-24-6	LA-505-412		25.9		mg/kg	0.5	0.056	0.56	06/27/12
Tin	7440-31-5	LA-505-412		0.436		mg/kg	0.5	0.028	0.28	06/27/12
Uranium	7440-61-1	LA-505-412		0.507		mg/kg	0.5	0.028	0.14	06/27/12
Arsenic	7440-38-2	LA-505-412		1.73		mg/kg	0.5	0.11	1.1	06/27/12
Selenium	7782-49-2	LA-505-412	B	0.359		mg/kg	0.5	0.28	2.8	06/27/12
Boron	7440-42-8	LA-505-412	B	0.304		mg/kg	0.5	0.28	2.8	06/27/12
Preparation for Cr6 (SO)										**06/27/12**
Hexavalent chromium										
~~Hexavalent chromium~~	~~18540-29-9~~	~~LA-265-403~~	~~U~~	~~<0.10~~		~~ug/g~~	~~1~~	~~0.10~~	~~0.51~~	~~06/28/12~~

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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)

EH
07/13/12

Appendix 4

Laboratory Narrative and Chain-of-Custody Documentation

CASE NARRATIVE

CH2MHill Plateau Remediation Company
P.O. Box 1600
MS B3-60
Richland, Washington 99352
June 8, 2012
Attention: Scot Fitzgerald

SDG	: SL1272
Number of Samples	: sample
Sample Matrix	: Soil
Data Deliverable	: Summary
Date SDG Closed	: May 25, 2012

II. Introduction

On May 25, 2012, a soil sample was received by TestAmerica - St. Louis for chemical analysis. The sample was received within temperature criteria. See the COC and CUR forms for documentation of any variations on receipt conditions and temperature. Upon receipt, the sample was given a laboratory Id to correspond with specific client Id. 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: F11-095.

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.

CH2M Hill Plateau Remediation Company

June 8, 2012
SDG: SL1272

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.

ICP Metals

Batch: 2150029

The MS (MSD) recoveries for Copper and Manganese are outside the established QC limits. The RPD values are within method acceptance criteria indicating possible matrix interference. Method performance is demonstrated by acceptable LCS recovery. These analytes have been qualified with an "N" flag in the associated sample.
Affected Samples:
F2E250455 (1): B2L1R5

The CCV bracketing the initial QC (ICSA, ICSAB, and LLC) was outside acceptable QC limits for Boron indicating a potential bias. The initial QC all passed within acceptable limits. The samples were bracketed by acceptable CCV/CCBs. Results are reported.
Affected Samples:
F2E250455 (1): B2L1R5

There were no observations or nonconformances for the following methods: Ion Chromatography, PCBs, and Mercury.

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:

Chenise Y. Lambert-Sykes
St. Louis Project Manager

SL1272

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	F11-095-533	PAGE 1 OF 1

COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C; AIR QUALITY: ☐; DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183KE Pothole Soil Sample 35	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	
ICE CHEST NO.: GWS-248	FIELD LOGBOOK NO.: HNF-N-507-24	ACTUAL SAMPLE DEPTH: 5ft.	COA: 302548ES10	METHOD OF SHIPMENT: FEDERAL EXPRESS; ORIGINAL
SHIPPED TO: TestAmerica St. Louis	OFFSITE PROPERTY NO.: SEE PTR		BILL OF LADING/AIR BILL NO.: SEE PTR 7984 3403 4749	

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

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool~4C	Cool~4C	Cool~4C
HOLDING TIME	1 yr/1 yr	6 Months	28 Days/48 Hours
TYPE OF CONTAINER	aG	G/P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	120mL	60mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	IC Anions - 300.0 {Chloride, Sulfate};

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2L1R5	SOIL	MAY 20 2012	1152	✓	✓	✓

TFVL 12- 039

CHAIN OF POSSESSION	SIGN/ PRINT NAMES
RELINQUISHED BY/REMOVED FROM: FM Hall, CHPRC — DATE/TIME: MAY 20 2012	RECEIVED BY/STORED IN: SSU #1 — DATE/TIME: MAY 20 2012
RELINQUISHED BY/REMOVED FROM: SSU #1 — DATE/TIME: 5-24-12 0820	RECEIVED BY/STORED IN: MaWhite — DATE/TIME: 5-24-12 0820
RELINQUISHED BY/REMOVED FROM: MaWhite — DATE/TIME: 5-24-12 1400	RECEIVED BY/STORED IN: FEDEX — DATE/TIME:
RELINQUISHED BY/REMOVED FROM: FED EX — DATE/TIME:	RECEIVED BY/STORED IN: Swilson — DATE/TIME: 5-25-12 0920
RELINQUISHED BY/REMOVED FROM: — DATE/TIME:	RECEIVED BY/STORED IN: — DATE/TIME:
RELINQUISHED BY/REMOVED FROM: — DATE/TIME:	RECEIVED BY/STORED IN: — DATE/TIME:
RELINQUISHED BY/REMOVED FROM: — DATE/TIME:	RECEIVED BY/STORED IN: — DATE/TIME:

SPECIAL INSTRUCTIONS

** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};
(2) ICP Metals - 6020 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP Metals - 6020 (Add-on) {Arsenic, Beryllium, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; Mercury - 7471 - (CV);

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

PRINTED ON 4/2/2012

A-6003-618 (REV 2)

SDG: SL1272
TestAmerica St. Louis
257 of 596
6 of 30

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

CASE NARRATIVE

CH2MHill Plateau Remediation Company
P.O. Box 1600
MS B3-60
Richland, Washington 99352
July 06, 2012
Attention: Scot Fitzgerald

TestAmerica Laboratories, Inc.

SDG	: SL1278
Number of Samples	: sample
Sample Matrix	: Soil
Data Deliverable	: Summary
Date SDG Closed	: June 26, 2012

II. Introduction

On June 26, 2012, a soil sample was received by TestAmerica - St. Louis for chemical analysis. The sample was 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: F11-095

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.

13715 Rider Trail North Earth City, MO 63045 **tel** 314.298.8566 **fax** 314.298.8757 **www.testamericainc.com**

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

CH2M Hill Plateau Remediation Company

July 6, 2012

SDG: SL1278

TestAmerica Laboratories, Inc.

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.

PCBs

Batch: 2180117

The CCV recovery is outside the QC limits of greater than 20%D. The CCV excursion occurred in the secondary column which is only used for confirmation, and no data is reported from it.
Affected Samples:
F2F260421 (1): B2L1T0

ICPMS Metals

Batch: 2179022

Boron and Silver were detected in the Method Blank at a concentration above the MDL but below the RL. These analytes have been qualified with a "C" flag in the associated sample.
Affected Samples:
F2F260421 (1): B2L1T0

The MS (MSD) recovery for Manganese is outside the established QC limits. The RPD is within method acceptance criteria indicating possible matrix interference. Method performance is demonstrated by acceptable LCS recovery. This analytes has been qualified with an "N" flag in the associated sample.
Affected Samples:
F2F260421 (1): B2L1T0

The CCV recovery was outside the upper QC limit (greater than 110%) for Boron indicating a potential high bias for this analyte in the samples associated with this CCV. This analytes was not detected above the reporting limit in the associated sample.
Affected Samples:
F2F260421 (1): B2L1T0

13715 Rider Trail North Earth City, MO 63045 **tel** 314.298.8566 **fax** 314.298.8757 **www.testamericainc.com**

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

CH2M Hill Plateau Remediation Company

July 6, 2012

SDG: SL1278

TestAmerica Laboratories, Inc.

There were no observations or nonconformances for the following methods: Anions and Mercury

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:

Chenise Y. Lambert-Sykes
St. Louis Project Manager

13715 Rider Trail North Earth City, MO 63045 **tel** 314.298.8566 **fax** 314.298.8757 **www.testamericainc.com**

SL1278

SL1278 CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-095-538

PAGE 1 OF 1

COLLECTOR CUL179 Frank Hall	**COMPANY CONTACT** TRENT, SJ	**TELEPHONE NO.** 373-5869	**PROJECT COORDINATOR** TRENT, SJ
SAMPLING LOCATION 183.2KE Pothole Soil Sample 36	**PROJECT DESIGNATION** 183 KE/KW Water Treatment Plant - Soil		**SAF NO.** F11-095
ICE CHEST NO. GWS-098	**FIELD LOGBOOK NO.** HNF-N-507-25	**ACTUAL SAMPLE DEPTH** 10'	**COA** 302548ES10
SHIPPED TO TestAmerica St. Louis	**OFFSITE PROPERTY NO.** SEE PTR		**BILL OF LADING/AIR BILL NO.** ~~SEE PTR~~ 7985 4820 0995

PRICE CODE 8C

AIR QUALITY ☐

DATA TURNAROUND 15 Days / 15 Days

METHOD OF SHIPMENT FEDERAL EXPRESS

ORIGINAL

RW 6/25/12

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

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool~4C	Cool~4C	Cool~4C
HOLDING TIME	1 yr/1 yr	6 Months	28 Days/48 Hours
TYPE OF CONTAINER	aG	G/P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	120mL	60mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	IC Anions - 300.0 {Chloride, Sulfate};

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2L1T0	SOIL	JUN 20 2012	0925	✓	✓	✓

FA-12-039

CHAIN OF POSSESSION	SIGN/ PRINT NAMES
RELINQUISHED BY/REMOVED FROM Frank Hall — DATE/TIME JUN 20 2012 1300	RECEIVED BY/STORED IN SSU#1 — DATE/TIME JUN 20 2012 1300
RELINQUISHED BY/REMOVED FROM SSU#1 — DATE/TIME JUN 25 2012 0815	RECEIVED BY/STORED IN L.D. Wall CHPRC — DATE/TIME JUN 25 2012 0815
RELINQUISHED BY/REMOVED FROM L.D. Wall CHPRC — DATE/TIME JUN 25 2012 1400	RECEIVED BY/STORED IN FEDEX — DATE/TIME
RELINQUISHED BY/REMOVED FROM FED EX — DATE/TIME	RECEIVED BY/STORED IN NICHOLAS OWENS — DATE/TIME 6/26/12 0940
RELINQUISHED BY/REMOVED FROM — DATE/TIME	RECEIVED BY/STORED IN — DATE/TIME
RELINQUISHED BY/REMOVED FROM — DATE/TIME	RECEIVED BY/STORED IN — DATE/TIME
RELINQUISHED BY/REMOVED FROM — DATE/TIME	RECEIVED BY/STORED IN — DATE/TIME

SPECIAL INSTRUCTIONS

** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};
(2) ICP Metals - 6020 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP Metals - 6020 (Add-on) {Arsenic, Beryllium, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; Mercury - 7471 - (CV);

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

PRINTED ON 4/2/2012

A-6003-618 (REV 2)

SSGF#SL1278

TestAmerica St. Louis

Attachment 2
Narrative
WSCF120661

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), Master Contract 39818, Revision 3, "Laboratory Analytical Services to CHPRC Soil and Groundwater Remediation Project."*

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. In addition, Sample Discrepancy Report 12-268 is attached regarding a metal QC 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

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

- All applicable QC controls are within the established limits.

Attachment 2
Narrative
WSCF120661

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.

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 SDR12-268 regarding Strontium LCS failure is attached to this report.
- All other applicable QC controls are within the established limits.

Organic Comments

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

- All applicable QC controls are within the established limits.

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

Attachment 2
Narrative
WSCF120661

SAMPLE ISSUE RESOLUTION

SIR NUM	SDR12-268
REV NUM	0
DATE INITIATED	5/30/2012

SAMPLE EVENT INFORMATION

SAF NUM(S)	F11-095, F10-255
OPERABLE UNIT(S)	100-KR-2
PROJECT(S)	183 KE/KW, 100 K RA
SAMPLE EVENT TITLE(S)	100 K Remedial Action, 183 KE/KW WTP
LABORATORY	Waste Sampling & Characterization

SAMPLING INFORMATION

NUMBER OF SAMPLES	20
SAMPLE NUMBERS	B2F188, B2F189, B2F190, B2F191, B2H1C3, B2H1D1, B2H1D5, B2H1D9, B2H1F3, B2H1F7, B2H1H1, B2H1H5, B2H1J3, B2H1J7, B2L1L4, B2L1L8, B2L1M2, B2L1M6, B2L1P6, B2L1T4
SAMPLE MATRIX	SOIL
COLLECTION DATE	5/20/2012 - 5/20/2012
SDG NUM	WSCF120665, WSCF120662, WSCF120661

ISSUE BACKGROUND

CLASS	Laboratory Issue
TYPE	Quality Control Failure
DESCRIPTION	Strontium LCS was slightly low at 74.2% with control limits of 78-119%. The MS (98.3) and MSD (95.7) were both within the control limits of 70-130%. The blank was non-detect.

DISPOSITION

DESCRIPTION	PROPOSED DISPOSITION: Report the data as-is and note the QC failures in the case narrative.
JUSTIFICATION	ACCEPTED DISPOSITION: Accept proposed resolution.

SUBMITTED BY: Heather Medley/WSCF DATE: 5/30/12

ACCEPTED BY: Steve Trent/CHPRC DATE: 5/30/12
Jennifer Hammons/CHPRC DATE: 5/30/12

A-6003-640 (03/30)

PAGE 1 of 1

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-436	PAGE 1 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 4 Soil Sample 2	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: N/A	FIELD LOGBOOK NO.: HNF-N-507-24	ACTUAL SAMPLE DEPTH: 5 ft.	COA: 302548ES10	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: 120661

PRESERVATION	Cool~4C	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS PCB	SEE ITEM (2) IN SPECIAL INSTRUCTIONS 2008	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2H1J3	SOIL	MAY 2 0 2012	1214	✓	✓	✓	✓	

GH 5/18/12

TRVL- 12- 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: FM Hall, CHPRC	DATE/TIME: MAY 2 0 2012 1430	RECEIVED BY/STORED IN: SJ#1	DATE/TIME: MAY 2 0 2012 1430	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: SJ#1	DATE/TIME: MAY 2 1 2012 0830	RECEIVED BY/STORED IN: CW Brotherton, Jr, CHPRC	DATE/TIME: MAY 2 1 2012 0830	
RELINQUISHED BY/REMOVED FROM: CW Brotherton, Jr, CHPRC	DATE/TIME: MAY 2 1 2012 0900	RECEIVED BY/STORED IN: TA Frazier	DATE/TIME: MAY 2 1 2012 0900	
RELINQUISHED BY/REMOVED FROM: CHPRC	DATE/TIME:	RECEIVED BY/STORED IN:	DATE/TIME:	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
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 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-436	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 183.2KE Pothole 4 Soil Sample 2	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO. N/A	FIELD LOGBOOK NO. HNF-N-507-24	ACTUAL SAMPLE DEPTH 5 ft.	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ 3/15/12

TRVL- 12- 039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-500	PAGE 1 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 10 Soil Sample 1	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: N/A	FIELD LOGBOOK NO.: HNF-N-507-24	ACTUAL SAMPLE DEPTH: Surface	COA: 302548E510	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2L1M2 2	SOIL	MAY 2 0 2012	1240	✓	✓	✓	✓	

DH 5/18/12

TRVL- 12- 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: MAY 2 0 2012 1430	RECEIVED BY/STORED IN: SSV #1	DATE/TIME: MAY 2 0 2012 1430	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: SSV #1	DATE/TIME: MAY 2 1 2012 0830	RECEIVED BY/STORED IN: DW Brotherton, Jr CHPRC	DATE/TIME: MAY 2 1 2012 0830	
RELINQUISHED BY/REMOVED FROM: DW Brotherton, Jr CHPRC	DATE/TIME: MAY 2 1 2012 0900	RECEIVED BY/STORED IN: TA Prosin	DATE/TIME: MAY 2 1 2012 0900	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

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

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-500	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 183.2KE Pothole 10 Soil Sample 1	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO. N/A	FIELD LOGBOOK NO. HNF-N-507-24-	ACTUAL SAMPLE DEPTH Surface	COA 302548E510	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha - {Gross alpha}; Gross Beta - {Gross beta};~~ 5/18/12

TRVL- 12- 039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-408	PAGE 1 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 2 Soil Sample 1	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: N/A	FIELD LOGBOOK NO.: HNF-N-507-24	ACTUAL SAMPLE DEPTH: Surface	COA: 302548ES10	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; SE=Sediment; T=Tissue; V=Vegetation; W=Water; WI=Wipe; X=Other

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool~4C	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2H1D5 3	SOIL	5/20/12	1148	✓	✓	✓	✓	

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CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: MAY 20 2012 1430	RECEIVED BY/STORED IN: SSU#1	DATE/TIME: MAY 20 2012 1430	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: SSU#1	DATE/TIME: MAY 21 2012 0830	RECEIVED BY/STORED IN: DW Brotherton, Jr CHPRC	DATE/TIME: MAY 21 2012 0830	
RELINQUISHED BY/REMOVED FROM: DW Brotherton, Jr CHPRC	DATE/TIME: MAY 21 2012 0900	RECEIVED BY/STORED IN: TA Frazier	DATE/TIME: MAY 21 2012 0900	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

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

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-408	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 183.2KE Pothole 2 Soil Sample 1	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO. n/a	FIELD LOGBOOK NO. HNF-N-507-24	ACTUAL SAMPLE DEPTH Surface	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100 K Facility until it is determined if any additional analyses are needed.~~ ☐ 162 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha - {Gross alpha}; - Gross Beta - {Gross beta}~~; 3/19/12

TR-L- 12- 039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-428	PAGE 1 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 3 Soil Sample 3	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: 1/2	FIELD LOGBOOK NO.: HNF -N-507-24	ACTUAL SAMPLE DEPTH: 10 ft.	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2H1H5 4	SOIL	MAY 2 0 2012	1232	✓	✓	✓	✓	

QH 5/18/12

TRL 12 - 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: FM Hall, CHPRC	DATE/TIME: MAY 2 0 2012 1430	RECEIVED BY/STORED IN: SSLL#1	DATE/TIME: MAY 2 0 2012 1430	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: SSLL#1	DATE/TIME: MAY 2 1 2012 0830	RECEIVED BY/STORED IN: DW Brotherton, Jr., CHPRC	DATE/TIME: MAY 2 1 2012 0830	
RELINQUISHED BY/REMOVED FROM: DW Brotherton, Jr., CHPRC	DATE/TIME: MAY 2 1 2012 0900	RECEIVED BY/STORED IN: TA Frazier	DATE/TIME: MAY 2 1 2012 0900	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

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

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-428	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 3 Soil Sample 3	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	
ICE CHEST NO.	FIELD LOGBOOK NO. HNF -N-507-24-	ACTUAL SAMPLE DEPTH 10 ft	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ AJJ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}~~; 9K 5/13/12

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A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F11-095-524	PAGE 1 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C / AIR QUALITY: ☐ / DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole Soil Sample 33	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	
ICE CHEST NO.: N/A	FIELD LOGBOOK NO.: HNF-N-507 24	ACTUAL SAMPLE DEPTH: 5 ft.	COA: 302548E510	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	8G	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2L1P6 5	SOIL	MAY 2 0 2012	1115	✓	✓	✓	✓	

TRVL- 12- 039

CHAIN OF POSSESSION	DATE/TIME	SIGN/ PRINT NAMES	DATE/TIME
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	MAY 2 0 2012 1430	RECEIVED BY/STORED IN:	MAY 2 0 2012 1430
RELINQUISHED BY/REMOVED FROM:	MAY 2 1 2012 0830	RECEIVED BY/STORED IN: DW Brotherton, CHPRC	MAY 2 1 2012 0830
RELINQUISHED BY/REMOVED FROM: DW Brotherton, CHPRC	MAY 2 1 2012 0900	RECEIVED BY/STORED IN: TA Frazin	MAY 2 1 2012 0900
RELINQUISHED BY/REMOVED FROM:		RECEIVED BY/STORED IN:	
RELINQUISHED BY/REMOVED FROM:		RECEIVED BY/STORED IN:	
RELINQUISHED BY/REMOVED FROM:		RECEIVED BY/STORED IN:	
RELINQUISHED BY/REMOVED FROM:		RECEIVED BY/STORED IN:	

SPECIAL INSTRUCTIONS: 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 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-524	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 183.2KE Pothole Soil Sample 33	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO. N/A	FIELD LOGBOOK NO. HNF-N-507 24	ACTUAL SAMPLE DEPTH 5 ft.	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ 5/3/12

TR-VL- 12 - 039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-400	PAGE 1 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 1 Soil Sample 2	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: N/A	FIELD LOGBOOK NO.: HNF-N-507 24	ACTUAL SAMPLE DEPTH: 5 ft	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196,	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2H1C3 6	SOIL	MAY 2 0 2012	1115	✓	✓	✓	✓	

gH 5/13/12

TRVL- 12- 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: FM Hall, CHPRC	DATE/TIME: MAY 2 0 2012 1430	RECEIVED BY/STORED IN: SSU #1	DATE/TIME: MAY 2 0 2012 1430	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: SSU #1	DATE/TIME: MAY 2 1 2012 0830	RECEIVED BY/STORED IN: DW Brotherton, Jr, CHPRC	DATE/TIME: MAY 2 1 2012 0830	
RELINQUISHED BY/REMOVED FROM: DW Brotherton, Jr, CHPRC	DATE/TIME: MAY 2 1 2012 0900	RECEIVED BY/STORED IN: TA Enzim Quality	DATE/TIME: MAY 2 1 2012 0900	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

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

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-400	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 1 Soil Sample 2	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	
ICE CHEST NO. N/A	FIELD LOGBOOK NO. HNF-N-507 24	ACTUAL SAMPLE DEPTH 5 ft.	COA 302548E510	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ KDZ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ JK 5/3/12

TRVL- 12 - 039

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A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-412	PAGE 1 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 2 Soil Sample 2	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	
ICE CHEST NO. N/A	FIELD LOGBOOK NO. HNF-N-507-24	ACTUAL SAMPLE DEPTH 5ft	COA 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2H1D9 7	SOIL	MAY 2 0 2012	1152	✓	✓	✓	✓	

3/14/12

TRVL-12-039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM FM Hall CHPRC	DATE/TIME MAY 2 0 2012 1430	RECEIVED BY/STORED IN SSU #1	DATE/TIME MAY 2 0 2012 1430	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM SSU #1	DATE/TIME MAY 2 1 2012 0830	RECEIVED BY/STORED IN DW Brotherton, Jr CHPRC	DATE/TIME MAY 2 1 2012 0830	
RELINQUISHED BY/REMOVED FROM DW Brotherton, Jr CHPRC	DATE/TIME MAY 2 1 2012 0900	RECEIVED BY/STORED IN TA Frazier	DATE/TIME MAY 2 1 2012 0900	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

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

PRINTED ON 3/14/2012

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Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-412	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 2 Soil Sample 2	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	
ICE CHEST NO. n/a	FIELD LOGBOOK NO. HNF-N-507-24	ACTUAL SAMPLE DEPTH 5 ft	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ 3/18/12

TRVL-12-039

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A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-496	PAGE 1 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 9 Soil Sample 2	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: N/A	FIELD LOGBOOK NO.: HNF-N-507-24	ACTUAL SAMPLE DEPTH: 10'	COA: 302548ES10	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	Cool--4C	Cool--4C	Cool--4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	50mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2L1L8 8	SOIL	5/20/12	1254	✓	✓	✓	✓	

24 5/18/12

039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: FM Hall, CHPRC	DATE/TIME: MAY 2 0 2012 1430	RECEIVED BY/STORED IN: SSU #1	DATE/TIME: MAY 2 0 2012 1430	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: SSU #1	DATE/TIME: MAY 2 1 2012 0830	RECEIVED BY/STORED IN: DW Brotherton, Jr, CHPRC	DATE/TIME: MAY 2 1 2012 0830	
RELINQUISHED BY/REMOVED FROM: DW Brotherton, Jr, CHPRC	DATE/TIME: MAY 2 1 2012 0900	RECEIVED BY/STORED IN: TA Brazin	DATE/TIME: MAY 2 1 2012 0900	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

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

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-496	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 9 Soil Sample 2	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	
ICE CHEST NO. N/A	FIELD LOGBOOK NO. HNF-N-507-24	ACTUAL SAMPLE DEPTH 10'	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ DJR 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ 9K 5/18/12

TRVL- 12- 039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-420	PAGE 1 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 3 Soil Sample 1	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: 0/2	FIELD LOGBOOK NO.: HNF-N-507-24	ACTUAL SAMPLE DEPTH: Surface	COA: 302548ES10	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

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	PRESERVATION	HOLDING TIME	TYPE OF CONTAINER	NO. OF CONTAINER(S)	VOLUME	SAMPLE ANALYSIS
				Cool~4C	1 yr/1 yr	aG	1	250mL	SEE ITEM (1) IN SPECIAL INSTRUCTIONS
				Cool~4C	6 Months	G/P	1	120mL	SEE ITEM (2) IN SPECIAL INSTRUCTIONS
				Cool~4C	30 Days	G/P	1	60mL	Chromium Hex - 7196;
				Cool~4C	28 Days/48 Hours	G/P	1	60mL	IC Anions - 300.0 (Chloride, Sulfate);
				None	6 Months	G/P	1	120mL	SEE ITEM (3) IN SPECIAL INSTRUCTIONS
B2H1F7	9 SOIL	MAY 2 0 2012	1228	✓	✓	✓	✓		

94 5/19/12

TRVL 12- 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: FM Hall, CHPRC	DATE/TIME: MAY 2 0 2012 1430	RECEIVED BY/STORED IN: SSW #1	DATE/TIME: MAY 2 0 2012 1430	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: SSW #1	DATE/TIME: MAY 2 1 2012 0830	RECEIVED BY/STORED IN: CW Brotherton, Jr, CHPRC	DATE/TIME: MAY 2 1 2012 0830	
RELINQUISHED BY/REMOVED FROM: CW Brotherton, Jr, CHPRC	DATE/TIME: MAY 2 1 2012 0900	RECEIVED BY/STORED IN: TA Frazier	DATE/TIME: MAY 2 1 2012 0900	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

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

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-420	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 183.2KE Pothole 3 Soil Sample 1	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO. N/A	FIELD LOGBOOK NO. HNF-N-507-24	ACTUAL SAMPLE DEPTH Surface	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ AJ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ JK 3/19/12

TRVL-12-039

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A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-440	PAGE 1 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 4 Soil Sample 3	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: N/A	FIELD LOGBOOK NO.: HNF-N-507-24-	ACTUAL SAMPLE DEPTH: 10 ft.	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2H1J7 10	SOIL	MAY 2 0 2012	1216	✓	✓	✓	✓	

JH 5/18/12

TRVL- 12- 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: MAY 2 0 2012 1430	RECEIVED BY/STORED IN: SSU#1	DATE/TIME: MAY 2 0 2012 1430	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: SSU#1	DATE/TIME: MAY 2 1 2012 0830	RECEIVED BY/STORED IN: DW Brotherton, Jr CHPRC	DATE/TIME: MAY 2 1 2012 0830	
RELINQUISHED BY/REMOVED FROM: DW Brotherton, Jr CHPRC	DATE/TIME: MAY 2 1 2012 0900	RECEIVED BY/STORED IN: TA Frazier	DATE/TIME: MAY 2 1 2012 0900	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

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

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-440	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 183.2KE Pothole 4 Soil Sample 3	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO. N/A	FIELD LOGBOOK NO. HNF-N-507-24	ACTUAL SAMPLE DEPTH 10ft.	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed.~~ ☐ — 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha - {Gross alpha}; Gross Beta - {Gross beta};~~

TRVL- 12- 039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

Attachment 2
Narrative Rev1
WSCF120665

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

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), Master Contract 39818, Revision 3, "Laboratory Analytical Services to CHPRC Soil and Groundwater Remediation Project."*

The narrative (Attachment 2) will address sample characteristics, analyses requested and general information in performance of the analytical methods. Additionally, a copy of the completed P&D # WSCF120665 is included with this case narrative. 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. In addition, Sample Discrepancy Report 12-268 is attached regarding a metal QC 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

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

Attachment 2
Narrative Rev1
WSCF120665

- All applicable QC controls are within the established limits.

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

- All applicable QC controls are within the established limits.

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

- Batch QC 201896
  - Sample Issue Resolution Form SDR12-268 regarding 200.8 LCS failure is attached to this report.
- Batch QC 202257
  - Copper – Detected in the Blank and evaluated. No sample results in this batch were affected. "C" Flags not required.
  - Manganese – Exceeded spiking levels by a factor of 4. Spike recoveries and associated RPDs are not valid.
  - All other applicable QC controls are within the established limits.

Organic Comments

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

- All applicable QC controls are within the established limits.

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

Attachment 2
Narrative Rev1
WSCF120665

SAMPLE ISSUE RESOLUTION

SIR NUM	SDR12-268
REV NUM	0
DATE INITIATED	5/30/2012

SAMPLE EVENT INFORMATION

SAF NUM(S)	F11-095, F10-255
OPERABLE UNIT(S)	100-KR-2
PROJECT(S)	183 KE/KW, 100 K RA
SAMPLE EVENT TITLE(S)	100 K Remedial Action, 183 KE/KW WTP
LABORATORY	Waste Sampling & Characterization

SAMPLING INFORMATION

NUMBER OF SAMPLES	20
SAMPLE NUMBERS	B2F188, B2F189, B2F190, B2F191, B2H1C3, B2H1D1, B2H1D5, B2H1D9, B2H1F3, B2H1F7, B2H1H1, B2H1H5, B2H1J3, B2H1J7, B2L1L4, B2L1L8, B2L1M2, B2L1M6, B2L1P6, B2L1T4
SAMPLE MATRIX	SOIL
COLLECTION DATE	5/20/2012 - 5/20/2012
SDG NUM	WSCF120665, WSCF120662, WSCF120661

ISSUE BACKGROUND

CLASS	Laboratory Issue
TYPE	Quality Control Failure
DESCRIPTION	Strontium LCS was slightly low at 74.2% with control limits of 78-119%. The MS (98.3) and MSD (95.7) were both within the control limits of 70-130%. The blank was non-detect.

DISPOSITION

DESCRIPTION	PROPOSED DISPOSITION: Report the data as-is and note the QC failures in the case narrative.
JUSTIFICATION	ACCEPTED DISPOSITION: Accept proposed resolution.

SUBMITTED BY: Heather Medley/WSCF DATE: 5/30/12

ACCEPTED BY: Steve Trent/CHPRC DATE: 5/30/12
Jennifer Hammons/CHPRC DATE: 5/30/12

A-6003-640 (03/30)

PAGE 1 of 1

Attachment 2
Narrative Rev1
WSCF120665

Problem and Discrepancy Report

WSCF

SDG WSCF120665

06/14/2012

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1. The data package has the following issues:

a) ICP-MS, beryllium was requested for samples B2H1B9, B2H1D1, B2H1F3, B2H1H1, B2H1H9, B2L1L4, and B2L1M6 but was not reported. (HC/E)

Resolution: *Provide appropriate correction*

Lab Response: **Beryllium has now been added.**

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F11-095-424	PAGE 1 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C; AIR QUALITY: ☐	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 3 Soil Sample 2	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	
ICE CHEST NO.:	FIELD LOGBOOK NO.: HNF-N-507-34-	ACTUAL SAMPLE DEPTH: 5 ft	COA: 302548E510	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: 120665

PRESERVATION	Cool~4C	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2H1H1	SOIL	MAY 2 0 2012	1230	✓	✓	✓	✓	

TRVL- 12- 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: MAY 2 0 2012 1430	RECEIVED BY/STORED IN: SSU#1	DATE/TIME: MAY 2 0 2012 1430	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: SSU-1 5/21/12	DATE/TIME: 0830	RECEIVED BY/STORED IN: R Ellingsworth 5/21/12	DATE/TIME: 0830	
RELINQUISHED BY/REMOVED FROM: R Ellingsworth 5/21/12	DATE/TIME: 0900	RECEIVED BY/STORED IN: TA Frazier 5/21/12	DATE/TIME: 0900	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

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			F11-095-424	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 3 Soil Sample 2	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-507-24	ACTUAL SAMPLE DEPTH 5 ft.	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ 4/18/12

TR-L-12-039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-404	PAGE 1 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 183.2KE Pothole 1 Soil Sample 3	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-507 24	ACTUAL SAMPLE DEPTH 10 ft.	COA 302548ES10	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	Cool<4C	Cool<4C	Cool<4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2H1D1 2	SOIL	MAY 2 0 2012	1112	✓	✓	✓	✓	

OK 5/31/12

TRVL- 12- 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM FM Hall CHPRC	DATE/TIME 1430 MAY 2 0 2012	RECEIVED BY/STORED IN SSU#1	DATE/TIME 1430 MAY 2 0 2012	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM SSU-1 5/21/12	DATE/TIME 0830	RECEIVED BY/STORED IN Z Ellingsworth 5/21/12	DATE/TIME 0830	
RELINQUISHED BY/REMOVED FROM R Ellingsworth 5/21/12	DATE/TIME 0900	RECEIVED BY/STORED IN TA Frazier 5/21/12	DATE/TIME 0900	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

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

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-404	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 1 Sol Sample 3	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-507 24	ACTUAL SAMPLE DEPTH 10 ft.	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ 5/3/12

TRVL 12- 039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-504	PAGE 1 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 10 Soil Sample 2	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-507-24	ACTUAL SAMPLE DEPTH: 10 ft	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2L1M6 3	SOIL	MAY 2 0 2012	1242	✓	✓	✓	✓	

94 5/18/12

TRVL- 12- 039

CHAIN OF POSSESSION	SIGN/ PRINT NAMES	SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC — DATE/TIME: MAY 2 0 2012 1430	RECEIVED BY/STORED IN: SSU #1 — DATE/TIME: MAY 2 0 2012 1430	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: SSU-1 — DATE/TIME: 5/21/12 0830	RECEIVED BY/STORED IN: R Ellingsworth — DATE/TIME: 5/21/12 0830	
RELINQUISHED BY/REMOVED FROM: R Ellingsworth — DATE/TIME: 5/21/12 0900	RECEIVED BY/STORED IN: TA Ramazin — DATE/TIME: 5/21/12 0900	
RELINQUISHED BY/REMOVED FROM — DATE/TIME	RECEIVED BY/STORED IN — DATE/TIME	
RELINQUISHED BY/REMOVED FROM — DATE/TIME	RECEIVED BY/STORED IN — DATE/TIME	
RELINQUISHED BY/REMOVED FROM — DATE/TIME	RECEIVED BY/STORED IN — DATE/TIME	
RELINQUISHED BY/REMOVED FROM — DATE/TIME	RECEIVED BY/STORED IN — DATE/TIME	

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

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-504	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 10 Soil Sample 2	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-507-24-	ACTUAL SAMPLE DEPTH 10 ft.	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~

3/16/12

TR-NL-12-039

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A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F11-095-416	PAGE 1 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C; AIR QUALITY: ☐	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 2 Soil Sample 3	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-507-24	ACTUAL SAMPLE DEPTH: 10 ft.	COA: 302548ES10	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, SE=Sediment, T=Tissue, V=Vegetation, W=Water, WI=Wipe, X=Other

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool~4C	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2H1F3 4	SOIL	MAY 2 0 2012	1150	✓	✓	✓	✓	

JH 5/18/12

TRVL- 12 - 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: MAY 2 0 2012 1430	RECEIVED BY/STORED IN: SJU #1	DATE/TIME: MAY 2 0 2012 1430	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: SJU-1	DATE/TIME: 5/21/12 0830	RECEIVED BY/STORED IN: R Ellingsworth	DATE/TIME: 5/21/12 0830	
RELINQUISHED BY/REMOVED FROM: R Ellingsworth	DATE/TIME: 5/21/12 0900	RECEIVED BY/STORED IN: TA Frazier	DATE/TIME: 5/21/12 0900	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

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

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

REVISED

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-416	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 183.2KE Pothole 2 Soil Sample 3	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-507-24-	ACTUAL SAMPLE DEPTH 10 ft	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ 173 5/15/12
(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};
(2) 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};
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ 9145/13/12

TR-AL- 12- 039

PRINTED ON 3/14/2012 A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-492	PAGE 1 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 9 Soil Sample 1	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-507-24	ACTUAL SAMPLE DEPTH: Surface	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7195;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2L1L4 5	SOIL	MAY 2 0 2012	1252	✓	✓	✓	✓	

RH 5/18/12

TF-VL- 12 - 039

CHAIN OF POSSESSION	DATE/TIME	SIGN/ PRINT NAMES: RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	MAY 2 0 2012 1430	SSG #1	MAY 2 0 2012 1430
RELINQUISHED BY/REMOVED FROM: SSG-1	5/21/12 0830	RECEIVED BY/STORED IN: R Ellingsworth	5/21/12 0830
RELINQUISHED BY/REMOVED FROM: R Ellingsworth	5/21/12 0900	RECEIVED BY/STORED IN: TA Frazier	5/21/12 0900
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS: 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 3/14/2012

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-492	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 9 Soil Sample 1	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-507-24	ACTUAL SAMPLE DEPTH Surface	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100 K Facility until it is determined if any additional analyses are needed. ☐~~ SJE 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ SH 3/18/12

TRAL 12- 039

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A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — F11-095-542 — PAGE 1 OF 1

COLLECTOR: L.D. Wall CHPRC; FM Hall CHPRC	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days	AIR QUALITY:	
SAMPLING LOCATION: 183.2KE Pothole Soil Sample 37	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil	SAF NO.: F11-095	
ICE CHEST NO.:	FIELD LOGBOOK NO.: HNF-N-507-24	ACTUAL SAMPLE DEPTH: N/A	COA: 302548ES10
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	Cool<4C	Cool<4C	Cool<4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2L1T4 6	SOIL	5/20/12	1055	X	X	X	X	

5/21/12

12- 039

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
L.D. Wall CHPRC; FM Hall CHPRC	MAY 20 2012 1430	SSLC #1	MAY 20 2012 1430
SSLC-1	5/21/12 0830	R Ellingsworth	5/21/12 0830
R Ellingsworth	5/21/12 0900	TA Frazier	5/21/12 0900

SPECIAL INSTRUCTIONS

** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};
(2) 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};
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ 5/31/12

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

PRINTED ON 4/2/2012 — A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-396	PAGE 1 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 183.2KE Pothole 1 Soil Sample 1	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-507 24	ACTUAL SAMPLE DEPTH Surface	COA 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2H1B9	SOIL	MAY 2 0 2012	1110	✓	✓	✓	✓	

94 5/21/12

TRVL- 12- 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM FM Hall CHPRC	DATE/TIME MAY 2 0 2012 1430	RECEIVED BY/STORED IN SSLee	DATE/TIME MAY 2 0 2012 1430	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM SSLee	DATE/TIME 5/21/12 0830	RECEIVED BY/STORED IN R Ellingsworth	DATE/TIME 5/21/12 0830	
RELINQUISHED BY/REMOVED FROM R Ellingsworth	DATE/TIME 5/21/12 0900	RECEIVED BY/STORED IN TA Enozian	DATE/TIME 5/21/12 0900	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

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

PRINTED ON 3/14/2012

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REVISED

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-396	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 183.2KE Pothole 1 Soil Sample 1	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-507 24	ACTUAL SAMPLE DEPTH Surface	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed.~~ ☐ 482 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ 9# 5/3/12

TRVL- 12- 039

PRINTED ON 3/14/2012

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Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-432	PAGE 1 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 183.2KE Pothole 4 Soil Sample 1	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-507-24	ACTUAL SAMPLE DEPTH Surface	COA 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2H1H9	SOIL	MAY 2 0 2012	1210	✓	✓	✓	✓	

JH 5/18/12

TRVL- 12- 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM FM Hall CHPRC	DATE/TIME MAY 2 0 2012 1430	RECEIVED BY/STORED IN SSU#1	DATE/TIME MAY 2 0 2012 1430	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM SSU-1	DATE/TIME 5/21/12 0830	RECEIVED BY/STORED IN R Ellingsworth	DATE/TIME 5/21/12 0830	
RELINQUISHED BY/REMOVED FROM R Ellingsworth	DATE/TIME 5/21/12 0900	RECEIVED BY/STORED IN TAF-Fedex	DATE/TIME 5/21/12 0900	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

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

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

REVISED

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-432	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 4 Soil Sample 1	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-507-24	ACTUAL SAMPLE DEPTH Surface	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~

5/10/12

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Attachment 2
Narrative
WSCF120809

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), Master Contract 39818, Revision 3, "Laboratory Analytical Services to CHPRC Soil and Groundwater Remediation Project."*

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

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

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

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

Analytical Methodology for Requested Analyses

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

Inorganic Comments

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

- All applicable QC controls are within the established limits.

Attachment 2
Narrative
WSCF120809

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.

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

- Batch QC 203697
  - Vanadium and Copper – Detected in the Blank and evaluated. Affected sample results in this batch were "C" Flagged.
- Batch QC 203871
  - Vanadium, Nickel, Chromium and Copper – Detected in the Blank and evaluated. Affected sample results in this batch were "C" Flagged.
  - Manganese – Exceeded spiking levels by a factor of 4. Spike recoveries and associated RPDs are not valid.
  - All other applicable QC controls are within the established limits.

