# CHPRC - REVIEW COMMENT RECORD (RCR)

| 1. Date | 2. Review No. |
|---|---|
| 03/01/2011 | |
| 3. Project No. | Page 1 of 1 |

| 5. Document Number(s)/Title(s) | 6. Program/Project/Building Number | 7. Reviewer | 8. Organization/Group | 9. Location/Phone |
|---|---|---|---|---|
| VSR11-033 | | 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)) | Scot Fitzgerald (Reviewer/Point of Contact (print and sign)) |
| | Date: 03/01/2011 | Date: 03/01/2011 |
| | Author/Originator (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 |
|---|---|---|---|---|---|---|
| | No issues noted. | | | | | |
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| REVIEW COMMENT RECORD (RCR) | 1. Date 03/01/2011 | 2. Review No. |
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| 5. Document Number(s)/Title(s) | 6. Program/Project/Building Number | 7. Reviewer | 8. Organization/Group | 9. Location/Phone |
|---|---|---|---|---|
| VSR11-033, Data Validation Report for CHPRC - Project CPP 600 Area Chemical & Radiological Validation - Level C | S&GRP Sample Data Groups (SDGs); SL964, WSCF102303, WSCF102845 & WSCF103065 | JA Edwards | Environmental Quality Assurance (EQA) | 2420 Stevens Rm. 345 376-4324 |

| 17. Comment Submittal Approval | 10. Agreement With Indicated Comment Disposition(s) | 11. CLOSED |
|---|---|---|
| Date: ____ Organization Manager (optional) (print and sign): ____ | Date: 03/03/2010 Reviewer/Point of Contact (print and sign): JA Edwards / *JA Edwards* Author/Originator (print and sign): ____ | Date: 03/03/2010 Reviewer/Point of Contact (print and sign): JA Edwards / *JA Edwards* 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 |
|---|---|---|---|---|---|---|
| | (page 4 of 319) **Holding Times and Sample Preservation**<br>"*The holding time requirements for volatile organics are analysis within 14 days of sample collection.* **Sample preservation for soil samples requires freezing to < -7 degrees Celsius.** *Sample preservation for water samples requires chilling to 4 degrees Celsius and acid preservation with hydrochloric or sulfuric acid to pH <2.*"<br>The SAP does not have this requirement prescribed for soil samples. | **DOE/RL-2008-73**, Rev. 0, *Hanford Facility Dangerous Waste Closure/ Postclosure Plan for the 600 Area Purgewater Storage and Treatment Facility*, February 2010<br>**Table A-5** (p. A-15) Sample Preservation, Container, and Holding Time Guidelines indicates; **"Cool 4 °C"** | Suggest adjusting verbiage to match the SAP, or remove. | Y | Not accepted.<br>The language in the DV report matches both the COC and SAF forms and reflects the actual requirements. | Closed |
| | (page 116 of 319) **Surrogates**<br>*"It should be noted that per client request DV procedure HNF-20433, Rev 0 was used for target analyte associations to the surrogates."* | **GRP-GD-003,**, Rev. 0 supersedes HNF-20433, Rev. 0 and the current revision should be used.<br>Based upon the Email, justification for use of HNF-20433 for values found for surrogates. | Email from Carl Schloesslin;<br>*"AQA has been struggling with surrogate assessment with the new DV procedure, and I am afraid with VSR11-033 that clear guidance is needed due to multiple surrogate failures."* | Y | This is not a DV finding but rather a deficiency with GRP-GD-003 that the client needs to address. | Closed |

| REVIEW COMMENT RECORD (RCR) | 1. Date 03/01/2011 | 2. Review No. |
|---|---|---|
| | 3. Project No. | Page 2 of 2 |

| 12. Item | 13a. Comments | 13b. Basis | 13c. Recommendation | 14. Reviewer Concurrence Required (Y or N) | 15. Disposition (provide justification if **NOT** accepted) | 16. Status |
|---|---|---|---|---|---|---|
| | | Revision to GRP-GD-003, *Data Validation for Chemical Analyses* should be made to incorporate surrogates. | Email from Scot Fitzgerald; *"In the interim please use the Surrogate association tables from the old DV procedure when applying validation flags."* | | | |

Documents:
GRP-GD-003, Rev. 0, Change 0, *Data Validation for Chemical Analyses*, August 2010
DOE/RL-2008-73, Rev. 0, *Hanford Facility Dangerous Waste Closure/Postclosure Plan for the 600 Area Purgewater Storage and Treatment Facility*, February 2010.

ANALYTICAL QUALITY ASSOCIATES, INC.
616 Maxine NE
Albuquerque, NM 87123
505-299-5201
www.aqainc.net

# Data Validation Report for CH2M Hill Plateau Remediation Company

## VSR11-033
## Project CPP 600 Area

## Chemical & Radiochemical Validation - Level C

**Validation Performed By:** Carl Schlosser **Date:** 2-28-2011

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Date: 28 February 2011
To: CH2M Hill (technical representative)
From: Analytical Quality Associates, Inc.
Project: CPP 600 Area
Subject: Volatile Organics - Sample Data Groups (SDGs) WSCF111310 and WSCF111311

## INTRODUCTION

This memorandum presents the results of data validation for SDGs WSCF111310 and WSCF111311 prepared by WSCF. 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 |
|---|---|---|---|---|
| B2BBJ0 | 1/26/2011 | Soil | C | 8260B |
| B2BBJ1 | 1/26/2011 | Soil | C | 8260B |
| B2BBJ2 | 1/26/2011 | Soil | C | 8260B |
| B2BBJ3 | 1/26/2011 | Soil | C | 8260B |
| B2BBJ4 | 1/26/2011 | Soil | C | 8260B |
| B2BBJ5 | 1/26/2011 | Soil | C | 8260B |
| B2BBJ6 | 1/26/2011 | Soil | C | 8260B |
| B2BBJ7 | 1/26/2011 | Soil | C | 8260B |
| B2BBJ8 | 1/26/2011 | Soil | C | 8260B |
| B2BBJ9 | 1/26/2011 | Soil | C | 8260B |
| B2BBK0 | 1/26/2011 | Soil | C | 8260B |
| B2BBK1 | 1/26/2011 | Soil | C | 8260B |
| B2BBH5 | 1/26/2011 | Soil | C | 8260B |
| B2BBH6 | 1/26/2011 | Soil | C | 8260B |
| B2BBH7 | 1/26/2011 | Soil | C | 8260B |
| B2BBH8 | 1/26/2011 | Soil | C | 8260B |
| B2BBH9 | 1/26/2011 | Soil | C | 8260B |
| B2BBK2 | 1/26/2011 | Water | C | 8260B |
| B2BBK3 | 1/26/2011 | Water | C | 8260B |
| B2BBK4 | 1/26/2011 | Water | C | 8260B |

Data validation was conducted in accordance with the CHPRC validation statement of work and the Hanford Facility Dangerous Waste Closure/Postclosure Plan for the 600 Area Purgewater Storage and Treatment Facility, DOE/RL-2008-73, Rev. 0 (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 volatile organics are analysis within 14 days of sample collection. Sample preservation for soil samples requires freezing to < -7 degrees Celsius. Sample preservation for water samples requires chilling to 4 degrees Celsius and acid preservation with hydrochloric or sulfuric acid to pH <2.

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

- **Blanks**

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

### Laboratory Blanks

All laboratory blank results were acceptable.

### Trip Blanks

All trip blank results were acceptable.

### Field Blanks

All field blank results were acceptable with the following exception. Methylene chloride was detected in field blank B2BBK3.

### Equipment Blanks

All equipment blank results were acceptable with the following exception. Methylene chloride was detected in equipment blank B2BBK4.

- **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 70% to 130%. The limits for reported analytes not listed in the SAP are specified by the DV procedure.

### Surrogates

All surrogate recoveries were acceptable.

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

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

For SDG WSCF111310, the only 8260B MS/MSD analytes reported were 1,1-dichloroethene, benzene, chlorobenzene, toluene and trichloroethene. Reported analytes not represented in the MS/MSDs were methyl isobutyl ketone, acetone and methyl ethyl ketone. These non-represented analytes should be qualified as estimates and flagged "UJ" for non-detects and "J" for detects. See the table in Appendix 2 for a listing of all affected sample results.

For SDG WSCF111311, the only 8260B MS/MSD analytes reported were 1,1-dichloroethene, benzene, toluene and trichloroethene. Reported analytes not represented in the MS/MSD were methyl isobutyl ketone, acetone and methyl ethyl ketone. These non-represented analytes were all non-detects and should be qualified as estimates and flagged "UJ." See the table in Appendix 2 for a listing of all affected sample results.

**Laboratory Control Samples (LCSs)**

All LCS recoveries were acceptable with the following exceptions.

For SDG WSCF111310, the only 8260B LCS analytes reported were 1,1-dichloroethene, benzene, chlorobenzene, toluene and trichloroethene. Reported analytes not represented in the LCSs were methyl isobutyl ketone, acetone and methyl ethyl ketone. These non-represented analytes should be qualified as estimates and flagged "UJ" for non-detects and "J" for detects. See the table in Appendix 2 for a listing of all affected sample results.

For SDG WSCF111311, the only 8260B LCS analytes reported were 1,1-dichloroethene, benzene, toluene and trichloroethene. Reported analytes not represented in the LCS were methyl isobutyl ketone, acetone and methyl ethyl ketone. These non-represented analytes were all non-detects and should be qualified as estimates and flagged "UJ." See the table in Appendix 2 for a listing of all affected sample results.

- **Precision**

Precision is evaluated by reviewing MS/MSD results, field duplicate sample results, field split sample results. These QC results provide information on the laboratory reproducibility and whether sampling activities are adequate to acquire consistent sample results. According to the SAP, the relative percent difference (RPD) limits are ±30%. The limits for reported analytes not listed in the SAP are specified by the DV procedure.

**MS/MSD Samples**

All MS/MSD relative percent difference values were acceptable.

**Field Duplicate Samples**

No field duplicates were submitted for validation.

**Field Split Samples**

No field splits were submitted for validation.

- **Internal Standards**

Internal standard performance criteria ensure that GC/MS sensitivity and response are stable during each analysis. Internal standards are added to all samples, including QC samples, prior to analysis.

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 were below the CRDLs.

- **Completeness**

SDGs WSCF111310 and WSCF111311 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 non-represented QC data for multiple analytes for all samples. 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-2008-73, Rev. 0, *Hanford Facility Dangerous Waste Closure/Postclosure Plan for the 600 Area Purgewater Storage and Treatment Facility*, February 2010

# 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

| Volatile Organics Data Qualification Summary | | | |
|---|---|---|---|
| SDGs: WSCF111310, WSCF111311 | Reviewer: AQA | Project: CPP 600 Area | Page 1 of 1 |
| **Analyte(s)** | **Qualifier** | **Samples Affected** | **Reason** |
| Acetone | J | B2BBJ0, B2BBJ1, B2BBJ4 | Non-represented MS/MSD and LCS data |
| Acetone | UJ | B2BBJ2, B2BBJ3, B2BBJ5, B2BBJ6, B2BBJ7, B2BBJ8, B2BBJ9, B2BBK0, B2BBK1, B2BBH5, B2BBH6, B2BBH7, B2BBH8, B2BBH9, B2BBK2, B2BBK3, B2BBK4 | Non-represented MS/MSD and LCS data |
| Methyl isobutyl ketone<br>Methyl ethyl ketone | UJ | B2BBJ0, B2BBJ1, B2BBJ2, B2BBJ3, B2BBJ4, B2BBJ5, B2BBJ6, B2BBJ7, B2BBJ8, B2BBJ9, B2BBK0, B2BBK1, B2BBH5, B2BBH6, B2BBH7, B2BBH8, B2BBH9, B2BBK2, B2BBK3, B2BBK4 | Non-represented MS/MSD and LCS data |

Comments: None

# Appendix 3

Annotated Laboratory Reports

# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Organic, Volatiles

**Group #** WSCF111310

**Sample #** 111310018
**SAF#** F11-042
**Sample ID** B2BBJ0

**Matrix** SOIL
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **8260 Prep** | | | | | | | | | | **01/30/11** |
| **SW-846 8260B** | | | | | | | | | | |
| 1,1-Dichloroethene | 75-35-4 | LA-523-455 | U | <0.9 | | ug/kg | 1 | 0.9 | 4 | 01/30/11 |
| Trichloroethene | 79-01-6 | LA-523-455 | U | <0.9 | | ug/kg | 1 | 0.9 | 4 | 01/30/11 |
| Benzene | 71-43-2 | LA-523-455 | U | <0.9 | | ug/kg | 1 | 0.9 | 4 | 01/30/11 |
| Toluene | 108-88-3 | LA-523-455 | U | <0.9 | | ug/kg | 1 | 0.9 | 4 | 01/30/11 |
| Chlorobenzene | 108-90-7 | LA-523-455 | U | <0.9 | | ug/kg | 1 | 0.9 | 4 | 01/30/11 |
| 1,1-Dichloroethane | 75-34-3 | LA-523-455 | U | <0.9 | | ug/kg | 1 | 0.9 | 4 | 01/30/11 |
| Methyl isobutyl ketone | 108-10-1 | LA-523-455 | U | <0.9 UJ | | ug/kg | 1 | 0.9 | 4 | 01/30/11 |
| Carbon tetrachloride | 56-23-5 | LA-523-455 | U | <0.9 | | ug/kg | 1 | 0.9 | 4 | 01/30/11 |
| Acetone | 67-64-1 | LA-523-455 | J | 3.4 J | | ug/kg | 1 | 0.9 | 4 | 01/30/11 |
| 1,1,1-Trichloroethane | 71-55-6 | LA-523-455 | U | <0.9 | | ug/kg | 1 | 0.9 | 4 | 01/30/11 |
| Methylene chloride | 75-09-2 | LA-523-455 | U | <0.9 | | ug/kg | 1 | 0.9 | 4 | 01/30/11 |
| Methyl ethyl ketone | 78-93-3 | LA-523-455 | U | <0.9 UJ | | ug/kg | 1 | 0.9 | 4 | 01/30/11 |

LS
2-28-2011

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

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

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

# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Organic, Volatiles

**Group #** WSCF111310

**Sample #** 111310019
**SAF#** F11-042
**Sample ID** B2BBJ1

**Matrix** SOIL
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **8260 Prep** | | | | | | | | | | **01/30/11** |
| **SW-846 8260B** | | | | | | | | | | |
| 1,1-Dichloroethene | 75-35-4 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Trichloroethene | 79-01-6 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Benzene | 71-43-2 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Toluene | 108-88-3 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Chlorobenzene | 108-90-7 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| 1,1-Dichloroethane | 75-34-3 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Methyl isobutyl ketone | 108-10-1 | LA-523-455 | U | <1 UJ | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Carbon tetrachloride | 56-23-5 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Acetone | 67-64-1 | LA-523-455 | | 7.8 J | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| 1,1,1-Trichloroethane | 71-55-6 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Methylene chloride | 75-09-2 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Methyl ethyl ketone | 78-93-3 | LA-523-455 | U | <1 UJ | | ug/kg | 1 | 1 | 5 | 01/30/11 |