Organic Comments

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

- 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			F11-095-545	PAGE 1 OF 1
COLLECTOR: Frank Hall	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole Soil Sample 38	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: (N/A)	FIELD LOGBOOK NO.: HNF-N-507-24	ACTUAL SAMPLE DEPTH: N/A	COA: 302548ES10	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: 120809

PRESERVATION	Cool~4C	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - /196; ✓	IC Anions - 300.0 (Chloride, Sulfate); ✓	SEE ITEM (3) IN SPECIAL INSTRUCTIONS 9/4/2012

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2L1T7	SOIL	JUN 20 2012	1025	✓	✓	✓	✓	

12- 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: Frank Hall	DATE/TIME: JUN 20 2012 1310	RECEIVED BY/STORED IN: C Johnson	DATE/TIME: JUN 20 2012 1310
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};
(2) 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};
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~
DA 5/3/12

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

PRINTED ON 4/2/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-444	PAGE 1 OF 2
COLLECTOR: Frank Hall	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 5 Soil Sample 1	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: (N/A)	FIELD LOGBOOK NO.: HNF-N-507-25	ACTUAL SAMPLE DEPTH: SURFACE	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - /10%;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2H1K1	SOIL	JUN 20 2012	1025	✓	✓	✓	✓	

9K 6/14/12

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: Frank Hall	DATE/TIME: JUN 20 2012 1310	RECEIVED BY/STORED IN: C Johnson	DATE/TIME: JUN 20 2012 1310
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
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

TPVL-12-039

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

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-444	PAGE 2 OF 2
COLLECTOR Frank Hall	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 183.2KE Pothole 5 Soil Sample 1	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY [ ]	15 Days / 15 Days
ICE CHEST NO. (N/A)	FIELD LOGBOOK NO. HNF-N-507-25	ACTUAL SAMPLE DEPTH SURFACE	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed.~~ ☐ 039 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ 9K 6/14/12

TRVL- 12 - 039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-480	PAGE 1 OF 2
COLLECTOR: Frank Hall	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 8 Soil Sample 1	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: (N/A)	FIELD LOGBOOK NO.: HNF-N-507-25	ACTUAL SAMPLE DEPTH: Surface	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None		
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months		
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P		
NO. OF CONTAINER(S)	1	1	1	1	1		
VOLUME	250mL	120mL	60mL	60mL	120mL		
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS		
SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME				
B2L1K2	SOIL	JUN 20 2012	0940	✓	✓	✓	

6/14/12

TRVL-12-039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: Frank Hall	DATE/TIME: JUN 20 2012 1310	RECEIVED BY/STORED IN: C Jones	DATE/TIME: JUN 20 2012 1310	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 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-480	PAGE 2 OF 2
COLLECTOR Frank Hall	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 183.2KE Pothole 8 Soil Sample 1	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO. (N/A)	FIELD LOGBOOK NO. HNF-N-507-25	ACTUAL SAMPLE DEPTH SURFACE	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ DST 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha - {Gross alpha}; Gross Beta - {Gross beta};~~ 94 6/14/12

IRVL 12- 039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-448	PAGE 1 OF 2
COLLECTOR: Frank Hall	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 5 Soil Sample 2	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: (N/A)	FIELD LOGBOOK NO.: ~~BNF-N-~~ 50725	ACTUAL SAMPLE DEPTH: 5'	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2H1K5 4	SOIL	JUN 20 2012	1030	✓	✓	✓	✓	

JH 6/14/12

TRVL-12-039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: Frank Hall	DATE/TIME: JUN 20 2012 1310	RECEIVED BY/STORED IN: C Jilhrn	DATE/TIME: JUN 20 2012 1310	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 3/14/2012

A-6003-618 (REV 7)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-448	PAGE 2 OF 2
COLLECTOR Frank Hall	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C AIR QUALITY ☐	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 5 Soil Sample 2	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095		
ICE CHEST NO. (N/A)	FIELD LOGBOOK NO. HNF-N-507-25	ACTUAL SAMPLE DEPTH 5'	COA 302548FS10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};
(2) 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};
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ 3/14/12

TR-12-039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F11-095-484	PAGE 1 OF 2
COLLECTOR: Frank Hall	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C; AIR QUALITY: ☐	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 8 Soil Sample 2	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	
ICE CHEST NO.: (N/A)	FIELD LOGBOOK NO.: HNF-N-502-25	ACTUAL SAMPLE DEPTH: 5'	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2L1K6 5	SOIL	JUN 2 0 2012	0944	✓	✓	✓	✓	

TRVL- 12- 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: Frank Hall	DATE/TIME: JUN 2 0 2012 1310	RECEIVED BY/STORED IN: C. Johnson	DATE/TIME: JUN 2 0 2012 1310	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 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-484	PAGE 2 OF 2
COLLECTOR Frank Hall	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C AIR QUALITY ☐	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 8 Soil Sample 2	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095		
ICE CHEST NO. (N/A)	FIELD LOGBOOK NO. HNF-N-507 25	ACTUAL SAMPLE DEPTH 5'	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ SJT 7/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ GH 6/14/12

TRVL 12- 039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-452	PAGE 1 OF 2
COLLECTOR: Frank Hall	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 5 Soil Sample 3	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: (N/A)	FIELD LOGBOOK NO.: HNF-N-507-25	ACTUAL SAMPLE DEPTH: 10'	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME				1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER				aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)				1	1	1	1	1
VOLUME				250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS				SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS
SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2H1K9	SOIL	JUN 2 0 2012	1033	✓	✓	✓	✓	

JH 6/14/12

TRVL- 12 - 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: Frank Hall	DATE/TIME: JUN 2 0 2012 1310	RECEIVED BY/STORED IN: C Jurnn	DATE/TIME: JUN 2 0 2012 1310	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 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-452	PAGE 2 OF 2
COLLECTOR Frank Hall	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C AIR QUALITY ☐	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 5 Soil Sample 3	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095		
ICE CHEST NO. (N/A)	FIELD LOGBOOK NO. HNF-N-507-25	ACTUAL SAMPLE DEPTH 10'	COA 302548FS10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ AJS 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~

9K 6/14/12

CR-12-039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F11-095-468	PAGE 1 OF 2
COLLECTOR: Frank Hall	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C / AIR QUALITY: ☐ / DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 7 Soil Sample 1	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	
ICE CHEST NO.: (N/A)	FIELD LOGBOOK NO.: 1NF-N-507 25	ACTUAL SAMPLE DEPTH: SURFACE	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2L1J0	SOIL	JUN 2 0 2012	1003	✓	✓	✓	✓	

QA 6/14/12

IPVL- 1 - 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: Frank Hall	DATE/TIME: JUN 2 0 2012 1310	RECEIVED BY/STORED IN: C Johnson	DATE/TIME: JUN 2 0 2012 1310	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 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-468	PAGE 2 OF 2
COLLECTOR Frank Hall	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 183.2KE Pothole 7 Sol Sample 1	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO. (N/A)	FIELD LOGBOOK NO. HNF-N- 507.25	ACTUAL SAMPLE DEPTH SURFACE	COA 302548FS10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};
(2) 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};
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~

6/14/12

IPL-12-039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-472	PAGE 1 OF 2
COLLECTOR: Frank Hall	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 7 Soil Sample 2	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-507-25	ACTUAL SAMPLE DEPTH: 5'	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None		
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months		
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P		
NO. OF CONTAINER(S)	1	1	1	1	1		
VOLUME	250mL	120mL	60mL	60mL	120mL		
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS		
SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME				
B2L1J4	SOIL	JUN 20 2012	1005	✓	✓	✓	✓

6/14/12

TRVL- 12 - 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: Frank Hall	DATE/TIME: JUN 20 2012 1310	RECEIVED BY/STORED IN: C Johnson	DATE/TIME: JUN 20 2012 1310	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 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-472	PAGE 2 OF 2
COLLECTOR Frank Hall	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C AIR QUALITY ☐	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 7 Soil Sample 2	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095		
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-302-25	ACTUAL SAMPLE DEPTH 5'	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed.~~ ☐ AJB 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};
(2) 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};
~~(3) Gross Alpha - {Gross alpha}; Gross Beta - {Gross beta};~~

GH 4/14/12

FRL 039

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A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-476	PAGE 1 OF 2
COLLECTOR: Frank Hall	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 7 Soil Sample 3	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: (N/A)	FIELD LOGBOOK NO.: INF-N- 507 25	ACTUAL SAMPLE DEPTH: 10'	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 Yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2L1J8	SOIL	JUN 2 0 2012	1008	✓	✓	✓	✓	

TRVL 12- 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: Frank Hall	DATE/TIME: JUN 2 0 2012 1310	RECEIVED BY/STORED IN: C Johnson	DATE/TIME: JUN 2 0 2012 1310	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 3/14/2012

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-476	PAGE 2 OF 2
COLLECTOR Frank Hall	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 183.2KE Pothole 7 Soil Sample 3	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO. (N/A)	FIELD LOGBOOK NO. HNF-N 507-25	ACTUAL SAMPLE DEPTH 10'	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500-mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ AJR 3/15/12
(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};
(2) 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};
~~(3) Gross Alpha - {Gross alpha}; Gross Beta - {Gross beta};~~
9K 6/14/12

TPVL- 14 - 039

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A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-508	PAGE 1 OF 2
COLLECTOR: Frank Hall	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: BC	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 11 Sol Sample 1	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: (N/A)	FIELD LOGBOOK NO.: HNF-N-507-25	ACTUAL SAMPLE DEPTH: SURFACE	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2L1N0 10	SOIL	JUN 20 2012	0835	✓	✓	✓	✓	

TRVL 12 - 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: Frank Hall	DATE/TIME: JUN 20 2012 1310	RECEIVED BY/STORED IN: C Johnson	DATE/TIME: JUN 20 2012 1310	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 3/14/2012

A-6003-616 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-508	PAGE 2 OF 2
COLLECTOR Frank Hall	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 183.2KE Pothole 11 Soil Sample 1	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO. (N/A)	FIELD LOGBOOK NO. HNF-N-507-25	ACTUAL SAMPLE DEPTH SURFACE	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};
(2) 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};
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}~~; PH 6/14/12

TRVL-12-039

PRINTED ON 3/14/2012 A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-512	PAGE 1 OF 2
COLLECTOR: Frank Hall	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 11 Soil Sample 2	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-507-25	ACTUAL SAMPLE DEPTH: SURFACE	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2L1N4	SOIL	~~6/20/12~~ 6/20/12	0839	✓	✓	✓	✓	

TRVL-12-039

CHAIN OF POSSESSION	DATE/TIME	SIGN/ PRINT NAMES: RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM: Frank Hall	JUN 20 2012 1310	C Johnson	JUN 20 2012 1310
RELINQUISHED BY/REMOVED FROM		RECEIVED BY/STORED IN	
RELINQUISHED BY/REMOVED FROM		RECEIVED BY/STORED IN	
RELINQUISHED BY/REMOVED FROM		RECEIVED BY/STORED IN	
RELINQUISHED BY/REMOVED FROM		RECEIVED BY/STORED IN	
RELINQUISHED BY/REMOVED FROM		RECEIVED BY/STORED IN	
RELINQUISHED BY/REMOVED FROM		RECEIVED BY/STORED IN	

SPECIAL INSTRUCTIONS: 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 3/14/2012

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-512	PAGE 2 OF 2
COLLECTOR Frank Hall	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C AIR QUALITY ☐	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 11 Soil Sample 2	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095		
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-507-25	ACTUAL SAMPLE DEPTH SURFACE	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};
(2) 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};
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~

3/15/12

TRVL- 12- 039

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A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-516	PAGE 1 OF 2
COLLECTOR: Frank Hall	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 12 Soil Sample 1	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: (N/A)	FIELD LOGBOOK NO.: HNF-N-507-25	ACTUAL SAMPLE DEPTH: SURFACE	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.		MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2L1N8	2	SOIL	JUN 20 2012	0857	✓	✓	✓	✓	

TRVL- 12- 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: Frank Hall	DATE/TIME: JUN 20 2012 1310	RECEIVED BY/STORED IN: C Johnson	DATE/TIME: JUN 20 2012 1310	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 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-516	PAGE 2 OF 2
COLLECTOR Frank Hall	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C AIR QUALITY ☐	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 12 Soil Sample 1	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095		
ICE CHEST NO. (N/A)	FIELD LOGBOOK NO. HNF-N-507-25	ACTUAL SAMPLE DEPTH SURFACE	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ AJJ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};
(2) 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};
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~

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TRVL- 12 - 039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-520	PAGE 1 OF 2
COLLECTOR: Frank Hell	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 12 Soil Sample 2	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: (N/A)	FIELD LOGBOOK NO.: HNF-N-507-25	ACTUAL SAMPLE DEPTH: 5'	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME			1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER			aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)			1	1	1	1	1
VOLUME			250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS			SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS
SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME				
B2L1P2 13	SOIL	JUN 20 2012	0900	✓	✓	✓	✓

TRVL- 12- 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: Frank Hell	DATE/TIME: JUN 20 2012 1310	RECEIVED BY/STORED IN: C Johnson	DATE/TIME: JUN 20 2012 1310	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 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-520	PAGE 2 OF 2
COLLECTOR Frank Hall	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C AIR QUALITY ☐	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 12 Soil Sample 2	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095		
ICE CHEST NO. (N/A)	FIELD LOGBOOK NO. HNF-N-507-25	ACTUAL SAMPLE DEPTH 5'	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};
(2) 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};
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~

6/14/12

TRVL- 12- 039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-488	PAGE 1 OF 2
COLLECTOR: Frank Hall	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 8 Soil Sample 3	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: (N/A)	FIELD LOGBOOK NO.: ~~INF-N~~ SD7.25	ACTUAL SAMPLE DEPTH: 101	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2L1L0 14	SOIL	JUN 20 2012	0948	✓	✓	✓	✓	

DH 6/14/12

TRVL 12- 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: Frank Hall	DATE/TIME: JUN 20 2012 1310	RECEIVED BY/STORED IN: C Johnson	DATE/TIME: JUN 20 2012 1310	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 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-488	PAGE 2 OF 2
COLLECTOR Frank Hall	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C AIR QUALITY ☐	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 8 Soil Sample 3	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095		
ICE CHEST NO. (N/A)	FIELD LOGBOOK NO. HNF-N-507-25	ACTUAL SAMPLE DEPTH 10'	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ AJR 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};
(2) 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};
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~

JH 3/14/12

TR-L 12- 039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-456	PAGE 1 OF 2
COLLECTOR: Frank Hall	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 6 Soil Sample 1	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: (N/A)	FIELD LOGBOOK NO.: HNF-N-507-25	ACTUAL SAMPLE DEPTH: SURFACE	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2H1L3	SOIL	JUN 20 2012	0912	✓	✓	✓	✓	

9H 6/14/12

TRVL-12-039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: Frank Hall	DATE/TIME: JUN 20 2012 1310	RECEIVED BY/STORED IN: C Dhnson	DATE/TIME: JUN 20 2012 1310	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 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-456	PAGE 2 OF 2
COLLECTOR Frank Hall	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C AIR QUALITY ☐	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 6 Soil Sample 1	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095		
ICE CHEST NO. (N/A)	FIELD LOGBOOK NO. INF-N- 50725	ACTUAL SAMPLE DEPTH SURFACE	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};
(2) 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};
~~(3) Gross Alpha- {Gross alpha}; Gross Beta- {Gross beta};~~

6/14/12

TRVL-12-039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-460	PAGE 1 OF 2
COLLECTOR: Frank Hall	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 6 Soil Sample 2	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: (N/A)	FIELD LOGBOOK NO.: HNF-N-502-25	ACTUAL SAMPLE DEPTH: 5'	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None	
HOLDING TIME	1 Yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months	
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P	
NO. OF CONTAINER(S)	1	1	1	1	1	
VOLUME	250mL	120mL	60mL	60mL	120mL	
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS	

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2H1L7	SOIL	JUN 20 2012	0918	✓	✓	✓	✓	

9H 6/14/12

TRVL-12-039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: Frank Hall	DATE/TIME: JUN 7 7 2012 1310	RECEIVED BY/STORED IN: C. Johns	DATE/TIME: JUN 20 2012 1310	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 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-460	PAGE 2 OF 2
COLLECTOR Frank Hell	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE BC AIR QUALITY ☐	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 6 Soil Sample 2	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095		
ICE CHEST NO. (N/A)	FIELD LOGBOOK NO. HNF-N-507-25	ACTUAL SAMPLE DEPTH 5'	COA 302548FS10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed.~~ ☐ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};
(2) 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};
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ 6/14/12

TRVL-12-039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-464	PAGE 1 OF 2
COLLECTOR: Frank Hall	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 6 Soil Sample 3	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-507-25	ACTUAL SAMPLE DEPTH: 10'	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2H1M1 17	SOIL	JUN 20 2012	0925	✓	✓	✓	✓	✓

6/14/12

TR-VL-12-039

CHAIN OF POSSESSION	DATE/TIME	SIGN/ PRINT NAMES	DATE/TIME
RELINQUISHED BY/REMOVED FROM: Frank Hall	JUN 20 2012 1310	RECEIVED BY/STORED IN: C Johnson	JUN 20 2012 1310
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
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 3/14/2012

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-464	PAGE 2 OF 2
COLLECTOR Frank Hall	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C AIR QUALITY ☐	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 6 Soil Sample 3	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095		
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-507-25	ACTUAL SAMPLE DEPTH 10'	COA 302548FS10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ AJZ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ QH 6/14/12

TRAL- 1 - 039

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A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-528	PAGE 1 OF .
COLLECTOR: Frank Hall	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole Soil Sample 34	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: (N/A)	FIELD LOGBOOK NO.: TNF-N-507-25	ACTUAL SAMPLE DEPTH: SURFACE	COA: 302S48ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.		MATRIX*	SAMPLE DATE	SAMPLE TIME
B2L1R0	18	SOIL	JUN 20 2012	0940

9d 6/14/12

IRVL 12 - 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: Frank Hall	DATE/TIME: JUN 20 2012 1310	RECEIVED BY/STORED IN: C. Johnson	DATE/TIME: JUN 20 2012 1310	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 3/14/2012

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-528	PAGE 2 OF 2
COLLECTOR Frank Hall	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C AIR QUALITY ☐	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole Soil Sample 34	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095		
ICE CHEST NO. (N/A)	FIELD LOGBOOK NO. INF-N-507-25	ACTUAL SAMPLE DEPTH SURFACE	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ DRJ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ 24 6/14/12

TFAL-12-039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

Appendix 5

Data Validation Supporting Documentation

VALIDATION LEVEL:	A	B	(C)	D	E
PROJECT: 100-K			DATA PACKAGE: VSR12-018		
VALIDATOR: Eyda Hergenreder		LAB: TestAmerica, WSCF		DATE: 07-13-2012	
			SDG: SL1272, SL1278, WSCF120661, WSCF120665, WSCF120809		
ANALYSES PERFORMED					
SW-846/ICP	SW-846/GFAA	SW-846/Hg X		EPA 200.8 X	

SAMPLES/MATRIX Soil samples

SDG SL1272: B2L1R5
SDG SL1278: B2L1T0
SDG WSCF120661: B2H1J3, B2L1M2, B2H1D5, B2H1H5, B2L1P6, B2H1C3, B2H1D9, B2L1L8, B2H1F7, B2H1J7
SDG WSCF120665: B2H1H1, B2H1D1, B2L1M6, B2H1F3, B2L1L4, B2L1T4, B2H1B9, B2H1H9
SDG WSCF120809: B2L1T7, B2H1K1, B2L1K2, B2H1K5, B2L1K6, B2H1K9, B2L1J0, B2L1J4, B2L1J8, B2L1N0, B2L1N4, B2L1N8, B2L1P2, B2L1L0, B2H1L3, B2H1L7, B2H1M1, B2L1R0

1. DATA PACKAGE COMPLETENESS AND CASE NARRATIVE

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

Comments: None

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

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

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

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

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

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

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

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

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

Comments:

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

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

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

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

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

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

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

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

Comments:
SDG SL1278: MB: B 4.8 mg/kg; Ag 0.15 mg/kg
SDG WSCF120665 (batch 202257) MB: Cu 0.124 mg/kg
SDG WSCF120809 (batch 203662) MB: Cu 0.164 mg/kg; V 0.140 mg/kg
(batch 203697) MB: Ni 0.130 mg/kg; Cr 0.179 mg/kg; Cu 0.0763 mg/kg; V 0.156 mg/kg

Field blank information on last page

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 SL1272: Cu MS 74%; Mn MSD 156%
SDG SL1278: Mn MS/MSD 142%/71%;
SDG WSCF120809 (batch 203687): Cu MSD 126%

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:
Field split RPDs samples B2H1D9/B2L1R5: Mn 43%; Ni 44%; Ba 42%; Cr 40%; Co 41%; Cu 99%; Sr 44%

6. ICP QUALITY CONTROL (Levels D and E)

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

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

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

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

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

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

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

Comments:

7. HOLDING TIMES (all levels)

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

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

Comments: None

8. RESULT QUANTITATION AND DETECTION LIMITS (all levels)

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

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

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

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

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

Comments: None

Comments (attach additional sheets as necessary):

EB B2L1T4: Mn 6.41 mg/kg; Ba 2.52 mg/kg; Co 0.0974 mg/kg; Pb 0.449 mg/kg; Sr 0.589 mg/kg; U 0.0904 mg/kg

EB B2L1T7: Mn 6.28 mg/kg; Ni 0.0746 mg/kg; Ba 2.49 mg/kg; Be 0.055 mg/kg; Cr 0.0901 mg/kg; Co 0.101 mg/kg; Cu 0.156 mg/kg; V 0.476 mg/kg; Zn 1.08 mg/kg; Pb 0.360 mg/kg; Mo 0.037 mg/kg; Sr 0.576 mg/kg; Sn 0.0636 mg/kg; U 0.113 mg/kg; As 0.178 mg/kg

Appendix 6

Additional Documentation Requested By Client

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: SL1272 **Matrix.....:** SOLID

MB Lot-Sample #: F2E290000-029 **Prep Batch #...:** 2150029

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Arsenic	ND	1.0	mg/kg	SW846 6020	05/29-06/04/12	MTTTW1AA
		Dilution Factor: 1				
Barium	ND	2.0	mg/kg	SW846 6020	05/29-06/04/12	MTTTW1AC
		Dilution Factor: 1				
Beryllium	ND	0.10	mg/kg	SW846 6020	05/29-06/04/12	MTTTW1AD
		Dilution Factor: 1				
Boron	ND	10.0	mg/kg	SW846 6020	05/29-06/04/12	MTTTW1AE
		Dilution Factor: 1				
Cadmium	ND	0.050	mg/kg	SW846 6020	05/29-06/04/12	MTTTW1AF
		Dilution Factor: 1				
Chromium	ND	1.0	mg/kg	SW846 6020	05/29-06/04/12	MTTTW1AV
		Dilution Factor: 1				
Cobalt	ND	0.20	mg/kg	SW846 6020	05/29-06/04/12	MTTTW1AG
		Dilution Factor: 1				
Copper	ND	1.0	mg/kg	SW846 6020	05/29-06/04/12	MTTTW1AH
		Dilution Factor: 1				
Lead	ND	0.30	mg/kg	SW846 6020	05/29-06/04/12	MTTTW1AJ
		Dilution Factor: 1				
Manganese	ND	0.50	mg/kg	SW846 6020	05/29-06/04/12	MTTTW1AK
		Dilution Factor: 1				
Molybdenum	ND	0.50	mg/kg	SW846 6020	05/29-06/04/12	MTTTW1AL
		Dilution Factor: 1				
Nickel	ND	0.50	mg/kg	SW846 6020	05/29-06/04/12	MTTTW1AM
		Dilution Factor: 1				
Selenium	ND	0.50	mg/kg	SW846 6020	05/29-06/04/12	MTTTW1AN
		Dilution Factor: 1				
Silver	ND	0.20	mg/kg	SW846 6020	05/29-06/06/12	MTTTW1AP
		Dilution Factor: 1				
Strontium	ND	0.50	mg/kg	SW846 6020	05/29-06/04/12	MTTTW1AQ
		Dilution Factor: 1				

(Continued on next page)

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: SL1272 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Tin	ND	0.20	mg/kg	SW846 6020	05/29-06/04/12	MTTTW1AR
		Dilution Factor: 1				
Uranium	ND	0.10	mg/kg	SW846 6020	05/29-06/04/12	MTTTW1AW
		Dilution Factor: 1				
Vanadium	ND	1.0	mg/kg	SW846 6020	05/29-06/04/12	MTTTW1AT
		Dilution Factor: 1				
Zinc	ND	5.0	mg/kg	SW846 6020	05/29-06/04/12	MTTTW1AU
		Dilution Factor: 1				

MB Lot-Sample #: F2E310000-022 **Prep Batch #...:** 2152022

Antimony	ND	0.50	mg/kg	SW846 6020	05/31-06/04/12	MTWFH1AA
		Dilution Factor: 1				

MB Lot-Sample #: F2F050000-023 **Prep Batch #...:** 2157023

Mercury	ND	0.033	mg/kg	SW846 7471A	06/05/12	MT0GX1AA
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: SL1272 **Matrix.....:** SOLID

LCS Lot-Sample#: F2E290000-029 **Prep Batch #...:** 2150029

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Arsenic	109	109	mg/kg	100	SW846 6020	05/29-06/04/12	MTTTW1AX
			Dilution Factor: 2.5				
Barium	325	321	mg/kg	99	SW846 6020	05/29-06/04/12	MTTTW1A0
			Dilution Factor: 2.5				
Beryllium	92.0	88.2	mg/kg	96	SW846 6020	05/29-06/04/12	MTTTW1A1
			Dilution Factor: 2.5				
Boron	142	118	mg/kg	83	SW846 6020	05/29-06/04/12	MTTTW1A2
			Dilution Factor: 2.5				
Cadmium	110	111	mg/kg	101	SW846 6020	05/29-06/04/12	MTTTW1A3
			Dilution Factor: 2.5				
Cobalt	133	134	mg/kg	101	SW846 6020	05/29-06/04/12	MTTTW1A4
			Dilution Factor: 2.5				
Copper	74.7	74.0	mg/kg	99	SW846 6020	05/29-06/04/12	MTTTW1A5
			Dilution Factor: 2.5				
Lead	152	147	mg/kg	97	SW846 6020	05/29-06/04/12	MTTTW1A6
			Dilution Factor: 2.5				
Manganese	443	421	mg/kg	95	SW846 6020	05/29-06/04/12	MTTTW1A7
			Dilution Factor: 2.5				
Molybdenum	82.5	80.4	mg/kg	97	SW846 6020	05/29-06/04/12	MTTTW1A8
			Dilution Factor: 2.5				
Nickel	109	109	mg/kg	100	SW846 6020	05/29-06/04/12	MTTTW1A9
			Dilution Factor: 2.5				
Selenium	207	208	mg/kg	101	SW846 6020	05/29-06/04/12	MTTTW1CA
			Dilution Factor: 2.5				
Silver	52.0	50.5	mg/kg	97	SW846 6020	05/29-06/04/12	MTTTW1CC
			Dilution Factor: 2.5				
Strontium	111	106	mg/kg	95	SW846 6020	05/29-06/04/12	MTTTW1CD
			Dilution Factor: 2.5				

(Continued on next page)

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: SL1272 **Matrix.....:** SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Tin	135	124	mg/kg	92	SW846 6020	05/29-06/04/12	MTTTW1CE
			Dilution Factor: 2.5				
Vanadium	110	103	mg/kg	93	SW846 6020	05/29-06/04/12	MTTTW1CF
			Dilution Factor: 2.5				
Zinc	299	297	mg/kg	99	SW846 6020	05/29-06/04/12	MTTTW1CG
			Dilution Factor: 2.5				
Chromium	93.4	90.3	mg/kg	97	SW846 6020	05/29-06/04/12	MTTTW1CH
			Dilution Factor: 2.5				
Uranium	100	98.3	mg/kg	98	SW846 6020	05/29-06/04/12	MTTTW1CJ
			Dilution Factor: 1				
LCS Lot-Sample#: F2E310000-022 **Prep Batch #...:** 2152022							
Antimony	50.0	45.6	mg/kg	91	SW846 6020	05/31-06/04/12	MTWFH1AC
			Dilution Factor: 1				
LCS Lot-Sample#: F2F050000-023 **Prep Batch #...:** 2157023							
Mercury	16.3	13.8	mg/kg	85	SW846 7471A	06/05/12	MT0GX1AC
			Dilution Factor: 20				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: SL1272 **Matrix.....:** SOLID
Date Sampled...: 05/20/12 **Date Received..:** 05/25/12

MS Lot-Sample #: F2E250455-001 **Prep Batch #...:** 2150029
% Moisture.....: 6.0

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Arsenic									
	4.6	106	103	mg/kg	92		SW846 6020	05/29-06/04/12	MTTL11CP
	4.6	106	113	mg/kg	102	9.8	SW846 6020	05/29-06/04/12	MTTL11CQ
			Dilution Factor: 1						
Barium									
	73.9	106	188	mg/kg	107		SW846 6020	05/29-06/04/12	MTTL11CR
	73.9	106	187	mg/kg	106	0.27	SW846 6020	05/29-06/04/12	MTTL11CT
			Dilution Factor: 1						
Beryllium									
	0.36	106	105	mg/kg	98		SW846 6020	05/29-06/04/12	MTTL11CU
	0.36	106	106	mg/kg	99	1.1	SW846 6020	05/29-06/04/12	MTTL11CV
			Dilution Factor: 1						
Boron									
	ND	106	103	mg/kg	97		SW846 6020	05/29-06/04/12	MTTL11CW
	ND	106	102	mg/kg	96	0.37	SW846 6020	05/29-06/04/12	MTTL11CX
			Dilution Factor: 1						
Cadmium									
	0.080	106	97.1	mg/kg	91		SW846 6020	05/29-06/04/12	MTTL11C0
	0.080	106	99.1	mg/kg	93	2.0	SW846 6020	05/29-06/04/12	MTTL11C1
			Dilution Factor: 1						
Chromium									
	7.6	106	108	mg/kg	94		SW846 6020	05/29-06/04/12	MTTL11CA
	7.6	106	126	mg/kg	111	16	SW846 6020	05/29-06/04/12	MTTL11CC
			Dilution Factor: 1						
Cobalt									
	10.2	106	109	mg/kg	93		SW846 6020	05/29-06/04/12	MTTL11C2
	10.2	106	121	mg/kg	104	10	SW846 6020	05/29-06/04/12	MTTL11C3
			Dilution Factor: 1						
Copper									
	37.7	106	117 N	mg/kg	74		SW846 6020	05/29-06/04/12	MTTL11C4
	37.7	106	129	mg/kg	86	9.8	SW846 6020	05/29-06/04/12	MTTL11C5
			Dilution Factor: 1						

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: SL1272 **Matrix.....:** SOLID
Date Sampled...: 05/20/12 **Date Received..:** 05/25/12

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Lead									
	5.6	106	108	mg/kg	96		SW846 6020	05/29-06/04/12	MTTL11C6
	5.6	106	109	mg/kg	97	0.64	SW846 6020	05/29-06/04/12	MTTL11C7
			Dilution Factor: 1						
Manganese									
	351	106	481	mg/kg	122		SW846 6020	05/29-06/04/12	MTTL11C8
	351	106	517 N	mg/kg	156	7.2	SW846 6020	05/29-06/04/12	MTTL11C9
			Dilution Factor: 1						
Molybdenum									
	0.41	106	109	mg/kg	102		SW846 6020	05/29-06/04/12	MTTL11DA
	0.41	106	110	mg/kg	103	0.72	SW846 6020	05/29-06/04/12	MTTL11DC
			Dilution Factor: 1						
Nickel									
	11.3	106	108	mg/kg	91		SW846 6020	05/29-06/04/12	MTTL11DD
	11.3	106	121	mg/kg	104	11	SW846 6020	05/29-06/04/12	MTTL11DE
			Dilution Factor: 1						
Selenium									
	0.41	106	83.7	mg/kg	78		SW846 6020	05/29-06/04/12	MTTL11DF
	0.41	106	95.6	mg/kg	90	13	SW846 6020	05/29-06/04/12	MTTL11DG
			Dilution Factor: 1						
Silver									
	0.14	10.6	10.9	mg/kg	101		SW846 6020	05/29-06/06/12	MTTL11DH
	0.14	10.6	10.9	mg/kg	101	0.67	SW846 6020	05/29-06/06/12	MTTL11DJ
			Dilution Factor: 1						
Strontium									
	37.3	106	142	mg/kg	99		SW846 6020	05/29-06/04/12	MTTL11DK
	37.3	106	140	mg/kg	96	1.9	SW846 6020	05/29-06/04/12	MTTL11DL
			Dilution Factor: 1						
Tin									
	2.3	106	103	mg/kg	94		SW846 6020	05/29-06/04/12	MTTL11DM
	2.3	106	104	mg/kg	95	0.92	SW846 6020	05/29-06/04/12	MTTL11DN
			Dilution Factor: 1						
Uranium									
	0.61	106	107	mg/kg	100		SW846 6020	05/29-06/04/12	MTTL11CD
	0.61	106	108	mg/kg	101	1.4	SW846 6020	05/29-06/04/12	MTTL11CE
			Dilution Factor: 1						

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: SL1272 **Matrix.....:** SOLID
Date Sampled...: 05/20/12 **Date Received..:** 05/25/12

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Vanadium									
	44.4	106	147	mg/kg	96		SW846 6020	05/29-06/04/12	MTTL11A6
	44.4	106	172	mg/kg	120	16	SW846 6020	05/29-06/04/12	MTTL11A7
			Dilution Factor: 1						
Zinc									
	48.4	106	139	mg/kg	86		SW846 6020	05/29-06/04/12	MTTL11A8
	48.4	106	155	mg/kg	101	11	SW846 6020	05/29-06/04/12	MTTL11A9
			Dilution Factor: 1						

MS Lot-Sample #: F2E250455-001 **Prep Batch #...:** 2152022
% Moisture.....: 6.0

Antimony									
	0.67	53.2	50.3	mg/kg	93		SW846 6020	05/31-06/04/12	MTTL11CF
	0.67	53.2	49.8	mg/kg	92	0.99	SW846 6020	05/31-06/04/12	MTTL11CG
			Dilution Factor: 1						

MS Lot-Sample #: F2E250455-001 **Prep Batch #...:** 2157023
% Moisture.....: 6.0

Mercury									
	0.029	0.167	0.211	mg/kg	109		SW846 7471A	06/05/12	MTTL11CH
	0.029	0.167	0.213	mg/kg	110	0.74	SW846 7471A	06/05/12	MTTL11CJ
			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.

N Spiked analyte recovery is outside stated control limits.

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: SL1278 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: F2F270000-022 **Prep Batch #...:** 2179022						
Arsenic	ND	1.0	mg/kg	SW846 6020	06/27-06/29/12	MVA2J1AA
		Dilution Factor: 1				
Barium	ND	2.0	mg/kg	SW846 6020	06/27-06/29/12	MVA2J1AC
		Dilution Factor: 1				
Beryllium	ND	0.10	mg/kg	SW846 6020	06/27-06/29/12	MVA2J1AD
		Dilution Factor: 1				
Boron	**4.8 B**	**10.0**	**mg/kg**	**SW846 6020**	**06/27-06/29/12**	**MVA2J1AE**
		Dilution Factor: 1				
Cadmium	ND	0.050	mg/kg	SW846 6020	06/27-06/29/12	MVA2J1AF
		Dilution Factor: 1				
Chromium	ND	1.0	mg/kg	SW846 6020	06/27-06/29/12	MVA2J1AV
		Dilution Factor: 1				
Cobalt	ND	0.20	mg/kg	SW846 6020	06/27-06/29/12	MVA2J1AG
		Dilution Factor: 1				
Copper	ND	1.0	mg/kg	SW846 6020	06/27-06/29/12	MVA2J1AH
		Dilution Factor: 1				
Lead	ND	0.30	mg/kg	SW846 6020	06/27-06/29/12	MVA2J1AJ
		Dilution Factor: 1				
Manganese	ND	0.50	mg/kg	SW846 6020	06/27-06/29/12	MVA2J1AK
		Dilution Factor: 1				
Molybdenum	ND	0.50	mg/kg	SW846 6020	06/27-06/29/12	MVA2J1AL
		Dilution Factor: 1				
Nickel	ND	0.50	mg/kg	SW846 6020	06/27-06/29/12	MVA2J1AM
		Dilution Factor: 1				
Selenium	ND	0.50	mg/kg	SW846 6020	06/27-06/29/12	MVA2J1AN
		Dilution Factor: 1				
Silver	**0.15 B**	**0.20**	**mg/kg**	**SW846 6020**	**06/27-06/29/12**	**MVA2J1AP**
		Dilution Factor: 1				
Strontium	ND	0.50	mg/kg	SW846 6020	06/27-06/29/12	MVA2J1AQ
		Dilution Factor: 1				

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METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: SL1278 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Tin	ND	0.20	mg/kg	SW846 6020	06/27-06/29/12	MVA2J1AR
		Dilution Factor: 1				
Uranium	ND	0.10	mg/kg	SW846 6020	06/27-06/29/12	MVA2J1AW
		Dilution Factor: 1				
Vanadium	ND	1.0	mg/kg	SW846 6020	06/27-06/29/12	MVA2J1AT
		Dilution Factor: 1				
Zinc	ND	5.0	mg/kg	SW846 6020	06/27-06/29/12	MVA2J1AU
		Dilution Factor: 1				

MB Lot-Sample #: F2F270000-025 **Prep Batch #...:** 2179025

Antimony	ND	0.50	mg/kg	SW846 6020	06/27-06/28/12	MVA2Q1AA
		Dilution Factor: 1				

MB Lot-Sample #: F2F290000-016 **Prep Batch #...:** 2181016

Mercury	ND	0.033	mg/kg	SW846 7471A	06/29/12	MVDNX1AA
		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 #...: SL1278 **Matrix.....:** SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: F2F270000-022 **Prep Batch #...:** 2179022							
Arsenic	109	109	mg/kg	100	SW846 6020	06/27-06/29/12	MVA2J1AX
			Dilution Factor: 2.5				
Barium	325	302	mg/kg	93	SW846 6020	06/27-06/29/12	MVA2J1A0
			Dilution Factor: 2.5				
Beryllium	92.0	87.7	mg/kg	95	SW846 6020	06/27-06/29/12	MVA2J1A1
			Dilution Factor: 2.5				
Boron	142	140	mg/kg	99	SW846 6020	06/27-06/29/12	MVA2J1A2
			Dilution Factor: 2.5				
Cadmium	110	108	mg/kg	98	SW846 6020	06/27-06/29/12	MVA2J1A3
			Dilution Factor: 2.5				
Cobalt	133	131	mg/kg	98	SW846 6020	06/27-06/29/12	MVA2J1A4
			Dilution Factor: 2.5				
Copper	74.7	74.0	mg/kg	99	SW846 6020	06/27-06/29/12	MVA2J1A5
			Dilution Factor: 2.5				
Lead	152	143	mg/kg	94	SW846 6020	06/27-06/29/12	MVA2J1A6
			Dilution Factor: 2.5				
Manganese	443	419	mg/kg	95	SW846 6020	06/27-06/29/12	MVA2J1A7
			Dilution Factor: 2.5				
Molybdenum	82.5	82.7	mg/kg	100	SW846 6020	06/27-06/29/12	MVA2J1A8
			Dilution Factor: 2.5				
Nickel	109	106	mg/kg	98	SW846 6020	06/27-06/29/12	MVA2J1A9
			Dilution Factor: 2.5				
Selenium	207	207	mg/kg	100	SW846 6020	06/27-06/29/12	MVA2J1CA
			Dilution Factor: 2.5				
Silver	52.0	51.4	mg/kg	99	SW846 6020	06/27-06/29/12	MVA2J1CC
			Dilution Factor: 2.5				
Strontium	111	100	mg/kg	90	SW846 6020	06/27-06/29/12	MVA2J1CD
			Dilution Factor: 2.5				

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LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: SL1278 **Matrix.....:** SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Tin	135	131	mg/kg	97	SW846 6020	06/27-06/29/12	MVA2J1CE
			Dilution Factor: 2.5				
Vanadium	110	107	mg/kg	97	SW846 6020	06/27-06/29/12	MVA2J1CF
			Dilution Factor: 2.5				
Zinc	299	287	mg/kg	96	SW846 6020	06/27-06/29/12	MVA2J1CG
			Dilution Factor: 2.5				
Chromium	93.4	89.8	mg/kg	96	SW846 6020	06/27-06/29/12	MVA2J1CH
			Dilution Factor: 2.5				
Uranium	100	100	mg/kg	100	SW846 6020	06/27-06/29/12	MVA2J1CJ
			Dilution Factor: 1				
LCS Lot-Sample#: F2F270000-025 **Prep Batch #...:** 2179025							
Antimony	50.0	47.9	mg/kg	96	SW846 6020	06/27-06/28/12	MVA2Q1AC
			Dilution Factor: 1				
LCS Lot-Sample#: F2F290000-016 **Prep Batch #...:** 2181016							
Mercury	0.167	0.169	mg/kg	101	SW846 7471A	06/29/12	MVDNX1AC
			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 #...: SL1278 **Matrix.....:** SOLID
Date Sampled...: 06/20/12 **Date Received..:** 06/26/12

MS Lot-Sample #: F2F260421-001 **Prep Batch #...:** 2179022
% Moisture.....: 2.1

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Arsenic									
	2.0	102	96.9	mg/kg	93		SW846 6020	06/27-06/29/12	MVART1A5
	2.0	102	94.4	mg/kg	90	2.6	SW846 6020	06/27-06/29/12	MVART1A6
			Dilution Factor: 1						
Barium									
	57.3	102	161	mg/kg	102		SW846 6020	06/27-06/29/12	MVART1A7
	57.3	102	155	mg/kg	96	4.1	SW846 6020	06/27-06/29/12	MVART1A8
			Dilution Factor: 1						
Beryllium									
	0.35	102	108	mg/kg	106		SW846 6020	06/27-06/29/12	MVART1A9
	0.35	102	105	mg/kg	102	3.3	SW846 6020	06/27-06/29/12	MVART1CA
			Dilution Factor: 1						
Boron									
	6.7	102	121	mg/kg	112		SW846 6020	06/27-06/29/12	MVART1CC
	6.7	102	120	mg/kg	111	1.4	SW846 6020	06/27-06/29/12	MVART1CD
			Dilution Factor: 1						
Cadmium									
	0.088	102	106	mg/kg	103		SW846 6020	06/27-06/29/12	MVART1CE
	0.088	102	104	mg/kg	102	1.3	SW846 6020	06/27-06/29/12	MVART1CF
			Dilution Factor: 1						
Chromium									
	4.5	102	100	mg/kg	94		SW846 6020	06/27-06/29/12	MVART1C9
	4.5	102	101	mg/kg	94	0.17	SW846 6020	06/27-06/29/12	MVART1DA
			Dilution Factor: 1						
Cobalt									
	11.0	102	102	mg/kg	89		SW846 6020	06/27-06/29/12	MVART1CG
	11.0	102	99.4	mg/kg	87	2.9	SW846 6020	06/27-06/29/12	MVART1CH
			Dilution Factor: 1						
Copper									
	16.0	102	105	mg/kg	88		SW846 6020	06/27-06/29/12	MVART1CJ
	16.0	102	102	mg/kg	84	3.5	SW846 6020	06/27-06/29/12	MVART1CK
			Dilution Factor: 1						

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MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: SL1278 **Matrix.....:** SOLID
Date Sampled...: 06/20/12 **Date Received..:** 06/26/12

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Lead									
	3.4	102	102	mg/kg	97		SW846 6020	06/27-06/29/12	MVART1CL
	3.4	102	103	mg/kg	97	0.29	SW846 6020	06/27-06/29/12	MVART1CM
			Dilution Factor: 1						
Manganese									
	354	102	499 N	mg/kg	142		SW846 6020	06/27-06/29/12	MVART1CN
	354	102	427 N	mg/kg	71	16	SW846 6020	06/27-06/29/12	MVART1CP
			Dilution Factor: 1						
Molybdenum									
	0.45	102	96.7	mg/kg	94		SW846 6020	06/27-06/29/12	MVART1CQ
	0.45	102	96.1	mg/kg	94	0.58	SW846 6020	06/27-06/29/12	MVART1CR
			Dilution Factor: 1						
Nickel									
	8.0	102	101	mg/kg	91		SW846 6020	06/27-06/29/12	MVART1CT
	8.0	102	97.8	mg/kg	88	3.5	SW846 6020	06/27-06/29/12	MVART1CU
			Dilution Factor: 1						
Selenium									
	2.0	102	94.4	mg/kg	90		SW846 6020	06/27-06/29/12	MVART1CV
	2.0	102	91.1	mg/kg	87	3.5	SW846 6020	06/27-06/29/12	MVART1CW
			Dilution Factor: 1						
Silver									
	0.29	10.2	10.6	mg/kg	101		SW846 6020	06/27-06/29/12	MVART1CX
	0.29	10.2	10.6	mg/kg	101	0.82	SW846 6020	06/27-06/29/12	MVART1C0
			Dilution Factor: 1						
Strontium									
	22.2	102	123	mg/kg	99		SW846 6020	06/27-06/29/12	MVART1C1
	22.2	102	119	mg/kg	95	3.2	SW846 6020	06/27-06/29/12	MVART1C2
			Dilution Factor: 1						
Tin									
	0.60	102	105	mg/kg	102		SW846 6020	06/27-06/29/12	MVART1C3
	0.60	102	102	mg/kg	100	2.1	SW846 6020	06/27-06/29/12	MVART1C4
			Dilution Factor: 1						
Uranium									
	0.46	102	103	mg/kg	101		SW846 6020	06/27-06/29/12	MVART1DC
	0.46	102	105	mg/kg	102	1.1	SW846 6020	06/27-06/29/12	MVART1DD
			Dilution Factor: 1						

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: SL1278 **Matrix.....:** SOLID
Date Sampled...: 06/20/12 **Date Received..:** 06/26/12

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Vanadium									
	70.1	102	168	mg/kg	95		SW846 6020	06/27-06/29/12	MVART1C5
	70.1	102	171	mg/kg	99	2.0	SW846 6020	06/27-06/29/12	MVART1C6
			Dilution Factor: 1						
Zinc									
	48.8	102	138	mg/kg	87		SW846 6020	06/27-06/29/12	MVART1C7
	48.8	102	133	mg/kg	83	3.4	SW846 6020	06/27-06/29/12	MVART1C8
			Dilution Factor: 1						

MS Lot-Sample #: F2F260421-001 **Prep Batch #...:** 2179025
% Moisture.....: 2.1

Antimony									
	0.071	51.1	50.2	mg/kg	98		SW846 6020	06/27-06/28/12	MVART1DE
	0.071	51.1	51.3	mg/kg	100	2.3	SW846 6020	06/27-06/28/12	MVART1DF
			Dilution Factor: 1						

MS Lot-Sample #: F2F260421-001 **Prep Batch #...:** 2181016
% Moisture.....: 2.1

Mercury									
	ND	0.167	0.179	mg/kg	107		SW846 7471A	06/29/12	MVART1DN
	ND	0.167	0.176	mg/kg	105	1.7	SW846 7471A	06/29/12	MVART1DP
			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.

N Spiked analyte recovery is outside stated control limits.

Batch QC List

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120661

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
201896	202068	4	BLANK	75612	BLANK		ICP-2008 MS All possible metal
201896	202068	5	LCS	75613	LCS		ICP-2008 MS All possible metal
201896	202068	6	SAMPLE	120661001	B2H1J3		ICP-2008 MS All possible metal
201896	202068	7	MS	75614	B2H1J3(120661001MS)	120661001	ICP-2008 MS All possible metal
201896	202068	8	MSD	75615	B2H1J3(120661001MSD)	120661001	ICP-2008 MS All possible metal
201896	202068	9	SAMPLE	120661002	B2L1M2		ICP-2008 MS All possible metal
201896	202068	10	SAMPLE	120661003	B2H1D5		ICP-2008 MS All possible metal
201896	202068	11	SAMPLE	120661004	B2H1H5		ICP-2008 MS All possible metal
201896	202068	12	SAMPLE	120661005	B2L1P6		ICP-2008 MS All possible metal
201896	202068	13	SAMPLE	120661006	B2H1C3		ICP-2008 MS All possible metal
201896	202068	14	SAMPLE	120661007	B2H1D9		ICP-2008 MS All possible metal
201896	202068	15	SAMPLE	120661008	B2L1L8		ICP-2008 MS All possible metal
201896	202068	16	SAMPLE	120661009	B2H1F7		ICP-2008 MS All possible metal
201896	202068	17	SAMPLE	120661010	B2H1J7		ICP-2008 MS All possible metal
201896	202150	1	LCS	75613	LCS		ICP-2008 MS All possible metal
201896	202150	2	BLANK	75612	BLANK		ICP-2008 MS All possible metal
201896	202150	19	SAMPLE	120661010	B2H1J7		ICP-2008 MS All possible metal
201896	202150	21	SAMPLE	120661009	B2H1F7		ICP-2008 MS All possible metal
201896	202150	22	SAMPLE	120661008	B2L1L8		ICP-2008 MS All possible metal
201896	202150	23	SAMPLE	120661007	B2H1D9		ICP-2008 MS All possible metal
201896	202150	24	SAMPLE	120661006	B2H1C3		ICP-2008 MS All possible metal
201896	202150	25	SAMPLE	120661005	B2L1P6		ICP-2008 MS All possible metal
201896	202150	26	SAMPLE	120661004	B2H1H5		ICP-2008 MS All possible metal

Batch QC List

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120661

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
201896	202150	27	SAMPLE	120661003	B2H1D5		ICP-2008 MS All possible metal
201896	202150	28	SAMPLE	120661002	B2L1M2		ICP-2008 MS All possible metal
201896	202150	29	MSD	75615	B2H1J3(120661001MSD)	120661001	ICP-2008 MS All possible metal
201896	202150	30	MS	75614	B2H1J3(120661001MS)	120661001	ICP-2008 MS All possible metal
201896	202150	31	SAMPLE	120661001	B2H1J3		ICP-2008 MS All possible metal
201956	202066	1	BLANK	75648	BLANK		Anions by Ion Chromatography (Solid)
201956	202066	2	LCS	75649	LCS		Anions by Ion Chromatography (Solid)
201956	202066	3	MS	75650	B2L1P6(120661005MS)	120661005	Anions by Ion Chromatography (Solid)
201956	202066	4	MSD	75651	B2L1P6(120661005MSD)	120661005	Anions by Ion Chromatography (Solid)
201956	202066	5	DUP	75652	B2L1P6(120661005DUP)	120661005	Anions by Ion Chromatography (Solid)
201956	202066	6	SAMPLE	120661001	B2H1J3		Anions by Ion Chromatography (Solid)
201956	202066	7	SAMPLE	120661002	B2L1M2		Anions by Ion Chromatography (Solid)
201956	202066	8	SAMPLE	120661003	B2H1D5		Anions by Ion Chromatography (Solid)
201956	202066	9	SAMPLE	120661004	B2H1H5		Anions by Ion Chromatography (Solid)
201956	202066	10	SAMPLE	120661005	B2L1P6		Anions by Ion Chromatography (Solid)
201956	202066	11	SAMPLE	120661006	B2H1C3		Anions by Ion Chromatography (Solid)
201956	202066	12	SAMPLE	120661007	B2H1D9		Anions by Ion Chromatography (Solid)
201956	202066	13	SAMPLE	120661008	B2L1L8		Anions by Ion Chromatography (Solid)
201956	202066	14	SAMPLE	120661009	B2H1F7		Anions by Ion Chromatography (Solid)
201956	202066	15	SAMPLE	120661010	B2H1J7		Anions by Ion Chromatography (Solid)
202153	202154	1	BLANK	75770	BLANK		Hexavalent chromium
202153	202154	4	LCS	75771	LCS		Hexavalent chromium
202153	202154	5	DUP	75772	B2H1J3(120661001DUP)	120661001	Hexavalent chromium

Quality Control Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120661

QC Batch 201896 **Test** ICP-2008 MS All possible metal
Associated Samples 120661001, 120661002, 120661003, 120661004, 120661005, 120661006, 120661007, 120661008, 120661009, 120661010

Analyte	CAS #	Original Found	QC Found	Units	% Recov Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #75612**						
Manganese	7439-96-5		<0.10	ug/L				U	05/24/12
Nickel	7440-02-0		<0.10	ug/L				U	05/24/12
Silver	7440-22-4		<0.050	ug/L				U	05/24/12
Antimony	7440-36-0		<0.30	ug/L				U	05/24/12
Barium	7440-39-3		<0.20	ug/L				U	05/24/12
Beryllium	7440-41-7		<0.10	ug/L				U	05/24/12
Cadmium	7440-43-9		<0.050	ug/L				U	05/24/12
Chromium	7440-47-3		<0.10	ug/L				U	05/24/12
Cobalt	7440-48-4		<0.050	ug/L				U	05/24/12
Copper	7440-50-8		<0.10	ug/L				U	05/24/12
Vanadium	7440-62-2		<0.20	ug/L				U	05/24/12
Zinc	7440-66-6		<1.0	ug/L				U	05/24/12
Lead	7439-92-1		<0.050	ug/L				U	05/24/12
Mercury	7439-97-6		<0.050	ug/L				U	05/24/12
Molybdenum	7439-98-7		<0.050	ug/L				U	05/24/12
Strontium	7440-24-6		<0.10	ug/L				UX	05/24/12
Tin	7440-31-5		<0.050	ug/L				U	05/24/12
Uranium	7440-61-1		<0.050	ug/L				U	05/24/12
Arsenic	7440-38-2		<0.20	ug/L				U	05/24/12

Quality Control Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120661

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Selenium	7782-49-2		<0.50	ug/L					U	05/29/12
LCS			**QC Sample #75613**							
Manganese	7439-96-5		245	mg/kg	85.7	75 - 121				05/24/12
Nickel	7440-02-0		49.1	mg/kg	83	74 - 122				05/24/12
Silver	7440-22-4		29.8	mg/kg	86.8	83 - 127				05/24/12
Antimony	7440-36-0		88.1	mg/kg	72.2	62 - 205				05/24/12
Barium	7440-39-3		136	mg/kg	80.7	78 - 118				05/24/12
Beryllium	7440-41-7		55.2	mg/kg	88.4	77 - 120				05/24/12
Cadmium	7440-43-9		54.3	mg/kg	87.9	76 - 129				05/24/12
Chromium	7440-47-3		55.4	mg/kg	77.7	68 - 119				05/24/12
Cobalt	7440-48-4		88.6	mg/kg	86	77 - 122				05/24/12
Copper	7440-50-8		65.2	mg/kg	80.2	67 - 120				05/24/12
Vanadium	7440-62-2		46.4	mg/kg	78.4	67 - 122				05/24/12
Zinc	7440-66-6		120	mg/kg	85	73 - 131				05/24/12
Lead	7439-92-1		78.1	mg/kg	84.5	79 - 124				05/24/12
Mercury	7439-97-6		3.19	mg/kg	84.6	69 - 124				05/24/12
Molybdenum	7439-98-7		37.4	mg/kg	87.9	80 - 125				05/24/12
Strontium	7440-24-6		55.7	mg/kg	76.9	78 - 119			X	05/24/12
Tin	7440-31-5		93.9	mg/kg	87.8	84 - 130				05/24/12
Uranium	7440-61-1		363	mg/kg	89.4	86 - 113				05/24/12
Arsenic	7440-38-2		83.5	mg/kg	90.1	79 - 125				05/24/12
Selenium	7782-49-2		81.6	mg/kg	91.2	82 - 133				05/29/12
MS			**QC Sample #75614**							
			Original 120661001							

Quality Control Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120661

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Manganese	7439-96-5	263	99.7	mg/kg	96.1	70 - 130				05/24/12
Nickel	7440-02-0	6.90	92.3	mg/kg	88.9	70 - 130				05/24/12
Silver	7440-22-4	<0.054	97.0	mg/kg	93.5	70 - 130				05/24/12
Antimony	7440-36-0	<0.33	81.8	mg/kg	78.9	70 - 130				05/24/12
Barium	7440-39-3	56.2	107	mg/kg	103	70 - 130				05/24/12
Beryllium	7440-41-7	0.196	103	mg/kg	99.6	70 - 130				05/24/12
Cadmium	7440-43-9	0.0762	98.7	mg/kg	95.1	70 - 130				05/24/12
Chromium	7440-47-3	3.55	93.9	mg/kg	90.5	70 - 130				05/24/12
Cobalt	7440-48-4	8.37	94.1	mg/kg	90.7	70 - 130				05/24/12
Copper	7440-50-8	16.3	90.7	mg/kg	87.4	70 - 130				05/24/12
Vanadium	7440-62-2	36.9	97.3	mg/kg	93.8	70 - 130				05/24/12
Zinc	7440-66-6	37.6	96.5	mg/kg	93	70 - 130				05/24/12
Lead	7439-92-1	3.59	96.1	mg/kg	92.6	70 - 130				05/24/12
Mercury	7439-97-6	<0.054	1.91	mg/kg	92	70 - 130				05/24/12
Molybdenum	7439-98-7	0.326	102	mg/kg	98.2	70 - 130				05/24/12
Strontium	7440-24-6	27.2	102	mg/kg	98.3	70 - 130			X	05/24/12
Tin	7440-31-5	0.449	98.7	mg/kg	95.1	70 - 130				05/24/12
Uranium	7440-61-1	0.466	99.0	mg/kg	95.4	70 - 130				05/24/12
Arsenic	7440-38-2	2.33	100	mg/kg	96.8	70 - 130				05/24/12
Selenium	7782-49-2	<0.27	91.9	mg/kg	88.6	70 - 130				05/29/12
MSD			**QC Sample #75615**							
			Original 120661001					**Paired**	**75614**	
Manganese	7439-96-5	263	117	mg/kg	116.5	70 - 130	4.70	30		05/24/12
Nickel	7440-02-0	6.90	87.6	mg/kg	87.5	70 - 130	4.80	30		05/24/12
Silver	7440-22-4	<0.054	91.2	mg/kg	91.1	70 - 130	6.20	30		05/24/12

Quality Control Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120661

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Antimony	7440-36-0	<0.33	77.2	mg/kg	77.1	70 - 130	5.80	30		05/24/12
Barium	7440-39-3	56.2	95.9	mg/kg	95.7	70 - 130	7.10	30		05/24/12
Beryllium	7440-41-7	0.196	91.3	mg/kg	91.2	70 - 130	12.80	30		05/24/12
Cadmium	7440-43-9	0.0762	92.4	mg/kg	92.3	70 - 130	6.50	30		05/24/12
Chromium	7440-47-3	3.55	90.1	mg/kg	90	70 - 130	4.00	30		05/24/12
Cobalt	7440-48-4	8.37	89.9	mg/kg	89.8	70 - 130	4.00	30		05/24/12
Copper	7440-50-8	16.3	86.3	mg/kg	86.2	70 - 130	3.80	30		05/24/12
Vanadium	7440-62-2	36.9	91.9	mg/kg	91.8	70 - 130	4.60	30		05/24/12
Zinc	7440-66-6	37.6	94.1	mg/kg	94	70 - 130	2.30	30		05/24/12
Lead	7439-92-1	3.59	90.8	mg/kg	90.7	70 - 130	5.40	30		05/24/12
Mercury	7439-97-6	<0.054	1.85	mg/kg	92.5	70 - 130	3.20	30		05/24/12
Molybdenum	7439-98-7	0.326	96.1	mg/kg	95.9	70 - 130	5.60	30		05/24/12
Strontium	7440-24-6	27.2	95.8	mg/kg	95.7	70 - 130	4.80	30	X	05/24/12
Tin	7440-31-5	0.449	93.2	mg/kg	93.1	70 - 130	5.70	30		05/24/12
Uranium	7440-61-1	0.466	93.8	mg/kg	93.6	70 - 130	5.40	30		05/24/12
Arsenic	7440-38-2	2.33	94.2	mg/kg	94.1	70 - 130	6.60	30		05/24/12
Selenium	7782-49-2	<0.27	90.2	mg/kg	90	70 - 130	1.90	30		05/29/12

Batch QC List

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120665

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
201896	202068	4	BLANK	75612	BLANK		ICP-2008 MS All possible metal
201896	202068	5	LCS	75613	LCS		ICP-2008 MS All possible metal
201896	202068	7	MS	75614	B2H1J3(120661001MS)	120661001	ICP-2008 MS All possible metal
201896	202068	8	MSD	75615	B2H1J3(120661001MSD)	120661001	ICP-2008 MS All possible metal
201896	202068	24	SAMPLE	120665001	B2H1H1		ICP-2008 MS All possible metal
201896	202068	25	SAMPLE	120665002	B2H1D1		ICP-2008 MS All possible metal
201896	202068	26	SAMPLE	120665003	B2L1M6		ICP-2008 MS All possible metal
201896	202068	27	SAMPLE	120665004	B2H1F3		ICP-2008 MS All possible metal
201896	202068	28	SAMPLE	120665005	B2L1L4		ICP-2008 MS All possible metal
201896	202068	29	SAMPLE	120665006	B2L1T4		ICP-2008 MS All possible metal
201896	202150	1	LCS	75613	LCS		ICP-2008 MS All possible metal
201896	202150	2	BLANK	75612	BLANK		ICP-2008 MS All possible metal
201896	202150	10	SAMPLE	120665006	B2L1T4		ICP-2008 MS All possible metal
201896	202150	11	SAMPLE	120665005	B2L1L4		ICP-2008 MS All possible metal
201896	202150	12	SAMPLE	120665004	B2H1F3		ICP-2008 MS All possible metal
201896	202150	13	SAMPLE	120665003	B2L1M6		ICP-2008 MS All possible metal
201896	202150	14	SAMPLE	120665002	B2H1D1		ICP-2008 MS All possible metal
201896	202150	15	SAMPLE	120665001	B2H1H1		ICP-2008 MS All possible metal
201896	202150	29	MSD	75615	B2H1J3(120661001MSD)	120661001	ICP-2008 MS All possible metal
201896	202150	30	MS	75614	B2H1J3(120661001MS)	120661001	ICP-2008 MS All possible metal
201957	202067	1	BLANK	75653	BLANK		Anions by Ion Chromatography (Solid)
201957	202067	2	LCS	75654	LCS		Anions by Ion Chromatography (Solid)
201957	202067	3	MS	75655	B2L1T4(120665006MS)	120665006	Anions by Ion Chromatography (Solid)

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Batch QC List

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120665

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
201957	202067	4	MSD	75656	B2L1T4(120665006MSD)	120665006	Anions by Ion Chromatography (Solid)
201957	202067	5	DUP	75657	B2L1T4(120665006DUP)	120665006	Anions by Ion Chromatography (Solid)
201957	202067	6	SAMPLE	120665001	B2H1H1		Anions by Ion Chromatography (Solid)
201957	202067	7	SAMPLE	120665002	B2H1D1		Anions by Ion Chromatography (Solid)
201957	202067	8	SAMPLE	120665003	B2L1M6		Anions by Ion Chromatography (Solid)
201957	202067	9	SAMPLE	120665004	B2H1F3		Anions by Ion Chromatography (Solid)
201957	202067	10	SAMPLE	120665005	B2L1L4		Anions by Ion Chromatography (Solid)
201957	202067	11	SAMPLE	120665006	B2L1T4		Anions by Ion Chromatography (Solid)
201957	202067	12	SAMPLE	120665007	B2H1B9		Anions by Ion Chromatography (Solid)
201957	202067	13	SAMPLE	120665008	B2H1H9		Anions by Ion Chromatography (Solid)
202153	202154	1	BLANK	75770	BLANK		Hexavalent chromium
202153	202154	4	LCS	75771	LCS		Hexavalent chromium
202153	202154	5	DUP	75772	B2H1J3(120661001DUP)	120661001	Hexavalent chromium
202153	202154	6	MS	75773	B2H1J3(120661001MS)	120661001	Hexavalent chromium
202153	202154	7	PSTSPK	75774	PSTSPK		Hexavalent chromium
202153	202154	8	IMS	75775	B2H1J3(120661001IMS)	120661001	Hexavalent chromium
202153	202154	24	SAMPLE	120665001	B2H1H1		Hexavalent chromium
202153	202154	25	SAMPLE	120665002	B2H1D1		Hexavalent chromium
202153	202154	26	SAMPLE	120665003	B2L1M6		Hexavalent chromium
202153	202154	27	SAMPLE	120665004	B2H1F3		Hexavalent chromium
202153	202154	28	SAMPLE	120665005	B2L1L4		Hexavalent chromium
202257	202261	4	BLANK	75939	BLANK		ICP-2008 MS All possible metal
202257	202261	5	LCS	75940	LCS		ICP-2008 MS All possible metal

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Batch QC List

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Group # WSCF120665

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
202257	202261	6	SAMPLE	120665007	B2H1B9		ICP-2008 MS All possible metal
202257	202261	7	MS	75941	B2H1B9(120665007MS)	120665007	ICP-2008 MS All possible metal
202257	202261	8	MSD	75942	B2H1B9(120665007MSD)	120665007	ICP-2008 MS All possible metal
202257	202261	9	SAMPLE	120665008	B2H1H9		ICP-2008 MS All possible metal
202257	202269	1	BLANK	75939	BLANK		ICP-2008 MS All possible metal
202257	202269	2	LCS	75940	LCS		ICP-2008 MS All possible metal
202257	202269	9	SAMPLE	120665008	B2H1H9		ICP-2008 MS All possible metal
202257	202269	10	MSD	75942	B2H1B9(120665007MSD)	120665007	ICP-2008 MS All possible metal
202257	202269	11	MS	75941	B2H1B9(120665007MS)	120665007	ICP-2008 MS All possible metal
202257	202269	12	SAMPLE	120665007	B2H1B9		ICP-2008 MS All possible metal
202363	202364	1	BLANK	76023	BLANK		Hexavalent chromium
202363	202364	4	LCS	76024	LCS		Hexavalent chromium
202363	202364	5	DUP	76025	B2L1T4(120665006DUP)	120665006	Hexavalent chromium
202363	202364	6	MS	76026	B2L1T4(120665006MS)	120665006	Hexavalent chromium
202363	202364	7	PSTSPK	76027	PSTSPK		Hexavalent chromium
202363	202364	8	IMS	76028	B2L1T4(120665006IMS)	120665006	Hexavalent chromium
202363	202364	9	SAMPLE	120665006	B2L1T4		Hexavalent chromium
202363	202364	10	SAMPLE	120665007	B2H1B9		Hexavalent chromium
202363	202364	11	SAMPLE	120665008	B2H1H9		Hexavalent chromium

Quality Control Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120665

QC Batch 201896 **Test** ICP-2008 MS All possible metal
Associated Samples 120665001, 120665002, 120665003, 120665004, 120665005, 120665006

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #75612**							
Manganese	7439-96-5		<0.10	ug/L					U	05/24/12
Nickel	7440-02-0		<0.10	ug/L					U	05/24/12
Silver	7440-22-4		<0.050	ug/L					U	05/24/12
Antimony	7440-36-0		<0.30	ug/L					U	05/24/12
Barium	7440-39-3		<0.20	ug/L					U	05/24/12
Beryllium	7440-41-7		<0.10	ug/L					U	05/24/12
Cadmium	7440-43-9		<0.050	ug/L					U	05/24/12
Chromium	7440-47-3		<0.10	ug/L					U	05/24/12
Cobalt	7440-48-4		<0.050	ug/L					U	05/24/12
Copper	7440-50-8		<0.10	ug/L					U	05/24/12
Vanadium	7440-62-2		<0.20	ug/L					U	05/24/12
Zinc	7440-66-6		<1.0	ug/L					U	05/24/12
Lead	7439-92-1		<0.050	ug/L					U	05/24/12
Mercury	7439-97-6		<0.050	ug/L					U	05/24/12
Molybdenum	7439-98-7		<0.050	ug/L					U	05/24/12
Strontium	7440-24-6		<0.10	ug/L					UX	05/24/12
Tin	7440-31-5		<0.050	ug/L					U	05/24/12
Uranium	7440-61-1		<0.050	ug/L					U	05/24/12
Arsenic	7440-38-2		<0.20	ug/L					U	05/24/12

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Quality Control Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120665

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Selenium	7782-49-2		<0.50	ug/L					U	05/29/12
LCS			**QC Sample #75613**							
Manganese	7439-96-5		245	mg/kg	85.7	75 - 121				05/24/12
Nickel	7440-02-0		49.1	mg/kg	83	74 - 122				05/24/12
Silver	7440-22-4		29.8	mg/kg	86.8	83 - 127				05/24/12
Antimony	7440-36-0		88.1	mg/kg	72.2	62 - 205				05/24/12
Barium	7440-39-3		136	mg/kg	80.7	78 - 118				05/24/12
Beryllium	7440-41-7		55.2	mg/kg	88.4	77 - 120				05/24/12
Cadmium	7440-43-9		54.3	mg/kg	87.9	76 - 129				05/24/12
Chromium	7440-47-3		55.4	mg/kg	77.7	68 - 119				05/24/12
Cobalt	7440-48-4		88.6	mg/kg	86	77 - 122				05/24/12
Copper	7440-50-8		65.2	mg/kg	80.2	67 - 120				05/24/12
Vanadium	7440-62-2		46.4	mg/kg	78.4	67 - 122				05/24/12
Zinc	7440-66-6		120	mg/kg	85	73 - 131				05/24/12
Lead	7439-92-1		78.1	mg/kg	84.5	79 - 124				05/24/12
Mercury	7439-97-6		3.19	mg/kg	84.6	69 - 124				05/24/12
Molybdenum	7439-98-7		37.4	mg/kg	87.9	80 - 125				05/24/12
Strontium	7440-24-6		55.7	mg/kg	76.9	78 - 119			X	05/24/12
Tin	7440-31-5		93.9	mg/kg	87.8	84 - 130				05/24/12
Uranium	7440-61-1		363	mg/kg	89.4	86 - 113				05/24/12
Arsenic	7440-38-2		83.5	mg/kg	90.1	79 - 125				05/24/12
Selenium	7782-49-2		81.6	mg/kg	91.2	82 - 133				05/29/12
MS			**QC Sample #75614**							
			Original 120661001							

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Quality Control Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120665

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Manganese	7439-96-5		99.7	mg/kg	96.1	70 - 130				05/24/12
Nickel	7440-02-0		92.3	mg/kg	88.9	70 - 130				05/24/12
Silver	7440-22-4		97.0	mg/kg	93.5	70 - 130				05/24/12
Antimony	7440-36-0		81.8	mg/kg	78.9	70 - 130				05/24/12
Barium	7440-39-3		107	mg/kg	103	70 - 130				05/24/12
Beryllium	7440-41-7		103	mg/kg	99.6	70 - 130				05/24/12
Cadmium	7440-43-9		98.7	mg/kg	95.1	70 - 130				05/24/12
Chromium	7440-47-3		93.9	mg/kg	90.5	70 - 130				05/24/12
Cobalt	7440-48-4		94.1	mg/kg	90.7	70 - 130				05/24/12
Copper	7440-50-8		90.7	mg/kg	87.4	70 - 130				05/24/12
Vanadium	7440-62-2		97.3	mg/kg	93.8	70 - 130				05/24/12
Zinc	7440-66-6		96.5	mg/kg	93	70 - 130				05/24/12
Lead	7439-92-1		96.1	mg/kg	92.6	70 - 130				05/24/12
Mercury	7439-97-6		1.91	mg/kg	92	70 - 130				05/24/12
Molybdenum	7439-98-7		102	mg/kg	98.2	70 - 130				05/24/12
Strontium	7440-24-6		102	mg/kg	98.3	70 - 130			X	05/24/12
Tin	7440-31-5		98.7	mg/kg	95.1	70 - 130				05/24/12
Uranium	7440-61-1		99.0	mg/kg	95.4	70 - 130				05/24/12
Arsenic	7440-38-2		100	mg/kg	96.8	70 - 130				05/24/12
Selenium	7782-49-2		91.9	mg/kg	88.6	70 - 130				05/29/12
MSD			**QC Sample #75615**							
			Original 120661001					**Paired**	**75614**	
Manganese	7439-96-5		117	mg/kg	116.5	70 - 130	4.70	30		05/24/12
Nickel	7440-02-0		87.6	mg/kg	87.5	70 - 130	4.80	30		05/24/12
Silver	7440-22-4		91.2	mg/kg	91.1	70 - 130	6.20	30		05/24/12

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Quality Control Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120665

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Antimony	7440-36-0		77.2	mg/kg	77.1	70 - 130	5.80	30		05/24/12
Barium	7440-39-3		95.9	mg/kg	95.7	70 - 130	7.10	30		05/24/12
Beryllium	7440-41-7		91.3	mg/kg	91.2	70 - 130	12.80	30		05/24/12
Cadmium	7440-43-9		92.4	mg/kg	92.3	70 - 130	6.50	30		05/24/12
Chromium	7440-47-3		90.1	mg/kg	90	70 - 130	4.00	30		05/24/12
Cobalt	7440-48-4		89.9	mg/kg	89.8	70 - 130	4.00	30		05/24/12
Copper	7440-50-8		86.3	mg/kg	86.2	70 - 130	3.80	30		05/24/12
Vanadium	7440-62-2		91.9	mg/kg	91.8	70 - 130	4.60	30		05/24/12
Zinc	7440-66-6		94.1	mg/kg	94	70 - 130	2.30	30		05/24/12
Lead	7439-92-1		90.8	mg/kg	90.7	70 - 130	5.40	30		05/24/12
Mercury	7439-97-6		1.85	mg/kg	92.5	70 - 130	3.20	30		05/24/12
Molybdenum	7439-98-7		96.1	mg/kg	95.9	70 - 130	5.60	30		05/24/12
Strontium	7440-24-6		95.8	mg/kg	95.7	70 - 130	4.80	30	X	05/24/12
Tin	7440-31-5		93.2	mg/kg	93.1	70 - 130	5.70	30		05/24/12
Uranium	7440-61-1		93.8	mg/kg	93.6	70 - 130	5.40	30		05/24/12
Arsenic	7440-38-2		94.2	mg/kg	94.1	70 - 130	6.60	30		05/24/12
Selenium	7782-49-2		90.2	mg/kg	90	70 - 130	1.90	30		05/29/12

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Quality Control Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120665

QC Batch 202257
Associated Samples 120665007, 120665008

Test ICP-2008 MS All possible metal

Analyte	CAS #	Original Found	QC Found	Units	% Recov Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #75939**						
Manganese	7439-96-5		<0.050	ug/L				U	05/30/12
Nickel	7440-02-0		<0.050	ug/L				U	05/30/12
Silver	7440-22-4		<0.025	ug/L				U	05/30/12
Antimony	7440-36-0		<0.15	ug/L				U	05/30/12
Barium	7440-39-3		<0.10	ug/L				U	05/30/12
Beryllium	7440-41-7		<0.050	ug/L				U	05/30/12
Cadmium	7440-43-9		<0.025	ug/L				U	05/30/12
Chromium	7440-47-3		<0.050	ug/L				U	05/30/12
Cobalt	7440-48-4		<0.025	ug/L				U	05/30/12
Copper	7440-50-8		0.124	ug/L				B	05/30/12
Vanadium	7440-62-2		<0.10	ug/L				U	05/30/12
Zinc	7440-66-6		<0.50	ug/L				U	05/30/12
Lead	7439-92-1		<0.025	ug/L				U	05/30/12
Mercury	7439-97-6		<0.025	ug/L				U	05/30/12
Molybdenum	7439-98-7		<0.025	ug/L				U	05/30/12
Strontium	7440-24-6		<0.050	ug/L				U	05/30/12
Tin	7440-31-5		<0.025	ug/L				U	05/30/12
Uranium	7440-61-1		<0.025	ug/L				U	05/30/12
Arsenic	7440-38-2		<0.10	ug/L				U	05/30/12

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Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120665

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Selenium	7782-49-2		<0.50	ug/L					U	05/30/12
LCS			**QC Sample #75940**							
Manganese	7439-96-5		243	mg/kg	85	75 - 121				05/30/12
Nickel	7440-02-0		54.1	mg/kg	91.5	74 - 122				05/30/12
Silver	7440-22-4		34.5	mg/kg	100.4	83 - 127				05/30/12
Antimony	7440-36-0		99.9	mg/kg	81.9	62 - 205				05/30/12
Barium	7440-39-3		154	mg/kg	91.1	78 - 118				05/30/12
Beryllium	7440-41-7		62.3	mg/kg	99.9	77 - 120				05/30/12
Cadmium	7440-43-9		60.2	mg/kg	97.5	76 - 129				05/30/12
Chromium	7440-47-3		63.1	mg/kg	88.4	68 - 119				05/30/12
Cobalt	7440-48-4		95.3	mg/kg	92.6	77 - 122				05/30/12
Copper	7440-50-8		71.8	mg/kg	88.4	67 - 120				05/30/12
Vanadium	7440-62-2		50.5	mg/kg	85.4	67 - 122				05/30/12
Zinc	7440-66-6		131	mg/kg	92.6	73 - 131				05/30/12
Lead	7439-92-1		89.0	mg/kg	96.3	79 - 124				05/30/12
Mercury	7439-97-6		3.70	mg/kg	98.1	69 - 124				05/30/12
Molybdenum	7439-98-7		40.8	mg/kg	95.8	80 - 125				05/30/12
Strontium	7440-24-6		62.4	mg/kg	86.2	78 - 119				05/30/12
Tin	7440-31-5		108	mg/kg	100.8	84 - 130				05/30/12
Uranium	7440-61-1		390	mg/kg	103.7	86 - 113				05/30/12
Arsenic	7440-38-2		93.4	mg/kg	100.9	79 - 125				05/30/12
Selenium	7782-49-2		85.0	mg/kg	95	82 - 133				05/30/12
MS			**QC Sample #75941**							
			Original 120665007							

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Group # WSCF120665

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Manganese	7439-96-5	275	35.2	mg/kg	32.8	70 - 130			X	05/30/12
Nickel	7440-02-0	5.23	98.2	mg/kg	91.6	70 - 130				05/30/12
Silver	7440-22-4	<0.026	93.8	mg/kg	87.5	70 - 130				05/30/12
Antimony	7440-36-0	<0.15	91.7	mg/kg	85.6	70 - 130				05/30/12
Barium	7440-39-3	43.9	106	mg/kg	99.2	70 - 130				05/30/12
Beryllium	7440-41-7	0.136	110	mg/kg	102.2	70 - 130				05/30/12
Cadmium	7440-43-9	0.0533	106	mg/kg	98.9	70 - 130				05/30/12
Chromium	7440-47-3	1.87	99.6	mg/kg	92.9	70 - 130				05/30/12
Cobalt	7440-48-4	8.12	97.9	mg/kg	91.3	70 - 130				05/30/12
Copper	7440-50-8	13.5	94.6	mg/kg	88.2	70 - 130				05/30/12
Vanadium	7440-62-2	34.7	85.3	mg/kg	79.5	70 - 130				05/30/12
Zinc	7440-66-6	32.1	93.6	mg/kg	87.3	70 - 130				05/30/12
Lead	7439-92-1	2.87	105	mg/kg	97.6	70 - 130				05/30/12
Mercury	7439-97-6	<0.026	2.09	mg/kg	97.5	70 - 130				05/30/12
Molybdenum	7439-98-7	0.311	114	mg/kg	106.3	70 - 130				05/30/12
Strontium	7440-24-6	20.8	108	mg/kg	100.4	70 - 130				05/30/12
Tin	7440-31-5	0.352	108	mg/kg	100.4	70 - 130				05/30/12
Uranium	7440-61-1	0.409	111	mg/kg	103.9	70 - 130				05/30/12
Arsenic	7440-38-2	1.37	108	mg/kg	100.4	70 - 130				05/30/12
Selenium	7782-49-2	<0.26	97.4	mg/kg	90.8	70 - 130				05/30/12
MSD			**QC Sample #75942**							
			Original 120665007					**Paired**	**75941**	
Manganese	7439-96-5	275	63.5	mg/kg	59.7	70 - 130	8.80	30	X	05/30/12
Nickel	7440-02-0	5.23	93.6	mg/kg	88	70 - 130	4.30	30		05/30/12
Silver	7440-22-4	<0.026	99.6	mg/kg	93.7	70 - 130	6.00	30		05/30/12

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Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120665

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Antimony	7440-36-0	<0.15	93.7	mg/kg	88.2	70 - 130	2.20	30		05/30/12
Barium	7440-39-3	43.9	102	mg/kg	95.8	70 - 130	2.70	30		05/30/12
Beryllium	7440-41-7	0.136	101	mg/kg	94.8	70 - 130	8.50	30		05/30/12
Cadmium	7440-43-9	0.0533	102	mg/kg	96.3	70 - 130	3.80	30		05/30/12
Chromium	7440-47-3	1.87	94.3	mg/kg	88.7	70 - 130	4.90	30		05/30/12
Cobalt	7440-48-4	8.12	93.1	mg/kg	87.5	70 - 130	4.80	30		05/30/12
Copper	7440-50-8	13.5	90.6	mg/kg	85.2	70 - 130	3.80	30		05/30/12
Vanadium	7440-62-2	34.7	98.0	mg/kg	92.2	70 - 130	10.40	30		05/30/12
Zinc	7440-66-6	32.1	94.4	mg/kg	88.7	70 - 130	0.80	30		05/30/12
Lead	7439-92-1	2.87	99.2	mg/kg	93.3	70 - 130	4.80	30		05/30/12
Mercury	7439-97-6	<0.026	2.03	mg/kg	95.5	70 - 130	2.90	30		05/30/12
Molybdenum	7439-98-7	0.311	110	mg/kg	103.9	70 - 130	2.70	30		05/30/12
Strontium	7440-24-6	20.8	104	mg/kg	97.3	70 - 130	3.20	30		05/30/12
Tin	7440-31-5	0.352	104	mg/kg	98.1	70 - 130	2.80	30		05/30/12
Uranium	7440-61-1	0.409	106	mg/kg	99.7	70 - 130	5.50	30		05/30/12
Arsenic	7440-38-2	1.37	102	mg/kg	95.9	70 - 130	5.70	30		05/30/12
Selenium	7782-49-2	<0.26	95.1	mg/kg	89.4	70 - 130	2.40	30		05/30/12

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Batch QC List

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Department Inorganic

Group # WSCF120809

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
203662	203697	4	BLANK	77239	BLANK		ICP-2008 MS All possible metal
203662	203697	5	LCS	77240	LCS		ICP-2008 MS All possible metal
203662	203697	7	MS	77241	B2LPX0(120787001MS)	120787001	ICP-2008 MS All possible metal
203662	203697	8	MSD	77242	B2LPX0(120787001MSD)	120787001	ICP-2008 MS All possible metal
203662	203697	20	SAMPLE	120809001	B2L1T7		ICP-2008 MS All possible metal
203662	203697	21	SAMPLE	120809002	B2H1K1		ICP-2008 MS All possible metal
203662	203697	22	SAMPLE	120809003	B2L1K2		ICP-2008 MS All possible metal
203662	203697	23	SAMPLE	120809004	B2H1K5		ICP-2008 MS All possible metal
203662	203697	24	SAMPLE	120809005	B2L1K6		ICP-2008 MS All possible metal
203662	203697	25	SAMPLE	120809006	B2H1K9		ICP-2008 MS All possible metal
203662	203697	26	SAMPLE	120809007	B2L1J0		ICP-2008 MS All possible metal
203662	203697	27	SAMPLE	120809008	B2L1J4		ICP-2008 MS All possible metal
203662	203697	28	SAMPLE	120809009	B2L1J8		ICP-2008 MS All possible metal
203662	203697	29	SAMPLE	120809010	B2L1N0		ICP-2008 MS All possible metal
203662	203876	1	LCS	77240	LCS		ICP-2008 MS All possible metal
203662	203876	2	BLANK	77239	BLANK		ICP-2008 MS All possible metal
203662	203876	13	MSD	77242	B2LPX0(120787001MSD)	120787001	ICP-2008 MS All possible metal
203662	203876	14	MS	77241	B2LPX0(120787001MS)	120787001	ICP-2008 MS All possible metal
203662	203876	22	SAMPLE	120809010	B2L1N0		ICP-2008 MS All possible metal
203662	203876	23	SAMPLE	120809009	B2L1J8		ICP-2008 MS All possible metal
203662	203876	24	SAMPLE	120809008	B2L1J4		ICP-2008 MS All possible metal
203662	203876	25	SAMPLE	120809007	B2L1J0		ICP-2008 MS All possible metal
203662	203876	26	SAMPLE	120809006	B2H1K9		ICP-2008 MS All possible metal

Batch QC List

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Group # WSCF120809

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
203662	203876	27	SAMPLE	120809005	B2L1K6		ICP-2008 MS All possible metal
203662	203876	28	SAMPLE	120809004	B2H1K5		ICP-2008 MS All possible metal
203662	203876	29	SAMPLE	120809003	B2L1K2		ICP-2008 MS All possible metal
203662	203876	30	SAMPLE	120809002	B2H1K1		ICP-2008 MS All possible metal
203662	203876	31	SAMPLE	120809001	B2L1T7		ICP-2008 MS All possible metal
203672	203673	3	BLANK	77278	BLANK		Anions by Ion Chromatography (Solid)
203672	203673	4	LCS	77279	LCS		Anions by Ion Chromatography (Solid)
203672	203673	5	MS	77280	B2L1T7(120809001MS)	120809001	Anions by Ion Chromatography (Solid)
203672	203673	6	MSD	77281	B2L1T7(120809001MSD)	120809001	Anions by Ion Chromatography (Solid)
203672	203673	7	DUP	77282	B2L1T7(120809001DUP)	120809001	Anions by Ion Chromatography (Solid)
203672	203673	8	SAMPLE	120809001	B2L1T7		Anions by Ion Chromatography (Solid)
203672	203673	9	SAMPLE	120809002	B2H1K1		Anions by Ion Chromatography (Solid)
203672	203673	10	SAMPLE	120809003	B2L1K2		Anions by Ion Chromatography (Solid)
203672	203673	11	SAMPLE	120809004	B2H1K5		Anions by Ion Chromatography (Solid)
203672	203673	12	SAMPLE	120809005	B2L1K6		Anions by Ion Chromatography (Solid)
203672	203673	13	SAMPLE	120809006	B2H1K9		Anions by Ion Chromatography (Solid)
203672	203673	14	SAMPLE	120809007	B2L1J0		Anions by Ion Chromatography (Solid)
203672	203673	15	SAMPLE	120809008	B2L1J4		Anions by Ion Chromatography (Solid)
203672	203673	16	SAMPLE	120809009	B2L1J8		Anions by Ion Chromatography (Solid)
203672	203673	17	SAMPLE	120809010	B2L1N0		Anions by Ion Chromatography (Solid)
203687	203871	4	BLANK	77317	BLANK		ICP-2008 MS All possible metal
203687	203871	5	LCS	77318	LCS		ICP-2008 MS All possible metal
203687	203871	7	MS	77319	B2LRC8(120827001MS)	120827001	ICP-2008 MS All possible metal

Batch QC List

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Group # WSCF120809

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
203687	203871	8	MSD	77320	B2LRC8(120827001MSD)	120827001	ICP-2008 MS All possible metal
203687	203871	9	SAMPLE	120809011	B2L1N4		ICP-2008 MS All possible metal
203687	203871	10	SAMPLE	120809012	B2L1N8		ICP-2008 MS All possible metal
203687	203871	11	SAMPLE	120809013	B2L1P2		ICP-2008 MS All possible metal
203687	203871	12	SAMPLE	120809014	B2L1L0		ICP-2008 MS All possible metal
203687	203871	13	SAMPLE	120809015	B2H1L3		ICP-2008 MS All possible metal
203687	203871	14	SAMPLE	120809016	B2H1L7		ICP-2008 MS All possible metal
203687	203871	15	SAMPLE	120809017	B2H1M1		ICP-2008 MS All possible metal
203687	203871	16	SAMPLE	120809018	B2L1R0		ICP-2008 MS All possible metal
203687	203879	1	LCS	77318	LCS		ICP-2008 MS All possible metal
203687	203879	2	BLANK	77317	BLANK		ICP-2008 MS All possible metal
203687	203879	8	MS	77319	B2LRC8(120827001MS)	120827001	ICP-2008 MS All possible metal
203687	203879	9	SAMPLE	120809018	B2L1R0		ICP-2008 MS All possible metal
203687	203879	10	SAMPLE	120809011	B2L1N4		ICP-2008 MS All possible metal
203687	203879	11	SAMPLE	120809017	B2H1M1		ICP-2008 MS All possible metal
203687	203879	12	MSD	77320	B2LRC8(120827001MSD)	120827001	ICP-2008 MS All possible metal
203687	203879	13	SAMPLE	120809016	B2H1L7		ICP-2008 MS All possible metal
203687	203879	14	SAMPLE	120809015	B2H1L3		ICP-2008 MS All possible metal
203687	203879	15	SAMPLE	120809014	B2L1L0		ICP-2008 MS All possible metal
203687	203879	16	SAMPLE	120809013	B2L1P2		ICP-2008 MS All possible metal
203687	203879	17	SAMPLE	120809012	B2L1N8		ICP-2008 MS All possible metal
203712	203713	3	BLANK	77407	BLANK		Anions by Ion Chromatography (Solid)
203712	203713	4	LCS	77408	LCS		Anions by Ion Chromatography (Solid)