LS
2-28-2011

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

# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Organic, Volatiles

**Group #** WSCF111310

**Sample #** 111310020
**SAF#** F11-042
**Sample ID** B2BBJ2

**Matrix** SOIL
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **8260 Prep** | | | | | | | | | | **01/30/11** |
| **SW-846 8260B** | | | | | | | | | | |
| 1,1-Dichloroethene | 75-35-4 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Trichloroethene | 79-01-6 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Benzene | 71-43-2 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Toluene | 108-88-3 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Chlorobenzene | 108-90-7 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| 1,1-Dichloroethane | 75-34-3 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Methyl isobutyl ketone | 108-10-1 | LA-523-455 | U | <1 | UJ | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Carbon tetrachloride | 56-23-5 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Acetone | 67-64-1 | LA-523-455 | U | <1 | UJ | ug/kg | 1 | 1 | 5 | 01/30/11 |
| 1,1,1-Trichloroethane | 71-55-6 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Methylene chloride | 75-09-2 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Methyl ethyl ketone | 78-93-3 | LA-523-455 | U | <1 | UJ | ug/kg | 1 | 1 | 5 | 01/30/11 |

LS
2-28-2011

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

B - Analyte was detected in both the BLANK and SAMPLE
D - Analyte was reported at a secondary diltution factor.
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J - Analyte < PQL (or EQL) >= MDL.
N - Presumed evidence based on MS library search(GC/MS only)

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

# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Organic, Volatiles

**Group #** WSCF111310

**Sample #** 111310021
**SAF#** F11-042
**Sample ID** B2BBJ3

**Matrix** SOIL
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **8260 Prep** | | | | | | | | | | **01/30/11** |
| **SW-846 8260B** | | | | | | | | | | |
| 1,1-Dichloroethene | 75-35-4 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 6 | 01/30/11 |
| Trichloroethene | 79-01-6 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 6 | 01/30/11 |
| Benzene | 71-43-2 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 6 | 01/30/11 |
| Toluene | 108-88-3 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 6 | 01/30/11 |
| Chlorobenzene | 108-90-7 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 6 | 01/30/11 |
| 1,1-Dichloroethane | 75-34-3 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 6 | 01/30/11 |
| Methyl isobutyl ketone | 108-10-1 | LA-523-455 | U | <1 UJ | | ug/kg | 1 | 1 | 6 | 01/30/11 |
| Carbon tetrachloride | 56-23-5 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 6 | 01/30/11 |
| Acetone | 67-64-1 | LA-523-455 | U | <1 UJ | | ug/kg | 1 | 1 | 6 | 01/30/11 |
| 1,1,1-Trichloroethane | 71-55-6 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 6 | 01/30/11 |
| Methylene chloride | 75-09-2 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 6 | 01/30/11 |
| Methyl ethyl ketone | 78-93-3 | LA-523-455 | U | <1 UJ | | ug/kg | 1 | 1 | 6 | 01/30/11 |

LS
2-28-2011

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

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

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

# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Organic, Volatiles

**Group #** WSCF111310

**Sample #** 111310022
**SAF#** F11-042
**Sample ID** B2BBJ4

**Matrix** SOIL
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **8260 Prep** | | | | | | | | | | **01/30/11** |
| **SW-846 8260B** | | | | | | | | | | |
| 1,1-Dichloroethene | 75-35-4 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Trichloroethene | 79-01-6 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Benzene | 71-43-2 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Toluene | 108-88-3 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Chlorobenzene | 108-90-7 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| 1,1-Dichloroethane | 75-34-3 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Methyl isobutyl ketone | 108-10-1 | LA-523-455 | U | <1 UJ | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Carbon tetrachloride | 56-23-5 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Acetone | 67-64-1 | LA-523-455 | | 9.4 J | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| 1,1,1-Trichloroethane | 71-55-6 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Methylene chloride | 75-09-2 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Methyl ethyl ketone | 78-93-3 | LA-523-455 | U | <1 UJ | | ug/kg | 1 | 1 | 5 | 01/30/11 |

LS
2-28-2011

MDL = Minimum Detection
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J - Analyte < PQL (or EQL) >= MDL.
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U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
N - MS and/or MSD recovery outside control limits.
PQL is equivalent to Estimated Quantitation Limit (EQL)

# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Organic, Volatiles

**Group #** WSCF111310

**Sample #** 111310023
**SAF#** F11-042
**Sample ID** B2BBJ5

**Matrix** SOIL
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **8260 Prep** | | | | | | | | | | **01/30/11** |
| **SW-846 8260B** | | | | | | | | | | |
| 1,1-Dichloroethene | 75-35-4 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Trichloroethene | 79-01-6 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Benzene | 71-43-2 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Toluene | 108-88-3 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Chlorobenzene | 108-90-7 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| 1,1-Dichloroethane | 75-34-3 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Methyl isobutyl ketone | 108-10-1 | LA-523-455 | U | <1 | UJ | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Carbon tetrachloride | 56-23-5 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Acetone | 67-64-1 | LA-523-455 | U | <1 | UJ | ug/kg | 1 | 1 | 5 | 01/30/11 |
| 1,1,1-Trichloroethane | 71-55-6 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Methylene chloride | 75-09-2 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Methyl ethyl ketone | 78-93-3 | LA-523-455 | U | <1 | UJ | ug/kg | 1 | 1 | 5 | 01/30/11 |

LS
2-28-2011

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PQL is equivalent to Estimated Quantitation Limit (EQL)

# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Organic, Volatiles

**Group #** WSCF111310

**Sample #** 111310024
**SAF#** F11-042
**Sample ID** B2BBJ6

**Matrix** SOIL
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **8260 Prep** | | | | | | | | | | **01/30/11** |
| **SW-846 8260B** | | | | | | | | | | |
| 1,1-Dichloroethene | 75-35-4 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Trichloroethene | 79-01-6 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Benzene | 71-43-2 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Toluene | 108-88-3 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Chlorobenzene | 108-90-7 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| 1,1-Dichloroethane | 75-34-3 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Methyl isobutyl ketone | 108-10-1 | LA-523-455 | U | <1 | UJ | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Carbon tetrachloride | 56-23-5 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Acetone | 67-64-1 | LA-523-455 | U | <1 | UJ | ug/kg | 1 | 1 | 5 | 01/30/11 |
| 1,1,1-Trichloroethane | 71-55-6 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Methylene chloride | 75-09-2 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Methyl ethyl ketone | 78-93-3 | LA-523-455 | U | <1 | UJ | ug/kg | 1 | 1 | 5 | 01/30/11 |

LS
2-28-2011

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# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Organic, Volatiles

**Group #** WSCF111310

**Sample #** 111310025
**SAF#** F11-042
**Sample ID** B2BBJ7

**Matrix** SOIL
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **8260 Prep** | | | | | | | | | | **01/30/11** |
| **SW-846 8260B** | | | | | | | | | | |
| 1,1-Dichloroethene | 75-35-4 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Trichloroethene | 79-01-6 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Benzene | 71-43-2 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Toluene | 108-88-3 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Chlorobenzene | 108-90-7 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| 1,1-Dichloroethane | 75-34-3 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Methyl isobutyl ketone | 108-10-1 | LA-523-455 | U | <1 | UJ | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Carbon tetrachloride | 56-23-5 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Acetone | 67-64-1 | LA-523-455 | U | <1 | UJ | ug/kg | 1 | 1 | 5 | 01/30/11 |
| 1,1,1-Trichloroethane | 71-55-6 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Methylene chloride | 75-09-2 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Methyl ethyl ketone | 78-93-3 | LA-523-455 | U | <1 | UJ | ug/kg | 1 | 1 | 5 | 01/30/11 |

LS
2-28-2011

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# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Organic, Volatiles

**Group #** WSCF111310

**Sample #** 111310026
**SAF#** F11-042
**Sample ID** B2BBJ8

**Matrix** SOIL
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **8260 Prep** | | | | | | | | | | **01/30/11** |
| **SW-846 8260B** | | | | | | | | | | |
| 1,1-Dichloroethene | 75-35-4 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Trichloroethene | 79-01-6 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Benzene | 71-43-2 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Toluene | 108-88-3 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Chlorobenzene | 108-90-7 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| 1,1-Dichloroethane | 75-34-3 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Methyl isobutyl ketone | 108-10-1 | LA-523-455 | U | <1 | UJ | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Carbon tetrachloride | 56-23-5 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Acetone | 67-64-1 | LA-523-455 | U | <1 | UJ | ug/kg | 1 | 1 | 5 | 01/30/11 |
| 1,1,1-Trichloroethane | 71-55-6 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Methylene chloride | 75-09-2 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Methyl ethyl ketone | 78-93-3 | LA-523-455 | U | <1 | UJ | ug/kg | 1 | 1 | 5 | 01/30/11 |

LS
2-28-2011

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# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Organic, Volatiles

**Group #** WSCF111310

**Sample #** 111310027
**SAF#** F11-042
**Sample ID** B2BBJ9

**Matrix** SOIL
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **8260 Prep** | | | | | | | | | | **01/30/11** |
| **SW-846 8260B** | | | | | | | | | | |
| 1,1-Dichloroethene | 75-35-4 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Trichloroethene | 79-01-6 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Benzene | 71-43-2 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Toluene | 108-88-3 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Chlorobenzene | 108-90-7 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| 1,1-Dichloroethane | 75-34-3 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Methyl isobutyl ketone | 108-10-1 | LA-523-455 | U | <1 | UJ | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Carbon tetrachloride | 56-23-5 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Acetone | 67-64-1 | LA-523-455 | U | <1 | UJ | ug/kg | 1 | 1 | 5 | 01/30/11 |
| 1,1,1-Trichloroethane | 71-55-6 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Methylene chloride | 75-09-2 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Methyl ethyl ketone | 78-93-3 | LA-523-455 | U | <1 | UJ | ug/kg | 1 | 1 | 5 | 01/30/11 |

LS
2-28-2011

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# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Organic, Volatiles

**Group #** WSCF111310

**Sample #** 111310028
**SAF#** F11-042
**Sample ID** B2BBK0

**Matrix** SOIL
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **8260 Prep** | | | | | | | | | | **01/30/11** |
| **SW-846 8260B** | | | | | | | | | | |
| 1,1-Dichloroethene | 75-35-4 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 6 | 01/30/11 |
| Trichloroethene | 79-01-6 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 6 | 01/30/11 |
| Benzene | 71-43-2 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 6 | 01/30/11 |
| Toluene | 108-88-3 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 6 | 01/30/11 |
| Chlorobenzene | 108-90-7 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 6 | 01/30/11 |
| 1,1-Dichloroethane | 75-34-3 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 6 | 01/30/11 |
| Methyl isobutyl ketone | 108-10-1 | LA-523-455 | U | <1 | UJ | ug/kg | 1 | 1 | 6 | 01/30/11 |
| Carbon tetrachloride | 56-23-5 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 6 | 01/30/11 |
| Acetone | 67-64-1 | LA-523-455 | U | <1 | UJ | ug/kg | 1 | 1 | 6 | 01/30/11 |
| 1,1,1-Trichloroethane | 71-55-6 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 6 | 01/30/11 |
| Methylene chloride | 75-09-2 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 6 | 01/30/11 |
| Methyl ethyl ketone | 78-93-3 | LA-523-455 | U | <1 | UJ | ug/kg | 1 | 1 | 6 | 01/30/11 |

LS
2-28-2011

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# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Organic, Volatiles

**Group #** WSCF111310

**Sample #** 111310029
**SAF#** F11-042
**Sample ID** B2BBK1

**Matrix** SOIL
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **8260 Prep** | | | | | | | | | | **01/30/11** |
| **SW-846 8260B** | | | | | | | | | | |
| 1,1-Dichloroethene | 75-35-4 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Trichloroethene | 79-01-6 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Benzene | 71-43-2 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Toluene | 108-88-3 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Chlorobenzene | 108-90-7 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| 1,1-Dichloroethane | 75-34-3 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Methyl isobutyl ketone | 108-10-1 | LA-523-455 | U | <1 | UJ | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Carbon tetrachloride | 56-23-5 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Acetone | 67-64-1 | LA-523-455 | U | <1 | UJ | ug/kg | 1 | 1 | 5 | 01/30/11 |
| 1,1,1-Trichloroethane | 71-55-6 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Methylene chloride | 75-09-2 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/30/11 |
| Methyl ethyl ketone | 78-93-3 | LA-523-455 | U | <1 | UJ | ug/kg | 1 | 1 | 5 | 01/30/11 |

LS
2-28-2011

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N - Presumed evidence based on MS library search(GC/MS only)

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

# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Organic, Volatiles

**Group #** WSCF111310

**Sample #** 111310030
**SAF#** F11-042
**Sample ID** B2BBH5

**Matrix** SOIL
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **8260 Prep** | | | | | | | | | | **01/30/11** |
| **SW-846 8260B** | | | | | | | | | | |
| 1,1-Dichloroethene | 75-35-4 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/31/11 |
| Trichloroethene | 79-01-6 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/31/11 |
| Benzene | 71-43-2 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/31/11 |
| Toluene | 108-88-3 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/31/11 |
| Chlorobenzene | 108-90-7 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/31/11 |
| 1,1-Dichloroethane | 75-34-3 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/31/11 |
| Methyl isobutyl ketone | 108-10-1 | LA-523-455 | U | <1 | UJ | ug/kg | 1 | 1 | 5 | 01/31/11 |
| Carbon tetrachloride | 56-23-5 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/31/11 |
| Acetone | 67-64-1 | LA-523-455 | U | <1 | UJ | ug/kg | 1 | 1 | 5 | 01/31/11 |
| 1,1,1-Trichloroethane | 71-55-6 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/31/11 |
| Methylene chloride | 75-09-2 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/31/11 |
| Methyl ethyl ketone | 78-93-3 | LA-523-455 | U | <1 | UJ | ug/kg | 1 | 1 | 5 | 01/31/11 |