Quality Control Report

Attention Scot Fitzgerald
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Group # WSCF120809

Analytical Batch 203697 (QC Batch: 203662) **Test** ICP-2008 MS All possible metal
Associated Samples 120809001, 120809002, 120809003, 120809004, 120809005, 120809006, 120809007, 120809008, 120809009, 120809010

Analyte	CAS #	Original Found	QC Found	Units	% Recov Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #77239**						
Manganese	7439-96-5		<0.050	ug/L				U	06/26/12
Nickel	7440-02-0		<0.050	ug/L				U	06/26/12
Silver	7440-22-4		<0.025	ug/L				U	06/26/12
Antimony	7440-36-0		<0.15	ug/L				U	06/26/12
Barium	7440-39-3		<0.10	ug/L				U	06/26/12
Beryllium	7440-41-7		<0.050	ug/L				U	06/26/12
Cadmium	7440-43-9		<0.025	ug/L				U	06/26/12
Chromium	7440-47-3		<0.050	ug/L				U	06/26/12
Cobalt	7440-48-4		<0.025	ug/L				U	06/26/12
Copper	7440-50-8		0.164	ug/L				B	06/26/12
Vanadium	7440-62-2		0.140	ug/L				B	06/26/12
Zinc	7440-66-6		<0.50	ug/L				U	06/26/12
Lead	7439-92-1		<0.025	ug/L				U	06/26/12
Mercury	7439-97-6		<0.025	ug/L				U	06/26/12
Molybdenum	7439-98-7		<0.025	ug/L				U	06/26/12
Strontium	7440-24-6		<0.050	ug/L				U	06/26/12
Tin	7440-31-5		<0.025	ug/L				U	06/26/12
Uranium	7440-61-1		<0.025	ug/L				U	06/26/12
Arsenic	7440-38-2		<0.10	ug/L				U	06/26/12

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Group # WSCF120809

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Selenium	7782-49-2		<0.50	ug/L					U	06/26/12
LCS			**QC Sample #77240**							
Manganese	7439-96-5		278	mg/kg	97.4	75 - 121				06/26/12
Nickel	7440-02-0		59.9	mg/kg	101.4	74 - 122				06/26/12
Silver	7440-22-4		37.5	mg/kg	109	83 - 127				06/26/12
Antimony	7440-36-0		132	mg/kg	107.9	62 - 205				06/26/12
Barium	7440-39-3		172	mg/kg	101.9	78 - 118				06/26/12
Beryllium	7440-41-7		65.8	mg/kg	105.4	77 - 120				06/26/12
Cadmium	7440-43-9		63.4	mg/kg	102.6	76 - 129				06/26/12
Chromium	7440-47-3		71.4	mg/kg	100.1	68 - 119				06/26/12
Cobalt	7440-48-4		108	mg/kg	105.1	77 - 122				06/26/12
Copper	7440-50-8		79.7	mg/kg	98.1	67 - 120				06/26/12
Vanadium	7440-62-2		61.4	mg/kg	103.8	67 - 122				06/26/12
Zinc	7440-66-6		141	mg/kg	99.7	73 - 131				06/26/12
Lead	7439-92-1		95.6	mg/kg	103.5	79 - 124				06/26/12
Mercury	7439-97-6		4.27	mg/kg	113.2	69 - 124				06/26/12
Molybdenum	7439-98-7		47.3	mg/kg	111.1	80 - 125				06/26/12
Strontium	7440-24-6		73.5	mg/kg	101.5	78 - 119				06/26/12
Tin	7440-31-5		115	mg/kg	107.5	84 - 130				06/26/12
Uranium	7440-61-1		426	mg/kg	105.9	86 - 113				06/26/12
Arsenic	7440-38-2		97.6	mg/kg	105.4	79 - 125				06/26/12
Selenium	7782-49-2		83.9	mg/kg	93.7	82 - 133				06/26/12
MS			**QC Sample #77241**							
			Original 120787001							

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Group # WSCF120809

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Manganese	7439-96-5		112	mg/kg	104.6	70 - 130				06/26/12
Nickel	7440-02-0		110	mg/kg	103.2	70 - 130				06/26/12
Silver	7440-22-4		108	mg/kg	100.8	70 - 130				06/26/12
Antimony	7440-36-0		107	mg/kg	100.7	70 - 130				06/26/12
Barium	7440-39-3		111	mg/kg	103.5	70 - 130				06/26/12
Beryllium	7440-41-7		106	mg/kg	99.2	70 - 130				06/26/12
Cadmium	7440-43-9		108	mg/kg	101	70 - 130				06/26/12
Chromium	7440-47-3		110	mg/kg	103.5	70 - 130				06/26/12
Cobalt	7440-48-4		111	mg/kg	104.2	70 - 130				06/26/12
Copper	7440-50-8		109	mg/kg	101.7	70 - 130				06/26/12
Vanadium	7440-62-2		113	mg/kg	105.5	70 - 130				06/26/12
Zinc	7440-66-6		108	mg/kg	101.6	70 - 130				06/26/12
Lead	7439-92-1		107	mg/kg	100	70 - 130				06/26/12
Mercury	7439-97-6		2.43	mg/kg	114	70 - 130				06/26/12
Molybdenum	7439-98-7		111	mg/kg	104	70 - 130				06/26/12
Strontium	7440-24-6		109	mg/kg	102.2	70 - 130				06/26/12
Tin	7440-31-5		110	mg/kg	102.7	70 - 130				06/26/12
Uranium	7440-61-1		111	mg/kg	104.1	70 - 130				06/26/12
Arsenic	7440-38-2		107	mg/kg	99.8	70 - 130				06/26/12
Selenium	7782-49-2		99.4	mg/kg	93.2	70 - 130				06/26/12
MSD			**QC Sample #77242**							
			Original 120787001						**Paired 77241**	
Manganese	7439-96-5		98.5	mg/kg	101.7	70 - 130	11.60	30		06/26/12
Nickel	7440-02-0		98.8	mg/kg	102.1	70 - 130	10.60	30		06/26/12
Silver	7440-22-4		101	mg/kg	104.4	70 - 130	6.70	30		06/26/12

Quality Control Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Antimony	7440-36-0		99.8	mg/kg	103.1	70 - 130	7.00	30		06/26/12
Barium	7440-39-3		102	mg/kg	105	70 - 130	8.30	30		06/26/12
Beryllium	7440-41-7		101	mg/kg	104.6	70 - 130	4.80	30		06/26/12
Cadmium	7440-43-9		99.6	mg/kg	102.9	70 - 130	8.10	30		06/26/12
Chromium	7440-47-3		98.7	mg/kg	102	70 - 130	11.60	30		06/26/12
Cobalt	7440-48-4		99.7	mg/kg	103	70 - 130	10.60	30		06/26/12
Copper	7440-50-8		97.6	mg/kg	100.8	70 - 130	10.60	30		06/26/12
Vanadium	7440-62-2		99.5	mg/kg	102.8	70 - 130	12.10	30		06/26/12
Zinc	7440-66-6		96.0	mg/kg	99.2	70 - 130	11.90	30		06/26/12
Lead	7439-92-1		98.2	mg/kg	101.4	70 - 130	8.10	30		06/26/12
Mercury	7439-97-6		2.24	mg/kg	115.5	70 - 130	8.10	30		06/26/12
Molybdenum	7439-98-7		103	mg/kg	106.4	70 - 130	7.50	30		06/26/12
Strontium	7440-24-6		102	mg/kg	105	70 - 130	7.50	30		06/26/12
Tin	7440-31-5		101	mg/kg	104.3	70 - 130	8.50	30		06/26/12
Uranium	7440-61-1		102	mg/kg	105.4	70 - 130	8.50	30		06/26/12
Arsenic	7440-38-2		98.1	mg/kg	101.4	70 - 130	8.30	30		06/26/12
Selenium	7782-49-2		91.8	mg/kg	94.8	70 - 130	7.90	30		06/26/12

Quality Control Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Analytical Batch 203871 (QC Batch: 203687) **Test** ICP-2008 MS All possible metal
Associated Samples 120809011, 120809012, 120809013, 120809014, 120809015, 120809016, 120809017, 120809018

Analyte	CAS #	Original Found	QC Found	Units	% Recov Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #77317**						
Manganese	7439-96-5		<0.050	ug/L				U	06/27/12
Nickel	7440-02-0		0.130	ug/L				B	06/27/12
Silver	7440-22-4		<0.025	ug/L				U	06/27/12
Antimony	7440-36-0		<0.15	ug/L				U	06/27/12
Barium	7440-39-3		<0.10	ug/L				U	06/27/12
Beryllium	7440-41-7		<0.050	ug/L				U	06/27/12
Cadmium	7440-43-9		<0.025	ug/L				U	06/27/12
Chromium	7440-47-3		0.179	ug/L				B	06/27/12
Cobalt	7440-48-4		<0.025	ug/L				U	06/27/12
Copper	7440-50-8		0.0763	ug/L				B	06/27/12
Vanadium	7440-62-2		0.156	ug/L				B	06/27/12
Zinc	7440-66-6		<0.50	ug/L				U	06/27/12
Lead	7439-92-1		<0.025	ug/L				U	06/27/12
Mercury	7439-97-6		<0.025	ug/L				U	06/27/12
Molybdenum	7439-98-7		<0.025	ug/L				U	06/27/12
Strontium	7440-24-6		<0.050	ug/L				U	06/27/12
Tin	7440-31-5		<0.025	ug/L				U	06/27/12
Uranium	7440-61-1		<0.025	ug/L				U	06/27/12
Arsenic	7440-38-2		<0.10	ug/L				U	06/27/12

Quality Control Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Selenium	7782-49-2		<0.50	ug/L					U	06/27/12
LCS			**QC Sample #77318**							
Manganese	7439-96-5		275	mg/kg	96.2	75 - 121				06/27/12
Nickel	7440-02-0		60.2	mg/kg	101.8	74 - 122				06/27/12
Silver	7440-22-4		40.1	mg/kg	116.6	83 - 127				06/27/12
Antimony	7440-36-0		133	mg/kg	109.3	62 - 205				06/27/12
Barium	7440-39-3		173	mg/kg	102.4	78 - 118				06/27/12
Beryllium	7440-41-7		67.5	mg/kg	108.2	77 - 120				06/27/12
Cadmium	7440-43-9		65.2	mg/kg	105.4	76 - 129				06/27/12
Chromium	7440-47-3		71.5	mg/kg	100.2	68 - 119				06/27/12
Cobalt	7440-48-4		109	mg/kg	106	77 - 122				06/27/12
Copper	7440-50-8		81.6	mg/kg	100.5	67 - 120				06/27/12
Vanadium	7440-62-2		59.4	mg/kg	100.3	67 - 122				06/27/12
Zinc	7440-66-6		143	mg/kg	101.4	73 - 131				06/27/12
Lead	7439-92-1		97.9	mg/kg	106	79 - 124				06/27/12
Mercury	7439-97-6		4.36	mg/kg	115.6	69 - 124				06/27/12
Molybdenum	7439-98-7		46.4	mg/kg	108.9	80 - 125				06/27/12
Strontium	7440-24-6		67.5	mg/kg	93.3	78 - 119				06/27/12
Tin	7440-31-5		117	mg/kg	109.4	84 - 130				06/27/12
Uranium	7440-61-1		398	mg/kg	105.6	86 - 113				06/27/12
Arsenic	7440-38-2		99.5	mg/kg	107.5	79 - 125				06/27/12
Selenium	7782-49-2		99.5	mg/kg	111.2	82 - 133				06/27/12
MS			**QC Sample #77319**							
			Original 120827001							

Quality Control Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Manganese	7439-96-5		130	mg/kg	124.3	70 - 130			X	06/27/12
Nickel	7440-02-0		96.6	mg/kg	92.3	70 - 130				06/27/12
Silver	7440-22-4		99.4	mg/kg	94.9	70 - 130				06/27/12
Antimony	7440-36-0		84.1	mg/kg	80.4	70 - 130				06/27/12
Barium	7440-39-3		99.5	mg/kg	95	70 - 130				06/27/12
Beryllium	7440-41-7		105	mg/kg	100.8	70 - 130				06/27/12
Cadmium	7440-43-9		98.6	mg/kg	94.2	70 - 130				06/27/12
Chromium	7440-47-3		96.4	mg/kg	92.1	70 - 130				06/27/12
Cobalt	7440-48-4		102	mg/kg	97.1	70 - 130				06/27/12
Copper	7440-50-8		99.0	mg/kg	94.6	70 - 130				06/27/12
Vanadium	7440-62-2		105	mg/kg	100.3	70 - 130				06/27/12
Zinc	7440-66-6		107	mg/kg	102.1	70 - 130				06/27/12
Lead	7439-92-1		94.6	mg/kg	90.4	70 - 130				06/27/12
Mercury	7439-97-6		2.34	mg/kg	112	70 - 130				06/27/12
Molybdenum	7439-98-7		107	mg/kg	101.9	70 - 130				06/27/12
Strontium	7440-24-6		104	mg/kg	99	70 - 130				06/27/12
Tin	7440-31-5		101	mg/kg	96.3	70 - 130				06/27/12
Uranium	7440-61-1		110	mg/kg	105.5	70 - 130				06/27/12
Arsenic	7440-38-2		101	mg/kg	96.9	70 - 130				06/27/12
Selenium	7782-49-2		104	mg/kg	99	70 - 130				06/27/12
MSD			**QC Sample #77320**							
			Original 120827001					**Paired**	**77319**	
Manganese	7439-96-5		153	mg/kg	158.2	70 - 130	5.90	30	X	06/27/12
Nickel	7440-02-0		96.5	mg/kg	99.9	70 - 130	0.00	30		06/27/12
Silver	7440-22-4		99.9	mg/kg	103.4	70 - 130	0.50	30		06/27/12

Quality Control Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Antimony	7440-36-0		84.5	mg/kg	87.4	70 - 130	0.30	30		06/27/12
Barium	7440-39-3		121	mg/kg	125.2	70 - 130	8.50	30		06/27/12
Beryllium	7440-41-7		103	mg/kg	106.5	70 - 130	2.90	30		06/27/12
Cadmium	7440-43-9		99.9	mg/kg	103.4	70 - 130	1.40	30		06/27/12
Chromium	7440-47-3		97.4	mg/kg	100.8	70 - 130	0.90	30		06/27/12
Cobalt	7440-48-4		99.0	mg/kg	102.5	70 - 130	2.80	30		06/27/12
Copper	7440-50-8		122	mg/kg	126.1	70 - 130	15.80	30		06/27/12
Vanadium	7440-62-2		106	mg/kg	109.5	70 - 130	0.70	30		06/27/12
Zinc	7440-66-6		108	mg/kg	111.5	70 - 130	0.50	30		06/27/12
Lead	7439-92-1		97.6	mg/kg	101	70 - 130	2.70	30		06/27/12
Mercury	7439-97-6		2.38	mg/kg	123	70 - 130	1.70	30		06/27/12
Molybdenum	7439-98-7		109	mg/kg	112.4	70 - 130	1.80	30		06/27/12
Strontium	7440-24-6		113	mg/kg	117.2	70 - 130	5.20	30		06/27/12
Tin	7440-31-5		103	mg/kg	106.4	70 - 130	1.90	30		06/27/12
Uranium	7440-61-1		112	mg/kg	115.9	70 - 130	1.80	30		06/27/12
Arsenic	7440-38-2		106	mg/kg	110.1	70 - 130	3.70	30		06/27/12
Selenium	7782-49-2		103	mg/kg	106.6	70 - 130	1.00	30		06/27/12

Date: 13 July 2012
To: CH2M Hill (technical representative)
From: Analytical Quality Associates, Inc.
Project: 100-K
Subject: General Chemistry - Sample Data Groups (SDGs) SL1272, SL1278, W06446, W06458, WSCF120661, WSCF120665 and WSCF120809

INTRODUCTION

This memorandum presents the results of data validation for SDGs SL1272, SL1278, W06446 and W06458 prepared by TestAmerica Laboratories, Inc. and SDGs WSCF120661, WSCF120665 and WSCF120809 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
B2L1R5	05/20/12	Soil	C	300.0A
B2L1T0	06/20/12	Soil	C	300.0A
B1L1R4	05/20/12	Soil	C	Cr^{+6}
B2L1R9	06/20/12	Soil	C	Cr^{+6}
B2H1J3	05/20/12	Soil	C	300.0 & Cr^{+6}
B2L1M2	05/20/12	Soil	C	300.0 & Cr^{+6}
B2H1D5	05/20/12	Soil	C	300.0 & Cr^{+6}
B2H1H5	05/20/12	Soil	C	300.0 & Cr^{+6}
B2L1P6	05/20/12	Soil	C	300.0 & Cr^{+6}
B2H1C3	05/20/12	Soil	C	300.0 & Cr^{+6}
B2H1D9	05/20/12	Soil	C	300.0 & Cr^{+6}
B2L1L8	05/20/12	Soil	C	300.0 & Cr^{+6}
B2H1F7	05/20/12	Soil	C	300.0 & Cr^{+6}
B2H1J7	05/20/12	Soil	C	300.0 & Cr^{+6}
B2H1H1	05/20/12	Soil	C	300.0 & Cr^{+6}
B2H1D1	05/20/12	Soil	C	300.0 & Cr^{+6}
B2L1M6	05/20/12	Soil	C	300.0 & Cr^{+6}
B2H1F3	05/20/12	Soil	C	300.0 & Cr^{+6}
B2L1L4	05/20/12	Soil	C	300.0 & Cr^{+6}
B2L1T4	05/20/12	Soil	C	300.0 & Cr^{+6}
B2H1B9	05/20/12	Soil	C	300.0 & Cr^{+6}
B2H1H9	05/20/12	Soil	C	300.0 & Cr^{+6}
B2L1T7	06/20/12	Soil	C	300.0 & Cr^{+6}
B2H1K1	06/20/12	Soil	C	300.0 & Cr^{+6}
B2L1K2	06/20/12	Soil	C	300.0 & Cr^{+6}
B2H1K5	06/20/12	Soil	C	300.0 & Cr^{+6}
B2L1K6	06/20/12	Soil	C	300.0 & Cr^{+6}
B2H1K9	06/20/12	Soil	C	300.0 & Cr^{+6}
B2L1J0	06/20/12	Soil	C	300.0 & Cr^{+6}
B2L1J4	06/20/12	Soil	C	300.0 & Cr^{+6}

B2L1J8	06/20/12	Soil	C	300.0 & Cr^{+6}
B2L1N0	06/20/12	Soil	C	300.0 & Cr^{+6}
B2L1N4	06/20/12	Soil	C	300.0 & Cr^{+6}
B2L1N8	06/20/12	Soil	C	300.0 & Cr^{+6}
B2L1P2	06/20/12	Soil	C	300.0 & Cr^{+6}
B2L1L0	06/20/12	Soil	C	300.0 & Cr^{+6}
B2H1L3	06/20/12	Soil	C	300.0 & Cr^{+6}
B2H1L7	06/20/12	Soil	C	300.0 & Cr^{+6}
B2H1M1	06/20/12	Soil	C	300.0 & Cr^{+6}
B2L1R0	06/20/12	Soil	C	300.0 & Cr^{+6}

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

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

DATA QUALITY OBJECTIVES

- **Holding Times and Sample Preservation**

Holding times are calculated from Chain-of-Custody forms to determine the validity of the results. The holding time requirements are as follows:

- Sulfate and chloride – extraction within 28 days of sample collection and analysis within 48 hours after extraction.
- Hexavalent chromium – analysis within 30 days of sample collection

Sample preservation for the above analyses 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

The laboratory blank results were acceptable with the following exceptions.
For SDG SL1272, the chloride laboratory blank result was > the method detection limit (MDL) but < the reporting limit (RL). The chloride result for sample B2L1R5 was detect > the RL but ≤10X the blank value and based on professional judgment should be qualified as an estimate and flagged "J."

Trip Blanks

No trip blanks were submitted for validation.

Field Blanks

No field blanks were submitted for validation.

Equipment Blanks

All equipment blank results were acceptable with the following exception. Hexavalent chromium was detect in equipment blank B2L1T4.

- **Accuracy**

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

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

All MS/MSD recoveries were acceptable.

Laboratory Control Samples (LCSs)

All LCS recoveries were acceptable.

- **Precision**

Precision is evaluated by reviewing MS/MSD results, laboratory duplicate sample results, field duplicate sample results, and field split sample results. These QC results provide information on the laboratory reproducibility and whether sampling activities are adequate to acquire consistent sample results. According to the SAP, the relative percent difference (RPD) limits are ±30%. The 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 reporting limits with difference <2X the required detection limits no precision infraction occurred

MS/MSD Samples

All MS/MSD RPD values were acceptable.

Laboratory Duplicate Samples

All laboratory duplicate results were acceptable.

Field Duplicate Samples

All field duplicate results were acceptable.

Field Split Samples

.
All field split results were acceptable with the following exception. Samples B2H1D9/B2L1R5 had a sulfate RPD 44%.

- **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 with the following exceptions. The sulfate MDLs for samples B2L1L8, B2L1T4 and B2L1T7 were slightly greater than the CRDL.

- **Completeness**

SDGs SL1272, SL1278, W06446, W06458, WSCF120661, WSCF120665 and WSCF120809 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

A minor deficiency leading to qualification of chloride result for sample B2L1R5 was due to laboratory blank contamination.

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			
SDGs: SL1272, SL1278, W06446, W06458, WSCF120661, WSCF120665, WSCF120809	Reviewer: AQA	Project: 100-K	Page 1 of 1
Analyte(s)	**Qualifier**	**Samples Affected**	**Reason**
Chloride	J	B2L1R5	Laboratory blank contamination

Comments: None

Appendix 3

Annotated Laboratory Reports

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2L1R5

General Chemistry

Lot-Sample #...: F2E250455-001 **Work Order #...:** MTTL1 **Matrix.....:** SOLID
Date Sampled...: 05/20/12 **Date Received..:** 05/25/12
% Moisture.....: 6.0

PARAMETER		RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride	J	3.6 J	2.1	mg/kg	MCAWW 300.0A	05/31/12	2152115
			Dilution Factor: 1		MDL.....: 0.21		
Percent Moisture		6.0	0.10	%	MCAWW 160.3 MOD	05/29-05/30/12	2150015
			Dilution Factor: 1		MDL.....:		
Sulfate		36.6	5.3	mg/kg	MCAWW 300.0A	05/31/12	2152116
			Dilution Factor: 1		MDL.....: 0.53		

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

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

EH
07/13/12

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B2L1T0

General Chemistry

Lot-Sample #...: F2F260421-001 **Work Order #...:** MVART **Matrix.....:** SOLID
Date Sampled...: 06/20/12 **Date Received..:** 06/26/12
% Moisture.....: 2.1

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride	1.5 B	2.0	mg/kg	MCAWW 300.0A	06/27-06/28/12	2180054
		Dilution Factor: 1		MDL.....: 0.20		
Percent Moisture	2.1	0.10	%	MCAWW 160.3 MOD	06/27-06/28/12	2179015
		Dilution Factor: 1		MDL.....:		
Sulfate	11.4	5.1	mg/kg	MCAWW 300.0A	06/27-06/28/12	2180055
		Dilution Factor: 1		MDL.....: 0.51		

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

FORM I

SAMPLE RESULTS

Date: 24-May-12

Lab Name:	TestAmerica	**SDG:**	W06446	**Collection Date:**	5/20/2012 11:52:00 AM
Lot-Sample No.:	J2E210447-1	**Report No. :**	51800	**Received Date:**	5/21/2012 2:20:00 PM
Client Sample ID:	B2L1R4	**COC No. :**	F11-095-532	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 2142184	7196_CR6			**Work Order:**	MTNXF1AA		**Report DB ID:**	9MTNXF10				
HEXCHROME	***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*(1.)*	5/22/12		2.5	
							1.55E-01	*N/A*			g	

No. of Results: 1 **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 I

SAMPLE RESULTS

Date: 28-Jun-12

Lab Name:	TestAmerica	SDG:	W06458	Collection Date:	6/20/2012 9:25:00 AM
Lot-Sample No.:	J2F250434-1	Report No. :	52155	Received Date:	6/25/2012 11:15:00 AM
Client Sample ID:	B2L1R9	COC No. :	F11-095-537	Matrix:	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 2178041	7196_CR6			Work Order:	MVAAN1AA		Report DB ID:	9MVAAN10				
HEXCHROME	***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*(1.)*	6/26/12		2.5	
							1.55E-01	*N/A*			g	

No. of Results: 1 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.

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120661

Sample # 120661001
SAF# F11-095
Sample ID B2H1J3

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**05/22/12**
Anions by IC										
Chloride	16887-00-6	LA-533-410	U	<3.0		mg/kg	1	3.0	21	05/23/12
Sulfate	14808-79-8	LA-533-410	B	23.3		mg/kg	1	5.7	55	05/23/12
Cr(VI) Prep										**05/23/12**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.51	05/24/12
ICPMS Prep										**05/23/12**
ICP-MS										
Manganese	7439-96-5	LA-505-412		263		mg/kg	1	0.11	1.1	05/24/12
Nickel	7440-02-0	LA-505-412		6.90		mg/kg	1	0.11	1.1	05/24/12
Silver	7440-22-4	LA-505-412	U	<0.054		mg/kg	1	0.054	0.54	05/24/12
Antimony	7440-36-0	LA-505-412	U	<0.33		mg/kg	1	0.33	3.3	05/24/12
Barium	7440-39-3	LA-505-412		56.2		mg/kg	1	0.22	2.2	05/24/12
Beryllium	7440-41-7	LA-505-412	B	0.196		mg/kg	1	0.11	1.1	05/24/12
Cadmium	7440-43-9	LA-505-412	B	0.0762		mg/kg	1	0.054	0.54	05/24/12
Chromium	7440-47-3	LA-505-412		3.55		mg/kg	1	0.11	1.1	05/24/12
Cobalt	7440-48-4	LA-505-412		8.37		mg/kg	1	0.054	0.27	05/24/12
Copper	7440-50-8	LA-505-412		16.3		mg/kg	1	0.11	1.1	05/24/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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)

EH
07/13/12

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120661

Sample # 120661002
SAF# F11-095
Sample ID B2L1M2

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**05/22/12**
Anions by IC										
Chloride	16887-00-6	LA-533-410	U	<3.0		mg/kg	1	3.0	21	05/23/12
Sulfate	14808-79-8	LA-533-410	B	17.6		mg/kg	1	5.6	53	05/23/12
Cr(VI) Prep										**05/23/12**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.51	05/24/12
ICPMS Prep										**05/23/12**
ICP-MS										
Manganese	7439-96-5	LA-505-412		311		mg/kg	1	0.095	0.95	05/24/12
Nickel	7440-02-0	LA-505-412		6.70		mg/kg	1	0.095	0.95	05/24/12
Silver	7440-22-4	LA-505-412	U	<0.048		mg/kg	1	0.048	0.48	05/24/12
Antimony	7440-36-0	LA-505-412	U	<0.29		mg/kg	1	0.29	2.9	05/24/12
Barium	7440-39-3	LA-505-412		67.8		mg/kg	1	0.19	1.9	05/24/12
Beryllium	7440-41-7	LA-505-412	B	0.242		mg/kg	1	0.095	0.95	05/24/12
Cadmium	7440-43-9	LA-505-412	B	0.0639		mg/kg	1	0.048	0.48	05/24/12
Chromium	7440-47-3	LA-505-412		2.07		mg/kg	1	0.095	0.95	05/24/12
Cobalt	7440-48-4	LA-505-412		9.24		mg/kg	1	0.048	0.24	05/24/12
Copper	7440-50-8	LA-505-412		14.0		mg/kg	1	0.095	0.95	05/24/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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)

EH
07/13/12

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120661

Sample # 120661003
SAF# F11-095
Sample ID B2H1D5

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**05/22/12**
Anions by IC										
Chloride	16887-00-6	LA-533-410	B	3.71		mg/kg	1	3.0	21	05/23/12
Sulfate	14808-79-8	LA-533-410	B	34.0		mg/kg	1	5.6	54	05/23/12
Cr(VI) Prep										**05/23/12**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.52	05/24/12
ICPMS Prep										**05/23/12**
ICP-MS										
Manganese	7439-96-5	LA-505-412		249		mg/kg	1	0.10	1.0	05/24/12
Nickel	7440-02-0	LA-505-412		7.29		mg/kg	1	0.10	1.0	05/24/12
Silver	7440-22-4	LA-505-412	U	<0.051		mg/kg	1	0.051	0.51	05/24/12
Antimony	7440-36-0	LA-505-412	U	<0.30		mg/kg	1	0.30	3.0	05/24/12
Barium	7440-39-3	LA-505-412		49.2		mg/kg	1	0.20	2.0	05/24/12
Beryllium	7440-41-7	LA-505-412	B	0.200		mg/kg	1	0.10	1.0	05/24/12
Cadmium	7440-43-9	LA-505-412	B	0.0651		mg/kg	1	0.051	0.51	05/24/12
Chromium	7440-47-3	LA-505-412		4.47		mg/kg	1	0.10	1.0	05/24/12
Cobalt	7440-48-4	LA-505-412		7.74		mg/kg	1	0.051	0.25	05/24/12
Copper	7440-50-8	LA-505-412		14.3		mg/kg	1	0.10	1.0	05/24/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120661

Sample # 120661004
SAF# F11-095
Sample ID B2H1H5

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**05/22/12**
Anions by IC										
Chloride	16887-00-6	LA-533-410	U	<3.0		mg/kg	1	3.0	21	05/23/12
Sulfate	14808-79-8	LA-533-410	B	9.63		mg/kg	1	5.6	53	05/23/12
Cr(VI) Prep										**05/23/12**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.51	05/24/12
ICPMS Prep										**05/23/12**
ICP-MS										
Manganese	7439-96-5	LA-505-412		311		mg/kg	1	0.096	0.96	05/24/12
Nickel	7440-02-0	LA-505-412		6.08		mg/kg	1	0.096	0.96	05/24/12
Silver	7440-22-4	LA-505-412	U	<0.048		mg/kg	1	0.048	0.48	05/24/12
Antimony	7440-36-0	LA-505-412	U	<0.29		mg/kg	1	0.29	2.9	05/24/12
Barium	7440-39-3	LA-505-412		53.8		mg/kg	1	0.19	1.9	05/24/12
Beryllium	7440-41-7	LA-505-412	B	0.172		mg/kg	1	0.096	0.96	05/24/12
Cadmium	7440-43-9	LA-505-412	B	0.0491		mg/kg	1	0.048	0.48	05/24/12
Chromium	7440-47-3	LA-505-412		2.16		mg/kg	1	0.096	0.96	05/24/12
Cobalt	7440-48-4	LA-505-412		9.03		mg/kg	1	0.048	0.24	05/24/12
Copper	7440-50-8	LA-505-412		13.0		mg/kg	1	0.096	0.96	05/24/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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)

EH
07/13/12

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120661

Sample # 120661005
SAF# F11-095
Sample ID B2L1P6

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**05/22/12**
Anions by IC										
Chloride	16887-00-6	LA-533-410	U	<2.9		mg/kg	1	2.9	20	05/23/12
Sulfate	14808-79-8	LA-533-410	B	15.5		mg/kg	1	5.5	53	05/23/12
Cr(VI) Prep										**05/23/12**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.51	05/24/12
ICPMS Prep										**05/23/12**
ICP-MS										
Manganese	7439-96-5	LA-505-412		280		mg/kg	1	0.11	1.1	05/24/12
Nickel	7440-02-0	LA-505-412		5.22		mg/kg	1	0.11	1.1	05/24/12
Silver	7440-22-4	LA-505-412	U	<0.053		mg/kg	1	0.053	0.53	05/24/12
Antimony	7440-36-0	LA-505-412	U	<0.32		mg/kg	1	0.32	3.2	05/24/12
Barium	7440-39-3	LA-505-412		42.5		mg/kg	1	0.21	2.1	05/24/12
Beryllium	7440-41-7	LA-505-412	B	0.174		mg/kg	1	0.11	1.1	05/24/12
Cadmium	7440-43-9	LA-505-412	B	0.0554		mg/kg	1	0.053	0.53	05/24/12
Chromium	7440-47-3	LA-505-412		2.49		mg/kg	1	0.11	1.1	05/24/12
Cobalt	7440-48-4	LA-505-412		8.84		mg/kg	1	0.053	0.27	05/24/12
Copper	7440-50-8	LA-505-412		12.4		mg/kg	1	0.11	1.1	05/24/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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)

EH
07/13/12

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120661

Sample # 120661006
SAF# F11-095
Sample ID B2H1C3

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**05/22/12**
Anions by IC										
Chloride	16887-00-6	LA-533-410	U	<2.9		mg/kg	1	2.9	20	05/23/12
Sulfate	14808-79-8	LA-533-410	B	16.6		mg/kg	1	5.5	53	05/23/12
Cr(VI) Prep										**05/23/12**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.51	05/24/12
ICPMS Prep										**05/23/12**
ICP-MS										
Manganese	7439-96-5	LA-505-412		233		mg/kg	1	0.10	1.0	05/24/12
Nickel	7440-02-0	LA-505-412		4.65		mg/kg	1	0.10	1.0	05/24/12
Silver	7440-22-4	LA-505-412	U	<0.051		mg/kg	1	0.051	0.51	05/24/12
Antimony	7440-36-0	LA-505-412	U	<0.31		mg/kg	1	0.31	3.1	05/24/12
Barium	7440-39-3	LA-505-412		39.4		mg/kg	1	0.20	2.0	05/24/12
Beryllium	7440-41-7	LA-505-412	B	0.232		mg/kg	1	0.10	1.0	05/24/12
Cadmium	7440-43-9	LA-505-412	B	0.0539		mg/kg	1	0.051	0.51	05/24/12
Chromium	7440-47-3	LA-505-412		1.76		mg/kg	1	0.10	1.0	05/24/12
Cobalt	7440-48-4	LA-505-412		7.87		mg/kg	1	0.051	0.25	05/24/12
Copper	7440-50-8	LA-505-412		11.7		mg/kg	1	0.10	1.0	05/24/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120661

Sample # 120661007
SAF# F11-095
Sample ID B2H1D9

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**05/22/12**
Anions by IC										
Chloride	16887-00-6	LA-533-410	B	5.46		mg/kg	1	3.1	22	05/23/12
Sulfate	14808-79-8	LA-533-410		70.0		mg/kg	1	5.8	55	05/23/12
Cr(VI) Prep										**05/23/12**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	B	0.123		ug/g	1	0.11	0.53	05/24/12
ICPMS Prep										**05/23/12**
ICP-MS										
Manganese	7439-96-5	LA-505-412		226		mg/kg	1	0.11	1.1	05/24/12
Nickel	7440-02-0	LA-505-412		7.17		mg/kg	1	0.11	1.1	05/24/12
Silver	7440-22-4	LA-505-412	U	<0.055		mg/kg	1	0.055	0.55	05/24/12
Antimony	7440-36-0	LA-505-412	B	0.383		mg/kg	1	0.33	3.3	05/24/12
Barium	7440-39-3	LA-505-412		48.3		mg/kg	1	0.22	2.2	05/24/12
Beryllium	7440-41-7	LA-505-412	B	0.277		mg/kg	1	0.11	1.1	05/24/12
Cadmium	7440-43-9	LA-505-412	B	0.0653		mg/kg	1	0.055	0.55	05/24/12
Chromium	7440-47-3	LA-505-412		5.06		mg/kg	1	0.11	1.1	05/24/12
Cobalt	7440-48-4	LA-505-412		6.72		mg/kg	1	0.055	0.28	05/24/12
Copper	7440-50-8	LA-505-412		12.7		mg/kg	1	0.11	1.1	05/24/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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)

EH
07/13/12

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120661

Sample # 120661008
SAF# F11-095
Sample ID B2L1L8

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**05/22/12**
Anions by IC										
Chloride	16887-00-6	LA-533-410	U	<2.9		mg/kg	1	2.9	20	05/23/12
Sulfate	14808-79-8	LA-533-410	U	<5.5		mg/kg	1	5.5	52	05/23/12
Cr(VI) Prep										**05/23/12**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.50	05/24/12
ICPMS Prep										**05/23/12**
ICP-MS										
Manganese	7439-96-5	LA-505-412		252		mg/kg	1	0.092	0.92	05/24/12
Nickel	7440-02-0	LA-505-412		5.46		mg/kg	1	0.092	0.92	05/24/12
Silver	7440-22-4	LA-505-412	U	<0.046		mg/kg	1	0.046	0.46	05/24/12
Antimony	7440-36-0	LA-505-412	U	<0.28		mg/kg	1	0.28	2.8	05/24/12
Barium	7440-39-3	LA-505-412		42.9		mg/kg	1	0.18	1.8	05/24/12
Beryllium	7440-41-7	LA-505-412	B	0.234		mg/kg	1	0.092	0.92	05/24/12
Cadmium	7440-43-9	LA-505-412	B	0.0462		mg/kg	1	0.046	0.46	05/24/12
Chromium	7440-47-3	LA-505-412		1.58		mg/kg	1	0.092	0.92	05/24/12
Cobalt	7440-48-4	LA-505-412		8.09		mg/kg	1	0.046	0.23	05/24/12
Copper	7440-50-8	LA-505-412		12.1		mg/kg	1	0.092	0.92	05/24/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120661

Sample # 120661009
SAF# F11-095
Sample ID B2H1F7

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**05/22/12**
Anions by IC										
Chloride	16887-00-6	LA-533-410	B	3.33		mg/kg	1	2.8	19	05/23/12
Sulfate	14808-79-8	LA-533-410		63.6		mg/kg	1	5.2	50	05/23/12
Cr(VI) Prep										**05/23/12**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.51	05/24/12
ICPMS Prep										**05/23/12**
ICP-MS										
Manganese	7439-96-5	LA-505-412		224		mg/kg	1	0.099	0.99	05/24/12
Nickel	7440-02-0	LA-505-412		4.45		mg/kg	1	0.099	0.99	05/24/12
Silver	7440-22-4	LA-505-412	U	<0.049		mg/kg	1	0.049	0.49	05/24/12
Antimony	7440-36-0	LA-505-412	U	<0.30		mg/kg	1	0.30	3.0	05/24/12
Barium	7440-39-3	LA-505-412		35.4		mg/kg	1	0.20	2.0	05/24/12
Beryllium	7440-41-7	LA-505-412	B	0.179		mg/kg	1	0.099	0.99	05/24/12
Cadmium	7440-43-9	LA-505-412	B	0.0533		mg/kg	1	0.049	0.49	05/24/12
Chromium	7440-47-3	LA-505-412		1.47		mg/kg	1	0.099	0.99	05/24/12
Cobalt	7440-48-4	LA-505-412		7.09		mg/kg	1	0.049	0.25	05/24/12
Copper	7440-50-8	LA-505-412		10.5		mg/kg	1	0.099	0.99	05/24/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120661

Sample # 120661010
SAF# F11-095
Sample ID B2H1J7

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**05/22/12**
Anions by IC										
Chloride	16887-00-6	LA-533-410	U	<2.9		mg/kg	1	2.9	21	05/23/12
Sulfate	14808-79-8	LA-533-410	B	23.1		mg/kg	1	5.6	53	05/23/12
Cr(VI) Prep										**05/23/12**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.51	05/24/12
ICPMS Prep										**05/23/12**
ICP-MS										
Manganese	7439-96-5	LA-505-412		297		mg/kg	1	0.11	1.1	05/24/12
Nickel	7440-02-0	LA-505-412		6.92		mg/kg	1	0.11	1.1	05/24/12
Silver	7440-22-4	LA-505-412	U	<0.056		mg/kg	1	0.056	0.56	05/24/12
Antimony	7440-36-0	LA-505-412	U	<0.34		mg/kg	1	0.34	3.4	05/24/12
Barium	7440-39-3	LA-505-412		50.7		mg/kg	1	0.23	2.3	05/24/12
Beryllium	7440-41-7	LA-505-412	B	0.260		mg/kg	1	0.11	1.1	05/24/12
Cadmium	7440-43-9	LA-505-412	B	0.0564		mg/kg	1	0.056	0.56	05/24/12
Chromium	7440-47-3	LA-505-412		3.42		mg/kg	1	0.11	1.1	05/24/12
Cobalt	7440-48-4	LA-505-412		9.42		mg/kg	1	0.056	0.28	05/24/12
Copper	7440-50-8	LA-505-412		14.6		mg/kg	1	0.11	1.1	05/24/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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)

EH
07/13/12

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120665

Sample # 120665001
SAF# F11-095
Sample ID B2H1H1

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**05/22/12**
Anions by IC										
Chloride	16887-00-6	LA-533-410	U	<2.9		mg/kg	1	2.9	20	05/23/12
Sulfate	14808-79-8	LA-533-410	B	25.2		mg/kg	1	5.5	52	05/23/12
Cr(VI) Prep										**05/23/12**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.50	05/24/12
ICPMS Prep										**05/23/12**
ICP-MS										
Manganese	7439-96-5	LA-505-412		267		mg/kg	1	0.10	1.0	05/24/12
Nickel	7440-02-0	LA-505-412		5.58		mg/kg	1	0.10	1.0	05/24/12
Silver	7440-22-4	LA-505-412	U	<0.051		mg/kg	1	0.051	0.51	05/24/12
Antimony	7440-36-0	LA-505-412	U	<0.31		mg/kg	1	0.31	3.1	05/24/12
Barium	7440-39-3	LA-505-412		49.9		mg/kg	1	0.20	2.0	05/24/12
Beryllium	7440-41-7	LA-505-412	B	0.130		mg/kg	1	0.10	1.0	05/24/12
Cadmium	7440-43-9	LA-505-412	U	<0.051		mg/kg	1	0.051	0.51	05/24/12
Chromium	7440-47-3	LA-505-412		1.50		mg/kg	1	0.10	1.0	05/24/12
Cobalt	7440-48-4	LA-505-412		8.41		mg/kg	1	0.051	0.25	05/24/12
Copper	7440-50-8	LA-505-412		11.1		mg/kg	1	0.10	1.0	05/24/12

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

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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)

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EH
07/13/12

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120665

Sample # 120665002
SAF# F11-095
Sample ID B2H1D1

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**05/22/12**
Anions by IC										
Chloride	16887-00-6	LA-533-410	U	<2.9		mg/kg	1	2.9	20	05/23/12
Sulfate	14808-79-8	LA-533-410	B	14.7		mg/kg	1	5.4	52	05/23/12
Cr(VI) Prep										**05/23/12**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.51	05/24/12
ICPMS Prep										**05/23/12**
ICP-MS										
Manganese	7439-96-5	LA-505-412		289		mg/kg	1	0.11	1.1	05/24/12
Nickel	7440-02-0	LA-505-412		5.83		mg/kg	1	0.11	1.1	05/24/12
Silver	7440-22-4	LA-505-412	U	<0.055		mg/kg	1	0.055	0.55	05/24/12
Antimony	7440-36-0	LA-505-412	U	<0.33		mg/kg	1	0.33	3.3	05/24/12
Barium	7440-39-3	LA-505-412		45.6		mg/kg	1	0.22	2.2	05/24/12
Beryllium	7440-41-7	LA-505-412	B	0.152		mg/kg	1	0.11	1.1	05/24/12
Cadmium	7440-43-9	LA-505-412	B	0.0569		mg/kg	1	0.055	0.55	05/24/12
Chromium	7440-47-3	LA-505-412		2.04		mg/kg	1	0.11	1.1	05/24/12
Cobalt	7440-48-4	LA-505-412		9.34		mg/kg	1	0.055	0.27	05/24/12
Copper	7440-50-8	LA-505-412		14.8		mg/kg	1	0.11	1.1	05/24/12

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

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

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

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EH
07/13/12

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120665

Sample # 120665003
SAF# F11-095
Sample ID B2L1M6

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**05/22/12**
Anions by IC										
Chloride	16887-00-6	LA-533-410	U	<3.0		mg/kg	1	3.0	21	05/23/12
Sulfate	14808-79-8	LA-533-410	B	14.7		mg/kg	1	5.6	53	05/23/12
Cr(VI) Prep										**05/23/12**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.51	05/24/12
ICPMS Prep										**05/23/12**
ICP-MS										
Manganese	7439-96-5	LA-505-412		355		mg/kg	1	0.11	1.1	05/24/12
Nickel	7440-02-0	LA-505-412		6.19		mg/kg	1	0.11	1.1	05/24/12
Silver	7440-22-4	LA-505-412	U	<0.055		mg/kg	1	0.055	0.55	05/24/12
Antimony	7440-36-0	LA-505-412	U	<0.33		mg/kg	1	0.33	3.3	05/24/12
Barium	7440-39-3	LA-505-412		67.8		mg/kg	1	0.22	2.2	05/24/12
Beryllium	7440-41-7	LA-505-412	B	0.249		mg/kg	1	0.11	1.1	05/24/12
Cadmium	7440-43-9	LA-505-412	B	0.0716		mg/kg	1	0.055	0.55	05/24/12
Chromium	7440-47-3	LA-505-412		2.48		mg/kg	1	0.11	1.1	05/24/12
Cobalt	7440-48-4	LA-505-412		10.8		mg/kg	1	0.055	0.28	05/24/12
Copper	7440-50-8	LA-505-412		15.3		mg/kg	1	0.11	1.1	05/24/12

MDL = Minimum Detection Limit
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TP Err = Total Propagated Error
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)

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WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120665

Sample # 120665004
SAF# F11-095
Sample ID B2H1F3

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**05/22/12**
Anions by IC										
Chloride	16887-00-6	LA-533-410	B	3.06		mg/kg	1	3.0	21	05/23/12
Sulfate	14808-79-8	LA-533-410	B	20.0		mg/kg	1	5.6	54	05/23/12
Cr(VI) Prep										**05/23/12**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.51	05/24/12
ICPMS Prep										**05/23/12**
ICP-MS										
Manganese	7439-96-5	LA-505-412		321		mg/kg	1	0.10	1.0	05/24/12
Nickel	7440-02-0	LA-505-412		7.12		mg/kg	1	0.10	1.0	05/24/12
Silver	7440-22-4	LA-505-412	U	<0.050		mg/kg	1	0.050	0.50	05/24/12
Antimony	7440-36-0	LA-505-412	U	<0.30		mg/kg	1	0.30	3.0	05/24/12
Barium	7440-39-3	LA-505-412		63.4		mg/kg	1	0.20	2.0	05/24/12
Beryllium	7440-41-7	LA-505-412	B	0.282		mg/kg	1	0.10	1.0	05/24/12
Cadmium	7440-43-9	LA-505-412	B	0.0635		mg/kg	1	0.050	0.50	05/24/12
Chromium	7440-47-3	LA-505-412		2.96		mg/kg	1	0.10	1.0	05/24/12
Cobalt	7440-48-4	LA-505-412		9.67		mg/kg	1	0.050	0.25	05/24/12
Copper	7440-50-8	LA-505-412		16.0		mg/kg	1	0.10	1.0	05/24/12

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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)

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WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120665

Sample # 120665005
SAF# F11-095
Sample ID B2L1L4

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**05/22/12**
Anions by IC										
Chloride	16887-00-6	LA-533-410	U	<2.9		mg/kg	1	2.9	20	05/23/12
Sulfate	14808-79-8	LA-533-410	B	33.9		mg/kg	1	5.5	52	05/23/12
Cr(VI) Prep										**05/23/12**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.51	05/24/12
ICPMS Prep										**05/23/12**
ICP-MS										
Manganese	7439-96-5	LA-505-412		307		mg/kg	1	0.11	1.1	05/24/12
Nickel	7440-02-0	LA-505-412		7.49		mg/kg	1	0.11	1.1	05/24/12
Silver	7440-22-4	LA-505-412	U	<0.055		mg/kg	1	0.055	0.55	05/24/12
Antimony	7440-36-0	LA-505-412	U	<0.33		mg/kg	1	0.33	3.3	05/24/12
Barium	7440-39-3	LA-505-412		56.8		mg/kg	1	0.22	2.2	05/24/12
Beryllium	7440-41-7	LA-505-412	B	0.166		mg/kg	1	0.11	1.1	05/24/12
Cadmium	7440-43-9	LA-505-412	B	0.0643		mg/kg	1	0.055	0.55	05/24/12
Chromium	7440-47-3	LA-505-412		2.63		mg/kg	1	0.11	1.1	05/24/12
Cobalt	7440-48-4	LA-505-412		9.98		mg/kg	1	0.055	0.27	05/24/12
Copper	7440-50-8	LA-505-412		16.5		mg/kg	1	0.11	1.1	05/24/12

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N - MS and/or MSD recovery outside control limits.