LS
2-28-2011

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

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

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

# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Organic, Volatiles

**Group #** WSCF111310

**Sample #** 111310031
**SAF#** F11-042
**Sample ID** B2BBH6

**Matrix** SOIL
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **8260 Prep** | | | | | | | | | | **01/30/11** |
| **SW-846 8260B** | | | | | | | | | | |
| 1,1-Dichloroethene | 75-35-4 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/31/11 |
| Trichloroethene | 79-01-6 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/31/11 |
| Benzene | 71-43-2 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/31/11 |
| Toluene | 108-88-3 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/31/11 |
| Chlorobenzene | 108-90-7 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/31/11 |
| 1,1-Dichloroethane | 75-34-3 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/31/11 |
| Methyl isobutyl ketone | 108-10-1 | LA-523-455 | U | <1 | UJ | ug/kg | 1 | 1 | 5 | 01/31/11 |
| Carbon tetrachloride | 56-23-5 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/31/11 |
| Acetone | 67-64-1 | LA-523-455 | U | <1 | UJ | ug/kg | 1 | 1 | 5 | 01/31/11 |
| 1,1,1-Trichloroethane | 71-55-6 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/31/11 |
| Methylene chloride | 75-09-2 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/31/11 |
| Methyl ethyl ketone | 78-93-3 | LA-523-455 | U | <1 | UJ | ug/kg | 1 | 1 | 5 | 01/31/11 |

LS
2-28-2011

MDL = Minimum Detection
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DF = Dilution Factor
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E - The calibration exceeds the calibration range (GC/MS).
J - Analyte < PQL (or EQL) >= MDL.
N - Presumed evidence based on MS library search(GC/MS only)

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

# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Organic, Volatiles

**Group #** WSCF111310

**Sample #** 111310032
**SAF#** F11-042
**Sample ID** B2BBH7

**Matrix** SOIL
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **8260 Prep** | | | | | | | | | | **01/30/11** |
| **SW-846 8260B** | | | | | | | | | | |
| 1,1-Dichloroethene | 75-35-4 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 6 | 01/31/11 |
| Trichloroethene | 79-01-6 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 6 | 01/31/11 |
| Benzene | 71-43-2 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 6 | 01/31/11 |
| Toluene | 108-88-3 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 6 | 01/31/11 |
| Chlorobenzene | 108-90-7 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 6 | 01/31/11 |
| 1,1-Dichloroethane | 75-34-3 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 6 | 01/31/11 |
| Methyl isobutyl ketone | 108-10-1 | LA-523-455 | U | <1 | UJ | ug/kg | 1 | 1 | 6 | 01/31/11 |
| Carbon tetrachloride | 56-23-5 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 6 | 01/31/11 |
| Acetone | 67-64-1 | LA-523-455 | U | <1 | UJ | ug/kg | 1 | 1 | 6 | 01/31/11 |
| 1,1,1-Trichloroethane | 71-55-6 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 6 | 01/31/11 |
| Methylene chloride | 75-09-2 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 6 | 01/31/11 |
| Methyl ethyl ketone | 78-93-3 | LA-523-455 | U | <1 | UJ | ug/kg | 1 | 1 | 6 | 01/31/11 |

LS
2-28-2011

MDL = Minimum Detection
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DF = Dilution Factor
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D - Analyte was reported at a secondary diltution factor.
E - The calibration exceeds the calibration range (GC/MS).
J - Analyte < PQL (or EQL) >= MDL.
N - Presumed evidence based on MS library search(GC/MS only)

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

# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Organic, Volatiles

**Group #** WSCF111310

**Sample #** 111310033
**SAF#** F11-042
**Sample ID** B2BBH8

**Matrix** SOIL
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **8260 Prep** | | | | | | | | | | **01/30/11** |
| **SW-846 8260B** | | | | | | | | | | |
| 1,1-Dichloroethene | 75-35-4 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/31/11 |
| Trichloroethene | 79-01-6 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/31/11 |
| Benzene | 71-43-2 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/31/11 |
| Toluene | 108-88-3 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/31/11 |
| Chlorobenzene | 108-90-7 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/31/11 |
| 1,1-Dichloroethane | 75-34-3 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/31/11 |
| Methyl isobutyl ketone | 108-10-1 | LA-523-455 | U | <1 UJ | | ug/kg | 1 | 1 | 5 | 01/31/11 |
| Carbon tetrachloride | 56-23-5 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/31/11 |
| Acetone | 67-64-1 | LA-523-455 | U | <1 UJ | | ug/kg | 1 | 1 | 5 | 01/31/11 |
| 1,1,1-Trichloroethane | 71-55-6 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/31/11 |
| Methylene chloride | 75-09-2 | LA-523-455 | U | <1 | | ug/kg | 1 | 1 | 5 | 01/31/11 |
| Methyl ethyl ketone | 78-93-3 | LA-523-455 | U | <1 UJ | | ug/kg | 1 | 1 | 5 | 01/31/11 |

LS
2-28-2011

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

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

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

# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Organic, Volatiles

**Group #** WSCF111310

**Sample #** 111310034
**SAF#** F11-042
**Sample ID** B2BBH9

**Matrix** SOIL
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **8260 Prep** | | | | | | | | | | **01/30/11** |
| **SW-846 8260B** | | | | | | | | | | |
| 1,1-Dichloroethene | 75-35-4 | LA-523-455 | U | <0.9 | | ug/kg | 1 | 0.9 | 5 | 01/31/11 |
| Trichloroethene | 79-01-6 | LA-523-455 | U | <0.9 | | ug/kg | 1 | 0.9 | 5 | 01/31/11 |
| Benzene | 71-43-2 | LA-523-455 | U | <0.9 | | ug/kg | 1 | 0.9 | 5 | 01/31/11 |
| Toluene | 108-88-3 | LA-523-455 | U | <0.9 | | ug/kg | 1 | 0.9 | 5 | 01/31/11 |
| Chlorobenzene | 108-90-7 | LA-523-455 | U | <0.9 | | ug/kg | 1 | 0.9 | 5 | 01/31/11 |
| 1,1-Dichloroethane | 75-34-3 | LA-523-455 | U | <0.9 | | ug/kg | 1 | 0.9 | 5 | 01/31/11 |
| Methyl isobutyl ketone | 108-10-1 | LA-523-455 | U | <0.9 | UJ | ug/kg | 1 | 0.9 | 5 | 01/31/11 |
| Carbon tetrachloride | 56-23-5 | LA-523-455 | U | <0.9 | | ug/kg | 1 | 0.9 | 5 | 01/31/11 |
| Acetone | 67-64-1 | LA-523-455 | U | <0.9 | UJ | ug/kg | 1 | 0.9 | 5 | 01/31/11 |
| 1,1,1-Trichloroethane | 71-55-6 | LA-523-455 | U | <0.9 | | ug/kg | 1 | 0.9 | 5 | 01/31/11 |
| Methylene chloride | 75-09-2 | LA-523-455 | U | <0.9 | | ug/kg | 1 | 0.9 | 5 | 01/31/11 |
| Methyl ethyl ketone | 78-93-3 | LA-523-455 | U | <0.9 | UJ | ug/kg | 1 | 0.9 | 5 | 01/31/11 |

LS
2-28-2011

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

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

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

# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Organic, Volatiles

**Group #** WSCF111311

**Sample #** 111311001
**SAF#** F11-043
**Sample ID** B2BBK4

**Matrix** WATER
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **8260 Prep** | | | | | | | | | | | **01/28/11** |
| **SW-846 8260B** | | | | | | | | | | | |
| 1,1-Dichloroethene | 75-35-4 | LA-523-455 | U | <1 | | | ug/L | 1 | 1 | 5 | 01/28/11 |
| Trichloroethene | 79-01-6 | LA-523-455 | U | <1 | | | ug/L | 1 | 1 | 5 | 01/28/11 |
| Benzene | 71-43-2 | LA-523-455 | U | <1 | | | ug/L | 1 | 1 | 5 | 01/28/11 |
| Toluene | 108-88-3 | LA-523-455 | U | <1 | | | ug/L | 1 | 1 | 5 | 01/28/11 |
| 1,1-Dichloroethane | 75-34-3 | LA-523-455 | U | <1 | | | ug/L | 1 | 1 | 5 | 01/28/11 |
| Methyl isobutyl ketone | 108-10-1 | LA-523-455 | U | <1 | UJ | | ug/L | 1 | 1 | 5 | 01/28/11 |
| Carbon tetrachloride | 56-23-5 | LA-523-455 | U | <1 | | | ug/L | 1 | 1 | 5 | 01/28/11 |
| Acetone | 67-64-1 | LA-523-455 | U | <1 | UJ | | ug/L | 1 | 1 | 5 | 01/28/11 |
| 1,1,1-Trichloroethane | 71-55-6 | LA-523-455 | U | <1 | | | ug/L | 1 | 1 | 5 | 01/28/11 |
| Methylene chloride | 75-09-2 | LA-523-455 | | 5.0 | | | ug/L | 1 | 1 | 5 | 01/28/11 |
| Methyl ethyl ketone | 78-93-3 | LA-523-455 | U | <1 | UJ | | ug/L | 1 | 1 | 5 | 01/28/11 |

LS
2-28-2011

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

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

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

# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Organic, Volatiles

**Group #** WSCF111311

**Sample #** 111311002
**SAF#** F11-043
**Sample ID** B2BBK2

**Matrix** WATER
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **8260 Prep** | | | | | | | | | | **01/28/11** |
| **SW-846 8260B** | | | | | | | | | | |
| 1,1-Dichloroethene | 75-35-4 | LA-523-455 | U | <1 | | ug/L | 1 | 1 | 5 | 01/28/11 |
| Trichloroethene | 79-01-6 | LA-523-455 | U | <1 | | ug/L | 1 | 1 | 5 | 01/28/11 |
| Benzene | 71-43-2 | LA-523-455 | U | <1 | | ug/L | 1 | 1 | 5 | 01/28/11 |
| Toluene | 108-88-3 | LA-523-455 | U | <1 | | ug/L | 1 | 1 | 5 | 01/28/11 |
| 1,1-Dichloroethane | 75-34-3 | LA-523-455 | U | <1 | | ug/L | 1 | 1 | 5 | 01/28/11 |
| Methyl isobutyl ketone | 108-10-1 | LA-523-455 | U | <1 | UJ | ug/L | 1 | 1 | 5 | 01/28/11 |
| Carbon tetrachloride | 56-23-5 | LA-523-455 | U | <1 | | ug/L | 1 | 1 | 5 | 01/28/11 |
| Acetone | 67-64-1 | LA-523-455 | U | <1 | UJ | ug/L | 1 | 1 | 5 | 01/28/11 |
| 1,1,1-Trichloroethane | 71-55-6 | LA-523-455 | U | <1 | | ug/L | 1 | 1 | 5 | 01/28/11 |
| Methylene chloride | 75-09-2 | LA-523-455 | U | <1 | | ug/L | 1 | 1 | 5 | 01/28/11 |
| Methyl ethyl ketone | 78-93-3 | LA-523-455 | U | <1 | UJ | ug/L | 1 | 1 | 5 | 01/28/11 |

LS
2-28-2011

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

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

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

# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Organic, Volatiles

**Group #** WSCF111311

**Sample #** 111311003
**SAF#** F11-043
**Sample ID** B2BBK3

**Matrix** WATER
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **8260 Prep** | | | | | | | | | | **01/28/11** |
| **SW-846 8260B** | | | | | | | | | | |
| 1,1-Dichloroethene | 75-35-4 | LA-523-455 | U | <1 | | ug/L | 1 | 1 | 5 | 01/28/11 |
| Trichloroethene | 79-01-6 | LA-523-455 | U | <1 | | ug/L | 1 | 1 | 5 | 01/28/11 |
| Benzene | 71-43-2 | LA-523-455 | U | <1 | | ug/L | 1 | 1 | 5 | 01/28/11 |
| Toluene | 108-88-3 | LA-523-455 | U | <1 | | ug/L | 1 | 1 | 5 | 01/28/11 |
| 1,1-Dichloroethane | 75-34-3 | LA-523-455 | U | <1 | | ug/L | 1 | 1 | 5 | 01/28/11 |
| Methyl isobutyl ketone | 108-10-1 | LA-523-455 | U | <1 UJ | | ug/L | 1 | 1 | 5 | 01/28/11 |
| Carbon tetrachloride | 56-23-5 | LA-523-455 | U | <1 | | ug/L | 1 | 1 | 5 | 01/28/11 |
| Acetone | 67-64-1 | LA-523-455 | U | <1 UJ | | ug/L | 1 | 1 | 5 | 01/28/11 |
| 1,1,1-Trichloroethane | 71-55-6 | LA-523-455 | U | <1 | | ug/L | 1 | 1 | 5 | 01/28/11 |
| Methylene chloride | 75-09-2 | LA-523-455 | | 5.6 | | ug/L | 1 | 1 | 5 | 01/28/11 |
| Methyl ethyl ketone | 78-93-3 | LA-523-455 | U | <1 UJ | | ug/L | 1 | 1 | 5 | 01/28/11 |

LS
2-28-2011

MDL = Minimum Detection
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DF = Dilution Factor
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B - Analyte was detected in both the BLANK and SAMPLE
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# Appendix 4

Laboratory Narrative and Chain-of-Custody Documentation

Attachment 2
**Narrative**
WSCF111310

## Introduction

Samples were received at the WSCF laboratory as referenced on the WSCF SAF Number Cross Reference table included in the final report. The samples were analyzed for the analytes indicated on the attached copy of the chain of custody (COC) form in accordance with the *Statement of Work (SOW), Modification No. 2 to Agreement 36587, Release 3, "FH WSCF ANALYTICAL SERVICES FOR GROUNDWATER."*

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

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

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

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

## Analytical Methodology for Requested Analyses

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

## Inorganic Comments

**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):

- All applicable QC controls are within the established limits.

Attachment 2
**Narrative**
WSCF111310

**Organic Comments**

**Semi-VOA** – 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):

- B2BBH0 (111310001) did not meet the acceptance limits for surrogate 2-Fluorobiphenyl. Sample results were not flagged. The quality control report was flagged for surrogate recovery failure.
- B2BBH1 (111310002) did not meet the acceptance limits for surrogates 2-Fluorophenol, Phenol-d5, Nitrobenzene-d5, 2-Fluorobiphenyl and 2,4,6-Tribromophenol. Sample results were not flagged. The quality control report was flagged for surrogate recovery failure.
- B2BBF2 (111310008) did not meet the acceptance limits for surrogates 2-Fluorophenol, Phenol-d5, Nitrobenzene-d5, 2-Fluorobiphenyl and 2,4,6-Tribromophenol. Sample results were not flagged. The quality control report was flagged for surrogate recovery failure.
- B2BBF3 (111310009) did not meet the acceptance limits for surrogates Nitrobenzene-d5 and 2-Fluorobiphenyl. Sample results were not flagged. The quality control report was flagged for surrogate recovery failure.
- B2BBF4 (111310010) did not meet the acceptance limits for surrogate 2-Fluorobiphenyl. Sample results were not flagged. The quality control report was flagged for surrogate recovery failure.
- All other applicable QC controls are within the established limits.

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

- 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 | | | F11-042-013 | PAGE 1 OF 1 |
|---|---|---|---|---|---|
| COLLECTOR: J. Scalos | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-13a | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: | |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-N-507-16-2 | ACTUAL SAMPLE DEPTH: 0-4" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

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

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

111310

SPECIAL HANDLING AND/OR STORAGE

| PRESERVATION | Cool~4C | None |
|---|---|---|
| HOLDING TIME | 14/40 Days | 6 Months |
| TYPE OF CONTAINER | aG | G/P |
| NO. OF CONTAINER(S) | 1 | 1 |
| VOLUME | 250mL | 60mL |
| SAMPLE ANALYSIS | Semi-VOA - 8270 (Add-On) (Total cresols); | ICP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | |
|---|---|---|---|---|---|
| B2BBH0 1 | SOIL | 1-26-11 | 1000 | X | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J. Scalos | DATE/TIME: 1-26-11 1000 | RECEIVED BY/STORED IN: Victor Sims | DATE/TIME: 1-26-11 1002 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |

SPECIAL INSTRUCTIONS

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-014 | PAGE 1 OF 1 |
|---|---|---|---|---|---|
| COLLECTOR: J. Scales | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-14a | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-N-507-16.23 | ACTUAL SAMPLE DEPTH: 0-4" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

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

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

SPECIAL HANDLING AND/OR STORAGE

| PRESERVATION | Cool~4C | None |
|---|---|---|
| HOLDING TIME | 14/40 Days | 6 Months |
| TYPE OF CONTAINER | aG | G/P |
| NO. OF CONTAINER(S) | 1 | 1 |
| VOLUME | 250mL | 60mL |
| SAMPLE ANALYSIS | Semi-VOA - 8270 (Add-On) (Total cresols); | ICP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | |
|---|---|---|---|---|---|
| B2BBH1 2 | SOIL | 1-26-11 | 0957 | X | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J. Scales | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: Victor Sing | DATE/TIME: 1-26-11 1200 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |

SPECIAL INSTRUCTIONS

* The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.

ORIGINAL

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-015 | PAGE 1 OF 1 |
|---|---|---|---|---|---|
| COLLECTOR 1-26-11 C. Chamberlain | COMPANY CONTACT WIDRIG, DL | TELEPHONE NO. 376-2858 | PROJECT COORDINATOR WIDRIG, DL | PRICE CODE 8C / AIR QUALITY ☐ | DATA TURNAROUND 15 Days / 15 Days |
| SAMPLING LOCATION PSTFUNIT1-VS-15a | PROJECT DESIGNATION 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO. F11-042 | | |
| ICE CHEST NO. AM | FIELD LOGBOOK NO. HNF-N-507. 16273 | ACTUAL SAMPLE DEPTH 0-4" | COA 300068ES10 | METHOD OF SHIPMENT GOVERNMENT VEHICLE | |
| SHIPPED TO Waste Sampling & Characterization | OFFSITE PROPERTY NO. N/A | | BILL OF LADING/AIR BILL NO. N/A | | |

| MATRIX* | POSSIBLE SAMPLE HAZARDS/ REMARKS | PRESERVATION | Cool<4C | None |
|---|---|---|---|---|
| A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegetation, W=Water, WI=Wipe, X=Other | Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993) | HOLDING TIME | 14/40 Days | 6 Months |
| | | TYPE OF CONTAINER | aG | G/P |
| | | NO. OF CONTAINER(S) | 1 | 1 |
| | | VOLUME | 250mL | 60mL |
| | SPECIAL HANDLING AND/OR STORAGE | SAMPLE ANALYSIS | Semi-VOA - 8270 (Add-On) (Total vesols); | ICP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | |
|---|---|---|---|---|---|
| B2BBH2 3 | SOIL | 1-26-11 | 0951 | X | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM C. Chamberlain | DATE/TIME 1-26-11 1200 | RECEIVED BY/STORED IN Victor Sims | DATE/TIME 1-26-11 1200 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.

ORIGINAL

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | F11-042-016 | PAGE 1 OF 1 |
|---|---|---|---|---|
| COLLECTOR: C. Chamberlain | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C; DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-16a | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-N-507-16.23 | ACTUAL SAMPLE DEPTH: 0-4' | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | |

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

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

SPECIAL HANDLING AND/OR STORAGE

| PRESERVATION | Cool~4C | None |
|---|---|---|
| HOLDING TIME | 14/10 Days | 6 Months |
| TYPE OF CONTAINER | aG | G/P |
| NO. OF CONTAINER(S) | 1 | 1 |
| VOLUME | 250ml | 60ml |
| SAMPLE ANALYSIS | Semi-VOA - 8270 (Add-On) (Total cresols); | ICP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | |
|---|---|---|---|---|---|
| B2BBH3 4 | SOIL | 1-26-11 | 0945 | X | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: C. Chamberlain | DATE/TIME: 1-26-11 | RECEIVED BY/STORED IN: Victor Sims | DATE/TIME: 1-26-11 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |

SPECIAL INSTRUCTIONS

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKT applies to this SAF.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | F11-042-017 | PAGE 1 OF 1 |
|---|---|---|---|
| COLLECTOR: J. Stalos | COMPANY CONTACT: WIDRIG, DL; TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C; DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-17a | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | SAF NO.: F11-042 | AIR QUALITY: |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-N-507-16-23; ACTUAL SAMPLE DEPTH: 0-4 | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | BILL OF LADING/AIR BILL NO.: N/A | |

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

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

SPECIAL HANDLING AND/OR STORAGE

| PRESERVATION | Cool~4C | None |
|---|---|---|
| HOLDING TIME | 14/40 Days | 6 Months |
| TYPE OF CONTAINER | aG | G/P |
| NO. OF CONTAINER(S) | 1 | 1 |
| VOLUME | 250mL | 50mL |
| SAMPLE ANALYSIS | Semi-VOA - 8270 (Add-On) (Total cresols); | ICP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | |
|---|---|---|---|---|---|
| B2BBH4 5 | SOIL | 1-26-11 | 0856 | X | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J. Stalos | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: Victor Sims | DATE/TIME: 1-26-11 1200 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |

SPECIAL INSTRUCTIONS

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis CKI applies to this SAF.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-003 | PAGE 1 OF 1 |
|---|---|---|---|---|---|
| COLLECTOR: J Scales | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-3a | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: MA | FIELD LOGBOOK NO.: HNF-N-507-16-23 | ACTUAL SAMPLE DEPTH: 0-4" | COA: 300088ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

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

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

**SPECIAL HANDLING AND/OR STORAGE**

| | | |
|---|---|---|
| PRESERVATION | Cool-4C | None |
| HOLDING TIME | 14/40 Days | 6 Months |
| TYPE OF CONTAINER | aG | G/P |
| NO. OF CONTAINER(S) | 1 | 1 |
| VOLUME | 250mL | 60mL |
| SAMPLE ANALYSIS | Semi-VOA - 8270 (Add-On) (Total cresols); | ICP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | |
|---|---|---|---|---|---|
| B2BBF0 6 | SOIL | 1-26-11 | 0840 | X | Y |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J Scales | DATE/TIME: 1200 1-26-11 | RECEIVED BY/STORED IN: Victor Bivins | DATE/TIME: 1200 1-26-11 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.

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

A 6003 618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | F11-042-004 | PAGE 1 OF 1 |
|---|---|---|---|

| COLLECTOR | COMPANY CONTACT | TELEPHONE NO. | PROJECT COORDINATOR | PRICE CODE 8C | DATA TURNAROUND |
|---|---|---|---|---|---|
| C. Chamberlain | WIDRIG, DL | 376-2858 | WIDRIG, DL | | 15 Days / 15 Days |
| **SAMPLING LOCATION** | **PROJECT DESIGNATION** | | **SAF NO.** | **AIR QUALITY** ☐ | |
| PSTFUNIT1 VS 4a | 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | F11-042 | | |
| **ICE CHEST NO.** | **FIELD LOGBOOK NO.** | **ACTUAL SAMPLE DEPTH** | **COA** | **METHOD OF SHIPMENT** | |
| NA | HNF-N-507-16-23 | 0-4' | 300068ES10 | GOVERNMENT VEHICLE | |
| **SHIPPED TO** | **OFFSITE PROPERTY NO.** | | **BILL OF LADING/AIR BILL NO.** | | |
| Waste Sampling & Characterization | N/A | | N/A | | |

| MATRIX* | POSSIBLE SAMPLE HAZARDS/ REMARKS | | | |
|---|---|---|---|---|
| A=Air<br>DL=Drum Liquids<br>DS=Drum Solids<br>L=Liquid<br>O=Oil<br>S=Soil<br>SF=Sediment<br>T=Tissue<br>V=Vegetation<br>W=Water<br>WI=Wipe<br>X=Other | Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993) | PRESERVATION | Cool-4C | None |
| | | HOLDING TIME | 14/40 Days | 6 Months |
| | | TYPE OF CONTAINER | aG | G/P |
| | | NO. OF CONTAINER(S) | 1 | 1 |
| | | VOLUME | 250mL | 60mL |
| | SPECIAL HANDLING AND/OR STORAGE | SAMPLE ANALYSIS | Semi-VOA - 8270 (Add-On) (Total dioxin); | TOP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | |
|---|---|---|---|---|---|
| B2BBF1 7 | SOIL | 1-26-11 | 0854 | X | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: C. Chamberlain | DATE/TIME 1200 1-26-11 | RECEIVED BY/STORED IN: VISTOV/SMS | DATE/TIME 1200 1-26-11 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.

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

A-6003-618 (REV 2)

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-005 | PAGE 1 OF 1 |
|---|---|---|---|---|---|
| COLLECTOR: J Scales | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2853 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-Sa | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: MM | FIELD LOGBOOK NO.: ~~FINF-N-507-~~ 10.23 | ACTUAL SAMPLE DEPTH: 0-4" | COA: 300069ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

MATRIX*: A=Air; DL=Drum Liquids; DS=Drum Solids; L=Liquid; O=Oil; S=Soil; SE=Sediment; T=Tissue; V=Vegetation; W=Water; W1=Wipe; X=Other

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

SPECIAL HANDLING AND/OR STORAGE

| | | |
|---|---|---|
| PRESERVATION | Cool~4C | None |
| HOLDING TIME | 14/40 Days | 6 Months |
| TYPE OF CONTAINER | aG | C/P |
| NO. OF CONTAINER(S) | 1 | 1 |
| VOLUME | 250mL | 60mL |
| SAMPLE ANALYSIS | Semi-VOA - 8270 (Add-On) (Total cresols); | ICP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | |
|---|---|---|---|---|---|
| B2BBF2 8 | SOIL | 1-26-11 | 0856 | X | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J Scales | DATE/TIME: 1-26-11 | RECEIVED BY/STORED IN: Victor Sing | DATE/TIME: 1-26-11 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |

SPECIAL INSTRUCTIONS

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.

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

A-6001-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | F11-042-006 | PAGE 1 OF 1 |
|---|---|---|---|

| | | | |
|---|---|---|---|
| COLLECTOR: C. Chamberlain | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2853 | PROJECT COORDINATOR: WIDRIG, DL |
| SAMPLING LOCATION: PSTFUNIT1-VS-6a | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-N-507-16-23 | ACTUAL SAMPLE DEPTH: 0.4" | COA: 300068ES10 |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A |

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

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

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

SPECIAL HANDLING AND/OR STORAGE:

| PRESERVATION | Cool~4C | None |
|---|---|---|
| HOLDING TIME | 14/40 Days | 6 Months |
| TYPE OF CONTAINER | aG | G/P |
| NO. OF CONTAINER(S) | 1 | 1 |
| VOLUME | 250mL | 60mL |
| SAMPLE ANALYSIS | Semi-VOA - 8270 (Add-On (Total cresols); | ICP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | |
|---|---|---|---|---|---|
| B2BBF3 9 | SOIL | 1-26-11 | 0906 | X | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: C. Chamberlain | DATE/TIME/20: 1-26-11 | RECEIVED BY/STORED IN: VICTOR SIMS | DATE/TIME/20: 1-26-11 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |

SPECIAL INSTRUCTIONS
** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.

ORIGINAL

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

A-5003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-007 | PAGE 1 OF 1 |
|---|---|---|---|---|---|
| COLLECTOR: J. Scalog | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2853 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-7a | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: | FIELD LOGBOOK NO.: HNF-N-507-16-2 | ACTUAL SAMPLE DEPTH: 0-4" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

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

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

**SPECIAL HANDLING AND/OR STORAGE**

| PRESERVATION | Cool~4C | None |
|---|---|---|
| HOLDING TIME | 14/40 Days | 6 Months |
| TYPE OF CONTAINER | aG | G/P |
| NO. OF CONTAINER(S) | 1 | 1 |
| VOLUME | 250mL | 60mL |
| SAMPLE ANALYSIS | Semi-VOA - 8270 (Add-On) (Total cresols); | ICP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | |
|---|---|---|---|---|---|
| B2BBF4 10 | SOIL | 1-26-11 | 0909 | X | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J. Scalog | DATE/TIME: 1-26-11 2000 | RECEIVED BY/STORED IN: Victor Bim | DATE/TIME: 1-26-11 2000 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.

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

A-6003-618 (REV 2)

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | F11-042-008 | PAGE 1 OF 1 |
|---|---|---|---|---|
| COLLECTOR: C. Chamberlain | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C; AIR QUALITY: L; DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTT1UNIT1-VS-Ra | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11 042 | |
| ICE CHEST NO.: MA | FIELD LOGBOOK NO.: HNF-N-507-16-23 | ACTUAL SAMPLE DEPTH: 0-4" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | |

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

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

SPECIAL HANDLING AND/OR STORAGE

| PRESERVATION | Cool~4C | None |
|---|---|---|
| HOLDING TIME | 14/40 Days | 6 Months |
| TYPE OF CONTAINER | aG | G/P |
| NO. OF CONTAINER(S) | 1 | 1 |
| VOLUME | 250mL | 60mL |
| SAMPLE ANALYSIS | Semi-VOA - 8270 (add-On) (Total cresols); | ICP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | |
|---|---|---|---|---|---|
| B2BBF5 11 | SOIL | 1-26-11 | 0917 | X | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: C. Chamberlain | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: Victor Bing | DATE/TIME: 1-26-11 1200 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |

SPECIAL INSTRUCTIONS
** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.