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

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WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120665

Sample # 120665006
SAF# F11-095
Sample ID B2L1T4

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**05/22/12**
Anions by IC										
Chloride	16887-00-6	LA-533-410	U	<2.9		mg/kg	1	2.9	20	05/23/12
Sulfate	14808-79-8	LA-533-410	U	<5.5		mg/kg	1	5.5	52	05/23/12
Cr(VI) Prep										**05/30/12**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	B	0.0970		ug/g	1	0.097	0.48	05/31/12
ICPMS Prep										**05/23/12**
ICP-MS										
Manganese	7439-96-5	LA-505-412		6.41		mg/kg	1	0.099	0.99	05/24/12
Nickel	7440-02-0	LA-505-412	U	<0.099		mg/kg	1	0.099	0.99	05/24/12
Silver	7440-22-4	LA-505-412	U	<0.050		mg/kg	1	0.050	0.50	05/24/12
Antimony	7440-36-0	LA-505-412	U	<0.30		mg/kg	1	0.30	3.0	05/24/12
Barium	7440-39-3	LA-505-412		2.52		mg/kg	1	0.20	2.0	05/24/12
Beryllium	7440-41-7	LA-505-412	U	<0.099		mg/kg	1	0.099	0.99	05/24/12
Cadmium	7440-43-9	LA-505-412	U	<0.050		mg/kg	1	0.050	0.50	05/24/12
Chromium	7440-47-3	LA-505-412	U	<0.099		mg/kg	1	0.099	0.99	05/24/12
Cobalt	7440-48-4	LA-505-412	B	0.0974		mg/kg	1	0.050	0.25	05/24/12
Copper	7440-50-8	LA-505-412	U	<0.099		mg/kg	1	0.099	0.99	05/24/12

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

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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)

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WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120665

Sample # 120665007
SAF# F11-095
Sample ID B2H1B9

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**05/22/12**
Anions by IC										
Chloride	16887-00-6	LA-533-410	U	<2.7		mg/kg	1	2.7	19	05/23/12
Sulfate	14808-79-8	LA-533-410	B	18.2		mg/kg	1	5.2	50	05/23/12
Cr(VI) Prep										**05/30/12**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.099		ug/g	1	0.099	0.50	05/31/12
ICPMS Prep										**05/30/12**
ICP-MS										
Manganese	7439-96-5	LA-505-412		275		mg/kg	0.5	0.051	0.51	05/30/12
Nickel	7440-02-0	LA-505-412		5.23		mg/kg	0.5	0.051	0.51	05/30/12
Silver	7440-22-4	LA-505-412	U	<0.026		mg/kg	0.5	0.026	0.26	05/30/12
Antimony	7440-36-0	LA-505-412	U	<0.15		mg/kg	0.5	0.15	1.5	05/30/12
Barium	7440-39-3	LA-505-412		43.9		mg/kg	0.5	0.10	1.0	05/30/12
Beryllium	7440-41-7	LA-505-412	B	0.136		mg/kg	0.5	0.051	0.51	05/30/12
Cadmium	7440-43-9	LA-505-412	B	0.0533		mg/kg	0.5	0.026	0.26	05/30/12
Chromium	7440-47-3	LA-505-412		1.87		mg/kg	0.5	0.051	0.51	05/30/12
Cobalt	7440-48-4	LA-505-412		8.12		mg/kg	0.5	0.026	0.13	05/30/12
Copper	7440-50-8	LA-505-412		13.5		mg/kg	0.5	0.051	0.51	05/30/12

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

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

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

REVISED

EH
07/13/12

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120665

Sample # 120665008
SAF# F11-095
Sample ID B2H1H9

Matrix SOIL
Sampled 05/20/12
Received 05/21/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**05/22/12**
Anions by IC										
Chloride	16887-00-6	LA-533-410	U	<2.9		mg/kg	1	2.9	21	05/23/12
Sulfate	14808-79-8	LA-533-410	B	18.2		mg/kg	1	5.6	53	05/23/12
Cr(VI) Prep										**05/30/12**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.50	05/31/12
ICPMS Prep										**05/30/12**
ICP-MS										
Manganese	7439-96-5	LA-505-412		294		mg/kg	0.5	0.054	0.54	05/30/12
Nickel	7440-02-0	LA-505-412		8.32		mg/kg	0.5	0.054	0.54	05/30/12
Silver	7440-22-4	LA-505-412	B	0.0877		mg/kg	0.5	0.027	0.27	05/30/12
Antimony	7440-36-0	LA-505-412	U	<0.16		mg/kg	0.5	0.16	1.6	05/30/12
Barium	7440-39-3	LA-505-412		60.8		mg/kg	0.5	0.11	1.1	05/30/12
Beryllium	7440-41-7	LA-505-412	B	0.276		mg/kg	0.5	0.054	0.54	05/30/12
Cadmium	7440-43-9	LA-505-412	B	0.0692		mg/kg	0.5	0.027	0.27	05/30/12
Chromium	7440-47-3	LA-505-412		4.89		mg/kg	0.5	0.054	0.54	05/30/12
Cobalt	7440-48-4	LA-505-412		9.44		mg/kg	0.5	0.027	0.14	05/30/12
Copper	7440-50-8	LA-505-412		17.3		mg/kg	0.5	0.054	0.54	05/30/12

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

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

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

REVISED

EH
07/13/12

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809001
SAF# F11-095
Sample ID B2L1T7

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anion Prep (S)										**06/21/12**
Anions by Ion Chromatography (Solid)										
Chloride	16887-00-6	LA-533-410	U	<2.9		mg/kg	1	2.9	20	06/21/12
Sulfate	14808-79-8	LA-533-410	U	<5.4		mg/kg	1	5.4	51	06/21/12
ICPMS Prep (S)										**06/25/12**
ICP-2008 MS All possible metal										
Manganese	7439-96-5	LA-505-412		6.28		mg/kg	0.5	0.050	0.50	06/26/12
Nickel	7440-02-0	LA-505-412	B	0.0746		mg/kg	0.5	0.050	0.50	06/26/12
Silver	7440-22-4	LA-505-412	U	<0.025		mg/kg	0.5	0.025	0.25	06/26/12
Antimony	7440-36-0	LA-505-412	U	<0.15		mg/kg	0.5	0.15	1.5	06/26/12
Barium	7440-39-3	LA-505-412		2.49		mg/kg	0.5	0.10	1.0	06/26/12
Beryllium	7440-41-7	LA-505-412	B	0.0550		mg/kg	0.5	0.050	0.50	06/26/12
Cadmium	7440-43-9	LA-505-412	U	<0.025		mg/kg	0.5	0.025	0.25	06/26/12
Chromium	7440-47-3	LA-505-412	B	0.0901		mg/kg	0.5	0.050	0.50	06/26/12
Cobalt	7440-48-4	LA-505-412	B	0.101		mg/kg	0.5	0.025	0.13	06/26/12
Copper	7440-50-8	LA-505-412	BC	0.156		mg/kg	0.5	0.050	0.50	06/26/12
Vanadium	7440-62-2	LA-505-412	BC	0.476		mg/kg	0.5	0.10	1.0	06/26/12
Zinc	7440-66-6	LA-505-412	B	1.08		mg/kg	0.5	0.50	5.0	06/26/12
Lead	7439-92-1	LA-505-412		0.360		mg/kg	0.5	0.025	0.25	06/26/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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)

EH
07/13/12

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809001
SAF# F11-095
Sample ID B2L1T7

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury	7439-97-6	LA-505-412	U	<0.025		mg/kg	0.5	0.025	0.10	06/26/12
Molybdenum	7439-98-7	LA-505-412	B	0.0370		mg/kg	0.5	0.025	0.25	06/26/12
Strontium	7440-24-6	LA-505-412		0.576		mg/kg	0.5	0.050	0.50	06/26/12
Tin	7440-31-5	LA-505-412	B	0.0636		mg/kg	0.5	0.025	0.25	06/26/12
Uranium	7440-61-1	LA-505-412	B	0.113		mg/kg	0.5	0.025	0.13	06/26/12
Arsenic	7440-38-2	LA-505-412	B	0.178		mg/kg	0.5	0.10	1.0	06/26/12
Selenium	7782-49-2	LA-505-412	U	<0.25		mg/kg	0.5	0.25	2.5	06/26/12
Boron	7440-42-8	LA-505-412	U	<0.25		mg/kg	0.5	0.25	2.5	06/26/12
Preparation for Cr6 (SO)										**06/26/12**
Hexavalent chromium										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.099		ug/g	1	0.099	0.50	06/26/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809002
SAF# F11-095
Sample ID B2H1K1

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anion Prep (S)										**06/21/12**
Anions by Ion Chromatography (Solid)										
Chloride	16887-00-6	LA-533-410	U	<2.9		mg/kg	1	2.9	20	06/21/12
Sulfate	14808-79-8	LA-533-410	B	13.2		mg/kg	1	5.5	52	06/21/12
ICPMS Prep (S)										**06/25/12**
ICP-2008 MS All possible metal										
Manganese	7439-96-5	LA-505-412		261		mg/kg	0.5	0.046	0.46	06/26/12
Nickel	7440-02-0	LA-505-412		5.69		mg/kg	0.5	0.046	0.46	06/26/12
Silver	7440-22-4	LA-505-412	B	0.0283		mg/kg	0.5	0.023	0.23	06/26/12
Antimony	7440-36-0	LA-505-412	B	0.240		mg/kg	0.5	0.14	1.4	06/26/12
Barium	7440-39-3	LA-505-412		45.1		mg/kg	0.5	0.093	0.93	06/26/12
Beryllium	7440-41-7	LA-505-412	B	0.254		mg/kg	0.5	0.046	0.46	06/26/12
Cadmium	7440-43-9	LA-505-412	B	0.0696		mg/kg	0.5	0.023	0.23	06/26/12
Chromium	7440-47-3	LA-505-412		2.25		mg/kg	0.5	0.046	0.46	06/26/12
Cobalt	7440-48-4	LA-505-412		9.48		mg/kg	0.5	0.023	0.12	06/26/12
Copper	7440-50-8	LA-505-412		14.6		mg/kg	0.5	0.046	0.46	06/26/12
Vanadium	7440-62-2	LA-505-412		58.8		mg/kg	0.5	0.093	0.93	06/26/12
Zinc	7440-66-6	LA-505-412		39.3		mg/kg	0.5	0.46	4.6	06/26/12
Lead	7439-92-1	LA-505-412		2.41		mg/kg	0.5	0.023	0.23	06/26/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809002
SAF# F11-095
Sample ID B2H1K1

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury	7439-97-6	LA-505-412	U	<0.023		mg/kg	0.5	0.023	0.093	06/26/12
Molybdenum	7439-98-7	LA-505-412		0.403		mg/kg	0.5	0.023	0.23	06/26/12
Strontium	7440-24-6	LA-505-412		24.5		mg/kg	0.5	0.046	0.46	06/26/12
Tin	7440-31-5	LA-505-412		0.488		mg/kg	0.5	0.023	0.23	06/26/12
Uranium	7440-61-1	LA-505-412		0.458		mg/kg	0.5	0.023	0.12	06/26/12
Arsenic	7440-38-2	LA-505-412		1.73		mg/kg	0.5	0.093	0.93	06/26/12
Selenium	7782-49-2	LA-505-412	B	0.321		mg/kg	0.5	0.23	2.3	06/26/12
Boron	7440-42-8	LA-505-412	B	0.250		mg/kg	0.5	0.23	2.3	06/26/12
Preparation for Cr6 (SO)										**06/26/12**
Hexavalent chromium										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.51	06/26/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809003
SAF# F11-095
Sample ID B2L1K2

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anion Prep (S)										**06/21/12**
Anions by Ion Chromatography (Solid)										
Chloride	16887-00-6	LA-533-410	U	<2.9		mg/kg	1	2.9	21	06/21/12
Sulfate	14808-79-8	LA-533-410	B	16.7		mg/kg	1	5.6	53	06/21/12
ICPMS Prep (S)										**06/25/12**
ICP-2008 MS All possible metal										
Manganese	7439-96-5	LA-505-412		309		mg/kg	0.5	0.047	0.47	06/26/12
Nickel	7440-02-0	LA-505-412		7.38		mg/kg	0.5	0.047	0.47	06/26/12
Silver	7440-22-4	LA-505-412	B	0.0259		mg/kg	0.5	0.024	0.24	06/26/12
Antimony	7440-36-0	LA-505-412	U	<0.14		mg/kg	0.5	0.14	1.4	06/26/12
Barium	7440-39-3	LA-505-412		51.4		mg/kg	0.5	0.094	0.94	06/26/12
Beryllium	7440-41-7	LA-505-412	B	0.294		mg/kg	0.5	0.047	0.47	06/26/12
Cadmium	7440-43-9	LA-505-412	B	0.0462		mg/kg	0.5	0.024	0.24	06/26/12
Chromium	7440-47-3	LA-505-412		2.43		mg/kg	0.5	0.047	0.47	06/26/12
Cobalt	7440-48-4	LA-505-412		10.6		mg/kg	0.5	0.024	0.12	06/26/12
Copper	7440-50-8	LA-505-412		13.5		mg/kg	0.5	0.047	0.47	06/26/12
Vanadium	7440-62-2	LA-505-412		69.8		mg/kg	0.5	0.094	0.94	06/26/12
Zinc	7440-66-6	LA-505-412		42.4		mg/kg	0.5	0.47	4.7	06/26/12
Lead	7439-92-1	LA-505-412		2.33		mg/kg	0.5	0.024	0.24	06/26/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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)

EH
07/13/12

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809003
SAF# F11-095
Sample ID B2L1K2

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury	7439-97-6	LA-505-412	U	<0.024		mg/kg	0.5	0.024	0.094	06/26/12
Molybdenum	7439-98-7	LA-505-412		0.434		mg/kg	0.5	0.024	0.24	06/26/12
Strontium	7440-24-6	LA-505-412		25.3		mg/kg	0.5	0.047	0.47	06/26/12
Tin	7440-31-5	LA-505-412		0.407		mg/kg	0.5	0.024	0.24	06/26/12
Uranium	7440-61-1	LA-505-412		0.448		mg/kg	0.5	0.024	0.12	06/26/12
Arsenic	7440-38-2	LA-505-412		1.41		mg/kg	0.5	0.094	0.94	06/26/12
Selenium	7782-49-2	LA-505-412	B	0.329		mg/kg	0.5	0.24	2.4	06/26/12
Boron	7440-42-8	LA-505-412	U	<0.24		mg/kg	0.5	0.24	2.4	06/26/12
Preparation for Cr6 (SO)										**06/26/12**
Hexavalent chromium										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.51	06/26/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809004
SAF# F11-095
Sample ID B2H1K5

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anion Prep (S)										**06/21/12**
Anions by Ion Chromatography (Solid)										
Chloride	16887-00-6	LA-533-410	B	3.06		mg/kg	1	3.0	21	06/21/12
Sulfate	14808-79-8	LA-533-410	B	28.8		mg/kg	1	5.6	53	06/21/12
ICPMS Prep (S)										**06/25/12**
ICP-2008 MS All possible metal										
Manganese	7439-96-5	LA-505-412		269		mg/kg	0.5	0.050	0.50	06/26/12
Nickel	7440-02-0	LA-505-412		6.53		mg/kg	0.5	0.050	0.50	06/26/12
Silver	7440-22-4	LA-505-412	U	<0.025		mg/kg	0.5	0.025	0.25	06/26/12
Antimony	7440-36-0	LA-505-412	B	0.452		mg/kg	0.5	0.15	1.5	06/26/12
Barium	7440-39-3	LA-505-412		40.7		mg/kg	0.5	0.099	0.99	06/26/12
Beryllium	7440-41-7	LA-505-412	B	0.155		mg/kg	0.5	0.050	0.50	06/26/12
Cadmium	7440-43-9	LA-505-412	B	0.0407		mg/kg	0.5	0.025	0.25	06/26/12
Chromium	7440-47-3	LA-505-412		2.40		mg/kg	0.5	0.050	0.50	06/26/12
Cobalt	7440-48-4	LA-505-412		9.25		mg/kg	0.5	0.025	0.12	06/26/12
Copper	7440-50-8	LA-505-412		14.0		mg/kg	0.5	0.050	0.50	06/26/12
Vanadium	7440-62-2	LA-505-412		58.1		mg/kg	0.5	0.099	0.99	06/26/12
Zinc	7440-66-6	LA-505-412		38.4		mg/kg	0.5	0.50	5.0	06/26/12
Lead	7439-92-1	LA-505-412		2.35		mg/kg	0.5	0.025	0.25	06/26/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809004
SAF# F11-095
Sample ID B2H1K5

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury	7439-97-6	LA-505-412	U	<0.025		mg/kg	0.5	0.025	0.099	06/26/12
Molybdenum	7439-98-7	LA-505-412		0.387		mg/kg	0.5	0.025	0.25	06/26/12
Strontium	7440-24-6	LA-505-412		25.2		mg/kg	0.5	0.050	0.50	06/26/12
Tin	7440-31-5	LA-505-412		0.532		mg/kg	0.5	0.025	0.25	06/26/12
Uranium	7440-61-1	LA-505-412		0.426		mg/kg	0.5	0.025	0.12	06/26/12
Arsenic	7440-38-2	LA-505-412		2.31		mg/kg	0.5	0.099	0.99	06/26/12
Selenium	7782-49-2	LA-505-412	B	0.316		mg/kg	0.5	0.25	2.5	06/26/12
Boron	7440-42-8	LA-505-412	U	<0.25		mg/kg	0.5	0.25	2.5	06/26/12
Preparation for Cr6 (SO)										**06/26/12**
Hexavalent chromium										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.50	06/26/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809005
SAF# F11-095
Sample ID B2L1K6

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anion Prep (S)										**06/21/12**
Anions by Ion Chromatography (Solid)										
Chloride	16887-00-6	LA-533-410	U	<2.9		mg/kg	1	2.9	21	06/21/12
Sulfate	14808-79-8	LA-533-410	B	16.6		mg/kg	1	5.6	53	06/21/12
ICPMS Prep (S)										**06/25/12**
ICP-2008 MS All possible metal										
Manganese	7439-96-5	LA-505-412		299		mg/kg	0.5	0.047	0.47	06/26/12
Nickel	7440-02-0	LA-505-412		15.1		mg/kg	0.5	0.047	0.47	06/26/12
Silver	7440-22-4	LA-505-412	B	0.0271		mg/kg	0.5	0.024	0.24	06/26/12
Antimony	7440-36-0	LA-505-412	U	<0.14		mg/kg	0.5	0.14	1.4	06/26/12
Barium	7440-39-3	LA-505-412		47.4		mg/kg	0.5	0.095	0.95	06/26/12
Beryllium	7440-41-7	LA-505-412	B	0.190		mg/kg	0.5	0.047	0.47	06/26/12
Cadmium	7440-43-9	LA-505-412	B	0.0503		mg/kg	0.5	0.024	0.24	06/26/12
Chromium	7440-47-3	LA-505-412		4.64		mg/kg	0.5	0.047	0.47	06/26/12
Cobalt	7440-48-4	LA-505-412		9.98		mg/kg	0.5	0.024	0.12	06/26/12
Copper	7440-50-8	LA-505-412		13.5		mg/kg	0.5	0.047	0.47	06/26/12
Vanadium	7440-62-2	LA-505-412		52.8		mg/kg	0.5	0.095	0.95	06/26/12
Zinc	7440-66-6	LA-505-412		39.1		mg/kg	0.5	0.47	4.7	06/26/12
Lead	7439-92-1	LA-505-412		2.79		mg/kg	0.5	0.024	0.24	06/26/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809005
SAF# F11-095
Sample ID B2L1K6

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury	7439-97-6	LA-505-412	U	<0.024		mg/kg	0.5	0.024	0.095	06/26/12
Molybdenum	7439-98-7	LA-505-412		0.357		mg/kg	0.5	0.024	0.24	06/26/12
Strontium	7440-24-6	LA-505-412		24.9		mg/kg	0.5	0.047	0.47	06/26/12
Tin	7440-31-5	LA-505-412		0.383		mg/kg	0.5	0.024	0.24	06/26/12
Uranium	7440-61-1	LA-505-412		0.550		mg/kg	0.5	0.024	0.12	06/26/12
Arsenic	7440-38-2	LA-505-412		1.61		mg/kg	0.5	0.095	0.95	06/26/12
Selenium	7782-49-2	LA-505-412	B	0.312		mg/kg	0.5	0.24	2.4	06/26/12
Boron	7440-42-8	LA-505-412	B	0.490		mg/kg	0.5	0.24	2.4	06/26/12
Preparation for Cr6 (SO)										**06/26/12**
Hexavalent chromium										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.51	06/26/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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)

EH
07/13/12

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809006
SAF# F11-095
Sample ID B2H1K9

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anion Prep (S)										**06/21/12**
Anions by Ion Chromatography (Solid)										
Chloride	16887-00-6	LA-533-410	B	3.72		mg/kg	1	2.9	21	06/21/12
Sulfate	14808-79-8	LA-533-410	B	32.2		mg/kg	1	5.5	53	06/21/12
ICPMS Prep (S)										**06/25/12**
ICP-2008 MS All possible metal										
Manganese	7439-96-5	LA-505-412		290		mg/kg	0.5	0.048	0.48	06/26/12
Nickel	7440-02-0	LA-505-412		6.91		mg/kg	0.5	0.048	0.48	06/26/12
Silver	7440-22-4	LA-505-412	B	0.0270		mg/kg	0.5	0.024	0.24	06/26/12
Antimony	7440-36-0	LA-505-412	U	<0.14		mg/kg	0.5	0.14	1.4	06/26/12
Barium	7440-39-3	LA-505-412		43.4		mg/kg	0.5	0.097	0.97	06/26/12
Beryllium	7440-41-7	LA-505-412	B	0.182		mg/kg	0.5	0.048	0.48	06/26/12
Cadmium	7440-43-9	LA-505-412	B	0.0449		mg/kg	0.5	0.024	0.24	06/26/12
Chromium	7440-47-3	LA-505-412		2.85		mg/kg	0.5	0.048	0.48	06/26/12
Cobalt	7440-48-4	LA-505-412		10.0		mg/kg	0.5	0.024	0.12	06/26/12
Copper	7440-50-8	LA-505-412		13.4		mg/kg	0.5	0.048	0.48	06/26/12
Vanadium	7440-62-2	LA-505-412		67.2		mg/kg	0.5	0.097	0.97	06/26/12
Zinc	7440-66-6	LA-505-412		41.4		mg/kg	0.5	0.48	4.8	06/26/12
Lead	7439-92-1	LA-505-412		2.45		mg/kg	0.5	0.024	0.24	06/26/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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)

EH
07/13/12

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809006
SAF# F11-095
Sample ID B2H1K9

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury	7439-97-6	LA-505-412	U	<0.024		mg/kg	0.5	0.024	0.097	06/26/12
Molybdenum	7439-98-7	LA-505-412		0.401		mg/kg	0.5	0.024	0.24	06/26/12
Strontium	7440-24-6	LA-505-412		22.9		mg/kg	0.5	0.048	0.48	06/26/12
Tin	7440-31-5	LA-505-412		0.446		mg/kg	0.5	0.024	0.24	06/26/12
Uranium	7440-61-1	LA-505-412		0.436		mg/kg	0.5	0.024	0.12	06/26/12
Arsenic	7440-38-2	LA-505-412		1.51		mg/kg	0.5	0.097	0.97	06/26/12
Selenium	7782-49-2	LA-505-412	B	0.315		mg/kg	0.5	0.24	2.4	06/26/12
Boron	7440-42-8	LA-505-412	B	0.362		mg/kg	0.5	0.24	2.4	06/26/12
Preparation for Cr6 (SO)										**06/26/12**
Hexavalent chromium										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.50	06/26/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809007
SAF# F11-095
Sample ID B2L1J0

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anion Prep (S)										**06/21/12**
Anions by Ion Chromatography (Solid)										
Chloride	16887-00-6	LA-533-410	B	3.32		mg/kg	1	3.0	21	06/21/12
Sulfate	14808-79-8	LA-533-410		84.2		mg/kg	1	5.7	54	06/21/12
ICPMS Prep (S)										**06/25/12**
ICP-2008 MS All possible metal										
Manganese	7439-96-5	LA-505-412		276		mg/kg	0.5	0.053	0.53	06/26/12
Nickel	7440-02-0	LA-505-412		7.89		mg/kg	0.5	0.053	0.53	06/26/12
Silver	7440-22-4	LA-505-412	B	0.0356		mg/kg	0.5	0.027	0.27	06/26/12
Antimony	7440-36-0	LA-505-412		2.17		mg/kg	0.5	0.16	1.6	06/26/12
Barium	7440-39-3	LA-505-412		67.2		mg/kg	0.5	0.11	1.1	06/26/12
Beryllium	7440-41-7	LA-505-412	B	0.321		mg/kg	0.5	0.053	0.53	06/26/12
Cadmium	7440-43-9	LA-505-412	B	0.0765		mg/kg	0.5	0.027	0.27	06/26/12
Chromium	7440-47-3	LA-505-412		5.49		mg/kg	0.5	0.053	0.53	06/26/12
Cobalt	7440-48-4	LA-505-412		8.95		mg/kg	0.5	0.027	0.13	06/26/12
Copper	7440-50-8	LA-505-412		18.0		mg/kg	0.5	0.053	0.53	06/26/12
Vanadium	7440-62-2	LA-505-412		31.8		mg/kg	0.5	0.11	1.1	06/26/12
Zinc	7440-66-6	LA-505-412		46.1		mg/kg	0.5	0.53	5.3	06/26/12
Lead	7439-92-1	LA-505-412		4.36		mg/kg	0.5	0.027	0.27	06/26/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809007
SAF# F11-095
Sample ID B2L1J0

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury	7439-97-6	LA-505-412	U	<0.027		mg/kg	0.5	0.027	0.11	06/26/12
Molybdenum	7439-98-7	LA-505-412		0.325		mg/kg	0.5	0.027	0.27	06/26/12
Strontium	7440-24-6	LA-505-412		35.8		mg/kg	0.5	0.053	0.53	06/26/12
Tin	7440-31-5	LA-505-412		2.72		mg/kg	0.5	0.027	0.27	06/26/12
Uranium	7440-61-1	LA-505-412		0.577		mg/kg	0.5	0.027	0.13	06/26/12
Arsenic	7440-38-2	LA-505-412		9.11		mg/kg	0.5	0.11	1.1	06/26/12
Selenium	7782-49-2	LA-505-412	B	0.286		mg/kg	0.5	0.27	2.7	06/26/12
Boron	7440-42-8	LA-505-412	B	1.22		mg/kg	0.5	0.27	2.7	06/26/12
Preparation for Cr6 (SO)										**06/26/12**
Hexavalent chromium										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.52	06/26/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809008
SAF# F11-095
Sample ID B2L1J4

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anion Prep (S)										**06/21/12**
Anions by Ion Chromatography (Solid)										
Chloride	16887-00-6	LA-533-410	B	4.22		mg/kg	1	3.0	21	06/21/12
Sulfate	14808-79-8	LA-533-410		76.7		mg/kg	1	5.7	54	06/21/12
ICPMS Prep (S)										**06/25/12**
ICP-2008 MS All possible metal										
Manganese	7439-96-5	LA-505-412		282		mg/kg	0.5	0.051	0.51	06/26/12
Nickel	7440-02-0	LA-505-412		8.59		mg/kg	0.5	0.051	0.51	06/26/12
Silver	7440-22-4	LA-505-412	B	0.0463		mg/kg	0.5	0.025	0.25	06/26/12
Antimony	7440-36-0	LA-505-412		2.53		mg/kg	0.5	0.15	1.5	06/26/12
Barium	7440-39-3	LA-505-412		67.5		mg/kg	0.5	0.10	1.0	06/26/12
Beryllium	7440-41-7	LA-505-412	B	0.404		mg/kg	0.5	0.051	0.51	06/26/12
Cadmium	7440-43-9	LA-505-412	B	0.0738		mg/kg	0.5	0.025	0.25	06/26/12
Chromium	7440-47-3	LA-505-412		6.62		mg/kg	0.5	0.051	0.51	06/26/12
Cobalt	7440-48-4	LA-505-412		8.60		mg/kg	0.5	0.025	0.13	06/26/12
Copper	7440-50-8	LA-505-412		18.5		mg/kg	0.5	0.051	0.51	06/26/12
Vanadium	7440-62-2	LA-505-412		42.8		mg/kg	0.5	0.10	1.0	06/26/12
Zinc	7440-66-6	LA-505-412		50.4		mg/kg	0.5	0.51	5.1	06/26/12
Lead	7439-92-1	LA-505-412		5.66		mg/kg	0.5	0.025	0.25	06/26/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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)

EH
07/13/12

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809008
SAF# F11-095
Sample ID B2L1J4

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury	7439-97-6	LA-505-412	B	0.0316		mg/kg	0.5	0.025	0.10	06/26/12
Molybdenum	7439-98-7	LA-505-412		0.410		mg/kg	0.5	0.025	0.25	06/26/12
Strontium	7440-24-6	LA-505-412		39.8		mg/kg	0.5	0.051	0.51	06/26/12
Tin	7440-31-5	LA-505-412		1.44		mg/kg	0.5	0.025	0.25	06/26/12
Uranium	7440-61-1	LA-505-412		0.622		mg/kg	0.5	0.025	0.13	06/26/12
Arsenic	7440-38-2	LA-505-412		10.2		mg/kg	0.5	0.10	1.0	06/26/12
Selenium	7782-49-2	LA-505-412	B	0.261		mg/kg	0.5	0.25	2.5	06/26/12
Boron	7440-42-8	LA-505-412	B	1.63		mg/kg	0.5	0.25	2.5	06/26/12
Preparation for Cr6 (SO)										**06/26/12**
Hexavalent chromium										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.51	06/26/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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)

EH
07/13/12

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809009
SAF# F11-095
Sample ID B2L1J8

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anion Prep (S)										**06/21/12**
Anions by Ion Chromatography (Solid)										
Chloride	16887-00-6	LA-533-410	U	<2.9		mg/kg	1	2.9	21	06/21/12
Sulfate	14808-79-8	LA-533-410	B	14.5		mg/kg	1	5.6	53	06/21/12
ICPMS Prep (S)										**06/25/12**
ICP-2008 MS All possible metal										
Manganese	7439-96-5	LA-505-412		297		mg/kg	0.5	0.056	0.56	06/26/12
Nickel	7440-02-0	LA-505-412		7.39		mg/kg	0.5	0.056	0.56	06/26/12
Silver	7440-22-4	LA-505-412	B	0.0289		mg/kg	0.5	0.028	0.28	06/26/12
Antimony	7440-36-0	LA-505-412	B	0.284		mg/kg	0.5	0.17	1.7	06/26/12
Barium	7440-39-3	LA-505-412		48.5		mg/kg	0.5	0.11	1.1	06/26/12
Beryllium	7440-41-7	LA-505-412	B	0.285		mg/kg	0.5	0.056	0.56	06/26/12
Cadmium	7440-43-9	LA-505-412	B	0.0362		mg/kg	0.5	0.028	0.28	06/26/12
Chromium	7440-47-3	LA-505-412		3.05		mg/kg	0.5	0.056	0.56	06/26/12
Cobalt	7440-48-4	LA-505-412		10.3		mg/kg	0.5	0.028	0.14	06/26/12
Copper	7440-50-8	LA-505-412		15.8		mg/kg	0.5	0.056	0.56	06/26/12
Vanadium	7440-62-2	LA-505-412		69.7		mg/kg	0.5	0.11	1.1	06/26/12
Zinc	7440-66-6	LA-505-412		44.7		mg/kg	0.5	0.56	5.6	06/26/12
Lead	7439-92-1	LA-505-412		2.58		mg/kg	0.5	0.028	0.28	06/26/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809009
SAF# F11-095
Sample ID B2L1J8

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury	7439-97-6	LA-505-412	U	<0.028		mg/kg	0.5	0.028	0.11	06/26/12
Molybdenum	7439-98-7	LA-505-412		0.423		mg/kg	0.5	0.028	0.28	06/26/12
Strontium	7440-24-6	LA-505-412		24.7		mg/kg	0.5	0.056	0.56	06/26/12
Tin	7440-31-5	LA-505-412		0.484		mg/kg	0.5	0.028	0.28	06/26/12
Uranium	7440-61-1	LA-505-412		0.439		mg/kg	0.5	0.028	0.14	06/26/12
Arsenic	7440-38-2	LA-505-412		2.38		mg/kg	0.5	0.11	1.1	06/26/12
Selenium	7782-49-2	LA-505-412	B	0.305		mg/kg	0.5	0.28	2.8	06/26/12
Boron	7440-42-8	LA-505-412	B	0.374		mg/kg	0.5	0.28	2.8	06/26/12
Preparation for Cr6 (SO)										**06/26/12**
Hexavalent chromium										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.51	06/26/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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)

EH
07/13/12

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809010
SAF# F11-095
Sample ID B2L1N0

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anion Prep (S)										**06/21/12**
Anions by Ion Chromatography (Solid)										
Chloride	16887-00-6	LA-533-410	U	<2.9		mg/kg	1	2.9	20	06/21/12
Sulfate	14808-79-8	LA-533-410	B	7.38		mg/kg	1	5.5	52	06/21/12
ICPMS Prep (S)										**06/25/12**
ICP-2008 MS All possible metal										
Manganese	7439-96-5	LA-505-412		307		mg/kg	0.5	0.050	0.50	06/26/12
Nickel	7440-02-0	LA-505-412		6.59		mg/kg	0.5	0.050	0.50	06/26/12
Silver	7440-22-4	LA-505-412	B	0.0335		mg/kg	0.5	0.025	0.25	06/26/12
Antimony	7440-36-0	LA-505-412	U	<0.15		mg/kg	0.5	0.15	1.5	06/26/12
Barium	7440-39-3	LA-505-412		49.6		mg/kg	0.5	0.10	1.0	06/26/12
Beryllium	7440-41-7	LA-505-412	B	0.244		mg/kg	0.5	0.050	0.50	06/26/12
Cadmium	7440-43-9	LA-505-412	B	0.0485		mg/kg	0.5	0.025	0.25	06/26/12
Chromium	7440-47-3	LA-505-412		2.56		mg/kg	0.5	0.050	0.50	06/26/12
Cobalt	7440-48-4	LA-505-412		10.8		mg/kg	0.5	0.025	0.13	06/26/12
Copper	7440-50-8	LA-505-412		14.0		mg/kg	0.5	0.050	0.50	06/26/12
Vanadium	7440-62-2	LA-505-412		68.0		mg/kg	0.5	0.10	1.0	06/26/12
Zinc	7440-66-6	LA-505-412		44.0		mg/kg	0.5	0.50	5.0	06/26/12
Lead	7439-92-1	LA-505-412		2.82		mg/kg	0.5	0.025	0.25	06/26/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809010
SAF# F11-095
Sample ID B2L1N0

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury	7439-97-6	LA-505-412	U	<0.025		mg/kg	0.5	0.025	0.10	06/26/12
Molybdenum	7439-98-7	LA-505-412		0.438		mg/kg	0.5	0.025	0.25	06/26/12
Strontium	7440-24-6	LA-505-412		22.6		mg/kg	0.5	0.050	0.50	06/26/12
Tin	7440-31-5	LA-505-412		0.449		mg/kg	0.5	0.025	0.25	06/26/12
Uranium	7440-61-1	LA-505-412		0.470		mg/kg	0.5	0.025	0.13	06/26/12
Arsenic	7440-38-2	LA-505-412		1.42		mg/kg	0.5	0.10	1.0	06/26/12
Selenium	7782-49-2	LA-505-412	B	0.324		mg/kg	0.5	0.25	2.5	06/26/12
Boron	7440-42-8	LA-505-412	U	<0.25		mg/kg	0.5	0.25	2.5	06/26/12
Preparation for Cr6 (SO)										**06/26/12**
Hexavalent chromium										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.51	06/26/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809011
SAF# F11-095
Sample ID B2L1N4

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anion Prep (S)										**06/25/12**
Anions by Ion Chromatography (Solid)										
Chloride	16887-00-6	LA-533-410	B	3.67		mg/kg	1	2.9	20	06/25/12
Sulfate	14808-79-8	LA-533-410	B	26.7		mg/kg	1	5.5	52	06/25/12
ICPMS Prep (S)										**06/27/12**
ICP-2008 MS All possible metal										
Manganese	7439-96-5	LA-505-412		317		mg/kg	0.5	0.054	0.54	06/27/12
Nickel	7440-02-0	LA-505-412		6.43		mg/kg	0.5	0.054	0.54	06/27/12
Silver	7440-22-4	LA-505-412	B	0.0327		mg/kg	0.5	0.027	0.27	06/27/12
Antimony	7440-36-0	LA-505-412	B	0.200		mg/kg	0.5	0.16	1.6	06/27/12
Barium	7440-39-3	LA-505-412		48.2		mg/kg	0.5	0.11	1.1	06/27/12
Beryllium	7440-41-7	LA-505-412	B	0.179		mg/kg	0.5	0.054	0.54	06/27/12
Cadmium	7440-43-9	LA-505-412	B	0.0546		mg/kg	0.5	0.027	0.27	06/27/12
Chromium	7440-47-3	LA-505-412		3.00		mg/kg	0.5	0.054	0.54	06/27/12
Cobalt	7440-48-4	LA-505-412		10.7		mg/kg	0.5	0.027	0.13	06/27/12
Copper	7440-50-8	LA-505-412		14.7		mg/kg	0.5	0.054	0.54	06/27/12
Vanadium	7440-62-2	LA-505-412		63.3		mg/kg	0.5	0.11	1.1	06/27/12
Zinc	7440-66-6	LA-505-412		43.7		mg/kg	0.5	0.54	5.4	06/27/12
Lead	7439-92-1	LA-505-412		2.58		mg/kg	0.5	0.027	0.27	06/27/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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)