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

A 6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-009 | PAGE 1 OF 1 |
|---|---|---|---|---|---|
| COLLECTOR: J Scales | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-9a | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-N-507-16-23 | ACTUAL SAMPLE DEPTH: 0-4" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

MATRIX*: A=Air; 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 | None |
|---|---|---|
| HOLDING TIME | 14/40 Days | 6 Months |
| TYPE OF CONTAINER | aG | G/P |
| NO. OF CONTAINER(S) | 1 | 1 |
| VOLUME | 250mL | 60mL |
| SAMPLE ANALYSIS | Semi-VOA - 8270 (Add-On) (Total cresols); | ICP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | |
|---|---|---|---|---|---|
| B2BBF6 12 | SOIL | 1-26-11 | 0946 | X | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J Scales | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: V L Hawkins | DATE/TIME: 1-26-11 1200 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |

SPECIAL INSTRUCTIONS

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GK1 applies to this SAF.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-010 | PAGE 1 OF 1 |
|---|---|---|---|---|---|
| COLLECTOR: J. Stubbs | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1 VS 10a | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: NN | FIELD LOGBOOK NO.: HNF-N-507-16-22 | ACTUAL SAMPLE DEPTH: 0-4" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

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

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

**SPECIAL HANDLING AND/OR STORAGE**:

| | | |
|---|---|---|
| PRESERVATION | Cool~4C | None |
| HOLDING TIME | 14/40 Days | 6 Months |
| TYPE OF CONTAINER | aG | G/P |
| NO. OF CONTAINER(S) | 1 | 1 |
| VOLUME | 250mL | 60mL |
| SAMPLE ANALYSIS | Semi VOA - 8270 (Add-On) (Total cresols); | ICP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | |
|---|---|---|---|---|---|
| B2BBF7 13 | SOIL | 1-26-11 | 0932 | X | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J. Stubbs | DATE/TIME: 1200 1-26-11 | RECEIVED BY/STORED IN: Victor Bjorns | DATE/TIME: 1200 1-26-11 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-011 | PAGE 1 OF 1 |
|---|---|---|---|---|---|
| COLLECTOR: J Scales | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, D. | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-11a | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-N-507-16.23 | ACTUAL SAMPLE DEPTH: 0-4" | COA: 300068ES1D | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

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

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

SPECIAL HANDLING AND/OR STORAGE

| PRESERVATION | Cool-4C | None |
|---|---|---|
| HOLDING TIME | 14/40 Days | 6 Months |
| TYPE OF CONTAINER | eG | G/P |
| NO. OF CONTAINER(S) | 1 | 1 |
| VOLUME | 250mL | 60mL |
| SAMPLE ANALYSIS | Semi VOA - 8270 (Add-On) (Total cresols); | ICP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | |
|---|---|---|---|---|---|
| B2BBF8 14 | SOIL | 1-26-11 | 0926 | X | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J. Scales | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: Victor Bings | DATE/TIME: 1-26-11 1200 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |

SPECIAL INSTRUCTIONS

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-012 | PAGE 1 OF 1 |
|---|---|---|---|---|---|
| COLLECTOR: C. Chamberlain | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-12a | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-N-507-16.23 | ACTUAL SAMPLE DEPTH: 0-4" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

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

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

SPECIAL HANDLING AND/OR STORAGE

| PRESERVATION | Cool-4C | None |
|---|---|---|
| HOLDING TIME | 14/40 Days | 6 Months |
| TYPE OF CONTAINER | aG | G/P |
| NO. OF CONTAINER(S) | 1 | 1 |
| VOLUME | 250mL | 60mL |
| SAMPLE ANALYSIS | Semi VOA - 8270 (Add-On) (Total cresols); | ICP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | |
|---|---|---|---|---|---|
| B2BBF9 15 | SOIL | 1-26-11 | 0929 | X | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: C. Chamberlain | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: Victor Bins | DATE/TIME: 1-26-11 1200 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |

SPECIAL INSTRUCTIONS

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | F11-042-001 | PAGE 1 OF 1 |
|---|---|---|---|---|
| COLLECTOR: J Scalozzi | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C; DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-1a | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: ~~HNF-N-507-~~ 16-23 | ACTUAL SAMPLE DEPTH: 6-4" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | |

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

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

SPECIAL HANDLING AND/OR STORAGE

| PRESERVATION | Cool~4C | None |
|---|---|---|
| HOLDING TIME | 14/40 Days | 6 Months |
| TYPE OF CONTAINER | aG | G/F |
| NO. OF CONTAINER(S) | 1 | 1 |
| VOLUME | 250mL | 60mL |
| SAMPLE ANALYSIS | Semi-VOA - 8270 (Add-On) (Total Cresols); | ICP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | |
|---|---|---|---|---|---|
| B2BBD8 16 | SOIL | 1-26-11 | 0832 | X | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J. Scalozzi | DATE/TIME: 1-26 1200 | RECEIVED BY/STORED IN: Victor Ramos | DATE/TIME: 1-26 11 1200 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |

SPECIAL INSTRUCTIONS

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GK1 applies to this SAF.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.

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

A-5003-618 (REV 2)

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-002 | PAGE 1 OF 1 |
|---|---|---|---|---|---|
| COLLECTOR: J. Sanlez | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C / AIR QUALITY: ☐ | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-2a | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | | |
| ICE CHEST NO.: MA | FIELD INSPECTION NO.: 6.23 | ACTUAL SAMPLE DEPTH: 0-4" | COA: 300068E510 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

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

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

SPECIAL HANDLING AND/OR STORAGE

| PRESERVATION | Cool-4C | None |
|---|---|---|
| HOLDING TIME | 14/40 Days | 6 Months |
| TYPE OF CONTAINER | aG | G/P |
| NO. OF CONTAINER(S) | 1 | 1 |
| VOLUME | 250mL | 60mL |
| SAMPLE ANALYSIS | Semi-VOA - 8270 (Add-On) (Total cresols); | ICP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | |
|---|---|---|---|---|---|
| B2BBD9 17 | SOIL | 1-26-11 | 0840 | X | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J. Sanlez | DATE/TIME: 1200 1-26-11 | RECEIVED BY/STORED IN: Victor Bing | DATE/TIME: 1200 1-26-11 | ** The CACN for all analytical work at WSCF laboratory is 401880ES20. ** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. ** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C. |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-023 | PAGE 1 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR: C. Chamberlain | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND |
| SAMPLING LOCATION: PSTFUNIT1-VS-6b | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | 15 Days / 15 Days |
| ICE CHEST NO.: N/A | FIELD LOGBOOK NO.: HNF-N-507-162 27 | ACTUAL SAMPLE DEPTH: 4.8' | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

| MATRIX* | POSSIBLE SAMPLE HAZARDS/ REMARKS | PRESERVATION | Cool <-7C and >-20C |
|---|---|---|---|
| A=Air<br>DL=Drum Liquids<br>DS=Drum Solids<br>L=Liquid<br>O=Oil<br>S=Soil<br>SE=Sediment<br>T=Tissue<br>V=Vegetation<br>W=Water<br>WI=Wipe<br>X=Other | Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993) | HOLDING TIME | 14 Days |
| | | TYPE OF CONTAINER | aGs |
| | | NO. OF CONTAINER(S) | 5 |
| | | VOLUME | 40mL |
| | SPECIAL HANDLING AND/OR STORAGE | SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | | MATRIX* | SAMPLE DATE | SAMPLE TIME | |
|---|---|---|---|---|---|
| B2BBJ0 | 18 | SOIL | 1-26-11 | 0908 | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: C. Chamberlain | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: Victor Sims | DATE/TIME: 1-26-11 1200 | SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | F11-042-023 | PAGE 2 OF 2 |
|---|---|---|---|---|
| COLLECTOR<br>C. Chamberlain | COMPANY CONTACT<br>WIDRIG, DL | TELEPHONE NO.<br>376-2858 | PROJECT COORDINATOR<br>WIDRIG, DL | PRICE CODE 8C<br>AIR QUALITY ☐ | DATA TURNAROUND<br>15 Days / 15 Days |
| SAMPLING LOCATION<br>PSTFUNIT1-VS-6b | PROJECT DESIGNATION<br>600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.<br>F11-042 | |
| ICE CHEST NO.<br>NA | FIELD LOGBOOK NO.<br>HNF-N-507-16.23 | ACTUAL SAMPLE DEPTH<br>4.8" | COA<br>300068ES10 | METHOD OF SHIPMENT<br>GOVERNMENT VEHICLE |
| SHIPPED TO<br>Waste Sampling & Characterization | OFFSITE PROPERTY NO.<br>N/A | | BILL OF LADING/AIR BILL NO.<br>N/A | |

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

** All VOA samples will be collected using EPA Method 5035A.
** VOA sample bottle sets will include 5 bottles for low level analysis.
** The laboratory is to use one of the low level VOA bottles for moisture content determination.
** VOA bottles will be labeled with an appended suffix of K, L, M, N, or P for low level. These suffixes are for the purpose of providing bottle weights to the laboratories. These suffixes should not be include as part of the sample ID reported in the final data packages.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.
(1) VOA - 5035/8260 (LOW LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-024 | PAGE 1 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR: J Scales | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-7b | PROJECT DESIGNATION: 600 Area PSTF Unt 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: NX | FIELD LOGBOOK NO.: HNF-N-507-16-23 | ACTUAL SAMPLE DEPTH: 4-8" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

| MATRIX* | POSSIBLE SAMPLE HAZARDS/ REMARKS | | |
|---|---|---|---|
| A=Air<br>DL=Drum Liquids<br>DS=Drum Solids<br>L=Liquid<br>O=Oil<br>S=Soil<br>SE=Sediment<br>T=Tissue<br>V=Vegetation<br>W=Water<br>WI=Wipe<br>X=Other | Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993) | PRESERVATION | Cool <-7C and >-20C |
| | | HOLDING TIME | 14 Days |
| | | TYPE OF CONTAINER | aGs |
| | | NO. OF CONTAINER(S) | 5 |
| | | VOLUME | 40mL |
| | SPECIAL HANDLING AND/OR STORAGE | SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | |
|---|---|---|---|---|
| B2BBJ1 19 | SOIL | 1-26-11 | 0911 | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J Scales | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: Vilay Bjing | DATE/TIME: 1-26-11 1200 | SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

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

A-5003-613 (REV 2)

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-024 | PAGE 2 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR<br>J. Scalo3 | COMPANY CONTACT<br>WIDRIG, DL | TELEPHONE NO.<br>376-2858 | PROJECT COORDINATOR<br>WIDRIG, DL | PRICE CODE 8C<br>AIR QUALITY ☐ | DATA TURNAROUND<br>15 Days / 15 Days |
| SAMPLING LOCATION<br>PSTFUNIT1-V5-7b | PROJECT DESIGNATION<br>600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.<br>F11-042 | | |
| ICE CHEST NO.<br>LM | FIELD LOGBOOK NO.<br>HNF-N-502-16 p.27 | ACTUAL SAMPLE DEPTH<br>4-8' | COA<br>300068ES10 | METHOD OF SHIPMENT<br>GOVERNMENT VEHICLE | |
| SHIPPED TO<br>Waste Sampling & Characterization | OFFSITE PROPERTY NO.<br>N/A | | BILL OF LADING/AIR BILL NO.<br>N/A | | |

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

** All VOA samples will be collected using EPA Method 5035A.
** VOA sample bottle sets will include 5 bottles for low level analysis.
** The laboratory is to use one of the low level VOA bottles for moisture content determination.
** VOA bottles will be labeled with an appended suffix of K, L, M, N, or P for low level. These suffixes are for the purpose of providing bottle weights to the laboratories. These suffixes should not be include as part of the sample ID reported in the final data packages.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.
(1) VOA - 5035/8260 (LOW LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

A-6003-616 (REV 2)

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-025 | PAGE 1 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR: C. Chamberlain | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-8b | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-N-507-16.23 | ACTUAL SAMPLE DEPTH: 4.8" | COA: 300068E510 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

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

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

SPECIAL HANDLING AND/OR STORAGE

| | |
|---|---|
| PRESERVATION | Cool <-7C and >-20C |
| HOLDING TIME | 14 Days |
| TYPE OF CONTAINER | aGs |
| NO. OF CONTAINER(S) | 5 |
| VOLUME | 40mL |
| SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | |
|---|---|---|---|---|
| B2BBJ2 20 | SOIL | 1-26-11 | 0900 | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: C. Chamberlain | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: Victor Bivins | DATE/TIME: 1-26-11 1200 | SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

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

A-6003-618 (REV 2)

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-025 | PAGE 2 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR<br>P. Chamberlain | COMPANY CONTACT<br>WIDRIG, DL | TELEPHONE NO.<br>376-2858 | PROJECT COORDINATOR<br>WIDRIG, DL | PRICE CODE 8C<br>AIR QUALITY ☐ | DATA TURNAROUND<br>15 Days / 15 Days |
| SAMPLING LOCATION<br>PSTFUNIT1-VS-B5 | PROJECT DESIGNATION<br>600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.<br>F11-042 | | |
| ICE CHEST NO.<br>N/A | FIELD LOGBOOK NO.<br>HNF-N-507-76-23 | ACTUAL SAMPLE DEPTH<br>4-8" | COA<br>300068ES10 | METHOD OF SHIPMENT<br>GOVERNMENT VEHICLE | |
| SHIPPED TO<br>Waste Sampling & Characterization | OFFSITE PROPERTY NO.<br>N/A | | BILL OF LADING/AIR BILL NO.<br>N/A | | |

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

** All VOA samples will be collected using EPA Method 5035A.
** VOA sample bottle sets will include 5 bottles for low level analysis.
** The laboratory is to use one of the low level VOA bottles for moisture content determination.
** VOA bottles will be labeled with an appended suffix of K, L, M, N, or P for low level. These suffixes are for the purpose of providing bottle weights to the laboratories. These suffixes should not be include as part of the sample ID reported in the final data packages.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.
(1) VOA - 5035/8260 (LOW LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-026 | PAGE 1 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR: J. Scales | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-9b | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: N/A | FIELD LOGBOOK NO.: HNF-N-507-16.23 | ACTUAL SAMPLE DEPTH: 4-8" | COA: 300068E510 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

| MATRIX* | POSSIBLE SAMPLE HAZARDS/ REMARKS | | |
|---|---|---|---|
| A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegetation, W=Water, WI=Wipe, X=Other | Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993) | PRESERVATION | Cool <-7C and >-20C |
| | | HOLDING TIME | 14 Days |
| | | TYPE OF CONTAINER | aGs |
| | | NO. OF CONTAINER(S) | 5 |
| | | VOLUME | 40mL |
| | SPECIAL HANDLING AND/OR STORAGE | SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | |
|---|---|---|---|---|
| B2BBJ3 21 | SOIL | 1-26-11 | 0948 | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J. Scales | DATE/TIME: 1-26-11 2015 | RECEIVED BY/STORED IN: Victor Sims | DATE/TIME: 1-26-11 2015 | SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | F11-042-026 | PAGE 2 OF 2 |
|---|---|---|---|---|
| COLLECTOR: J Scales | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C; DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-9b | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ |
| ICE CHEST NO.: RM | FIELD LOGBOOK NO.: HNF-N-507-16-23 | ACTUAL SAMPLE DEPTH: 4-8" | COA: 300058ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | |

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

** All VOA samples will be collected using EPA Method 5035A.
** VOA sample bottle sets will include 5 bottles for low level analysis.
** The laboratory is to use one of the low level VOA bottles for moisture content determination.
** VOA bottles will be labeled with an appended suffix of K, L, M, N, or P for low level. These suffixes are for the purpose of providing bottle weights to the laboratories. These suffixes should not be include as part of the sample ID reported in the final data packages.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.
(1) VOA - 5035/8260 (LOW LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

A-6003-618 (REV 2)

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-027 | PAGE 1 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR: J Scalos | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND |
| SAMPLING LOCATION: PSTFUNIT1-VS-100 | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | 15 Days / 15 Days |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-N-507-16-23 | ACTUAL SAMPLE DEPTH: 4.5 | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

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

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

SPECIAL HANDLING AND/OR STORAGE

| PRESERVATION | Cool <-7C and >-20C |
|---|---|
| HOLDING TIME | 14 Days |
| TYPE OF CONTAINER | aGs |
| NO. OF CONTAINER(S) | 5 |
| VOLUME | 40mL |
| SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | |
|---|---|---|---|---|
| B2BBJ4 22 | SOIL | 1-26-11 | 0931 | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J. Scalos | DATE/TIME: 1-26-11 200 | RECEIVED BY/STORED IN: VICTOR | DATE/TIME: 1-26-11 200 | SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-027 | PAGE 2 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR<br>J. Scalos | COMPANY CONTACT<br>WIDRIG, DL | TELEPHONE NO.<br>376-2858 | PROJECT COORDINATOR<br>WIDRIG, DL | PRICE CODE 8C<br>AIR QUALITY ☐ | DATA TURNAROUND<br>15 Days / 15 Days |
| SAMPLING LOCATION<br>PSTFUNIT1-VS-10b | PROJECT DESIGNATION<br>600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.<br>F11-042 | | |
| ICE CHEST NO.<br>KM | FIELD LOGBOOK NO.<br>HNF-N-507-16-23 | ACTUAL SAMPLE DEPTH<br>4-8" | COA<br>300068ES10 | METHOD OF SHIPMENT<br>GOVERNMENT VEHICLE | |
| SHIPPED TO<br>Waste Sampling & Characterization | OFFSITE PROPERTY NO.<br>N/A | | BILL OF LADING/AIR BILL NO.<br>N/A | | |

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

** All VOA samples will be collected using EPA Method 5035A.
** VOA sample bottle sets will include 5 bottles for low level analysis.
** The laboratory is to use one of the low level VOA bottles for moisture content determination.
** VOA bottles will be labeled with an appended suffix of K, L, M, N, or P for low level. These suffixes are for the purpose of providing bottle weights to the laboratories. These suffixes should not be include as part of the sample ID reported in the final data packages.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.
(1) VOA - 5035/8260 (LOW LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-028 | PAGE 1 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR: J. Scales | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-11b | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: N/A | FIELD LOGBOOK NO.: HNF-N-507-16-23 | ACTUAL SAMPLE DEPTH: 4-5" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

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

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

SPECIAL HANDLING AND/OR STORAGE

| | |
|---|---|
| PRESERVATION | Cool <-7C and >-20C |
| HOLDING TIME | 14 Days |
| TYPE OF CONTAINER | aGs |
| NO. OF CONTAINER(S) | 5 |
| VOLUME | 40mL |
| SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | |
|---|---|---|---|---|
| B2BBJ5 23 | SOIL | 1-26-11 | 0928 | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J. Scales | DATE/TIME: 1200 1-26-11 | RECEIVED BY/STORED IN: VICTOR SIMS | DATE/TIME: 1200 1-26-11 | SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

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

A 6003-618 (REV 2)

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-028 | PAGE 2 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR<br>J. Beaulo | COMPANY CONTACT<br>WIDRIG, DL | TELEPHONE NO.<br>376-2858 | PROJECT COORDINATOR<br>WIDRIG, DL | PRICE CODE 8C<br>AIR QUALITY ☐ | DATA TURNAROUND<br>15 Days / 15 Days |
| SAMPLING LOCATION<br>PSTFUNIT1-VS-11b | PROJECT DESIGNATION<br>600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.<br>F11-042 | | |
| ICE CHEST NO.<br>N/A | FIELD LOGBOOK NO.<br>HNF-N-507-16-23 | ACTUAL SAMPLE DEPTH<br>c/- 8" | COA<br>3000G8ES10 | METHOD OF SHIPMENT<br>GOVERNMENT VEHICLE | |
| SHIPPED TO<br>Waste Sampling & Characterization | OFFSITE PROPERTY NO.<br>N/A | | BILL OF LADING/AIR BILL NO.<br>N/A | | |

SPECIAL INSTRUCTIONS

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

** All VOA samples will be collected using EPA Method 5035A.
** VOA sample bottle sets will include 5 bottles for low level analysis.
** The laboratory is to use one of the low level VOA bottles for moisture content determination.
** VOA bottles will be labeled with an appended suffix of K, L, M, N, or P for low level. These suffixes are for the purpose of providing bottle weights to the laboratories. These suffixes should not be include as part of the sample ID reported in the final data packages.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.
(1) VOA - 5035/8260 (LOW LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-029 | PAGE 1 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR: C. Chamberlain | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-12b | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO. | FIELD LOGBOOK NO.: HNF-N-507-16.23 | ACTUAL SAMPLE DEPTH: 4.5" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

| MATRIX* | POSSIBLE SAMPLE HAZARDS/ REMARKS | | |
|---|---|---|---|
| A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegetation, W=Water, WI=Wipe, X=Other | Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993) | PRESERVATION | Cool <-7C and >-20C |
| | | HOLDING TIME | 14 Days |
| | | TYPE OF CONTAINER | aGs |
| | | NO. OF CONTAINER(S) | 5 |
| | | VOLUME | 40mL |
| | SPECIAL HANDLING AND/OR STORAGE | SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | |
|---|---|---|---|---|
| B2BBJ6 24 | SOIL | 1-26-1 | 0933 | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: C. Chamberlain | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: [illegible] | DATE/TIME: 1-26-11 1200 | SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

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

A 6003-618 (REV 2)

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-029 | PAGE 2 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR<br>C. Chamberlain | COMPANY CONTACT<br>WIDRIG, DL | TELEPHONE NO.<br>376-2858 | PROJECT COORDINATOR<br>WIDRIG, DL | PRICE CODE 8C<br>AIR QUALITY ☐ | DATA TURNAROUND<br>15 Days / 15 Days |
| SAMPLING LOCATION<br>PSTFUNIT1-VS-12b | PROJECT DESIGNATION<br>600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.<br>F11-042 | | |
| ICE CHEST NO.<br>N/A | FIELD LOGBOOK NO.<br>HNF-N-507-16-23 | ACTUAL SAMPLE DEPTH<br>4-5" | COA<br>300068ES10 | METHOD OF SHIPMENT<br>GOVERNMENT VEHICLE | |
| SHIPPED TO<br>Waste Sampling & Characterization | OFFSITE PROPERTY NO.<br>N/A | | BILL OF LADING/AIR BILL NO.<br>N/A | | |

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

** All VOA samples will be collected using EPA Method 5035A.
** VOA sample bottle sets will include 5 bottles for low level analysis.
** The laboratory is to use one of the low level VOA bottles for moisture content determination.
** VOA bottles will be labeled with an appended suffix of K, L, M, N, or P for low level. These suffixes are for the purpose of providing bottle weights to the laboratories. These suffixes should not be include as part of the sample ID reported in the final data packages.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.
(1) VOA - 5035/8260 (LOW LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

A-6003-618 (REV 2)

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | F11-042-030 | PAGE 1 OF 2 |
|---|---|---|---|---|
| COLLECTOR: J. Scales | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C / AIR QUALITY: ☐ / DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-13b | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | |
| ICE CHEST NO.: RM | FIELD LOGBOOK NO.: HNF-N-507-16-23 | ACTUAL SAMPLE DEPTH: 4-5' | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | |

| MATRIX* | POSSIBLE SAMPLE HAZARDS/ REMARKS | | |
|---|---|---|---|
| A=Air, DI=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegetation, W=Water, WI=Wipe, X=Other | Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993) | PRESERVATION | Cool <-7C and > 20C |
| | | HOLDING TIME | 14 Days |
| | | TYPE OF CONTAINER | eGs |
| | | NO. OF CONTAINER(S) | 5 |
| | | VOLUME | 40mL |
| | SPECIAL HANDLING AND/OR STORAGE | SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | |
|---|---|---|---|---|
| B2BBJ7 25 | SOIL | 1-26-11 | 1005 | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J. Scales | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: Victor Bruns | DATE/TIME: 1-26-11 1200 | SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

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

A-6003-618 (REV 2)

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-030 | PAGE 2 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR<br>J Scales | COMPANY CONTACT<br>WIDRIG, DL | TELEPHONE NO.<br>376-2858 | PROJECT COORDINATOR<br>WIDRIG, DL | PRICE CODE BC | DATA TURNAROUND<br>15 Days / 15 Days |
| SAMPLING LOCATION<br>PSTFUNIT1-VS-13b | PROJECT DESIGNATION<br>600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.<br>F11-042 | AIR QUALITY ☐ | |
| ICE CHEST NO.<br>AA | FIELD LOGBOOK NO.<br>HNF-N-507-16-23 | ACTUAL SAMPLE DEPTH<br>4-8" | COA<br>300068ES10 | METHOD OF SHIPMENT<br>GOVERNMENT VEHICLE | |
| SHIPPED TO<br>Waste Sampling & Characterization | OFFSITE PROPERTY NO.<br>N/A | | BILL OF LADING/AIR BILL NO.<br>N/A | | |

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

** All VOA samples will be collected using EPA Method 5035A.
** VOA sample bottle sets will include 5 bottles for low level analysis.
** The laboratory is to use one of the low level VOA bottles for moisture content determination.
** VOA bottles will be labeled with an appended suffix of K, L, M, N, or P for low level. These suffixes are for the purpose of providing bottle weights to the laboratories. These suffixes should not be include as part of the sample ID reported in the final data packages.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.
(1) VOA - 5035/8260 (LOW LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

A-6003-61B (REV 2)

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-031 | PAGE 1 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR: J. Scales | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-14b | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: | |
| ICE CHEST NO.: M- | FIELD LOGBOOK NO.: ~~HNF-N-807-~~ 1623 | ACTUAL SAMPLE DEPTH: 4-8" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

| MATRIX* | POSSIBLE SAMPLE HAZARDS/ REMARKS | | |
|---|---|---|---|
| A=Air<br>DL=Drum Liquids<br>DS=Drum Solids<br>L=Liquid<br>O=Oil<br>S=Soil<br>SE=Sediment<br>T=Tissue<br>V=Vegetation<br>W=Water<br>WI=Wipe<br>X=Other | Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993) | PRESERVATION | Cool < 7C and >-20C |
| | | HOLDING TIME | 14 Days |
| | | TYPE OF CONTAINER | aGs |
| | | NO. OF CONTAINER(S) | 5 |
| | | VOLUME | 40mL |
| | SPECIAL HANDLING AND/OR STORAGE | SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | |
|---|---|---|---|---|
| B2BBJ8 26 | SOIL | 1-26-11 | 0958 | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J. Scales | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: Victor Sing | DATE/TIME: 1-26-11 1200 | SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

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

A-6003-618 (REV 2)

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-031 | PAGE 2 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR<br>J. Scales | COMPANY CONTACT<br>WIDRIG, DL | TELEPHONE NO.<br>376-2858 | PROJECT COORDINATOR<br>WIDRIG, DL | PRICE CODE 8C<br>AIR QUALITY ☐ | DATA TURNAROUND<br>15 Days / 15 Days |
| SAMPLING LOCATION<br>PSTFUNIT1-VS-14b | PROJECT DESIGNATION<br>600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.<br>F11-042 | | |
| ICE CHEST NO.<br>N/A | FIELD LOGBOOK NO.<br>HNF-N-507-16.23 | ACTUAL SAMPLE DEPTH<br>4.5' | COA<br>300068ES10 | METHOD OF SHIPMENT<br>GOVERNMENT VEHICLE | |
| SHIPPED TO<br>Waste Sampling & Characterization | OFFSITE PROPERTY NO.<br>N/A | | BILL OF LADING/AIR BILL NO.<br>N/A | | |

SPECIAL INSTRUCTIONS

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

** All VOA samples will be collected using EPA Method 5035A.
** VOA sample bottle sets will include 5 bottles for low level analysis.
** The laboratory is to use one of the low level VOA bottles for moisture content determination.
** VOA bottles will be labeled with an appended suffix of K, L, M, N, or P for low level. These suffixes are for the purpose of providing bottle weights to the laboratories. These suffixes should not be include as part of the sample ID reported in the final data packages.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.
(1) VOA - 5035/8260 (LOW LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

ORIGINAL

A-6003-618 (REV 2)

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | F11-042-032 | PAGE 1 OF 2 |
|---|---|---|---|---|
| COLLECTOR: C. Chamberlain | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C; DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-15b | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-N-507-16.23 | ACTUAL SAMPLE DEPTH: 4-8" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | |

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

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

SPECIAL HANDLING AND/OR STORAGE

| | |
|---|---|
| PRESERVATION | Cool <-7C and >-20C |
| HOLDING TIME | 14 Days |
| TYPE OF CONTAINER | aGs |
| NO. OF CONTAINER(S) | 5 |
| VOLUME | 40mL |
| SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | |
|---|---|---|---|---|
| B2BBJ9 27 | SOIL | 1-26-11 | 0957 | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: C. Chamberlain | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: Victor Byers | DATE/TIME: 1-26-11 1200 | SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

ORIGINAL

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

A-6003-613 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | F11-042-032 | PAGE 2 OF 2 |
|---|---|---|---|---|
| COLLECTOR: C. Chamberlain | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C |
| SAMPLING LOCATION: PSTFUNIT1-VS-150 | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-N-507-623 | ACTUAL SAMPLE DEPTH: 4.5' | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | |

DATA TURNAROUND: 15 Days / 15 Days

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

** All VOA samples will be collected using EPA Method 5035A.
** VOA sample bottle sets will include 5 bottles for low level analysis.
** The laboratory is to use one of the low level VOA bottles for moisture content determination.
** VOA bottles will be labeled with an appended suffix of K, L, M, N, or P for low level. These suffixes are for the purpose of providing bottle weights to the laboratories. These suffixes should not be include as part of the sample ID reported in the final data packages.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.
(1) VOA - 5035/8260 (LOW LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