EH
07/13/12

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809011
SAF# F11-095
Sample ID B2L1N4

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury	7439-97-6	LA-505-412	U	<0.027		mg/kg	0.5	0.027	0.11	06/27/12
Molybdenum	7439-98-7	LA-505-412		0.498		mg/kg	0.5	0.027	0.27	06/27/12
Strontium	7440-24-6	LA-505-412		22.1		mg/kg	0.5	0.054	0.54	06/27/12
Tin	7440-31-5	LA-505-412		0.491		mg/kg	0.5	0.027	0.27	06/27/12
Uranium	7440-61-1	LA-505-412		0.481		mg/kg	0.5	0.027	0.13	06/27/12
Arsenic	7440-38-2	LA-505-412		1.77		mg/kg	0.5	0.11	1.1	06/27/12
Selenium	7782-49-2	LA-505-412	B	0.293		mg/kg	0.5	0.27	2.7	06/27/12
Boron	7440-42-8	LA-505-412	B	0.505		mg/kg	0.5	0.27	2.7	06/27/12
Preparation for Cr6 (SO)										**06/27/12**
Hexavalent chromium										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.50	06/28/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809012
SAF# F11-095
Sample ID B2L1N8

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anion Prep (S)										**06/25/12**
Anions by Ion Chromatography (Solid)										
Chloride	16887-00-6	LA-533-410	U	<2.9		mg/kg	1	2.9	21	06/25/12
Sulfate	14808-79-8	LA-533-410	B	10.4		mg/kg	1	5.6	53	06/25/12
ICPMS Prep (S)										**06/27/12**
ICP-2008 MS All possible metal										
Manganese	7439-96-5	LA-505-412		163		mg/kg	0.5	0.052	0.52	06/27/12
Nickel	7440-02-0	LA-505-412		3.44		mg/kg	0.5	0.052	0.52	06/27/12
Silver	7440-22-4	LA-505-412	U	<0.026		mg/kg	0.5	0.026	0.26	06/27/12
Antimony	7440-36-0	LA-505-412	U	<0.16		mg/kg	0.5	0.16	1.6	06/27/12
Barium	7440-39-3	LA-505-412		24.4		mg/kg	0.5	0.10	1.0	06/27/12
Beryllium	7440-41-7	LA-505-412	B	0.138		mg/kg	0.5	0.052	0.52	06/27/12
Cadmium	7440-43-9	LA-505-412	B	0.0359		mg/kg	0.5	0.026	0.26	06/27/12
Chromium	7440-47-3	LA-505-412	C	1.28		mg/kg	0.5	0.052	0.52	06/27/12
Cobalt	7440-48-4	LA-505-412		5.88		mg/kg	0.5	0.026	0.13	06/27/12
Copper	7440-50-8	LA-505-412		8.66		mg/kg	0.5	0.052	0.52	06/27/12
Vanadium	7440-62-2	LA-505-412		31.9		mg/kg	0.5	0.10	1.0	06/27/12
Zinc	7440-66-6	LA-505-412		23.6		mg/kg	0.5	0.52	5.2	06/27/12
Lead	7439-92-1	LA-505-412		1.28		mg/kg	0.5	0.026	0.26	06/27/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809012
SAF# F11-095
Sample ID B2L1N8

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury	7439-97-6	LA-505-412	U	<0.026		mg/kg	0.5	0.026	0.10	06/27/12
Molybdenum	7439-98-7	LA-505-412	B	0.231		mg/kg	0.5	0.026	0.26	06/27/12
Strontium	7440-24-6	LA-505-412		12.9		mg/kg	0.5	0.052	0.52	06/27/12
Tin	7440-31-5	LA-505-412	B	0.235		mg/kg	0.5	0.026	0.26	06/27/12
Uranium	7440-61-1	LA-505-412		0.239		mg/kg	0.5	0.026	0.13	06/27/12
Arsenic	7440-38-2	LA-505-412	B	0.781		mg/kg	0.5	0.10	1.0	06/27/12
Selenium	7782-49-2	LA-505-412	U	<0.26		mg/kg	0.5	0.26	2.6	06/27/12
Boron	7440-42-8	LA-505-412	B	0.277		mg/kg	0.5	0.26	2.6	06/27/12
Preparation for Cr6 (SO)										**06/27/12**
Hexavalent chromium										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.50	06/28/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809013
SAF# F11-095
Sample ID B2L1P2

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anion Prep (S)										**06/25/12**
Anions by Ion Chromatography (Solid)										
Chloride	16887-00-6	LA-533-410	U	<3.0		mg/kg	1	3.0	21	06/25/12
Sulfate	14808-79-8	LA-533-410	B	10.4		mg/kg	1	5.6	53	06/25/12
ICPMS Prep (S)										**06/27/12**
ICP-2008 MS All possible metal										
Manganese	7439-96-5	LA-505-412		159		mg/kg	0.5	0.052	0.52	06/27/12
Nickel	7440-02-0	LA-505-412		3.44		mg/kg	0.5	0.052	0.52	06/27/12
Silver	7440-22-4	LA-505-412	U	<0.026		mg/kg	0.5	0.026	0.26	06/27/12
Antimony	7440-36-0	LA-505-412	U	<0.16		mg/kg	0.5	0.16	1.6	06/27/12
Barium	7440-39-3	LA-505-412		24.2		mg/kg	0.5	0.10	1.0	06/27/12
Beryllium	7440-41-7	LA-505-412	B	0.107		mg/kg	0.5	0.052	0.52	06/27/12
Cadmium	7440-43-9	LA-505-412	B	0.0330		mg/kg	0.5	0.026	0.26	06/27/12
Chromium	7440-47-3	LA-505-412	C	1.24		mg/kg	0.5	0.052	0.52	06/27/12
Cobalt	7440-48-4	LA-505-412		5.78		mg/kg	0.5	0.026	0.13	06/27/12
Copper	7440-50-8	LA-505-412		8.50		mg/kg	0.5	0.052	0.52	06/27/12
Vanadium	7440-62-2	LA-505-412		31.3		mg/kg	0.5	0.10	1.0	06/27/12
Zinc	7440-66-6	LA-505-412		23.1		mg/kg	0.5	0.52	5.2	06/27/12
Lead	7439-92-1	LA-505-412		1.26		mg/kg	0.5	0.026	0.26	06/27/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809013
SAF# F11-095
Sample ID B2L1P2

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury	7439-97-6	LA-505-412	U	<0.026		mg/kg	0.5	0.026	0.10	06/27/12
Molybdenum	7439-98-7	LA-505-412	B	0.206		mg/kg	0.5	0.026	0.26	06/27/12
Strontium	7440-24-6	LA-505-412		12.9		mg/kg	0.5	0.052	0.52	06/27/12
Tin	7440-31-5	LA-505-412	B	0.219		mg/kg	0.5	0.026	0.26	06/27/12
Uranium	7440-61-1	LA-505-412		0.238		mg/kg	0.5	0.026	0.13	06/27/12
Arsenic	7440-38-2	LA-505-412	B	0.805		mg/kg	0.5	0.10	1.0	06/27/12
Selenium	7782-49-2	LA-505-412	U	<0.26		mg/kg	0.5	0.26	2.6	06/27/12
Boron	7440-42-8	LA-505-412	B	0.309		mg/kg	0.5	0.26	2.6	06/27/12
Preparation for Cr6 (SO)										**06/27/12**
Hexavalent chromium										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.51	06/28/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809014
SAF# F11-095
Sample ID B2L1L0

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anion Prep (S)										**06/25/12**
Anions by Ion Chromatography (Solid)										
Chloride	16887-00-6	LA-533-410	U	<3.0		mg/kg	1	3.0	21	06/25/12
Sulfate	14808-79-8	LA-533-410	B	10.2		mg/kg	1	5.6	54	06/25/12
ICPMS Prep (S)										**06/27/12**
ICP-2008 MS All possible metal										
Manganese	7439-96-5	LA-505-412		235		mg/kg	0.5	0.048	0.48	06/27/12
Nickel	7440-02-0	LA-505-412		5.52		mg/kg	0.5	0.048	0.48	06/27/12
Silver	7440-22-4	LA-505-412	B	0.0288		mg/kg	0.5	0.024	0.24	06/27/12
Antimony	7440-36-0	LA-505-412	U	<0.14		mg/kg	0.5	0.14	1.4	06/27/12
Barium	7440-39-3	LA-505-412		57.2		mg/kg	0.5	0.096	0.96	06/27/12
Beryllium	7440-41-7	LA-505-412	B	0.214		mg/kg	0.5	0.048	0.48	06/27/12
Cadmium	7440-43-9	LA-505-412	B	0.0668		mg/kg	0.5	0.024	0.24	06/27/12
Chromium	7440-47-3	LA-505-412		1.89		mg/kg	0.5	0.048	0.48	06/27/12
Cobalt	7440-48-4	LA-505-412		8.92		mg/kg	0.5	0.024	0.12	06/27/12
Copper	7440-50-8	LA-505-412		14.2		mg/kg	0.5	0.048	0.48	06/27/12
Vanadium	7440-62-2	LA-505-412		38.9		mg/kg	0.5	0.096	0.96	06/27/12
Zinc	7440-66-6	LA-505-412		32.1		mg/kg	0.5	0.48	4.8	06/27/12
Lead	7439-92-1	LA-505-412		2.41		mg/kg	0.5	0.024	0.24	06/27/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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)

EH
07/13/12

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809014
SAF# F11-095
Sample ID B2L1L0

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury	7439-97-6	LA-505-412	U	<0.024		mg/kg	0.5	0.024	0.096	06/27/12
Molybdenum	7439-98-7	LA-505-412		0.272		mg/kg	0.5	0.024	0.24	06/27/12
Strontium	7440-24-6	LA-505-412		24.8		mg/kg	0.5	0.048	0.48	06/27/12
Tin	7440-31-5	LA-505-412		0.359		mg/kg	0.5	0.024	0.24	06/27/12
Uranium	7440-61-1	LA-505-412		0.441		mg/kg	0.5	0.024	0.12	06/27/12
Arsenic	7440-38-2	LA-505-412		2.11		mg/kg	0.5	0.096	0.96	06/27/12
Selenium	7782-49-2	LA-505-412	B	0.332		mg/kg	0.5	0.24	2.4	06/27/12
Boron	7440-42-8	LA-505-412	B	0.338		mg/kg	0.5	0.24	2.4	06/27/12
Preparation for Cr6 (SO)										**06/27/12**
Hexavalent chromium										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.51	06/28/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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)

EH
07/13/12

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809015
SAF# F11-095
Sample ID B2H1L3

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anion Prep (S)										**06/25/12**
Anions by Ion Chromatography (Solid)										
Chloride	16887-00-6	LA-533-410	U	<3.0		mg/kg	1	3.0	21	06/25/12
Sulfate	14808-79-8	LA-533-410	B	14.2		mg/kg	1	5.6	53	06/25/12
ICPMS Prep (S)										**06/27/12**
ICP-2008 MS All possible metal										
Manganese	7439-96-5	LA-505-412		247		mg/kg	0.5	0.054	0.54	06/27/12
Nickel	7440-02-0	LA-505-412		5.54		mg/kg	0.5	0.054	0.54	06/27/12
Silver	7440-22-4	LA-505-412	B	0.0329		mg/kg	0.5	0.027	0.27	06/27/12
Antimony	7440-36-0	LA-505-412	U	<0.16		mg/kg	0.5	0.16	1.6	06/27/12
Barium	7440-39-3	LA-505-412		46.8		mg/kg	0.5	0.11	1.1	06/27/12
Beryllium	7440-41-7	LA-505-412	B	0.229		mg/kg	0.5	0.054	0.54	06/27/12
Cadmium	7440-43-9	LA-505-412	B	0.0588		mg/kg	0.5	0.027	0.27	06/27/12
Chromium	7440-47-3	LA-505-412		2.13		mg/kg	0.5	0.054	0.54	06/27/12
Cobalt	7440-48-4	LA-505-412		9.43		mg/kg	0.5	0.027	0.13	06/27/12
Copper	7440-50-8	LA-505-412		14.5		mg/kg	0.5	0.054	0.54	06/27/12
Vanadium	7440-62-2	LA-505-412		45.4		mg/kg	0.5	0.11	1.1	06/27/12
Zinc	7440-66-6	LA-505-412		37.4		mg/kg	0.5	0.54	5.4	06/27/12
Lead	7439-92-1	LA-505-412		2.18		mg/kg	0.5	0.027	0.27	06/27/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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)

EH
07/13/12

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809015
SAF# F11-095
Sample ID B2H1L3

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury	7439-97-6	LA-505-412	U	<0.027		mg/kg	0.5	0.027	0.11	06/27/12
Molybdenum	7439-98-7	LA-505-412		0.301		mg/kg	0.5	0.027	0.27	06/27/12
Strontium	7440-24-6	LA-505-412		22.1		mg/kg	0.5	0.054	0.54	06/27/12
Tin	7440-31-5	LA-505-412		0.359		mg/kg	0.5	0.027	0.27	06/27/12
Uranium	7440-61-1	LA-505-412		0.424		mg/kg	0.5	0.027	0.13	06/27/12
Arsenic	7440-38-2	LA-505-412		1.19		mg/kg	0.5	0.11	1.1	06/27/12
Selenium	7782-49-2	LA-505-412	B	0.293		mg/kg	0.5	0.27	2.7	06/27/12
Boron	7440-42-8	LA-505-412	B	0.457		mg/kg	0.5	0.27	2.7	06/27/12
Preparation for Cr6 (SO)										**06/27/12**
Hexavalent chromium										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.51	06/28/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809016
SAF# F11-095
Sample ID B2H1L7

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anion Prep (S)										**06/25/12**
Anions by Ion Chromatography (Solid)										
Chloride	16887-00-6	LA-533-410	U	<2.9		mg/kg	1	2.9	20	06/25/12
Sulfate	14808-79-8	LA-533-410	B	6.32		mg/kg	1	5.5	53	06/25/12
ICPMS Prep (S)										**06/27/12**
ICP-2008 MS All possible metal										
Manganese	7439-96-5	LA-505-412		252		mg/kg	0.5	0.052	0.52	06/27/12
Nickel	7440-02-0	LA-505-412		5.39		mg/kg	0.5	0.052	0.52	06/27/12
Silver	7440-22-4	LA-505-412	U	<0.026		mg/kg	0.5	0.026	0.26	06/27/12
Antimony	7440-36-0	LA-505-412	U	<0.16		mg/kg	0.5	0.16	1.6	06/27/12
Barium	7440-39-3	LA-505-412		43.9		mg/kg	0.5	0.10	1.0	06/27/12
Beryllium	7440-41-7	LA-505-412	B	0.263		mg/kg	0.5	0.052	0.52	06/27/12
Cadmium	7440-43-9	LA-505-412	B	0.0464		mg/kg	0.5	0.026	0.26	06/27/12
Chromium	7440-47-3	LA-505-412		1.97		mg/kg	0.5	0.052	0.52	06/27/12
Cobalt	7440-48-4	LA-505-412		9.37		mg/kg	0.5	0.026	0.13	06/27/12
Copper	7440-50-8	LA-505-412		13.7		mg/kg	0.5	0.052	0.52	06/27/12
Vanadium	7440-62-2	LA-505-412		49.9		mg/kg	0.5	0.10	1.0	06/27/12
Zinc	7440-66-6	LA-505-412		36.7		mg/kg	0.5	0.52	5.2	06/27/12
Lead	7439-92-1	LA-505-412		2.16		mg/kg	0.5	0.026	0.26	06/27/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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)

EH
07/13/12

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809016
SAF# F11-095
Sample ID B2H1L7

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury	7439-97-6	LA-505-412	U	<0.026		mg/kg	0.5	0.026	0.10	06/27/12
Molybdenum	7439-98-7	LA-505-412		0.331		mg/kg	0.5	0.026	0.26	06/27/12
Strontium	7440-24-6	LA-505-412		21.8		mg/kg	0.5	0.052	0.52	06/27/12
Tin	7440-31-5	LA-505-412		0.363		mg/kg	0.5	0.026	0.26	06/27/12
Uranium	7440-61-1	LA-505-412		0.402		mg/kg	0.5	0.026	0.13	06/27/12
Arsenic	7440-38-2	LA-505-412		1.22		mg/kg	0.5	0.10	1.0	06/27/12
Selenium	7782-49-2	LA-505-412	U	<0.26		mg/kg	0.5	0.26	2.6	06/27/12
Boron	7440-42-8	LA-505-412	B	0.403		mg/kg	0.5	0.26	2.6	06/27/12
Preparation for Cr6 (SO)										**06/27/12**
Hexavalent chromium										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.51	06/28/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809017
SAF# F11-095
Sample ID B2H1M1

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anion Prep (S)										**06/25/12**
Anions by Ion Chromatography (Solid)										
Chloride	16887-00-6	LA-533-410	U	<2.9		mg/kg	1	2.9	20	06/25/12
Sulfate	14808-79-8	LA-533-410	B	12.9		mg/kg	1	5.5	52	06/25/12
ICPMS Prep (S)										**06/27/12**
ICP-2008 MS All possible metal										
Manganese	7439-96-5	LA-505-412		362		mg/kg	0.5	0.051	0.51	06/27/12
Nickel	7440-02-0	LA-505-412		8.45		mg/kg	0.5	0.051	0.51	06/27/12
Silver	7440-22-4	LA-505-412	B	0.0333		mg/kg	0.5	0.026	0.26	06/27/12
Antimony	7440-36-0	LA-505-412	U	<0.15		mg/kg	0.5	0.15	1.5	06/27/12
Barium	7440-39-3	LA-505-412		59.7		mg/kg	0.5	0.10	1.0	06/27/12
Beryllium	7440-41-7	LA-505-412	B	0.237		mg/kg	0.5	0.051	0.51	06/27/12
Cadmium	7440-43-9	LA-505-412	B	0.0636		mg/kg	0.5	0.026	0.26	06/27/12
Chromium	7440-47-3	LA-505-412		4.28		mg/kg	0.5	0.051	0.51	06/27/12
Cobalt	7440-48-4	LA-505-412		12.1		mg/kg	0.5	0.026	0.13	06/27/12
Copper	7440-50-8	LA-505-412		16.8		mg/kg	0.5	0.051	0.51	06/27/12
Vanadium	7440-62-2	LA-505-412		60.7		mg/kg	0.5	0.10	1.0	06/27/12
Zinc	7440-66-6	LA-505-412		46.9		mg/kg	0.5	0.51	5.1	06/27/12
Lead	7439-92-1	LA-505-412		3.84		mg/kg	0.5	0.026	0.26	06/27/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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)

EH
07/13/12

WSCF Analytical Results Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809017
SAF# F11-095
Sample ID B2H1M1

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury	7439-97-6	LA-505-412	U	<0.026		mg/kg	0.5	0.026	0.10	06/27/12
Molybdenum	7439-98-7	LA-505-412		0.400		mg/kg	0.5	0.026	0.26	06/27/12
Strontium	7440-24-6	LA-505-412		27.0		mg/kg	0.5	0.051	0.51	06/27/12
Tin	7440-31-5	LA-505-412		0.528		mg/kg	0.5	0.026	0.26	06/27/12
Uranium	7440-61-1	LA-505-412		0.546		mg/kg	0.5	0.026	0.13	06/27/12
Arsenic	7440-38-2	LA-505-412		2.20		mg/kg	0.5	0.10	1.0	06/27/12
Selenium	7782-49-2	LA-505-412	B	0.353		mg/kg	0.5	0.26	2.6	06/27/12
Boron	7440-42-8	LA-505-412	B	0.429		mg/kg	0.5	0.26	2.6	06/27/12
Preparation for Cr6 (SO)										**06/27/12**
Hexavalent chromium										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.51	06/28/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809018
SAF# F11-095
Sample ID B2L1R0

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anion Prep (S)										**06/25/12**
Anions by Ion Chromatography (Solid)										
Chloride	16887-00-6	LA-533-410	U	<3.0		mg/kg	1	3.0	21	06/25/12
Sulfate	14808-79-8	LA-533-410	B	14.9		mg/kg	1	5.6	53	06/25/12
ICPMS Prep (S)										**06/27/12**
ICP-2008 MS All possible metal										
Manganese	7439-96-5	LA-505-412		290		mg/kg	0.5	0.056	0.56	06/27/12
Nickel	7440-02-0	LA-505-412		5.86		mg/kg	0.5	0.056	0.56	06/27/12
Silver	7440-22-4	LA-505-412	U	<0.028		mg/kg	0.5	0.028	0.28	06/27/12
Antimony	7440-36-0	LA-505-412	U	<0.17		mg/kg	0.5	0.17	1.7	06/27/12
Barium	7440-39-3	LA-505-412		58.3		mg/kg	0.5	0.11	1.1	06/27/12
Beryllium	7440-41-7	LA-505-412	B	0.198		mg/kg	0.5	0.056	0.56	06/27/12
Cadmium	7440-43-9	LA-505-412	B	0.0802		mg/kg	0.5	0.028	0.28	06/27/12
Chromium	7440-47-3	LA-505-412		2.41		mg/kg	0.5	0.056	0.56	06/27/12
Cobalt	7440-48-4	LA-505-412		10.4		mg/kg	0.5	0.028	0.14	06/27/12
Copper	7440-50-8	LA-505-412		15.8		mg/kg	0.5	0.056	0.56	06/27/12
Vanadium	7440-62-2	LA-505-412		57.4		mg/kg	0.5	0.11	1.1	06/27/12
Zinc	7440-66-6	LA-505-412		41.1		mg/kg	0.5	0.56	5.6	06/27/12
Lead	7439-92-1	LA-505-412		2.54		mg/kg	0.5	0.028	0.28	06/27/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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 Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Sample # 120809018
SAF# F11-095
Sample ID B2L1R0

Matrix SOIL
Sampled 06/20/12
Received 06/20/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Mercury	7439-97-6	LA-505-412	U	<0.028		mg/kg	0.5	0.028	0.11	06/27/12
Molybdenum	7439-98-7	LA-505-412		0.383		mg/kg	0.5	0.028	0.28	06/27/12
Strontium	7440-24-6	LA-505-412		25.9		mg/kg	0.5	0.056	0.56	06/27/12
Tin	7440-31-5	LA-505-412		0.436		mg/kg	0.5	0.028	0.28	06/27/12
Uranium	7440-61-1	LA-505-412		0.507		mg/kg	0.5	0.028	0.14	06/27/12
Arsenic	7440-38-2	LA-505-412		1.73		mg/kg	0.5	0.11	1.1	06/27/12
Selenium	7782-49-2	LA-505-412	B	0.359		mg/kg	0.5	0.28	2.8	06/27/12
Boron	7440-42-8	LA-505-412	B	0.304		mg/kg	0.5	0.28	2.8	06/27/12
Preparation for Cr6 (SO)										**06/27/12**
Hexavalent chromium										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.10		ug/g	1	0.10	0.51	06/28/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
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)

EH
07/13/12

Appendix 4

Laboratory Narrative and Chain-of-Custody Documentation

CASE NARRATIVE

CH2MHill Plateau Remediation Company
P.O. Box 1600
MS B3-60
Richland, Washington 99352
June 8, 2012
Attention: Scot Fitzgerald

SDG	: SL1272
Number of Samples	: sample
Sample Matrix	: Soil
Data Deliverable	: Summary
Date SDG Closed	: May 25, 2012

II. Introduction

On May 25, 2012, a soil sample was received by TestAmerica - St. Louis for chemical analysis. The sample was received within temperature criteria. See the COC and CUR forms for documentation of any variations on receipt conditions and temperature. Upon receipt, the sample was given a laboratory Id to correspond with specific client Id. 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: F11-095.

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.

CH2M Hill Plateau Remediation Company

June 8, 2012
SDG: SL1272

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.

ICP Metals

Batch: 2150029

The MS (MSD) recoveries for Copper and Manganese are outside the established QC limits. The RPD values are within method acceptance criteria indicating possible matrix interference. Method performance is demonstrated by acceptable LCS recovery. These analytes have been qualified with an "N" flag in the associated sample.
Affected Samples:
F2E250455 (1): B2L1R5

The CCV bracketing the initial QC (ICSA, ICSAB, and LLC) was outside acceptable QC limits for Boron indicating a potential bias. The initial QC all passed within acceptable limits. The samples were bracketed by acceptable CCV/CCBs. Results are reported.
Affected Samples:
F2E250455 (1): B2L1R5

There were no observations or nonconformances for the following methods: Ion Chromatography, PCBs, and Mercury.

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:

Chenise Y. Lambert-Sykes
St. Louis Project Manager

SL1272

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	F11-095-533	PAGE 1 OF 1

COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C; AIR QUALITY: ☐; DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183KE Pothole Soil Sample 35	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	
ICE CHEST NO.: GWS-248	FIELD LOGBOOK NO.: HNF-N-507-24	ACTUAL SAMPLE DEPTH: 5ft.	COA: 302548ES10	METHOD OF SHIPMENT: FEDERAL EXPRESS; ORIGINAL
SHIPPED TO: TestAmerica St. Louis	OFFSITE PROPERTY NO.: SEE PTR		BILL OF LADING/AIR BILL NO.: SEE PTR 7984 3403 4749	

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

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool~4C	Cool~4C	Cool~4C
HOLDING TIME	1 yr/1 yr	6 Months	28 Days/48 Hours
TYPE OF CONTAINER	aG	G/P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	120mL	60mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	IC Anions - 300.0 {Chloride, Sulfate};

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2L1R5	SOIL	MAY 20 2012	1152	✓	✓	✓

TFVL 12- 039

CHAIN OF POSSESSION	SIGN/ PRINT NAMES
RELINQUISHED BY/REMOVED FROM: FM Hall, CHPRC — DATE/TIME: MAY 20 2012	RECEIVED BY/STORED IN: SSU #1 — DATE/TIME: MAY 20 2012
RELINQUISHED BY/REMOVED FROM: SSU #1 — DATE/TIME: 5-24-12 0820	RECEIVED BY/STORED IN: MaWhite — DATE/TIME: 5-24-12 0820
RELINQUISHED BY/REMOVED FROM: MaWhite — DATE/TIME: 5-24-12 1400	RECEIVED BY/STORED IN: FEDEX — DATE/TIME:
RELINQUISHED BY/REMOVED FROM: FED EX — DATE/TIME:	RECEIVED BY/STORED IN: Swilson — DATE/TIME: 5-25-12 0920
RELINQUISHED BY/REMOVED FROM: — DATE/TIME:	RECEIVED BY/STORED IN: — DATE/TIME:
RELINQUISHED BY/REMOVED FROM: — DATE/TIME:	RECEIVED BY/STORED IN: — DATE/TIME:
RELINQUISHED BY/REMOVED FROM: — DATE/TIME:	RECEIVED BY/STORED IN: — DATE/TIME:

SPECIAL INSTRUCTIONS

** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};
(2) ICP Metals - 6020 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP Metals - 6020 (Add-on) {Arsenic, Beryllium, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; Mercury - 7471 - (CV);

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

PRINTED ON 4/2/2012

A-6003-618 (REV 2)

SDG: SL1272
TestAmerica St. Louis
463 of 596
6 of 30

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

CASE NARRATIVE

CH2MHill Plateau Remediation Company
P.O. Box 1600
MS B3-60
Richland, Washington 99352
July 06, 2012
Attention: Scot Fitzgerald

TestAmerica Laboratories, Inc.

SDG	: SL1278
Number of Samples	: sample
Sample Matrix	: Soil
Data Deliverable	: Summary
Date SDG Closed	: June 26, 2012

II. Introduction

On June 26, 2012, a soil sample was received by TestAmerica - St. Louis for chemical analysis. The sample was 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: F11-095

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.

13715 Rider Trail North Earth City, MO 63045 **tel** 314.298.8566 **fax** 314.298.8757 **www.testamericainc.com**

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

CH2M Hill Plateau Remediation Company

July 6, 2012

SDG: SL1278

TestAmerica Laboratories, Inc.

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.

PCBs

Batch: 2180117

The CCV recovery is outside the QC limits of greater than 20%D. The CCV excursion occurred in the secondary column which is only used for confirmation, and no data is reported from it.
Affected Samples:
F2F260421 (1): B2L1T0

ICPMS Metals

Batch: 2179022

Boron and Silver were detected in the Method Blank at a concentration above the MDL but below the RL. These analytes have been qualified with a "C" flag in the associated sample.
Affected Samples:
F2F260421 (1): B2L1T0

The MS (MSD) recovery for Manganese is outside the established QC limits. The RPD is within method acceptance criteria indicating possible matrix interference. Method performance is demonstrated by acceptable LCS recovery. This analytes has been qualified with an "N" flag in the associated sample.
Affected Samples:
F2F260421 (1): B2L1T0

The CCV recovery was outside the upper QC limit (greater than 110%) for Boron indicating a potential high bias for this analyte in the samples associated with this CCV. This analytes was not detected above the reporting limit in the associated sample.
Affected Samples:
F2F260421 (1): B2L1T0

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TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

CH2M Hill Plateau Remediation Company

July 6, 2012

SDG: SL1278

TestAmerica Laboratories, Inc.

There were no observations or nonconformances for the following methods: Anions and Mercury

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:

Chenise Y. Lambert-Sykes
St. Louis Project Manager

13715 Rider Trail North Earth City, MO 63045 **tel** 314.298.8566 **fax** 314.298.8757 **www.testamericainc.com**

SL1278

SL1278 CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-095-538

COLLECTOR: CUL179 Frank Hall	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ
SAMPLING LOCATION: 183.2KE Pothole Soil Sample 36	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095
ICE/CHEST NO.: GWS-098	FIELD LOGBOOK NO.: HNF-N-507-25	ACTUAL SAMPLE DEPTH: 10'	COA: 302548ES10
SHIPPED TO: TestAmerica St. Louis	OFFSITE PROPERTY NO.: SEE PTR		BILL OF LADING/AIR BILL NO.: ~~SEE PTR~~ 7985 4820 0995

PRICE CODE: 8C

AIR QUALITY: ☐

DATA TURNAROUND: 15 Days / 15 Days

METHOD OF SHIPMENT: FEDERAL EXPRESS

ORIGINAL

RW 6/25/12

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

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool~4C	Cool~4C	Cool~4C
HOLDING TIME	1 yr/1 yr	6 Months	28 Days/48 Hours
TYPE OF CONTAINER	aG	G/P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	120mL	60mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	IC Anions - 300.0 {Chloride, Sulfate};

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B2L1T0	SOIL	JUN 20 2012	0925	✓	✓	✓

FA-12-039

CHAIN OF POSSESSION	SIGN/ PRINT NAMES
RELINQUISHED BY/REMOVED FROM: Frank Hall, DATE/TIME: JUN 20 2012 1300	RECEIVED BY/STORED IN: SSU #1, DATE/TIME: JUN 20 2012 1300
RELINQUISHED BY/REMOVED FROM: SSU #1, DATE/TIME: JUN 25 2012 0815	RECEIVED BY/STORED IN: L.D. Wall CHPRC, DATE/TIME: JUN 25 2012 0815
RELINQUISHED BY/REMOVED FROM: L.D. Wall CHPRC, DATE/TIME: JUN 25 2012 1400	RECEIVED BY/STORED IN: FEDEX, DATE/TIME:
RELINQUISHED BY/REMOVED FROM: FED EX, DATE/TIME:	RECEIVED BY/STORED IN: NICHOLAS OWENS, DATE/TIME: 6/26/12 0940
RELINQUISHED BY/REMOVED FROM: DATE/TIME:	RECEIVED BY/STORED IN: DATE/TIME:
RELINQUISHED BY/REMOVED FROM: DATE/TIME:	RECEIVED BY/STORED IN: DATE/TIME:
RELINQUISHED BY/REMOVED FROM: DATE/TIME:	RECEIVED BY/STORED IN: DATE/TIME:

SPECIAL INSTRUCTIONS

** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};
(2) ICP Metals - 6020 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc}; ICP Metals - 6020 (Add-on) {Arsenic, Beryllium, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; Mercury - 7471 - (CV);

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

PRINTED ON 4/2/2012

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

May 24, 2012

Attention: Scot Fitzgerald

SAF Number	:	F11-095
Date SDG Closed	:	May 21, 2012
Number of Samples	:	One (1)
Sample Type	:	Soil
SDG Number	:	W06446
Data Deliverable	:	15 Day Summary

CASE NARRATIVE

I. Introduction

On May 21, 2012 one soil sample was received at TestAmerica (TARL). Upon receipt, the sample was assigned the following laboratory ID numbers to correspond with the CH2M specific ID:

CH2M ID#	TARL ID#	MATRIX	DATE OF RECEIPT
B2L1R4	MTNXF	SOIL	5/21/12

II. Sample Receipt

The sample was received in good condition and no anomalies were noted during check-in.

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.

CH2M Hill Plateau Remediation Company
May 24, 2012

The requested analyses were:

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

Chemical Analysis
Hexavalent Chromium by EPA method 7196A
The LCS, batch blank, samples, sample duplicate (B2L1R4) and sample matrix spike (B2L1R4) 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

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-532	PAGE 1 OF 1
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 183.2KE Pothole Soil Sample 35	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO. N/A	FIELD LOGBOOK NO. HNF-N-507-24	ACTUAL SAMPLE DEPTH 5 ft.	COA 302548ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	ORIGINAL
SHIPPED TO TestAmerica Incorporated, Richland	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
MTNXF

PRESERVATION	Cool~4C
HOLDING TIME	30 Days
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	60mL
SAMPLE ANALYSIS	Chromium Hex - 7196;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B2L1R4	SOIL	MAY 2 0 2012	1152	✓

TFVL- 12- 039

SDG#W0644 6
Lot# J2E210447
Due 6-6-12

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM FM Hall CHPRC	DATE/TIME MAY 2 0 2012	RECEIVED BY/STORED IN SSU #1	DATE/TIME MAY 2 0 2012
RELINQUISHED BY/REMOVED FROM SSU #1	DATE/TIME 5/21/12 1315	RECEIVED BY/STORED IN Brotheden	DATE/TIME 5/21/12 1315
RELINQUISHED BY/REMOVED FROM Brotheden	DATE/TIME 5/21/12 1420	RECEIVED BY/STORED IN Julie Back TALR	DATE/TIME 5/21/12 1420
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

Chrome -10°C

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

PRINTED ON 4/2/2012

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

June 28, 2012

Attention: Scot Fitzgerald

SAF Number	:	F11-095
Date SDG Closed	:	June 25, 2012
Number of Samples	:	One (1)
Sample Type	:	Soil
SDG Number	:	W06458
Data Deliverable	:	15 Day / 15 Day Summary

CASE NARRATIVE

I. Introduction

On June 25, 2012 one soil sample was received at TestAmerica (TARL). Upon receipt, the sample was assigned the following laboratory ID numbers to correspond with the CH2M specific ID:

CH2M ID#	TARL ID#	MATRIX	DATE OF RECEIPT
B2L1R9	MVAAN	SOIL	6/25/12

II. Sample Receipt

The sample was received in good condition and no anomalies were noted during check-in.

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.

CH2M Hill Plateau Remediation Company
June 28, 2012

The requested analyses were:

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

Chemical Analysis
Hexavalent Chromium by EPA method 7196A
The LCS, batch blank, samples, sample duplicate (B2L1R9) and sample matrix spike (B2L1R9) 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

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-537	PAGE 1 OF 1
COLLECTOR Frank Hall	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 183.2KE Pothole Soil Sample 36	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO. N/A	FIELD LOGBOOK NO. HNF-N-507-25	ACTUAL SAMPLE DEPTH 10'	COA 302548ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	ORIGINAL
SHIPPED TO TestAmerica Incorporated, Richland	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
HOLDING TIME	30 Days
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	60mL
SAMPLE ANALYSIS	Chromium Hex - 7196;

J2F250434
W06458
Due 7/11/12
MVAAN

J2F250434

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B2L1R9	SOIL	JUN 2 0 2012	0925	

TFVL-12-039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM Frank Hall	DATE/TIME JUN 2 0 2012 1300	RECEIVED BY/STORED IN SSWH1	DATE/TIME JUN 2 0 2012 1300
RELINQUISHED BY/REMOVED FROM SSWH1	DATE/TIME JUN 2 5 2012 0800	RECEIVED BY/STORED IN L.D. Wall CHPRC	DATE/TIME JUN 2 5 2012 0800
RELINQUISHED BY/REMOVED FROM L.D. Wall CHPRC	DATE/TIME JUN 2 5 2012 1115	RECEIVED BY/STORED IN	DATE/TIME JUN 2 5 2012 1115
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

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

PRINTED ON 4/2/2012

A-6003-618 (REV 2)

Attachment 2
Narrative
WSCF120661

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), Master Contract 39818, Revision 3, "Laboratory Analytical Services to CHPRC Soil and Groundwater Remediation Project."*

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. In addition, Sample Discrepancy Report 12-268 is attached regarding a metal QC 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

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

- All applicable QC controls are within the established limits.

Attachment 2
Narrative
WSCF120661

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.

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 SDR12-268 regarding Strontium LCS failure is attached to this report.
- All other applicable QC controls are within the established limits.

Organic Comments

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

- All applicable QC controls are within the established limits.

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

Attachment 2
Narrative
WSCF120661

SAMPLE ISSUE RESOLUTION

SIR NUM	SDR12-268
REV NUM	0
DATE INITIATED	5/30/2012

SAMPLE EVENT INFORMATION

SAF NUM(S)	F11-095, F10-255
OPERABLE UNIT(S)	100-KR-2
PROJECT(S)	183 KE/KW, 100 K RA
SAMPLE EVENT TITLE(S)	100 K Remedial Action, 183 KE/KW WTP
LABORATORY	Waste Sampling & Characterization

SAMPLING INFORMATION

NUMBER OF SAMPLES	20
SAMPLE NUMBERS	B2F188, B2F189, B2F190, B2F191, B2H1C3, B2H1D1, B2H1D5, B2H1D9, B2H1F3, B2H1F7, B2H1H1, B2H1H5, B2H1J3, B2H1J7, B2L1L4, B2L1L8, B2L1M2, B2L1M6, B2L1P6, B2L1T4
SAMPLE MATRIX	SOIL
COLLECTION DATE	5/20/2012 - 5/20/2012
SDG NUM	WSCF120665, WSCF120662, WSCF120661

ISSUE BACKGROUND

CLASS	Laboratory Issue
TYPE	Quality Control Failure
DESCRIPTION	Strontium LCS was slightly low at 74.2% with control limits of 78-119%. The MS (98.3) and MSD (95.7) were both within the control limits of 70-130%. The blank was non-detect.

DISPOSITION

DESCRIPTION	PROPOSED DISPOSITION: Report the data as-is and note the QC failures in the case narrative.
JUSTIFICATION	ACCEPTED DISPOSITION: Accept proposed resolution.