ORIGINAL

A-6003-618 (REV 2)

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-033 | PAGE 1 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR: C. L. Chamberlain | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-16b | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-N-507-16.23 | ACTUAL SAMPLE DEPTH: 4.8' | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

| MATRIX* | POSSIBLE SAMPLE HAZARDS/ REMARKS | PRESERVATION | Cool <-7C and >-20C |
|---|---|---|---|
| A=Air<br>DL=Drum Liquids<br>DS=Drum Solids<br>L=Liquid<br>O=Oil<br>S=Soil<br>SE=Sediment<br>T=Tissue<br>V=Vegetation<br>W=Water<br>WI=Wipe<br>X=Other | Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993) | HOLDING TIME | 14 Days |
| | | TYPE OF CONTAINER | aGs |
| | | NO. OF CONTAINER(S) | 5 |
| | | VOLUME | 40mL |
| | SPECIAL HANDLING AND/OR STORAGE | SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | |
|---|---|---|---|---|
| B2BBK0 28 | SOIL | 1-26-11 | 0948 | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: C. L. Chamberlain | DATE/TIME: 1-26-11 | RECEIVED BY/STORED IN: Victor Binns | DATE/TIME: 1-26-11 | SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-033 | PAGE 2 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR<br>C. Chamberlain | COMPANY CONTACT<br>WIDRIG, DL | TELEPHONE NO.<br>376-2858 | PROJECT COORDINATOR<br>WIDRIG, DL | PRICE CODE 8C | DATA TURNAROUND |
| SAMPLING LOCATION<br>PSTFUNIT1-VS-16b | PROJECT DESIGNATION<br>600 Area PSTF Unit 1 Closure/Postclosure Soil | | SAF NO.<br>F11-042 | AIR QUALITY ☐ | 15 Days / 15 Days |
| ICE CHEST NO.<br>N/A | FIELD LOGBOOK NO.<br>HNF-N-507-16.22 | ACTUAL SAMPLE DEPTH<br>4.8' | COA<br>300068ES10 | METHOD OF SHIPMENT<br>GOVERNMENT VEHICLE | |
| SHIPPED TO<br>Waste Sampling & Characterization | OFFSITE PROPERTY NO.<br>N/A | | BILL OF LADING/AIR BILL NO.<br>N/A | | |

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

** All VOA samples will be collected using EPA Method 5035A.
** VOA sample bottle sets will include 5 bottles for low level analysis.
** The laboratory is to use one of the low level VOA bottles for moisture content determination.
** VOA bottles wil be labeled with an appended suffix of K, L, M, N, or P for low level. These suffixes are for the purpose of providing bottle weights to the laboratories. These suffixes should not be include as part of the sample ID reported in the final data packages.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.
(1) VOA - 5035/8260 (LOW LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachlorice, Methylene chloride};

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | F11-042-034 | PAGE 1 OF 2 |
|---|---|---|---|---|
| COLLECTOR: J Scale 8 | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C; AIR QUALITY: ☐ | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-17b | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-IN-SUT-19.2 | ACTUAL SAMPLE DEPTH: 4.5" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | |

| MATRIX* | POSSIBLE SAMPLE HAZARDS/ REMARKS | PRESERVATION | Cool <-7C and >-20C |
|---|---|---|---|
| A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegetation, W=Water, WI=Wipe, X=Other | Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993) | HOLDING TIME | 14 Days |
| | | TYPE OF CONTAINER | aGs |
| | | NO. OF CONTAINER(S) | 5 |
| | | VOLUME | 40mL |
| | SPECIAL HANDLING AND/OR STORAGE | SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | |
|---|---|---|---|---|
| B2BBK1 29 | SOIL | 1-26-11 | CALC | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J Xalang | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: Victor | DATE/TIME: 1-26-11 1200 | SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-034 | PAGE 2 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR: J Scalo 3 | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND |
| SAMPLING LOCATION: PSTFUNIT1-VS-17b | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | 15 Days / 15 Days |
| ICE CHEST NO.: N/A | FIELD LOGBOOK NO.: HNF-N-507-623 | ACTUAL SAMPLE DEPTH: 4-8' | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

** All VOA samples will be collected using EPA Method 5035A.
** VOA sample bottle sets will include 5 bottles for low level analysis.
** The laboratory is to use one of the low level VOA bottles for moisture content determination.
** VOA bottles will be labeled with an appended suffix of K, L, M, N, or P for low level. These suffixes are for the purpose of providing bottle weights to the laboratories. These suffixes should not be include as part of the sample ID reported in the final data packages.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.
(1) VOA - 5035/8260 (LOW LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

A-6002-618 (REV 2)

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | F11-042-018 | PAGE 1 OF 2 |
|---|---|---|---|

| COLLECTOR | COMPANY CONTACT | TELEPHONE NO. | PROJECT COORDINATOR | PRICE CODE 8C | DATA TURNAROUND |
|---|---|---|---|---|---|
| J. Scales | WIDRIG, DL | 376-2858 | WIDRIG, DL | AIR QUALITY ☐ | 15 Days / 15 Days |
| **SAMPLING LOCATION** | **PROJECT DESIGNATION** | | **SAF NO.** | | |
| PSTFUNIT1-VS-1b | 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | F11-042 | | |
| **ICE CHEST NO.** | **FIELD LOGBOOK NO.** | **ACTUAL SAMPLE DEPTH** | **COA** | **METHOD OF SHIPMENT** | |
| NA | HNF-N-607-16-23 | 4"-8" | 300068ES10 | GOVERNMENT VEHICLE | |
| **SHIPPED TO** | **OFFSITE PROPERTY NO.** | | **BILL OF LADING/AIR BILL NO.** | | |
| Waste Sampling & Characterization | N/A | | N/A | | |

| MATRIX* | POSSIBLE SAMPLE HAZARDS/ REMARKS | PRESERVATION | Cool <-7C and >-20C |
|---|---|---|---|
| A=Air<br>DL=Drum Liquids<br>DS=Drum Solids<br>L=Liquid<br>O=Oil<br>S=Soil<br>SE=Sediment<br>T=Tissue<br>V=Vegetation<br>W=Water<br>WI=Wipe<br>X=Other | Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993) | HOLDING TIME | 14 Days |
| | | TYPE OF CONTAINER | aGs |
| | | NO. OF CONTAINER(S) | 5 |
| | | VOLUME | 40mL |
| | SPECIAL HANDLING AND/OR STORAGE | SAMPLE ANALYSIS | SEE ITEM (3) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | |
|---|---|---|---|---|
| B28BH5 30 | SOIL | 1-26-11 | 0834 | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM<br>J Scales | DATE/TIME 1-26-11 1200 | RECEIVED BY/STORED IN<br>Victor Bins | DATE/TIME 1-26-11 1200 | SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

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

A-5003-618 (REV 2)

| CHZMHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-018 | PAGE 2 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR: J Beale | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND |
| SAMPLING LOCATION: PSTFUNIT1-VS-1b | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | 15 Days / 15 Days |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-N-507-16 . 23 | ACTUAL SAMPLE DEPTH: 4-8' | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880E520.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

** All VOA samples will be collected using EPA Method 5035A.
** VOA sample bottle sets will include 5 bottles for low level analysis.
** The laboratory is to use one of the low level VOA bottles for moisture content determination.
** VOA bottles will be labeled with an appended suffix of K, L, M, N, or P for low level. These suffixes are for the purpose of providing bottle weights to the laboratories. These suffixes should not be include as part of the sample ID reported in the final data packages.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.
(1) VOA - 5035/8260 (LOW LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

A-6003-618 (REV 2)

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | F11-042-019 | PAGE 1 OF 2 |
|---|---|---|---|---|
| COLLECTOR: J. Scalez | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: BC / DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-2b | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ |
| ICE CHEST NO.: MA | FIELD LOGBOOK NO.: HNF-N-807-16.23 | ACTUAL SAMPLE DEPTH: 4-8" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | |

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

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

SPECIAL HANDLING AND/OR STORAGE

| | |
|---|---|
| PRESERVATION | Cool <-7C and >-20C |
| HOLDING TIME | 14 Days |
| TYPE OF CONTAINER | aGs |
| NO. OF CONTAINER(S) | 5 |
| VOLUME | 40ml |
| SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME |
|---|---|---|---|
| B2BBH6 31 | SOIL | 1-26-11 | ~~0843~~ 0840 |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J Scalez | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: Victor Sims | DATE/TIME: 1-26-11 1200 | SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | F11-042-019 | PAGE 2 OF 2 |
|---|---|---|---|---|
| COLLECTOR: J. Scalang | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C; DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-2h | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-N-507-12-23 | ACTUAL SAMPLE DEPTH: 4-8' | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | |

SPECIAL INSTRUCTIONS

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

** All VOA samples will be collected using EPA Method 5035A.
** VOA sample bottle sets will include 5 bottles for low level analysis.
** The laboratory is to use one of the low level VOA bottles for moisture content determination.
** VOA bottles will be labeled with an appended suffix of K, L, M, N, or P for low level. These suffixes are for the purpose of providing bottle weights to the laboratories. These suffixes should not be include as part of the sample ID reported in the final data packages.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.
(1) VOA - 5035/8260 (LOW LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

A-6003-618 (REV 2)

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-020 | PAGE 1 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR: J Seeley | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-3b | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: ~~HNF-N-507~~-16-23 | ACTUAL SAMPLE DEPTH: 4-5' | COA: 300G8ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

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

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

SPECIAL HANDLING AND/OR STORAGE

| | |
|---|---|
| PRESERVATION | Cool <-7C and >-20C |
| HOLDING TIME | 14 Days |
| TYPE OF CONTAINER | aGs |
| NO. OF CONTAINER(S) | 5 |
| VOLUME | 40mL |
| SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | |
|---|---|---|---|---|
| B2BBH7 32 | SOIL | 1-26-11 | 0846 | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J Seeley | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: VL Gro / Sims | DATE/TIME: 1-26-11 1200 | SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-020 | PAGE 2 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR<br>S. Scarlett | COMPANY CONTACT<br>WIDRIG, DL | TELEPHONE NO.<br>376-2858 | PROJECT COORDINATOR<br>WIDRIG, DL | PRICE CODE 8C<br>AIR QUALITY ☐ | DATA TURNAROUND<br>15 Days / 15 Days |
| SAMPLING LOCATION<br>PSTFUNIT1-VS-3b | PROJECT DESIGNATION<br>600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.<br>F11-042 | | |
| ICE CHEST NO.<br>NA | FIELD LOGBOOK NO.<br>NNF-N-507-22 | ACTUAL SAMPLE DEPTH<br>4.5'' | COA<br>300068ES10 | METHOD OF SHIPMENT<br>GOVERNMENT VEHICLE | |
| SHIPPED TO<br>Waste Sampling & Characterization | OFFSITE PROPERTY NO.<br>N/A | | BILL OF LADING/AIR BILL NO.<br>N/A | | |

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

** All VOA samples will be collected using EPA Method 5035A.
** VOA sample bottle sets will include 5 bottles for low level analysis.
** The laboratory is to use one of the low level VOA bottles for moisture content determination.
** VOA bottles will be labeled with an appended suffix of K, L, M, N, or P for low level. These suffixes are for the purpose of providing bottle weights to the laboratories. These suffixes should not be include as part of the sample ID reported in the final data packages.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.
(1) VOA - 5035/8260 (LOW LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

A-6033-618 (REV 2)

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-021 | PAGE 1 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR: C. Chamberlain | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-4b | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: NN | FIELD LOGBOOK NO.: ~~NF-N-507~~ D-23 | ACTUAL SAMPLE DEPTH: 4'-8" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

| MATRIX* | POSSIBLE SAMPLE HAZARDS/ REMARKS | | |
|---|---|---|---|
| A=Air<br>DL=Drum Liquids<br>DS=Drum Solids<br>L=Liquid<br>O=Oil<br>S=Soil<br>SE=Sediment<br>T=Tissue<br>V=Vegetation<br>W=Water<br>WI=Wipe<br>X=Other | Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993) | PRESERVATION | Cool <-7C and >-20C |
| | | HOLDING TIME | 14 Days |
| | | TYPE OF CONTAINER | aGs |
| | | NO. OF CONTAINER(S) | 5 |
| | | VOLUME | 40mL |
| | SPECIAL HANDLING AND/OR STORAGE | SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | MATRIX* | | SAMPLE DATE | SAMPLE TIME | |
|---|---|---|---|---|---|
| B2BBH8 | SOIL | 33 | 1-26-11 | 0855 | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: C. Chamberlain | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: [illegible] | DATE/TIME: 1-26-11 1200 | SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

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

A 6003 618 (REV 2)

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-021 | PAGE 2 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR<br>C. Chamberlain | COMPANY CONTACT<br>WIDRIG, DL | TELEPHONE NO.<br>376-2858 | PROJECT COORDINATOR<br>WIDRIG, DL | PRICE CODE 8C<br>AIR QUALITY ☐ | DATA TURNAROUND<br>15 Days / 15 Days |
| SAMPLING LOCATION<br>PSTFUNIT1-V5-4b | PROJECT DESIGNATION<br>600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.<br>F11-042 | | |
| ICE CHEST NO.<br>NA | FIELD LOGBOOK NO.<br>HNF-N-607- 22 | ACTUAL SAMPLE DEPTH<br>4.8" | COA<br>300068ES10 | METHOD OF SHIPMENT<br>GOVERNMENT VEHICLE | |
| SHIPPED TO<br>Waste Sampling & Characterization | OFFSITE PROPERTY NO.<br>N/A | | BILL OF LADING/AIR BILL NO.<br>N/A | | |

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

** All VOA samples will be collected using EPA Method 5035A.
** VOA sample bottle sets will include 5 bottles for low level analysis.
** The laboratory is to use one of the low level VOA bottles for moisture content determination.
** VOA bottles will be labeled with an appended suffix of K, L, M, N, or P for low level. These suffixes are for the purpose of providing bottle weights to the laboratories. These suffixes should not be include as part of the sample ID reported in the final data packages.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.
(1) VOA - 5035/8260 (LOW LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

A-6003-618 (REV 2)

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-022 | PAGE 1 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR: J. Scalos | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-5b | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: ~~HNF-N-807~~ 16-27 | ACTUAL SAMPLE DEPTH: 4-8" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