SUBMITTED BY: Heather Medley/WSCF DATE: 5/30/12

ACCEPTED BY: Steve Trent/CHPRC DATE: 5/30/12
Jennifer Hammons/CHPRC DATE: 5/30/12

A-6003-640 (03/30)

PAGE 1 of 1

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-436	PAGE 1 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 4 Soil Sample 2	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: N/A	FIELD LOGBOOK NO.: HNF-N-507-24	ACTUAL SAMPLE DEPTH: 5 ft.	COA: 302548ES10	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: 120661

PRESERVATION	Cool~4C	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS PCB	SEE ITEM (2) IN SPECIAL INSTRUCTIONS 2008	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2H1J3	SOIL	MAY 2 0 2012	1214	✓	✓	✓	✓	

GH 5/18/12

TR-VL-12-039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: FM Hall, CHPRC	DATE/TIME: MAY 2 0 2012 1430	RECEIVED BY/STORED IN: SJ#1	DATE/TIME: MAY 2 0 2012 1430	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: SJ#1	DATE/TIME: MAY 2 1 2012 0830	RECEIVED BY/STORED IN: DW Brotherton, Jr, CHPRC	DATE/TIME: MAY 2 1 2012 0830	
RELINQUISHED BY/REMOVED FROM: DW Brotherton, Jr, CHPRC	DATE/TIME: MAY 2 1 2012 0900	RECEIVED BY/STORED IN: TA Frazier	DATE/TIME: MAY 2 1 2012 0900	
RELINQUISHED BY/REMOVED FROM: CHPRC	DATE/TIME:	RECEIVED BY/STORED IN:	DATE/TIME:	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
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 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-436	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 183.2KE Pothole 4 Soil Sample 2	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO. N/A	FIELD LOGBOOK NO. HNF-N-507-24	ACTUAL SAMPLE DEPTH 5 ft.	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ 3/15/12

TRVL- 12- 039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-500	PAGE 1 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 10 Soil Sample 1	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: N/A	FIELD LOGBOOK NO.: HNF-N-507-24	ACTUAL SAMPLE DEPTH: Surface	COA: 302548E510	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS;	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2L1M2 2	SOIL	MAY 2 0 2012	1240	✓	✓	✓	✓	

DH 5/18/12

TRVL- 12- 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: FM Hall, CHPRC	DATE/TIME: MAY 2 0 2012 1430	RECEIVED BY/STORED IN: SSV #1	DATE/TIME: MAY 2 0 2012 1430	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: SSV #1	DATE/TIME: MAY 2 1 2012 0830	RECEIVED BY/STORED IN: DW Brotherton, Jr, CHPRC	DATE/TIME: MAY 2 1 2012 0830	
RELINQUISHED BY/REMOVED FROM: DW Brotherton, Jr, CHPRC	DATE/TIME: MAY 2 1 2012 0900	RECEIVED BY/STORED IN: TA Prosin	DATE/TIME: MAY 2 1 2012 0900	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

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

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-500	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 183.2KE Pothole 10 Soil Sample 1	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO. N/A	FIELD LOGBOOK NO. HNF-N-507-24-	ACTUAL SAMPLE DEPTH Surface	COA 302548E510	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ JJ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha - {Gross alpha}; Gross Beta - {Gross beta};~~ GH 5/18/12

TRVL- 12- 039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-408	PAGE 1 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 2 Soil Sample 1	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: N/A	FIELD LOGBOOK NO.: HNF-N-507-24	ACTUAL SAMPLE DEPTH: Surface	COA: 302548ES10	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; SE=Sediment; T=Tissue; V=Vegetation; W=Water; WI=Wipe; X=Other

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool~4C	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2H1D5 3	SOIL	5/20/12	1148	✓	✓	✓	✓	

TRVL- 12- 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: MAY 20 2012 1430	RECEIVED BY/STORED IN: SSU#1	DATE/TIME: MAY 20 2012 1430	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: SSU#1	DATE/TIME: MAY 21 2012 0830	RECEIVED BY/STORED IN: DW Brotherton, Jr CHPRC	DATE/TIME: MAY 21 2012 0830	
RELINQUISHED BY/REMOVED FROM: DW Brotherton, Jr CHPRC	DATE/TIME: MAY 21 2012 0900	RECEIVED BY/STORED IN: TA Frazier	DATE/TIME: MAY 21 2012 0900	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

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

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-408	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 183.2KE Pothole 2 Soil Sample 1	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO. n/a	FIELD LOGBOOK NO. HNF-N-507-24	ACTUAL SAMPLE DEPTH Surface	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100 K Facility until it is determined if any additional analyses are needed.~~ ☐ 182 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha - {Gross alpha}; - Gross Beta - {Gross beta}~~; 3/19/12

TR-L- 12- 039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	F11-095-428	PAGE 1 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days	AIR QUALITY: ☐	
SAMPLING LOCATION: 183.2KE Pothole 3 Soil Sample 3	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil	SAF NO.: F11-095	
ICE CHEST NO.: 1/2	FIELD LOGBOOK NO.: HNF -N-507-24	ACTUAL SAMPLE DEPTH: 10 ft.	COA: 302548ES10
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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2H1H5 4	SOIL	MAY 2 0 2012	1232	✓	✓	✓	✓	

QK 5/18/12

TRL 12 - 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: FM Hall, CHPRC	DATE/TIME: MAY 2 0 2012 1430	RECEIVED BY/STORED IN: SSLL#1	DATE/TIME: MAY 2 0 2012 1430	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: SSLL#1	DATE/TIME: MAY 2 1 2012 0830	RECEIVED BY/STORED IN: DW Brotherton, Jr., CHPRC	DATE/TIME: MAY 2 1 2012 0830	
RELINQUISHED BY/REMOVED FROM: DW Brotherton, Jr., CHPRC	DATE/TIME: MAY 2 1 2012 0900	RECEIVED BY/STORED IN: TA Frazier	DATE/TIME: MAY 2 1 2012 0900	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

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

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-428	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 3 Soil Sample 3	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	
ICE CHEST NO.	FIELD LOGBOOK NO. HNF -N-507-24-	ACTUAL SAMPLE DEPTH 10 ft	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ AJJ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}~~; 9K 5/13/12

TRVL- 12- 039

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A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F11-095-524	PAGE 1 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C / AIR QUALITY: ☐ / DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole Soil Sample 33	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	
ICE CHEST NO.: N/A	FIELD LOGBOOK NO.: HNF-N-507 24	ACTUAL SAMPLE DEPTH: 5 ft.	COA: 302548E510	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	8G	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2L1P6 5	SOIL	MAY 2 0 2012	1115	✓	✓	✓	✓	

TRVL- 12- 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: MAY 2 0 2012 1430	RECEIVED BY/STORED IN:	DATE/TIME: MAY 2 0 2012 1430	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM:	DATE/TIME: MAY 2 1 2012 0830	RECEIVED BY/STORED IN: DW Brotherton, CHPRC	DATE/TIME: MAY 2 1 2012 0830	
RELINQUISHED BY/REMOVED FROM: DW Brotherton, CHPRC	DATE/TIME: MAY 2 1 2012 0900	RECEIVED BY/STORED IN: TA Frazin	DATE/TIME: MAY 2 1 2012 0900	
RELINQUISHED BY/REMOVED FROM:	DATE/TIME:	RECEIVED BY/STORED IN:	DATE/TIME:	
RELINQUISHED BY/REMOVED FROM:	DATE/TIME:	RECEIVED BY/STORED IN:	DATE/TIME:	
RELINQUISHED BY/REMOVED FROM:	DATE/TIME:	RECEIVED BY/STORED IN:	DATE/TIME:	
RELINQUISHED BY/REMOVED FROM:	DATE/TIME:	RECEIVED BY/STORED IN:	DATE/TIME:	

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

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-524	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 183.2KE Pothole Soil Sample 33	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO. N/A	FIELD LOGBOOK NO. HNF-N-507 24	ACTUAL SAMPLE DEPTH 5 ft.	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ 5/3/12

TR-VL- 12 - 039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-400	PAGE 1 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 1 Soil Sample 2	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: N/A	FIELD LOGBOOK NO.: HNF-N-507 24	ACTUAL SAMPLE DEPTH: 5 ft	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME			1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER			aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)			1	1	1	1	1
VOLUME			250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS			SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196,	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS
SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME				
B2H1C3 6	SOIL	MAY 2 0 2012	1115	✓	✓	✓	✓

4/5/12

TRVL- 12- 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: MAY 2 0 2012 1430	RECEIVED BY/STORED IN: SSU #1	DATE/TIME: MAY 2 0 2012 1430	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: SSU #1	DATE/TIME: MAY 2 1 2012 0830	RECEIVED BY/STORED IN: DW Brotherton, Jr CHPRC	DATE/TIME: MAY 2 1 2012 0830	
RELINQUISHED BY/REMOVED FROM: DW Brotherton, Jr CHPRC	DATE/TIME: MAY 2 1 2012 0900	RECEIVED BY/STORED IN: TA Enzim Quality	DATE/TIME: MAY 2 1 2012 0900	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

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

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-400	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 1 Soil Sample 2	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	
ICE CHEST NO. N/A	FIELD LOGBOOK NO. HNF-N-507 24	ACTUAL SAMPLE DEPTH 5 ft.	COA 302548E510	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ KDZ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ JK 5/3/12

TRVL- 12 - 039

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A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-412	PAGE 1 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 2 Soil Sample 2	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	
ICE CHEST NO. N/A	FIELD LOGBOOK NO. HNF-N-507-24	ACTUAL SAMPLE DEPTH 5ft	COA 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.		MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2H1D9	7	SOIL	MAY 2 0 2012	1152	✓	✓	✓	✓	

TRVL-12-039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM FM Hall CHPRC	DATE/TIME MAY 2 0 2012 1430	RECEIVED BY/STORED IN SSU #1	DATE/TIME MAY 2 0 2012 1430	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM SSU #1	DATE/TIME MAY 2 1 2012 0830	RECEIVED BY/STORED IN DW Brotherton, Jr CHPRC	DATE/TIME MAY 2 1 2012 0830	
RELINQUISHED BY/REMOVED FROM DW Brotherton, Jr CHPRC	DATE/TIME MAY 2 1 2012 0900	RECEIVED BY/STORED IN TA Frazier	DATE/TIME MAY 2 1 2012 0900	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

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)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-412	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 2 Soil Sample 2	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	
ICE CHEST NO. n/a	FIELD LOGBOOK NO. HNF-N-507-24	ACTUAL SAMPLE DEPTH 5 ft	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ 3/28/12

TRVL-12-039

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A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-496	PAGE 1 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 9 Soil Sample 2	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: N/A	FIELD LOGBOOK NO.: HNF-N-507-24	ACTUAL SAMPLE DEPTH: 10'	COA: 302548ES10	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	Cool--4C	Cool--4C	Cool--4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	50mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2L1L8 8	SOIL	5/20/12	1254	✓	✓	✓	✓	

24 5/18/12

039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: FM Hall, CHPRC	DATE/TIME: MAY 2 0 2012 1430	RECEIVED BY/STORED IN: SSU #1	DATE/TIME: MAY 2 0 2012 1430	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: SSU #1	DATE/TIME: MAY 2 1 2012 0830	RECEIVED BY/STORED IN: DW Brotherton, Jr, CHPRC	DATE/TIME: MAY 2 1 2012 0830	
RELINQUISHED BY/REMOVED FROM: DW Brotherton, Jr, CHPRC	DATE/TIME: MAY 2 1 2012 0900	RECEIVED BY/STORED IN: TA Brazin	DATE/TIME: MAY 2 1 2012 0900	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

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

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-496	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 9 Sol Sample 2	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	
ICE CHEST NO. N/A	FIELD LOGBOOK NO. HNF-N-507-24	ACTUAL SAMPLE DEPTH 10'	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ DJ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ 9K 3/14/12

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PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-420	PAGE 1 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 3 Soil Sample 1	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: 0/5	FIELD LOGBOOK NO.: HNF-N-507-24	ACTUAL SAMPLE DEPTH: Surface	COA: 302548ES10	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

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	PRESERVATION	HOLDING TIME	TYPE OF CONTAINER	NO. OF CONTAINER(S)	VOLUME	SAMPLE ANALYSIS
				Cool~4C	1 yr/1 yr	aG	1	250mL	SEE ITEM (1) IN SPECIAL INSTRUCTIONS
				Cool~4C	6 Months	G/P	1	120mL	SEE ITEM (2) IN SPECIAL INSTRUCTIONS
				Cool~4C	30 Days	G/P	1	60mL	Chromium Hex - 7196;
				Cool~4C	28 Days/48 Hours	G/P	1	60mL	IC Anions - 300.0 (Chloride, Sulfate);
				None	6 Months	G/P	1	120mL	SEE ITEM (3) IN SPECIAL INSTRUCTIONS
B2H1F7 9	SOIL	MAY 2 0 2012	1228	✓	✓	✓	✓		

94 5/19/12

TRVL 12- 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: MAY 2 0 2012 1430	RECEIVED BY/STORED IN: SSW #1	DATE/TIME: MAY 2 0 2012 1430	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: SSW #1	DATE/TIME: MAY 2 1 2012 0830	RECEIVED BY/STORED IN: CW Brotherton, Jr CHPRC	DATE/TIME: MAY 2 1 2012 0830	
RELINQUISHED BY/REMOVED FROM: CW Brotherton, Jr CHPRC	DATE/TIME: MAY 2 1 2012 0900	RECEIVED BY/STORED IN: TA Frazier	DATE/TIME: MAY 2 1 2012 0900	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

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

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-420	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 3 Soil Sample 1	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	
ICE CHEST NO. N/A	FIELD LOGBOOK NO. HNF-N-507-24	ACTUAL SAMPLE DEPTH Surface	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ AJ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ JK 3/19/12

TRVL-12-039

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A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-440	PAGE 1 OF 2
COLLECTOR: FM Hall CHPRC	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 4 Soil Sample 3	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: N/A	FIELD LOGBOOK NO.: HNF-N-507-24-	ACTUAL SAMPLE DEPTH: 10 ft.	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2H1J7 10	SOIL	MAY 2 0 2012	1216	✓	✓	✓	✓	

JH 5/18/12

TRVL- 12- 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: MAY 2 0 2012 1430	RECEIVED BY/STORED IN: SSU#1	DATE/TIME: MAY 2 0 2012 1430	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: SSU#1	DATE/TIME: MAY 2 1 2012 0830	RECEIVED BY/STORED IN: DW Brotherton, Jr CHPRC	DATE/TIME: MAY 2 1 2012 0830	
RELINQUISHED BY/REMOVED FROM: DW Brotherton, Jr CHPRC	DATE/TIME: MAY 2 1 2012 0900	RECEIVED BY/STORED IN: TA Frazier	DATE/TIME: MAY 2 1 2012 0900	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

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

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-440	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 183.2KE Pothole 4 Soil Sample 3	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO. N/A	FIELD LOGBOOK NO. HNF-N-507-24	ACTUAL SAMPLE DEPTH 10ft.	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha - {Gross alpha}; Gross Beta - {Gross beta};~~

TRVL- 12- 039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

Attachment 2
Narrative Rev1
WSCF120665

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

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), Master Contract 39818, Revision 3, "Laboratory Analytical Services to CHPRC Soil and Groundwater Remediation Project."*

The narrative (Attachment 2) will address sample characteristics, analyses requested and general information in performance of the analytical methods. Additionally, a copy of the completed P&D # WSCF120665 is included with this case narrative. 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. In addition, Sample Discrepancy Report 12-268 is attached regarding a metal QC 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

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

Attachment 2
Narrative Rev1
WSCF120665

- All applicable QC controls are within the established limits.

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

- All applicable QC controls are within the established limits.

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

- Batch QC 201896
  - Sample Issue Resolution Form SDR12-268 regarding 200.8 LCS failure is attached to this report.
- Batch QC 202257
  - Copper – Detected in the Blank and evaluated. No sample results in this batch were affected. "C" Flags not required.
  - Manganese – Exceeded spiking levels by a factor of 4. Spike recoveries and associated RPDs are not valid.
  - All other applicable QC controls are within the established limits.

Organic Comments

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

- 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.

Narrative

Attachment 2
Narrative Rev1
WSCF120665

SAMPLE ISSUE RESOLUTION

SIR NUM	SDR12-268
REV NUM	0
DATE INITIATED	5/30/2012

SAMPLE EVENT INFORMATION

SAF NUM(S)	F11-095, F10-255
OPERABLE UNIT(S)	100-KR-2
PROJECT(S)	183 KE/KW, 100 K RA
SAMPLE EVENT TITLE(S)	100 K Remedial Action, 183 KE/KW WTP
LABORATORY	Waste Sampling & Characterization

SAMPLING INFORMATION

NUMBER OF SAMPLES	20
SAMPLE NUMBERS	B2F188, B2F189, B2F190, B2F191, B2H1C3, B2H1D1, B2H1D5, B2H1D9, B2H1F3, B2H1F7, B2H1H1, B2H1H5, B2H1J3, B2H1J7, B2L1L4, B2L1L8, B2L1M2, B2L1M6, B2L1P6, B2L1T4
SAMPLE MATRIX	SOIL
COLLECTION DATE	5/20/2012 - 5/20/2012
SDG NUM	WSCF120665, WSCF120662, WSCF120661

ISSUE BACKGROUND

CLASS	Laboratory Issue
TYPE	Quality Control Failure
DESCRIPTION	Strontium LCS was slightly low at 74.2% with control limits of 78-119%. The MS (98.3) and MSD (95.7) were both within the control limits of 70-130%. The blank was non-detect.

DISPOSITION

DESCRIPTION	PROPOSED DISPOSITION: Report the data as-is and note the QC failures in the case narrative.
JUSTIFICATION	ACCEPTED DISPOSITION: Accept proposed resolution.

SUBMITTED BY: Heather Medley/WSCF DATE: 5/30/12

ACCEPTED BY: Steve Trent/CHPRC DATE: 5/30/12
Jennifer Hammons/CHPRC DATE: 5/30/12

A-6003-640 (03/30)

PAGE 1 of 1

Attachment 2
Narrative Rev1
WSCF120665

Problem and Discrepancy Report

WSCF

SDG WSCF120665

06/14/2012

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1. The data package has the following issues:

a) ICP-MS, beryllium was requested for samples B2H1B9, B2H1D1, B2H1F3, B2H1H1, B2H1H9, B2L1L4, and B2L1M6 but was not reported. (HC/E)

Resolution: *Provide appropriate correction*

Lab Response: **Beryllium has now been added.**

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-424	PAGE 1 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND
SAMPLING LOCATION: 183.2KE Pothole 3 Soil Sample 2	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	15 Days / 15 Days
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-507-34	ACTUAL SAMPLE DEPTH: 5 ft	COA: 302548E510	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: 120665

PRESERVATION	Cool~4C	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2H1H1	SOIL	MAY 2 0 2012	1230	✓	✓	✓	✓	

TR-VL- 12- 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: MAY 2 0 2012 1430	RECEIVED BY/STORED IN: SSU#1	DATE/TIME: MAY 2 0 2012 1430	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: SSU-1 5/21/12	DATE/TIME: 0830	RECEIVED BY/STORED IN: R Ellingsworth 5/21/12	DATE/TIME: 0830	
RELINQUISHED BY/REMOVED FROM: R Ellingsworth 5/21/12	DATE/TIME: 0900	RECEIVED BY/STORED IN: TA Frazier 5/21/12	DATE/TIME: 0900	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

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

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-424	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 3 Soil Sample 2	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-507-24	ACTUAL SAMPLE DEPTH 5 ft.	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed.~~ ☐ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ 4/18/12

TR/L-12-039

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A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-404	PAGE 1 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 183.2KE Pothole 1 Soil Sample 3	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-507 24	ACTUAL SAMPLE DEPTH 10 ft.	COA 302548ES10	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	Cool<4C	Cool<4C	Cool<4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2H1D1 2	SOIL	MAY 2 0 2012	1112	✓	✓	✓	✓	

OK 5/31/12

TRVL- 12- 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM FM Hall CHPRC	DATE/TIME MAY 2 0 2012 1430	RECEIVED BY/STORED IN SSU#1	DATE/TIME MAY 2 0 2012 1430	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM SSU-1	DATE/TIME 5/21/12 0830	RECEIVED BY/STORED IN R Ellingsworth	DATE/TIME 5/21/12 0830	
RELINQUISHED BY/REMOVED FROM R Ellingsworth	DATE/TIME 5/21/12 0900	RECEIVED BY/STORED IN TA Frazier	DATE/TIME 5/21/12 0900	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

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)

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F11-095-404	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C / DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 1 Sol Sample 3	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-507 24	ACTUAL SAMPLE DEPTH 10 ft.	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ 5/3/12

TRVL 12- 039

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A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-504	PAGE 1 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 10 Soil Sample 2	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-507-24	ACTUAL SAMPLE DEPTH: 10 ft	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2L1M6 3	SOIL	MAY 2 0 2012	1242	✓	✓	✓	✓	

94 5/18/12

TRVL- 12- 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: MAY 2 0 2012 1430	RECEIVED BY/STORED IN: SSU #1	DATE/TIME: MAY 2 0 2012 1430	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: SSU-1	DATE/TIME: 5/21/12 0830	RECEIVED BY/STORED IN: R Ellingsworth	DATE/TIME: 5/21/12 0830	
RELINQUISHED BY/REMOVED FROM: R Ellingsworth	DATE/TIME: 5/21/12 0900	RECEIVED BY/STORED IN: TA Ramazin	DATE/TIME: 5/21/12 0900	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

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

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

REVISED

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-504	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 10 Soil Sample 2	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-507-24-	ACTUAL SAMPLE DEPTH 10 ft.	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~

3/16/12

TR-NL-12-039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-416	PAGE 1 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 2 Soil Sample 3	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-507-24	ACTUAL SAMPLE DEPTH: 10 ft.	COA: 302548ES10	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, SE=Sediment, T=Tissue, V=Vegetation, W=Water, WI=Wipe, X=Other

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool~4C	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2H1F3 4	SOIL	MAY 2 0 2012	1150	✓	✓	✓	✓	

JH 5/18/12

TRVL- 12 - 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: FM Hall, CHPRC	DATE/TIME: MAY 2 0 2012 1430	RECEIVED BY/STORED IN: SJU #1	DATE/TIME: MAY 2 0 2012 1430	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: SJU-1	DATE/TIME: 5/21/12 0830	RECEIVED BY/STORED IN: R Ellingsworth	DATE/TIME: 5/21/12 0830	
RELINQUISHED BY/REMOVED FROM: R Ellingsworth	DATE/TIME: 5/21/12 0900	RECEIVED BY/STORED IN: TA Frazier	DATE/TIME: 5/21/12 0900	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

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

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-416	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C AIR QUALITY ☐	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 2 Soil Sample 3	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095		
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-507-24-	ACTUAL SAMPLE DEPTH 10 ft	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ 173 5/15/12
(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};
(2) 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};
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ 9145/13/12

TR-AL- 12- 039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-492	PAGE 1 OF 2
COLLECTOR: FM Hall, CHPRC	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 9 Soil Sample 1	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-507-24	ACTUAL SAMPLE DEPTH: Surface	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7195;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2L1L4 5	SOIL	MAY 2 0 2012	1252	✓	✓	✓	✓	

RH 5/18/12

TFVL- 12- 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: FM Hall CHPRC	DATE/TIME: MAY 2 0 2012 1430	RECEIVED BY/STORED IN: SSG #1	DATE/TIME: MAY 2 0 2012 1430	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: SSG-1	DATE/TIME: 5/21/12 0830	RECEIVED BY/STORED IN: R Ellingsworth	DATE/TIME: 5/21/12 0830	
RELINQUISHED BY/REMOVED FROM: R Ellingsworth	DATE/TIME: 5/21/12 0900	RECEIVED BY/STORED IN: TA Frazier	DATE/TIME: 5/21/12 0900	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

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

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-492	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 9 Soil Sample 1	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-507-24	ACTUAL SAMPLE DEPTH Surface	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ SJE 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ SH 3/18/12

TRL 12- 039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-542	PAGE 1 OF 1
COLLECTOR: L.D. Wall CHPRC; FM Hall CHPRC	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole Soil Sample 37	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY:	
ICE CHEST NO.:	FIELD LOGBOOK NO.: HNF-N-507-24	ACTUAL SAMPLE DEPTH: N/A	COA: 302548ES10	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	Cool<4C	Cool<4C	Cool<4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2L1T4 6	SOIL	5/20/12	1055	X	X	X	X	

5/21/12

12- 039

CHAIN OF POSSESSION — SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
L.D. Wall CHPRC; FM Hall CHPRC	MAY 20 2012 1430	SSLC #1	MAY 20 2012 1430
SSLC-1	5/21/12 0830	R Ellingsworth	5/21/12 0830
R Ellingsworth	5/21/12 0900	TA Frazier	5/21/12 0900

SPECIAL INSTRUCTIONS

** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};
(2) 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};
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ 5/31/12

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

PRINTED ON 4/2/2012 — A-6003-618 (REV 2)

REVISED

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-396	PAGE 1 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 183.2KE Pothole 1 Soil Sample 1	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-507 24	ACTUAL SAMPLE DEPTH Surface	COA 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2H1B9	SOIL	MAY 2 0 2012	1110	✓	✓	✓	✓	

94 5/21/12

TRVL- 12- 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM FM Hall CHPRC	DATE/TIME MAY 2 0 2012 1430	RECEIVED BY/STORED IN SSLee	DATE/TIME MAY 2 0 2012 1430	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM SSLee	DATE/TIME 5/21/12 0830	RECEIVED BY/STORED IN R Ellingsworth	DATE/TIME 5/21/12 0830	
RELINQUISHED BY/REMOVED FROM R Ellingsworth	DATE/TIME 5/21/12 0900	RECEIVED BY/STORED IN TA Endozian	DATE/TIME 5/21/12 0900	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

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

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

REVISED

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-396	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 1 Soil Sample 1	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-507 24	ACTUAL SAMPLE DEPTH Surface	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed.~~ ☐ 112 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ 9# 5/3/12

TRVL- 12- 039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-432	PAGE 1 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 183.2KE Pothole 4 Soil Sample 1	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-507-24	ACTUAL SAMPLE DEPTH Surface	COA 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2H1H9	SOIL	MAY 2 0 2012	1210	✓	✓	✓	✓	

JH 5/18/12

TRVL- 12- 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM FM Hall CHPRC	DATE/TIME MAY 2 0 2012 1430	RECEIVED BY/STORED IN SSU#1	DATE/TIME MAY 2 0 2012 1430	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM SSU-1	DATE/TIME 5/21/12 0830	RECEIVED BY/STORED IN R Ellingsworth	DATE/TIME 5/21/12 0830	
RELINQUISHED BY/REMOVED FROM R Ellingsworth	DATE/TIME 5/21/12 0900	RECEIVED BY/STORED IN TAF-Fedex	DATE/TIME 5/21/12 0900	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

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

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-432	PAGE 2 OF 2
COLLECTOR FM Hall CHPRC	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 4 Soil Sample 1	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-507-24	ACTUAL SAMPLE DEPTH Surface	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~

5/10/12

TRVL 12 - 039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

Attachment 2
Narrative
WSCF120809

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), Master Contract 39818, Revision 3, "Laboratory Analytical Services to CHPRC Soil and Groundwater Remediation Project."*

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

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

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

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

Analytical Methodology for Requested Analyses

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

Inorganic Comments

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

- All applicable QC controls are within the established limits.

Attachment 2
Narrative
WSCF120809

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.

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

- Batch QC 203697
  - Vanadium and Copper – Detected in the Blank and evaluated. Affected sample results in this batch were "C" Flagged.
- Batch QC 203871
  - Vanadium, Nickel, Chromium and Copper – Detected in the Blank and evaluated. Affected sample results in this batch were "C" Flagged.
  - Manganese – Exceeded spiking levels by a factor of 4. Spike recoveries and associated RPDs are not valid.
  - All other applicable QC controls are within the established limits.

Organic Comments

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

- 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			F11-095-545	PAGE 1 OF 1
COLLECTOR: Frank Hall	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole Soil Sample 3B	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: (N/A)	FIELD LOGBOOK NO.: HNF-N-507-2E	ACTUAL SAMPLE DEPTH: N/A	COA: 302548ES10	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: 120809

PRESERVATION	Cool<4C	Cool<4C	Cool<4C	Cool<4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - /196; ✓	IC Anions - 300.0 (Chloride, Sulfate); ✓	SEE ITEM (3) IN SPECIAL INSTRUCTIONS 9/4/2012

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2L1T7	SOIL	JUN 20 2012	1025	✓	✓	✓	✓	

12- 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: Frank Hall	DATE/TIME: JUN 20 2012 1310	RECEIVED BY/STORED IN: C Johnson	DATE/TIME: JUN 20 2012 1310
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};
(2) 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};
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~
DA 5/3/12

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

PRINTED ON 4/2/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-444	PAGE 1 OF 2
COLLECTOR: Frank Hall	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 5 Soil Sample 1	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: (N/A)	FIELD LOGBOOK NO.: INF-N-50725	ACTUAL SAMPLE DEPTH: SURFACE	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - /10%;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2H1K1	SOIL	JUN 20 2012	1025	✓	✓	✓	✓	

9k 6/14/12

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: Frank Hall	DATE/TIME: JUN 20 2012 1310	RECEIVED BY/STORED IN: C Johnson	DATE/TIME: JUN 20 2012 1310
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
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

TPVL-12-039

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

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-444	PAGE 2 OF 2
COLLECTOR Frank Hall	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 183.2KE Pothole 5 Soil Sample 1	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY [ ]	15 Days / 15 Days
ICE CHEST NO. (N/A)	FIELD LOGBOOK NO. HNF-N-507-25	ACTUAL SAMPLE DEPTH SURFACE	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ 039 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ 9K 6/14/12

TRVL- 12 - 039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-480	PAGE 1 OF 2
COLLECTOR: Frank Hall	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 8 Soil Sample 1	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: (N/A)	FIELD LOGBOOK NO.: HNF-N-507-25	ACTUAL SAMPLE DEPTH: Surface	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2L1K2	SOIL	JUN 20 2012	0940	✓	✓	✓		

6/14/12

TRVL-12-039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: Frank Hall	DATE/TIME: JUN 20 2012 1310	RECEIVED BY/STORED IN: C Jones	DATE/TIME: JUN 20 2012 1310	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 3/14/2012

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-480	PAGE 2 OF 2
COLLECTOR Frank Hall	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 183.2KE Pothole 8 Soil Sample 1	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO. (N/A)	FIELD LOGBOOK NO. HNF-N-507-25	ACTUAL SAMPLE DEPTH SURFACE	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ DST 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};
(2) 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};
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ 94 6/14/12

IRVL 12- 039

PRINTED ON 3/14/2012 A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-448	PAGE 1 OF 2
COLLECTOR Frank Hall	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C AIR QUALITY ☐	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 5 Soil Sample 2	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095		
ICE CHEST NO. (N/A)	FIELD LOGBOOK NO. BNF-N- 50725	ACTUAL SAMPLE DEPTH 5'	COA 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2H1K5 4	SOIL	JUN 20 2012	1030	✓	✓	✓	✓	

9H 6/14/12

TRVL-12-039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM Frank Hall	DATE/TIME JUN 20 2012 1310	RECEIVED BY/STORED IN C Jilhrn	DATE/TIME JUN 20 2012 1310	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 3/14/2012

A-6003-618 (REV 7)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-448	PAGE 2 OF 2
COLLECTOR Frank Hall	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C AIR QUALITY ☐	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 5 Soil Sample 2	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095		
ICE CHEST NO. (N/A)	FIELD LOGBOOK NO. HNF-N-507-25	ACTUAL SAMPLE DEPTH 5'	COA 302548FS10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};
(2) 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};
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ 3/14/12

TR-12-039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F11-095-484	PAGE 1 OF 2
COLLECTOR: Frank Hall	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C; AIR QUALITY: ☐	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 8 Soil Sample 2	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	
ICE CHEST NO.: (N/A)	FIELD LOGBOOK NO.: HNF-N-502-25	ACTUAL SAMPLE DEPTH: 5'	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2L1K6 5	SOIL	JUN 2 0 2012	0944	✓	✓	✓	✓	

TRVL- 12- 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: Frank Hall	DATE/TIME: JUN 2 0 2012 1310	RECEIVED BY/STORED IN: C. Johnson	DATE/TIME: JUN 2 0 2012 1310	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 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-484	PAGE 2 OF 2
COLLECTOR Frank Hall	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 183.2KE Pothole 8 Soil Sample 2	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO. (N/A)	FIELD LOGBOOK NO. HNF-N-507 25	ACTUAL SAMPLE DEPTH 5'	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed.~~ ☐ ~~SJT~~ 2/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ GH 6/14/12

TRVL 12- 039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-452	PAGE 1 OF 2
COLLECTOR: Frank Hall	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 5 Soil Sample 3	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: (N/A)	FIELD LOGBOOK NO.: HNF-N-507-25	ACTUAL SAMPLE DEPTH: 10'	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME				1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER				aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)				1	1	1	1	1
VOLUME				250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS				SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS
SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	[redacted]				
B2H1K9	SOIL	JUN 2 0 2012	1033	✓	✓	✓	✓	

JH 6/14/12

TRVL- 12 - 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: Frank Hall	DATE/TIME: JUN 2 0 2012 1310	RECEIVED BY/STORED IN: C Jurnn	DATE/TIME: JUN 2 0 2012 1310	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 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-452	PAGE 2 OF 2
COLLECTOR Frank Hall	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 183.2KE Pothole 5 Soil Sample 3	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO. (N/A)	FIELD LOGBOOK NO. HNF-N-507-25	ACTUAL SAMPLE DEPTH 10'	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ AJS 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~

9K 6/14/12

CR-12-039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F11-095-468	PAGE 1 OF 2
COLLECTOR: Frank Hall	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C / AIR QUALITY: ☐ / DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 7 Soil Sample 1	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	
ICE CHEST NO.: (N/A)	FIELD LOGBOOK NO.: FINF-N-507 25	ACTUAL SAMPLE DEPTH: SURFACE	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2L1J0	SOIL	JUN 2 0 2012	1003	✓	✓	✓	✓	

QA 6/14/12

IPVL- 1 - 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: Frank Hall	DATE/TIME: JUN 2 0 2012 1310	RECEIVED BY/STORED IN: C Johnson	DATE/TIME: JUN 2 0 2012 1310	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 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-468	PAGE 2 OF 2
COLLECTOR Frank Hall	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 183.2KE Pothole 7 Sol Sample 1	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO. (N/A)	FIELD LOGBOOK NO. HNF-N- 507.25	ACTUAL SAMPLE DEPTH SURFACE	COA 302548FS10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};
(2) 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};
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~

6/14/12

IPL-12-039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-472	PAGE 1 OF 2
COLLECTOR: Frank Hall	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 7 Soil Sample 2	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-507-25	ACTUAL SAMPLE DEPTH: 5'	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None		
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months		
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P		
NO. OF CONTAINER(S)	1	1	1	1	1		
VOLUME	250mL	120mL	60mL	60mL	120mL		
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS		
SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME				
B2L1J4	SOIL	JUN 20 2012	1005	✓	✓	✓	✓

6/14/12
TRVL- 12 - 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: Frank Hall	DATE/TIME: JUN 20 2012 1310	RECEIVED BY/STORED IN: C. Johnson	DATE/TIME: JUN 20 2012 1310	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 3/14/2012

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-472	PAGE 2 OF 2
COLLECTOR Frank Hall	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 183.2KE Pothole 7 Soil Sample 2	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-302-25	ACTUAL SAMPLE DEPTH 5'	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed.~~ ☐ AJB 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};
(2) 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};
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~

GH 4/14/12

IRM- 039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-476	PAGE 1 OF 2
COLLECTOR: Frank Hall	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 7 Soil Sample 3	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: (N/A)	FIELD LOGBOOK NO.: INF-N 507 25	ACTUAL SAMPLE DEPTH: 10'	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 Yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2L1J8	SOIL	JUN 2 0 2012	1008	✓	✓	✓	✓	

06/14/12

TRVL 12- 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: Frank Hall	DATE/TIME: JUN 2 0 2012 1310	RECEIVED BY/STORED IN: C Johnson	DATE/TIME: JUN 2 0 2012 1310	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 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-476	PAGE 2 OF 2
COLLECTOR Frank Hall	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 183.2KE Pothole 7 Soil Sample 3	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO. (N/A)	FIELD LOGBOOK NO. HNF-N 507-25	ACTUAL SAMPLE DEPTH 10'	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500-mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ AJR 3/15/12
(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};
(2) 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};
~~(3) Gross Alpha - {Gross alpha}; Gross Beta - {Gross beta};~~
9K 6/14/12

TPVL- 14 - 039

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A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-508	PAGE 1 OF 2
COLLECTOR: Frank Hall	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: BC	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 11 Soil Sample 1	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: (N/A)	FIELD LOGBOOK NO.: HNF-N-507-25	ACTUAL SAMPLE DEPTH: SURFACE	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None		
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months		
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P		
NO. OF CONTAINER(S)	1	1	1	1	1		
VOLUME	250mL	120mL	60mL	60mL	120mL		
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS		
SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME				
B2L1N0 10	SOIL	JUN 20 2012	0835	✓	✓	✓	✓

TRVL 12 - 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: Frank Hall	DATE/TIME: JUN 20 2012 1310	RECEIVED BY/STORED IN: C Johnson	DATE/TIME: JUN 20 2012 1310	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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A-6003-616 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-508	PAGE 2 OF 2
COLLECTOR	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION Frank Hall 183.2KE Pothole 11 Soil Sample 1	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO. (N/A)	FIELD LOGBOOK NO. HNF-N-507-25	ACTUAL SAMPLE DEPTH SURFACE	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};
(2) 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};
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta}~~; PH 6/14/12

TRVL-12-039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-512	PAGE 1 OF 2
COLLECTOR: Frank Hall	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 11 Soil Sample 2	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-507-25	ACTUAL SAMPLE DEPTH: SURFACE	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2L1N4	SOIL	~~6/20/12~~ 6/20/12	0839	✓	✓	✓	✓	

TRVL-12-039

CHAIN OF POSSESSION	DATE/TIME	SIGN/ PRINT NAMES: RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM: Frank Hall	JUN 20 2012 1310	C Johnson	JUN 20 2012 1310
RELINQUISHED BY/REMOVED FROM		RECEIVED BY/STORED IN	
RELINQUISHED BY/REMOVED FROM		RECEIVED BY/STORED IN	
RELINQUISHED BY/REMOVED FROM		RECEIVED BY/STORED IN	
RELINQUISHED BY/REMOVED FROM		RECEIVED BY/STORED IN	
RELINQUISHED BY/REMOVED FROM		RECEIVED BY/STORED IN	
RELINQUISHED BY/REMOVED FROM		RECEIVED BY/STORED IN	

SPECIAL INSTRUCTIONS: 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 3/14/2012

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-512	PAGE 2 OF 2
COLLECTOR Frank Hall	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C AIR QUALITY ☐	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 11 Soil Sample 2	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095		
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-507-25	ACTUAL SAMPLE DEPTH SURFACE	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};
(2) 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};
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~

3/15/12

TRVL- 12- 039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-516	PAGE 1 OF 2
COLLECTOR: Frank Hall	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 12 Soil Sample 1	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: (N/A)	FIELD LOGBOOK NO.: HNF-N-507-25	ACTUAL SAMPLE DEPTH: SURFACE	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.		MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2L1N8	2	SOIL	JUN 20 2012	0857	✓	✓	✓	✓	

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CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: Frank Hall	DATE/TIME: JUN 20 2012 1310	RECEIVED BY/STORED IN: C Johnson	DATE/TIME: JUN 20 2012 1310	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 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-516	PAGE 2 OF 2
COLLECTOR Frank Hall	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C AIR QUALITY ☐	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 12 Soil Sample 1	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095		
ICE CHEST NO. (N/A)	FIELD LOGBOOK NO. HNF-N-507-25	ACTUAL SAMPLE DEPTH SURFACE	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ AJJ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};
(2) 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};
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~

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PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-520	PAGE 1 OF 2
COLLECTOR: Frank Hell	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 12 Soil Sample 2	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: (N/A)	FIELD LOGBOOK NO.: HNF-N-507-25	ACTUAL SAMPLE DEPTH: 5'	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None	
HOLDING TIME			1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months	
TYPE OF CONTAINER			aG	G/P	G/P	G/P	G/P	
NO. OF CONTAINER(S)			1	1	1	1	1	
VOLUME			250mL	120mL	60mL	60mL	120mL	
SAMPLE ANALYSIS			SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS	
SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2L1P2 13	SOIL	JUN 20 2012	0900	✓	✓	✓	✓	

3/14/12

TRVL- 12- 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: Frank Hell	DATE/TIME: JUN 20 2012 1310	RECEIVED BY/STORED IN: C Johnson	DATE/TIME: JUN 20 2012 1310	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 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-520	PAGE 2 OF 2
COLLECTOR Frank Hall	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C AIR QUALITY ☐	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 12 Soil Sample 2	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095		
ICE CHEST NO. (N/A)	FIELD LOGBOOK NO. HNF-N-507-25	ACTUAL SAMPLE DEPTH 5'	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};
(2) 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};
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~

3/14/12

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PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-488	PAGE 1 OF 2
COLLECTOR: Frank Hall	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 8 Soil Sample 3	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: (N/A)	FIELD LOGBOOK NO.: ~~INF-N~~ SD7.25	ACTUAL SAMPLE DEPTH: 101	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2L1L0 14	SOIL	JUN 20 2012	0948	✓	✓	✓	✓	

DH 6/14/12

TRVL 12- 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: Frank Hall	DATE/TIME: JUN 20 2012 1310	RECEIVED BY/STORED IN: C Johnson	DATE/TIME: JUN 20 2012 1310	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 3/14/2012

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-488	PAGE 2 OF 2
COLLECTOR Frank Hall	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C AIR QUALITY ☐	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 8 Soil Sample 3	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095		
ICE CHEST NO. (N/A)	FIELD LOGBOOK NO. HNF-N-507-25	ACTUAL SAMPLE DEPTH 10'	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ AJR 3/15/12
(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};
(2) 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};
~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~
AJR 3/14/12

TR-L 12- 039

PRINTED ON 3/14/2012 A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-456	PAGE 1 OF 2
COLLECTOR: Frank Hall	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 6 Soil Sample 1	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: (N/A)	FIELD LOGBOOK NO.: HNF-N-507-25	ACTUAL SAMPLE DEPTH: SURFACE	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2H1L3	SOIL	JUN 20 2012	0911	✓	✓	✓	✓	

9H 6/14/12

TRVL-12-039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: Frank Hall	DATE/TIME: JUN 20 2012 1310	RECEIVED BY/STORED IN: C Johnson	DATE/TIME: JUN 20 2012 1310	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 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-456	PAGE 2 OF 2
COLLECTOR Frank Hall	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C AIR QUALITY ☐	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 6 Soil Sample 1	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095		
ICE CHEST NO. (N/A)	FIELD LOGBOOK NO. INF-N- 50125	ACTUAL SAMPLE DEPTH SURFACE	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};
(2) 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};
~~(3) Gross Alpha- {Gross alpha}; Gross Beta- {Gross beta};~~

6/14/12

TRVL-12-039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-460	PAGE 1 OF 2
COLLECTOR: Frank Hall	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 6 Soil Sample 2	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: (N/A)	FIELD LOGBOOK NO.: HNF-N-502-25	ACTUAL SAMPLE DEPTH: 5'	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 Yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2H1L7 14	SOIL	JUN 20 2012	0918	✓	✓	✓	✓	

9H 6/14/12

TRVL-12-039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: Frank Hall	DATE/TIME: JUN 7 7 2012 1310	RECEIVED BY/STORED IN: C. Johns	DATE/TIME: JUN 20 2012 1310	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 3/14/2012

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-460	PAGE 2 OF 2
COLLECTOR Frank Hell	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE BC AIR QUALITY ☐	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 6 Soil Sample 2	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095		
ICE CHEST NO. (N/A)	FIELD LOGBOOK NO. HNF-N-507-25	ACTUAL SAMPLE DEPTH 5'	COA 302548FS10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed.~~ ☐ ~~SJ~~ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ GH 6/14/12

TRVL-12-039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-464	PAGE 1 OF 2
COLLECTOR: Frank Hall	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole 6 Soil Sample 3	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-507 25	ACTUAL SAMPLE DEPTH: 10'	COA: 302548ES10	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	Cool~4C	Cool~4C	Cool~4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2H1M1 17	SOIL	JUN 2 0 2012	0925	✓	✓	✓	✓	

6/14/12

TR-VL- 1 - 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: Frank Hall	DATE/TIME: JUN 2 0 2012 1310	RECEIVED BY/STORED IN: C Johnson	DATE/TIME: JUN 2 0 2012 1310	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 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-464	PAGE 2 OF 2
COLLECTOR Frank Hall	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C AIR QUALITY ☐	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole 6 Soil Sample 3	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095		
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-502-25	ACTUAL SAMPLE DEPTH 10'	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ AJZ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ QH 6/14/12

TRAL- 12- 039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-528	PAGE 1 OF .
COLLECTOR: Frank Hall	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 183.2KE Pothole Soil Sample 34	PROJECT DESIGNATION: 183 KE/KW Water Treatment Plant - Soil		SAF NO.: F11-095	AIR QUALITY: ☐	
ICE CHEST NO.: (N/A)	FIELD LOGBOOK NO.: TNF-N-507-25	ACTUAL SAMPLE DEPTH: SURFACE	COA: 302S48ES10	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	Cool-4C	Cool-4C	Cool-4C	None
HOLDING TIME	1 yr/1 yr	6 Months	30 Days	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	aG	G/P	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	250mL	120mL	60mL	60mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	IC Anions - 300.0 (Chloride, Sulfate);	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.		MATRIX*	SAMPLE DATE	SAMPLE TIME					
B2L1R0	18	SOIL	JUN 20 2012	0940					

9/6/2012

IRVL 12 - 039

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: Frank Hall	DATE/TIME: JUN 20 2012 1310	RECEIVED BY/STORED IN: C. Johnson	DATE/TIME: JUN 20 2012 1310	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 3/14/2012

A-6003-618 (REV 2)

Sample Receipt

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-095-528	PAGE 2 OF 2
COLLECTOR Frank Hall	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8C AIR QUALITY ☐	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 183.2KE Pothole Soil Sample 34	PROJECT DESIGNATION 183 KE/KW Water Treatment Plant - Soil		SAF NO. F11-095		
ICE CHEST NO. (N/A)	FIELD LOGBOOK NO. INF-N-507-25	ACTUAL SAMPLE DEPTH SURFACE	COA 302548ES10	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 all analytical work at WSCF laboratory is 402581.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** The ~~500 mL poly bottle labeled Special Studies will be archived at the 100-K Facility until it is determined if any additional analyses are needed. ☐~~ DRJ 3/15/12

(1) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260};

(2) 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};

~~(3) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};~~ 24 6/14/12

TFAL-12-039

PRINTED ON 3/14/2012

A-6003-618 (REV 2)

Appendix 5

Data Validation Supporting Documentation

VALIDATION LEVEL:	A	B	C	D	E
PROJECT: 100-K			DATA PACKAGE: VSR12-018		
VALIDATOR: Eyda Hergenreder		LAB: TestAmerica, WSCF		DATE: 07-13-2012	
			SDG: SL1272, SL1278, W06446, W06458, WSCF120661, WSCF120665, WSCF120809		
ANALYSES PERFORMED					
Anions/IC X	TOC	TOX	TPH-418.1	Oil and Grease	Alkalinity
Ammonia	BOD/COD	Chloride	Chromium-VI X	pH	NO_3/NO_2
Sulfate	TDS	TKN	Phosphate	Cyanide	

SAMPLES/MATRIX Soil samples

SDG SL1272: B2L1R5
SDG SL1278: B2L1T0
SDG W06446: B2L1R4
SDG W06458: B2L1R9
SDG WSCF120661: B2H1J3, B2L1M2, B2H1D5, B2H1H5, B2L1P6, B2H1C3, B2H1D9, B2L1L8, B2H1F7, B2H1J7
SDG WSCF120665: B2H1H1, B2H1D1, B2L1M6, B2H1F3, B2L1L4, B2L1T4, B2H1B9, B2H1H9
SDG WSCF120809: B2L1T7, B2H1K1, B2L1K2, B2H1K5, B2L1K6, B2H1K9, B2L1J0, B2L1J4, B2L1J8, B2L1N0, B2L1N4, B2L1N8, B2L1P2, B2L1L0, B2H1L3, B2H1L7, B2H1M1, B2L1R0,

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:

SL1272: MB Chloride 0.46 mg/kg

EB B2L1T4: Cr+6 0.0970 ug/g

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: None

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:

Field split RPDs: samples B2H1D9/B2L1R5 SO_4 44%

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:

Sulfate MDLs for samples B2L1L8, B2L1T4 and B2L1T7 were > CRDL

Comments (attach additional sheets as necessary):

More

Appendix 6

Additional Documentation Requested By Client

METHOD BLANK REPORT

General Chemistry

Client Lot #...: SL1272 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride		Work Order #: MTXLJ1AA		MB Lot-Sample #:	F2E310000-115	
	0.46 B	**2.0**	**mg/kg**	**MCAWW 300.0A**	**05/31/12**	**2152115**
		Dilution Factor: 1				
Sulfate		Work Order #: MTXLK1AA		MB Lot-Sample #:	F2E310000-116	
	ND	5.0	mg/kg	MCAWW 300.0A	05/31/12	2152116
		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

General Chemistry

Client Lot #...: SL1272 **Matrix.....:** SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride			Work Order #:	MTXLJ1AC	LCS Lot-Sample#:	F2E310000-115	
	20.0	19.6	mg/kg	98	MCAWW 300.0A	05/31/12	2152115
			Dilution Factor: 1				
Sulfate			Work Order #:	MTXLK1AC	LCS Lot-Sample#:	F2E310000-116	
	80.0	76.1	mg/kg	95	MCAWW 300.0A	05/31/12	2152116
			Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

General Chemistry

Client Lot #...: SL1272 **Matrix.....:** SOLID
Date Sampled...: 05/20/12 **Date Received..:** 05/25/12

Percnt Moisture: 20

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride			Work Order #...: MTTL11CM			MS Lot-Sample #: F2E250455-001		
	3.6	21.3	24.8	mg/kg	100	MCAWW 300.0A	05/31-06/01/12	2152115
			Dilution Factor: 1					
Sulfate			Work Order #...: MTTL11CN			MS Lot-Sample #: F2E250455-001		
	36.6	42.5	79.9	mg/kg	102	MCAWW 300.0A	05/31-06/01/12	2152116
			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.

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: F2E250455 **Work Order #...:** MTJJD-SMP MTJJD-DUP **Matrix.....:** SOLID

Date Sampled...: 05/11/12 **Date Received..:** 05/12/12

% Moisture.....: 20

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture						SD Lot-Sample #:	F2E140421-001	
	20.2	19.9	%	1.3	(0-30)	MCAWW 160.3 MOD	05/29-05/30/12	2150015

Dilution Factor: 1

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: F2E250455 **Work Order #...:** MTTL1-SMP MTTL1-DUP **Matrix.....:** SOLID

Date Sampled...: 05/20/12 **Date Received..:** 05/25/12

% Moisture.....: 6.0

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride						SD Lot-Sample #:	F2E250455-001	
	3.6 J	3.3	mg/kg	7.5	(0-20)	MCAWW 300.0A	05/31/12	2152115
		Dilution Factor: 1						
Sulfate						SD Lot-Sample #:	F2E250455-001	
	36.6	36.4	mg/kg	0.65	(0-20)	MCAWW 300.0A	05/31/12	2152116
		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.

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

METHOD BLANK REPORT

General Chemistry

Client Lot #...: SL1278 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride		Work Order #: MVED11AA		MB Lot-Sample #:	F2F280000-054	
	ND	2.0	mg/kg	MCAWW 300.0A	06/27-06/28/12	2180054
		Dilution Factor: 1				
Sulfate		Work Order #: MVED21AA		MB Lot-Sample #:	F2F280000-055	
	ND	5.0	mg/kg	MCAWW 300.0A	06/27-06/28/12	2180055
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

General Chemistry

Client Lot #...: SL1278 **Matrix.....:** SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride			Work Order #:	MVED11AC	LCS Lot-Sample#:	F2F280000-054	
	20.0	21.0	mg/kg	105	MCAWW 300.0A	06/27-06/28/12	2180054
			Dilution Factor: 1				
Sulfate			Work Order #:	MVED21AC	LCS Lot-Sample#:	F2F280000-055	
	80.0	76.9	mg/kg	96	MCAWW 300.0A	06/27-06/28/12	2180055
			Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

General Chemistry

Client Lot #...: SL1278 **Matrix.....:** SOLID
Date Sampled...: 06/20/12 **Date Received..:** 06/26/12

Percnt Moisture: 77

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride			Work Order #...:		MVART1DG		MS Lot-Sample #:	F2F260421-001
	1.5	20.4	22.2	mg/kg	101	MCAWW 300.0A	06/27-06/28/12	2180054
			Dilution Factor: 1					
Sulfate			Work Order #...:		MVART1DH		MS Lot-Sample #:	F2F260421-001
	11.4	40.8	55.0	mg/kg	107	MCAWW 300.0A	06/27-06/28/12	2180055
			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.

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: F2F260421 **Work Order #...:** MVARC-SMP MVARC-DUP **Matrix.....:** SOLID

Date Sampled...: 06/25/12 **Date Received..:** 06/26/12

% Moisture.....: 77

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture						SD Lot-Sample #:	F2F260416-001	
	77.1	77.0	%	0.10	(0-30)	MCAWW 160.3 MOD	06/27-06/28/12	2179015

Dilution Factor: 1

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: F2F260421 **Work Order #...:** MVART-SMP MVART-DUP **Matrix.....:** SOLID

Date Sampled...: 06/20/12 **Date Received..:** 06/26/12

% Moisture.....: 2.1

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride						SD Lot-Sample #:	F2F260421-001	
	1.5 B	1.5 B	mg/kg	0.96	(0-20)	MCAWW 300.0A	06/27-06/28/12	2180054
		Dilution Factor: 1						
Sulfate						SD Lot-Sample #:	F2F260421-001	
	11.4	13.5	mg/kg	17	(0-20)	MCAWW 300.0A	06/27-06/28/12	2180055
		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.

B Estimated result. Result is less than RL.

FORM II

Date: 24-May-12

DUPLICATE RESULTS

Lab Name:	TestAmerica	**SDG:**	W06446	**Collection Date:**	5/20/2012 11:52:00 AM
Lot-Sample No.:	J2E210447-1	**Report No. :**	51800	**Received Date:**	5/21/2012 2:20:00 PM
Client Sample ID:	B2L1R4	**COC No. :**	F11-095-532	**Matrix:**	SOIL

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDL, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 2142184	7196_CR6			**Work Order:** MTNXF1AD		**Report DB ID:** MTNXF1DR			**Orig Sa DB ID:** 9MTNXF10			
HEXCHROME	1.55E-01	U		0.0E+00	1.55E-01	mg/kg	N/A	(1.)	5/22/12		2.5	
	1.55E-01	U	**RPD**	**0.0**		~~3.50E-01~~		N/A			g	

1.55E-01
SKS 5-24-12

No. of Results: 1 **Comments:**

TestAmerica
rptSTLRchDupV5.
2.20 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

BLANK RESULTS

Date: 24-May-12

Lab Name: TestAmerica

Matrix: SOIL

SDG: W06446

Report No. : 51800

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDL, Lc	Rpt Unit, CRDL	Yield	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 2142184	7196_CR6			Work Order:	MTN1R1AA		Report DB ID:	MTN1R1AB				
HEXCHROME	1.55E-01	U		0.0E+00	1.55E-01	mg/kg	N/A	(1.)	5/22/12		2.5	
						1.55E-01		N/A			g	

No. of Results: 1 Comments:

TestAmerica
rptSTLRchBlank
V5.2.20 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: 24-May-12

Lab Name: TestAmerica

Matrix: SOIL

SDG: W06446

Report No. : 51800

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDL	Report Unit	Yield	Expected	Expected Uncert	Recovery, Bias	Analysis, Prep Date	Aliquot Size	Primary Detector
Batch: 2142184	7196_CR6			**Work Order:**	MTN1R1AC		**Report DB ID:**	MTN1R1AS					
HEXCHROME	1.97E+01			0.0E+00	1.55E-01	mg/kg	N/A	2.00E+01		98%	5/22/12	2.5	
							Rec Limits:	80	120	0.0		g	

No. of Results: 1 **Comments:**

FORM II

MATRIX SPIKE RESULTS

Date: 24-May-12

Lab Name: TestAmerica **SDG:** W06446

Lot-Sample No.: J2E210447-1, B2L1R4 **Report No. :** 51800 **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: 2142184	Work Order: MTNXF1AC			Report DB ID: MTNXF1CW			Orig Sa DB ID: 9MTNXF10					
HEXCHROME	9.60E+00			0.0E+00	1.55E-01	mg/kg	N/A	90.47%	1.06E+01	5/22/12	2.5	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: 28-Jun-12

DUPLICATE RESULTS

Lab Name:	TestAmerica	**SDG:**	W06458	**Collection Date:**	6/20/2012 9:25:00 AM
Lot-Sample No.:	J2F250434-1	**Report No. :**	52155	**Received Date:**	6/25/2012 11:15:00 AM
Client Sample ID:	B2L1R9	**COC No. :**	F11-095-537	**Matrix:**	SOIL

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDL, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 2178041	7196_CR6			Work Order:	MVAAN1AD		Report DB ID:	MVAAN1DR		Orig Sa DB ID:	9MVAAN10	
HEXCHROME	1.55E-01	U		0.0E+00	1.55E-01	mg/kg	N/A	(1.)	6/26/12		2.5	
	1.55E-01	U	RPD	0.0		~~3.50E-01~~		N/A			g	

1.55E-01
SKS 6-28-12

No. of Results: 1 Comments:

TestAmerica
rptSTLRchDupV5.
2.20 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

BLANK RESULTS

Date: 28-Jun-12

Lab Name: TestAmerica

Matrix: SOIL

SDG: W06458

Report No. : 52155

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDL, Lc	Rpt Unit, CRDL	Yield	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 2178041	7196_CR6			**Work Order:**	MVANQ1AA	**Report DB ID:**	MVANQ1AB					
HEXCHROME	1.55E-01	U		0.0E+00	1.55E-01	mg/kg	N/A	(1.)	6/26/12		2.5	
						1.55E-01		N/A			g	

No. of Results: 1 **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: 28-Jun-12

Lab Name: TestAmerica

Matrix: SOIL

SDG: W06458

Report No. : 52155

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDL	Report Unit	Yield	Expected	Expected Uncert	Recovery, Bias	Analysis, Prep Date	Aliquot Size	Primary Detector
Batch: 2178041	7196_CR6			Work Order:	MVANQ1AC		Report DB ID:	MVANQ1AS					
HEXCHROME	1.90E+01			0.0E+00	1.55E-01	mg/kg	N/A	2.00E+01		95%	6/26/12	2.5	
							Rec Limits:	80	120	-0.1		g	

No. of Results: 1 Comments:

TestAmerica Bias - (Result/Expected)-1 as defined by ANSI N13.30.

rptSTLRchLcs
V5.2.20 A2002

FORM II

MATRIX SPIKE RESULTS

Date: 28-Jun-12

Lab Name: TestAmerica **SDG:** W06458

Lot-Sample No.: J2F250434-1, B2L1R9 **Report No. :** 52155 **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: 2178041	Work Order:	MVAAN1AC		Report DB ID:	MVAAN1CW		Orig Sa DB ID:	9MVAAN10				
HEXCHROME	9.32E+00			0.0E+00	1.55E-01	mg/kg	N/A	91.23%	1.02E+01	6/26/12	2.5	7196_CR6
	1.55E-01										g	

Number of Results: 1

Comments:

TestAmerica
rptSTLRchMs
V5.2.20 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.

Batch QC List

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120661

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
201896	202150	27	SAMPLE	120661003	B2H1D5		ICP-2008 MS All possible metal
201896	202150	28	SAMPLE	120661002	B2L1M2		ICP-2008 MS All possible metal
201896	202150	29	MSD	75615	B2H1J3(120661001MSD)	120661001	ICP-2008 MS All possible metal
201896	202150	30	MS	75614	B2H1J3(120661001MS)	120661001	ICP-2008 MS All possible metal
201896	202150	31	SAMPLE	120661001	B2H1J3		ICP-2008 MS All possible metal
201956	202066	1	BLANK	75648	BLANK		Anions by Ion Chromatography (Solid)
201956	202066	2	LCS	75649	LCS		Anions by Ion Chromatography (Solid)
201956	202066	3	MS	75650	B2L1P6(120661005MS)	120661005	Anions by Ion Chromatography (Solid)
201956	202066	4	MSD	75651	B2L1P6(120661005MSD)	120661005	Anions by Ion Chromatography (Solid)
201956	202066	5	DUP	75652	B2L1P6(120661005DUP)	120661005	Anions by Ion Chromatography (Solid)
201956	202066	6	SAMPLE	120661001	B2H1J3		Anions by Ion Chromatography (Solid)
201956	202066	7	SAMPLE	120661002	B2L1M2		Anions by Ion Chromatography (Solid)
201956	202066	8	SAMPLE	120661003	B2H1D5		Anions by Ion Chromatography (Solid)
201956	202066	9	SAMPLE	120661004	B2H1H5		Anions by Ion Chromatography (Solid)
201956	202066	10	SAMPLE	120661005	B2L1P6		Anions by Ion Chromatography (Solid)
201956	202066	11	SAMPLE	120661006	B2H1C3		Anions by Ion Chromatography (Solid)
201956	202066	12	SAMPLE	120661007	B2H1D9		Anions by Ion Chromatography (Solid)
201956	202066	13	SAMPLE	120661008	B2L1L8		Anions by Ion Chromatography (Solid)
201956	202066	14	SAMPLE	120661009	B2H1F7		Anions by Ion Chromatography (Solid)
201956	202066	15	SAMPLE	120661010	B2H1J7		Anions by Ion Chromatography (Solid)
202153	202154	1	BLANK	75770	BLANK		Hexavalent chromium
202153	202154	4	LCS	75771	LCS		Hexavalent chromium
202153	202154	5	DUP	75772	B2H1J3(120661001DUP)	120661001	Hexavalent chromium

Batch QC List

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120661

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
202153	202154	6	MS	75773	B2H1J3(120661001MS)	120661001	Hexavalent chromium
202153	202154	7	PSTSPK	75774	PSTSPK		Hexavalent chromium
202153	202154	8	IMS	75775	B2H1J3(120661001IMS)	120661001	Hexavalent chromium
202153	202154	9	SAMPLE	120661001	B2H1J3		Hexavalent chromium
202153	202154	10	SAMPLE	120661002	B2L1M2		Hexavalent chromium
202153	202154	11	SAMPLE	120661003	B2H1D5		Hexavalent chromium
202153	202154	12	SAMPLE	120661004	B2H1H5		Hexavalent chromium
202153	202154	13	SAMPLE	120661005	B2L1P6		Hexavalent chromium
202153	202154	14	SAMPLE	120661006	B2H1C3		Hexavalent chromium
202153	202154	15	SAMPLE	120661007	B2H1D9		Hexavalent chromium
202153	202154	16	SAMPLE	120661008	B2L1L8		Hexavalent chromium
202153	202154	17	SAMPLE	120661009	B2H1F7		Hexavalent chromium
202153	202154	18	SAMPLE	120661010	B2H1J7		Hexavalent chromium

Quality Control Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120661

QC Batch 201956 **Test** Anions by Ion Chromatography (Solid)
Associated Samples 120661001, 120661002, 120661003, 120661004, 120661005, 120661006, 120661007, 120661008, 120661009, 120661010

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #75648**							
Chloride	16887-00-6		<0.058	ug/mL					U	05/23/12
Sulfate	14808-79-8		<0.11	ug/mL					U	05/23/12
LCS			**QC Sample #75649**							
Chloride	16887-00-6		1.80	ug/mL	91	90 - 110				05/23/12
Sulfate	14808-79-8		3.62	ug/mL	92.3	90 - 110				05/23/12
MS			**QC Sample #75650**							
			Original 120661005							
Chloride	16887-00-6	<2.9	39.1	mg/kg	81.1	80 - 120				05/23/12
Sulfate	14808-79-8	15.5	80.0	mg/kg	83.9	80 - 120				05/23/12
MSD			**QC Sample #75651**							
			Original 120661005					**Paired**	**75650**	
Chloride	16887-00-6	<2.9	39.3	mg/kg	81.8	80 - 120	0.50	30		05/23/12
Sulfate	14808-79-8	15.5	78.0	mg/kg	81.8	80 - 120	2.20	30		05/23/12
DUP			**QC Sample #75652**							
			Original 120661005							
Chloride	16887-00-6	<2.9	<2.9	mg/kg			1.10	30	U	05/23/12
Sulfate	14808-79-8	15.5	13.6	mg/kg			13.30	30	B	05/23/12

Quality Control Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120661

QC Batch 202153 **Test** Hexavalent chromium
Associated Samples 120661001, 120661002, 120661003, 120661004, 120661005, 120661006, 120661007, 120661008, 120661009, 120661010

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
BLANK			**QC Sample #75770**								
Hexavalent chromium	18540-29-9		<0.098	ug/g						U	05/24/12
LCS			**QC Sample #75771**								
Hexavalent chromium	18540-29-9		4.01	ug/g	100.7	80 - 120					05/24/12
DUP			**QC Sample #75772**								
			Original 120661001								
Hexavalent chromium	18540-29-9	<0.10	<0.10	ug/g			53.00	30	*	UX	05/24/12
MS			**QC Sample #75773**								
			Original 120661001								
Hexavalent chromium	18540-29-9	<0.10	3.70	ug/g	93.8	75 - 125					05/24/12
PSTSPK			**QC Sample #75774**								
Hexavalent chromium	18540-29-9		0.0443	ug/g	88.6	85 - 115					05/24/12
IMS			**QC Sample #75775**								
			Original 120661001								
Hexavalent chromium	18540-29-9	<0.10	299	ug/g	92.7	75 - 125					05/24/12

Batch QC List

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120665

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
201896	202068	4	BLANK	75612	BLANK		ICP-2008 MS All possible metal
201896	202068	5	LCS	75613	LCS		ICP-2008 MS All possible metal
201896	202068	7	MS	75614	B2H1J3(120661001MS)	120661001	ICP-2008 MS All possible metal
201896	202068	8	MSD	75615	B2H1J3(120661001MSD)	120661001	ICP-2008 MS All possible metal
201896	202068	24	SAMPLE	120665001	B2H1H1		ICP-2008 MS All possible metal
201896	202068	25	SAMPLE	120665002	B2H1D1		ICP-2008 MS All possible metal
201896	202068	26	SAMPLE	120665003	B2L1M6		ICP-2008 MS All possible metal
201896	202068	27	SAMPLE	120665004	B2H1F3		ICP-2008 MS All possible metal
201896	202068	28	SAMPLE	120665005	B2L1L4		ICP-2008 MS All possible metal
201896	202068	29	SAMPLE	120665006	B2L1T4		ICP-2008 MS All possible metal
201896	202150	1	LCS	75613	LCS		ICP-2008 MS All possible metal
201896	202150	2	BLANK	75612	BLANK		ICP-2008 MS All possible metal
201896	202150	10	SAMPLE	120665006	B2L1T4		ICP-2008 MS All possible metal
201896	202150	11	SAMPLE	120665005	B2L1L4		ICP-2008 MS All possible metal
201896	202150	12	SAMPLE	120665004	B2H1F3		ICP-2008 MS All possible metal
201896	202150	13	SAMPLE	120665003	B2L1M6		ICP-2008 MS All possible metal
201896	202150	14	SAMPLE	120665002	B2H1D1		ICP-2008 MS All possible metal
201896	202150	15	SAMPLE	120665001	B2H1H1		ICP-2008 MS All possible metal
201896	202150	29	MSD	75615	B2H1J3(120661001MSD)	120661001	ICP-2008 MS All possible metal
201896	202150	30	MS	75614	B2H1J3(120661001MS)	120661001	ICP-2008 MS All possible metal
201957	202067	1	BLANK	75653	BLANK		Anions by Ion Chromatography (Solid)
201957	202067	2	LCS	75654	LCS		Anions by Ion Chromatography (Solid)
201957	202067	3	MS	75655	B2L1T4(120665006MS)	120665006	Anions by Ion Chromatography (Solid)

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Batch QC List

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Department Inorganic

Group # WSCF120665

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
201957	202067	4	MSD	75656	B2L1T4(120665006MSD)	120665006	Anions by Ion Chromatography (Solid)
201957	202067	5	DUP	75657	B2L1T4(120665006DUP)	120665006	Anions by Ion Chromatography (Solid)
201957	202067	6	SAMPLE	120665001	B2H1H1		Anions by Ion Chromatography (Solid)
201957	202067	7	SAMPLE	120665002	B2H1D1		Anions by Ion Chromatography (Solid)
201957	202067	8	SAMPLE	120665003	B2L1M6		Anions by Ion Chromatography (Solid)
201957	202067	9	SAMPLE	120665004	B2H1F3		Anions by Ion Chromatography (Solid)
201957	202067	10	SAMPLE	120665005	B2L1L4		Anions by Ion Chromatography (Solid)
201957	202067	11	SAMPLE	120665006	B2L1T4		Anions by Ion Chromatography (Solid)
201957	202067	12	SAMPLE	120665007	B2H1B9		Anions by Ion Chromatography (Solid)
201957	202067	13	SAMPLE	120665008	B2H1H9		Anions by Ion Chromatography (Solid)
202153	202154	1	BLANK	75770	BLANK		Hexavalent chromium
202153	202154	4	LCS	75771	LCS		Hexavalent chromium
202153	202154	5	DUP	75772	B2H1J3(120661001DUP)	120661001	Hexavalent chromium
202153	202154	6	MS	75773	B2H1J3(120661001MS)	120661001	Hexavalent chromium
202153	202154	7	PSTSPK	75774	PSTSPK		Hexavalent chromium
202153	202154	8	IMS	75775	B2H1J3(120661001IMS)	120661001	Hexavalent chromium
202153	202154	24	SAMPLE	120665001	B2H1H1		Hexavalent chromium
202153	202154	25	SAMPLE	120665002	B2H1D1		Hexavalent chromium
202153	202154	26	SAMPLE	120665003	B2L1M6		Hexavalent chromium
202153	202154	27	SAMPLE	120665004	B2H1F3		Hexavalent chromium
202153	202154	28	SAMPLE	120665005	B2L1L4		Hexavalent chromium
202257	202261	4	BLANK	75939	BLANK		ICP-2008 MS All possible metal
202257	202261	5	LCS	75940	LCS		ICP-2008 MS All possible metal

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QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
202257	202261	6	SAMPLE	120665007	B2H1B9		ICP-2008 MS All possible metal
202257	202261	7	MS	75941	B2H1B9(120665007MS)	120665007	ICP-2008 MS All possible metal
202257	202261	8	MSD	75942	B2H1B9(120665007MSD)	120665007	ICP-2008 MS All possible metal
202257	202261	9	SAMPLE	120665008	B2H1H9		ICP-2008 MS All possible metal
202257	202269	1	BLANK	75939	BLANK		ICP-2008 MS All possible metal
202257	202269	2	LCS	75940	LCS		ICP-2008 MS All possible metal
202257	202269	9	SAMPLE	120665008	B2H1H9		ICP-2008 MS All possible metal
202257	202269	10	MSD	75942	B2H1B9(120665007MSD)	120665007	ICP-2008 MS All possible metal
202257	202269	11	MS	75941	B2H1B9(120665007MS)	120665007	ICP-2008 MS All possible metal
202257	202269	12	SAMPLE	120665007	B2H1B9		ICP-2008 MS All possible metal
202363	202364	1	BLANK	76023	BLANK		Hexavalent chromium
202363	202364	4	LCS	76024	LCS		Hexavalent chromium
202363	202364	5	DUP	76025	B2L1T4(120665006DUP)	120665006	Hexavalent chromium
202363	202364	6	MS	76026	B2L1T4(120665006MS)	120665006	Hexavalent chromium
202363	202364	7	PSTSPK	76027	PSTSPK		Hexavalent chromium
202363	202364	8	IMS	76028	B2L1T4(120665006IMS)	120665006	Hexavalent chromium
202363	202364	9	SAMPLE	120665006	B2L1T4		Hexavalent chromium
202363	202364	10	SAMPLE	120665007	B2H1B9		Hexavalent chromium
202363	202364	11	SAMPLE	120665008	B2H1H9		Hexavalent chromium

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Group # WSCF120665

QC Batch 201957 **Test** Anions by Ion Chromatography (Solid)
Associated Samples 120665001, 120665002, 120665003, 120665004, 120665005, 120665006, 120665007, 120665008

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #75653**							
Chloride	16887-00-6		<0.058	ug/mL					U	05/23/12
Sulfate	14808-79-8		<0.11	ug/mL					U	05/23/12
LCS			**QC Sample #75654**							
Chloride	16887-00-6		1.82	ug/mL	91.7	90 - 110				05/23/12
Sulfate	14808-79-8		3.61	ug/mL	92.2	90 - 110				05/23/12
MS			**QC Sample #75655**							
			Original 120665006							
Chloride	16887-00-6	<2.9	40.5	mg/kg	81.7	80 - 120				05/23/12
Sulfate	14808-79-8	<5.5	88.5	mg/kg	90.1	80 - 120				05/23/12
MSD			**QC Sample #75656**							
			Original 120665006					**Paired**	**75655**	
Chloride	16887-00-6	<2.9	41.6	mg/kg	83.1	80 - 120	2.70	30		05/23/12
Sulfate	14808-79-8	<5.5	87.1	mg/kg	88	80 - 120	1.60	30		05/23/12
DUP			**QC Sample #75657**							
			Original 120665006							
Chloride	16887-00-6	<2.9	<2.8	mg/kg			13.90	30	U	05/23/12
Sulfate	14808-79-8	<5.5	<5.4	mg/kg			10.20	30	U	05/23/12

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Group # WSCF120665

QC Batch 202153 **Test** Hexavalent chromium
Associated Samples 120665001, 120665002, 120665003, 120665004, 120665005

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
BLANK			**QC Sample #75770**								
Hexavalent chromium	18540-29-9		<0.098	ug/g						U	05/24/12
LCS			**QC Sample #75771**								
Hexavalent chromium	18540-29-9		4.01	ug/g	100.7	80 - 120					05/24/12
DUP			**QC Sample #75772**								
			Original 120661001								
Hexavalent chromium	18540-29-9		<0.10	ug/g			53.00	30	*	UX	05/24/12
MS			**QC Sample #75773**								
			Original 120661001								
Hexavalent chromium	18540-29-9		3.70	ug/g	93.8	75 - 125					05/24/12
PSTSPK			**QC Sample #75774**								
Hexavalent chromium	18540-29-9		0.0443	ug/g	88.6	85 - 115					05/24/12
IMS			**QC Sample #75775**								
			Original 120661001								
Hexavalent chromium	18540-29-9		299	ug/g	92.7	75 - 125					05/24/12

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Group # WSCF120665

QC Batch 202363
Associated Samples 120665006, 120665007, 120665008

Test Hexavalent chromium

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #76023**							
Hexavalent chromium	18540-29-9		<0.098	ug/g					U	05/31/12
LCS			**QC Sample #76024**							
Hexavalent chromium	18540-29-9		3.41	ug/g	87.8	80 - 120				05/31/12
DUP			**QC Sample #76025**							
			Original 120665006							
Hexavalent chromium	18540-29-9	0.0970	<0.097	ug/g			0.00	30	U	05/31/12
MS			**QC Sample #76026**							
			Original 120665006							
Hexavalent chromium	18540-29-9	0.0970	3.47	ug/g	89.5	75 - 125				05/31/12
PSTSPK			**QC Sample #76027**							
Hexavalent chromium	18540-29-9		0.0527	ug/g	105.4	85 - 115				05/31/12
IMS			**QC Sample #76028**							
			Original 120665006							
Hexavalent chromium	18540-29-9	0.0970	484	ug/g	87.9	75 - 125				05/31/12

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QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
203662	203876	27	SAMPLE	120809005	B2L1K6		ICP-2008 MS All possible metal
203662	203876	28	SAMPLE	120809004	B2H1K5		ICP-2008 MS All possible metal
203662	203876	29	SAMPLE	120809003	B2L1K2		ICP-2008 MS All possible metal
203662	203876	30	SAMPLE	120809002	B2H1K1		ICP-2008 MS All possible metal
203662	203876	31	SAMPLE	120809001	B2L1T7		ICP-2008 MS All possible metal
203672	203673	3	BLANK	77278	BLANK		Anions by Ion Chromatography (Solid)
203672	203673	4	LCS	77279	LCS		Anions by Ion Chromatography (Solid)
203672	203673	5	MS	77280	B2L1T7(120809001MS)	120809001	Anions by Ion Chromatography (Solid)
203672	203673	6	MSD	77281	B2L1T7(120809001MSD)	120809001	Anions by Ion Chromatography (Solid)
203672	203673	7	DUP	77282	B2L1T7(120809001DUP)	120809001	Anions by Ion Chromatography (Solid)
203672	203673	8	SAMPLE	120809001	B2L1T7		Anions by Ion Chromatography (Solid)
203672	203673	9	SAMPLE	120809002	B2H1K1		Anions by Ion Chromatography (Solid)
203672	203673	10	SAMPLE	120809003	B2L1K2		Anions by Ion Chromatography (Solid)
203672	203673	11	SAMPLE	120809004	B2H1K5		Anions by Ion Chromatography (Solid)
203672	203673	12	SAMPLE	120809005	B2L1K6		Anions by Ion Chromatography (Solid)
203672	203673	13	SAMPLE	120809006	B2H1K9		Anions by Ion Chromatography (Solid)
203672	203673	14	SAMPLE	120809007	B2L1J0		Anions by Ion Chromatography (Solid)
203672	203673	15	SAMPLE	120809008	B2L1J4		Anions by Ion Chromatography (Solid)
203672	203673	16	SAMPLE	120809009	B2L1J8		Anions by Ion Chromatography (Solid)
203672	203673	17	SAMPLE	120809010	B2L1N0		Anions by Ion Chromatography (Solid)
203687	203871	4	BLANK	77317	BLANK		ICP-2008 MS All possible metal
203687	203871	5	LCS	77318	LCS		ICP-2008 MS All possible metal
203687	203871	7	MS	77319	B2LRC8(120827001MS)	120827001	ICP-2008 MS All possible metal

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QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
203687	203871	8	MSD	77320	B2LRC8(120827001MSD)	120827001	ICP-2008 MS All possible metal
203687	203871	9	SAMPLE	120809011	B2L1N4		ICP-2008 MS All possible metal
203687	203871	10	SAMPLE	120809012	B2L1N8		ICP-2008 MS All possible metal
203687	203871	11	SAMPLE	120809013	B2L1P2		ICP-2008 MS All possible metal
203687	203871	12	SAMPLE	120809014	B2L1L0		ICP-2008 MS All possible metal
203687	203871	13	SAMPLE	120809015	B2H1L3		ICP-2008 MS All possible metal
203687	203871	14	SAMPLE	120809016	B2H1L7		ICP-2008 MS All possible metal
203687	203871	15	SAMPLE	120809017	B2H1M1		ICP-2008 MS All possible metal
203687	203871	16	SAMPLE	120809018	B2L1R0		ICP-2008 MS All possible metal
203687	203879	1	LCS	77318	LCS		ICP-2008 MS All possible metal
203687	203879	2	BLANK	77317	BLANK		ICP-2008 MS All possible metal
203687	203879	8	MS	77319	B2LRC8(120827001MS)	120827001	ICP-2008 MS All possible metal
203687	203879	9	SAMPLE	120809018	B2L1R0		ICP-2008 MS All possible metal
203687	203879	10	SAMPLE	120809011	B2L1N4		ICP-2008 MS All possible metal
203687	203879	11	SAMPLE	120809017	B2H1M1		ICP-2008 MS All possible metal
203687	203879	12	MSD	77320	B2LRC8(120827001MSD)	120827001	ICP-2008 MS All possible metal
203687	203879	13	SAMPLE	120809016	B2H1L7		ICP-2008 MS All possible metal
203687	203879	14	SAMPLE	120809015	B2H1L3		ICP-2008 MS All possible metal
203687	203879	15	SAMPLE	120809014	B2L1L0		ICP-2008 MS All possible metal
203687	203879	16	SAMPLE	120809013	B2L1P2		ICP-2008 MS All possible metal
203687	203879	17	SAMPLE	120809012	B2L1N8		ICP-2008 MS All possible metal
203712	203713	3	BLANK	77407	BLANK		Anions by Ion Chromatography (Solid)
203712	203713	4	LCS	77408	LCS		Anions by Ion Chromatography (Solid)

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QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
203712	203713	5	MS	77409	B2L1N4(120809011MS)	120809011	Anions by Ion Chromatography (Solid)
203712	203713	6	MSD	77410	B2L1N4(120809011MSD)	120809011	Anions by Ion Chromatography (Solid)
203712	203713	7	DUP	77411	B2L1N4(120809011DUP)	120809011	Anions by Ion Chromatography (Solid)
203712	203713	8	SAMPLE	120809011	B2L1N4		Anions by Ion Chromatography (Solid)
203712	203713	9	SAMPLE	120809012	B2L1N8		Anions by Ion Chromatography (Solid)
203712	203713	10	SAMPLE	120809013	B2L1P2		Anions by Ion Chromatography (Solid)
203712	203713	11	SAMPLE	120809014	B2L1L0		Anions by Ion Chromatography (Solid)
203712	203713	12	SAMPLE	120809015	B2H1L3		Anions by Ion Chromatography (Solid)
203712	203713	13	SAMPLE	120809016	B2H1L7		Anions by Ion Chromatography (Solid)
203712	203713	14	SAMPLE	120809017	B2H1M1		Anions by Ion Chromatography (Solid)
203712	203713	15	SAMPLE	120809018	B2L1R0		Anions by Ion Chromatography (Solid)
203867	203868	1	BLANK	77470	BLANK		Hexavalent chromium
203867	203868	4	LCS	77471	LCS		Hexavalent chromium
203867	203868	5	DUP	77472	B2LPX0(120787001DUP)	120787001	Hexavalent chromium
203867	203868	6	MS	77473	B2LPX0(120787001MS)	120787001	Hexavalent chromium
203867	203868	7	PSTSPK	77474	PSTSPK		Hexavalent chromium
203867	203868	8	IMS	77475	B2LPX0(120787001IMS)	120787001	Hexavalent chromium
203867	203868	21	SAMPLE	120809001	B2L1T7		Hexavalent chromium
203867	203868	22	SAMPLE	120809002	B2H1K1		Hexavalent chromium
203867	203868	23	SAMPLE	120809003	B2L1K2		Hexavalent chromium
203867	203868	24	SAMPLE	120809004	B2H1K5		Hexavalent chromium
203867	203868	25	SAMPLE	120809005	B2L1K6		Hexavalent chromium
203867	203868	26	SAMPLE	120809006	B2H1K9		Hexavalent chromium

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QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
203867	203868	27	SAMPLE	120809007	B2L1J0		Hexavalent chromium
203867	203868	28	SAMPLE	120809008	B2L1J4		Hexavalent chromium
203867	203868	29	SAMPLE	120809009	B2L1J8		Hexavalent chromium
203867	203868	30	SAMPLE	120809010	B2L1N0		Hexavalent chromium
203910	203911	1	BLANK	77629	BLANK		Hexavalent chromium
203910	203911	4	LCS	77630	LCS		Hexavalent chromium
203910	203911	5	DUP	77631	B2L1N4(120809011DUP)	120809011	Hexavalent chromium
203910	203911	6	MS	77632	B2L1N4(120809011MS)	120809011	Hexavalent chromium
203910	203911	7	PSTSPK	77633	PSTSPK		Hexavalent chromium
203910	203911	8	IMS	77634	B2L1N4(120809011IMS)	120809011	Hexavalent chromium
203910	203911	9	SAMPLE	120809011	B2L1N4		Hexavalent chromium
203910	203911	10	SAMPLE	120809012	B2L1N8		Hexavalent chromium
203910	203911	11	SAMPLE	120809013	B2L1P2		Hexavalent chromium
203910	203911	12	SAMPLE	120809014	B2L1L0		Hexavalent chromium
203910	203911	13	SAMPLE	120809015	B2H1L3		Hexavalent chromium
203910	203911	14	SAMPLE	120809016	B2H1L7		Hexavalent chromium
203910	203911	15	SAMPLE	120809017	B2H1M1		Hexavalent chromium
203910	203911	16	SAMPLE	120809018	B2L1R0		Hexavalent chromium

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Group # WSCF120809

Analytical Batch 203673 (QC Batch: 203672) **Test** Anions by Ion Chromatography (Solid)
Associated Samples 120809001, 120809002, 120809003, 120809004, 120809005, 120809006, 120809007, 120809008, 120809009, 120809010

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
BLANK			**QC Sample #77278**								
Chloride	16887-00-6		<0.058	ug/mL						U	06/21/12
Sulfate	14808-79-8		<0.11	ug/mL						U	06/21/12
LCS			**QC Sample #77279**								
Chloride	16887-00-6		1.83	ug/mL	92.2	90 - 110					06/21/12
Sulfate	14808-79-8		3.71	ug/mL	94.6	90 - 110					06/21/12
MS			**QC Sample #77280**								
			Original 120809001								
Chloride	16887-00-6	<2.9	45.2	mg/kg	90.6	80 - 120					06/21/12
Sulfate	14808-79-8	<5.4	92.7	mg/kg	93.9	80 - 120					06/21/12
MSD			**QC Sample #77281**								
			Original 120809001						**Paired**	**77280**	
Chloride	16887-00-6	<2.9	45.8	mg/kg	92.2	80 - 120	1.30	30			06/21/12
Sulfate	14808-79-8	<5.4	92.9	mg/kg	94.4	80 - 120	0.20	30			06/21/12
DUP			**QC Sample #77282**								
			Original 120809001								
Chloride	16887-00-6	<2.9	3.31	mg/kg			16.70	30		B	06/21/12
Sulfate	14808-79-8	<5.4	<5.5	mg/kg			3.10	30		U	06/21/12

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Group # WSCF120809

Analytical Batch 203713 (QC Batch: 203712) **Test** Anions by Ion Chromatography (Solid)
Associated Samples 120809011, 120809012, 120809013, 120809014, 120809015, 120809016, 120809017, 120809018

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #77407**							
Chloride	16887-00-6		<0.058	ug/mL					U	06/25/12
Sulfate	14808-79-8		<0.11	ug/mL					U	06/25/12
LCS			**QC Sample #77408**							
Chloride	16887-00-6		1.82	ug/mL	91.9	90 - 110				06/25/12
Sulfate	14808-79-8		3.66	ug/mL	93.4	90 - 110				06/25/12
MS			**QC Sample #77409**							
			Original 120809011							
Chloride	16887-00-6	3.67	42.4	mg/kg	84.5	80 - 120				06/25/12
Sulfate	14808-79-8	26.7	83.6	mg/kg	84.2	80 - 120				06/25/12
MSD			**QC Sample #77410**							
			Original 120809011					**Paired**	**77409**	
Chloride	16887-00-6	3.67	41.8	mg/kg	84.1	80 - 120	1.30	30		06/25/12
Sulfate	14808-79-8	26.7	82.5	mg/kg	83.9	80 - 120	0.90	30		06/25/12
DUP			**QC Sample #77411**							
			Original 120809011							
Chloride	16887-00-6	3.67	3.69	mg/kg			0.50	30	B	06/25/12
Sulfate	14808-79-8	26.7	25.8	mg/kg			3.10	30	B	06/25/12

Quality Control Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Analytical Batch 203868 (QC Batch: 203867) **Test** Hexavalent chromium
Associated Samples 120809001, 120809002, 120809003, 120809004, 120809005, 120809006, 120809007, 120809008, 120809009, 120809010

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
BLANK			**QC Sample #77470**								
Hexavalent chromium	18540-29-9		<0.10	ug/g						U	06/26/12
LCS			**QC Sample #77471**								
Hexavalent chromium	18540-29-9		3.47	ug/g	88	80 - 120					06/26/12
DUP			**QC Sample #77472**								
			Original 120787001								
Hexavalent chromium	18540-29-9		<0.099	ug/g			117.40	30	*	UX	06/26/12
MS			**QC Sample #77473**								
			Original 120787001								
Hexavalent chromium	18540-29-9		3.58	ug/g	89.9	75 - 125					06/26/12
PSTSPK			**QC Sample #77474**								
Hexavalent chromium	18540-29-9		0.0504	ug/g	100.8	85 - 115					06/26/12
IMS			**QC Sample #77475**								
			Original 120787001								
Hexavalent chromium	18540-29-9		340	ug/g	75.6	75 - 125					06/26/12

Quality Control Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF120809

Analytical Batch 203911 (QC Batch: 203910) **Test** Hexavalent chromium
Associated Samples 120809011, 120809012, 120809013, 120809014, 120809015, 120809016, 120809017, 120809018

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #77629**							
Hexavalent chromium	18540-29-9		<0.099	ug/g					U	06/28/12
LCS			**QC Sample #77630**							
Hexavalent chromium	18540-29-9		3.58	ug/g	89.7	80 - 120				06/28/12
DUP			**QC Sample #77631**							
			Original 120809011							
Hexavalent chromium	18540-29-9	<0.10	<0.099	ug/g			28.30	30	U	06/28/12
MS			**QC Sample #77632**							
			Original 120809011							
Hexavalent chromium	18540-29-9	<0.10	3.45	ug/g	87	75 - 125				06/28/12
PSTSPK			**QC Sample #77633**							
Hexavalent chromium	18540-29-9		0.0487	ug/g	97.4	85 - 115				06/28/12
IMS			**QC Sample #77634**							
			Original 120809011							
Hexavalent chromium	18540-29-9	<0.10	312	ug/g	94.7	75 - 125				06/28/12