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

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

SPECIAL HANDLING AND/OR STORAGE

| | |
|---|---|
| PRESERVATION | Cool <-7C and >-20C |
| HOLDING TIME | 14 Days |
| TYPE OF CONTAINER | 8Gs |
| NO. OF CONTAINER(S) | 5 |
| VOLUME | 40mL |
| SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | |
|---|---|---|---|---|
| B2BBH9 34 | SOIL | 1-26-11 | 0900 | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J. Scalos | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: Victor Bing | DATE/TIME: 1-26-11 1200 | SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-022 | PAGE 2 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR<br>J. Scales | COMPANY CONTACT<br>WIDRIG, DL | TELEPHONE NO.<br>376-2858 | PROJECT COORDINATOR<br>WIDRIG, DL | PRICE CODE 8C | DATA TURNAROUND<br>15 Days / 15 Days |
| SAMPLING LOCATION<br>PSTFUNIT1-VS-5b | PROJECT DESIGNATION<br>600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.<br>F11-042 | AIR QUALITY ☐ | |
| ICE CHEST NO.<br>MA | FIELD LOGBOOK NO.<br>HNF-N-507-16-23 | ACTUAL SAMPLE DEPTH<br>1-8' | COA<br>300068ES10 | METHOD OF SHIPMENT<br>GOVERNMENT VEHICLE | |
| SHIPPED TO<br>Waste Sampling & Characterization | OFFSITE PROPERTY NO.<br>N/A | | BILL OF LADING/AIR BILL NO.<br>N/A | | |

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

** All VOA samples will be collected using EPA Method 5035A.
** VOA sample bottle sets will include 5 bottles for low level analysis.
** The laboratory is to use one of the low level VOA bottles for moisture content determination.
** VOA bottles will be labeled with an appended suffix of K, L, M, N, or P for low level. These suffixes are for the purpose of providing bottle weights to the laboratories. These suffixes should not be include as part of the sample ID reported in the final data packages.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.
(1) VOA - 5035/8260 (LOW LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

ORIGINAL

A-5003-618 (REV 2)

Attachment 2
**Narrative**
WSCF111311

## Introduction

Samples were received at the WSCF laboratory as referenced on the WSCF SAF Number Cross Reference table included in the final report. The samples were analyzed for the analytes indicated on the attached copy of the chain of custody (COC) form in accordance with the *Statement of Work (SOW), Modification No. 2 to Agreement 36587, Release 3, "FH WSCF ANALYTICAL SERVICES FOR GROUNDWATER."*

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

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

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

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

## Analytical Methodology for Requested Analyses

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

## Inorganic Comments

**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):

- All applicable QC controls are within the established limits.

Attachment 2
**Narrative**
WSCF111311

**Organic Comments**

**Semi-VOA** – 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):

- B2BBK4 (111311001) did not meet the acceptance limits for surrogate Phenol-d5. Sample results were not flagged. The quality control report was flagged for surrogate recovery failure.
- All other applicable QC controls are within the established limits.

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

- 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 | | | F11-043-003 | PAGE 1 OF 1 |
|---|---|---|---|---|---|
| COLLECTOR: Chamberlain | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 7C | DATA TURNAROUND |
| SAMPLING LOCATION: PSTFUNIT1-EB | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - QC Sampling | | SAF NO.: F11-043 | AIR QUALITY: ☐ | 15 Days / 15 Days |
| ICE CHEST NO. | FIELD LOGBOOK NO.: HNF-N-502-16 | ACTUAL SAMPLE DEPTH: N/A | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

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

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

111311

**SPECIAL HANDLING AND/OR STORAGE**

| PRESERVATION | HCl or H2SO4 to pH <2/Cool~4C | Cool~4C | HNO3 to pH <2 |
|---|---|---|---|
| HOLDING TIME | 14 Days | 7/40 Days | 6 Months |
| TYPE OF CONTAINER | aGs* | aG | G/P |
| NO. OF CONTAINER(S) | 3 | 4 | 1 |
| VOLUME | 40mL | 1L | 500mL |
| SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS | Semi-VOA - 8270 (Add-On) (Total cresols); | ICP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | | |
|---|---|---|---|---|---|---|
| B2BBK4 001 | WATER | 1-26-11 | 0650 | X | X | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| Craig Chamberlain | 1-26-11 1200 | VICTOR [illegible] | 1/26/11 1200 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| 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.

** The appropriate GKI will be provided to the laboratories prior to sample collection.

(1) VOA - 8260 (TCL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

☐ ORIGINAL

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-043-001 | PAGE 1 OF 1 |
|---|---|---|---|---|---|
| COLLECTOR: C. Chamberlain | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 7C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-FXR | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - QC Sampling | | SAF NO.: F11-043 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: N/A | FIELD LOGBOOK NO.: HNF-N-507-16-23 | ACTUAL SAMPLE DEPTH: N/A | COA: 300068E510 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

| MATRIX* | POSSIBLE SAMPLE HAZARDS/ REMARKS | | |
|---|---|---|---|
| A=Air<br>DI=Drum Liquids<br>DS=Drum Solids<br>L=Liquid<br>O=Oil<br>S=Soil<br>SE=Sediment<br>T=Tissue<br>V=Vegetation<br>W=Water<br>WI=Wipe<br>X=Other | Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993) | PRESERVATION | HCl or H2SO4 to pH <2/Cool≈4C |
| | | HOLDING TIME | 14 Days |
| | | TYPE OF CONTAINER | oGs* |
| | | NO. OF CONTAINER(S) | 3 |
| | | VOLUME | 40mL |
| | SPECIAL HANDLING AND/OR STORAGE | SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | |
|---|---|---|---|---|
| B2BBK2 | WATER | 1-26-11 | 0840 | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: C. Chamberlain | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: Victor Jung | DATE/TIME: 1-26-11 1200 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| 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.

** The appropriate GKI will be provided to the laboratories prior to sample collection.

(1) VOA - 8260 (TCL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | F11-043-002 | PAGE 1 OF 1 |
|---|---|---|---|
| COLLECTOR: Chamberlain | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL |
| PRICE CODE: 7C | DATA TURNAROUND: 15 Days / 15 Days | SAMPLING LOCATION: PSTFUNIT1-FB | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - QC Sampling |
| SAF NO.: F11-043 | AIR QUALITY: ☐ | ICE CHEST NO.: — | FIELD LOGBOOK NO.: HNF-N-507-16 |
| ACTUAL SAMPLE DEPTH: N/A | COA: 300068E510 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | SHIPPED TO: Waste Sampling & Characterization |
| OFFSITE PROPERTY NO.: N/A | BILL OF LADING/AIR BILL NO.: N/A | | |

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

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

SPECIAL HANDLING AND/OR STORAGE

| PRESERVATION | HCl or H2SO4 to pH <2/Cool<4C | Cool<4C | HNO3 to pH<2 |
|---|---|---|---|
| HOLDING TIME | 14 Days | 7/40 Days | 6 Months |
| TYPE OF CONTAINER | aGs* | aG | G/P |
| NO. OF CONTAINER(S) | 3 | [illegible] | [illegible] |
| VOLUME | 40mL | [illegible] | [illegible] |
| SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS | Semi-VOA 8270 (Non-Chlorinated) (TCL) (cresols); | ICP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | | |
|---|---|---|---|---|---|---|
| B2BBK3 003 | WATER | 1-26-11 | 0655 | X | | |

PMGENT 21JAN11

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: Greg Chamberlain | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: Victor Simon | DATE/TIME: 1/24/11 1200 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| 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.

** The appropriate GKI will be provided to the laboratories prior to sample collection.

(1) VOA - 8260 (TCL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

ORIGINAL

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

A-9003-518 (REV 2)

# Appendix 5

Data Validation Supporting Documentation

## Appendix A - Chemical Data Validation Checklist

| VALIDATION LEVEL: | A | B | (C) | D | E |
|---|---|---|---|---|---|
| PROJECT: CPP 600 AREA | | | DATA PACKAGE: VSR11-033 | | |
| VALIDATOR: Carl Schloesslin | | LAB: WSCF | | DATE: 2-28-2011 | |
| | | | SDG: WSCF111310, WSCF111311 | | |
| ANALYSES PERFORMED | | | | | |
| SW-846 8260 X | | SW-846 8260 (TCLP) | SW-846 8270 | | SW-846 8270 (TCLP) |
| | | | | | |

SAMPLES/MATRIX

SDG WSCF111310 (soil samples): B2BBJ0, B2BBJ1, B2BBJ2, B2BBJ3, B2BBJ4, B2BBJ5, B2BBJ6, B2BBJ7, B2BBJ8, B2BBJ9, B2BBK0, B2BBK1, B2BBH5, B2BBH6, B2BBH7, B2BBH8, B2BBH9

SDG WSCF111311 (water samples): B2BBK2, B2BBK3, B2BBK4

### 1. DATA PACKAGE COMPLETENESS AND CASE NARRATIVE

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

Comments: None

**2. INSTRUMENT TUNING AND CALIBRATION (Levels D and E)**

GC/MS tuning/performance check acceptable? ..... Yes No N/A

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

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:

WSCF111311: B2BBK3 (field blank) hit methylene chloride 5.6 ug/L
B2BBK4 (equipment blank) hit methylene chloride 5.0 ug/L

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

Surrogates/system monitoring compounds analyzed? ..... Yes No N/A

Surrogate/system monitoring compound 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? (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:

WSCF111310: Five common analytes spiked into LCS and MS/MSD. Three target analytes not represented.

WSCF111311: Four common analytes spiked into LCS and MS/MSD. Three target analytes not represented.

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

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

MS/MSD RPD values 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)**

Internal standards analyzed? ..... Yes No N/A

Internal standard areas acceptable? ..... Yes No N/A

Internal standard retention times 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. 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

Laboratory properly identified and coded all TIC? (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

**9. SAMPLE CLEANUP (Levels D and E)**

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 (attach additional sheets as necessary): None

# Appendix 6

Additional Documentation Requested By Client

## Quality Control Report

**Attention** Michael Neely
**Department** Organic, Volatiles

**Group #** WSCF111310

**QC Batch** 175344 **Test** SW-846 8260B Volatiles, separate prep
**Associated Samples** 111310018, 111310019, 111310020, 111310021, 111310022, 111310023, 111310024, 111310025, 111310026, 111310027, 111310028

| Analyte | CAS # | Original Found | QC Found | Units | % Recov | Limits | RPD | RPD Limit | RQ | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **BLANK** | | | **QC Sample #47781** | | | | | | | |
| 1,1-Dichloroethene | 75-35-4 | | <1 | ug/kg | | | | | U | 01/30/11 |
| Trichloroethene | 79-01-6 | | <1 | ug/kg | | | | | U | 01/30/11 |
| Benzene | 71-43-2 | | <1 | ug/kg | | | | | U | 01/30/11 |
| Toluene | 108-88-3 | | <1 | ug/kg | | | | | U | 01/30/11 |
| Chlorobenzene | 108-90-7 | | <1 | ug/kg | | | | | U | 01/30/11 |
| 1,1-Dichloroethane | 75-34-3 | | <1 | ug/kg | | | | | U | 01/30/11 |
| Methyl isobutyl ketone | 108-10-1 | | <1 | ug/kg | | | | | U | 01/30/11 |
| Carbon tetrachloride | 56-23-5 | | <1 | ug/kg | | | | | U | 01/30/11 |
| Acetone | 67-64-1 | | <1 | ug/kg | | | | | U | 01/30/11 |
| 1,1,1-Trichloroethane | 71-55-6 | | <1 | ug/kg | | | | | U | 01/30/11 |
| Methylene chloride | 75-09-2 | | <1 | ug/kg | | | | | U | 01/30/11 |
| Methyl ethyl ketone | 78-93-3 | | <1 | ug/kg | | | | | U | 01/30/11 |
| **LCS** | | | **QC Sample #47782** | | | | | | | |
| 1,1-Dichloroethene | 75-35-4 | | 21 | ug/kg | 83.2 | 50 - 131 | | | | 01/30/11 |
| Trichloroethene | 79-01-6 | | 20 | ug/kg | 81 | 66 - 119 | | | | 01/30/11 |
| Benzene | 71-43-2 | | 21 | ug/kg | 82.6 | 73 - 123 | | | | 01/30/11 |
| Toluene | 108-88-3 | | 20 | ug/kg | 80.2 | 77 - 128 | | | | 01/30/11 |

## Quality Control Report

**Attention** Michael Neely
**Department** Organic, Volatiles

**Group #** WSCF111310

| Analyte | CAS # | Original Found | QC Found | Units | % Recov | Limits | RPD | RPD Limit | RQ | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| Chlorobenzene | 108-90-7 | | 21 | ug/kg | 85.7 | 81 - 126 | | | | 01/30/11 |
| **MS** | | | **QC Sample #47783** | | | | | | | |
| | | | **Original 111310018** | | | | | | | |
| 1,1-Dichloroethene | 75-35-4 | <0.9 | 21 | ug/kg | 81 | 70 - 130 | | | | 01/30/11 |
| Trichloroethene | 79-01-6 | <0.9 | 22 | ug/kg | 83.4 | 70 - 130 | | | | 01/30/11 |
| Benzene | 71-43-2 | <0.9 | 23 | ug/kg | 87.6 | 70 - 130 | | | | 01/30/11 |
| Toluene | 108-88-3 | <0.9 | 22 | ug/kg | 82.6 | 70 - 130 | | | | 01/30/11 |
| Chlorobenzene | 108-90-7 | <0.9 | 21 | ug/kg | 81.2 | 70 - 130 | | | | 01/30/11 |
| **MSD** | | | **QC Sample #47784** | | | | | | | |
| | | | **Original 111310018** | | | | | **Paired** | **47783** | |
| 1,1-Dichloroethene | 75-35-4 | <0.9 | 14 | ug/kg | 77.8 | 70 - 130 | 4.00 | 30 | | 01/30/11 |
| Trichloroethene | 79-01-6 | <0.9 | 15 | ug/kg | 84.3 | 70 - 130 | 1.10 | 30 | | 01/30/11 |
| Benzene | 71-43-2 | <0.9 | 16 | ug/kg | 90.7 | 70 - 130 | 3.50 | 30 | | 01/30/11 |
| Toluene | 108-88-3 | <0.9 | 15 | ug/kg | 83.4 | 70 - 130 | 1.00 | 30 | | 01/30/11 |
| Chlorobenzene | 108-90-7 | <0.9 | 15 | ug/kg | 82.8 | 70 - 130 | 2.00 | 30 | | 01/30/11 |

## Quality Control Report

**Attention** Michael Neely
**Department** Organic, Volatiles

**Group #** WSCF111310

**QC Batch** 175346 **Test** SW-846 8260B Volatiles, separate prep
**Associated Samples** 111310029, 111310030, 111310031, 111310032, 111310033, 111310034

| Analyte | CAS # | Original Found | QC Found | Units | % Recov | Limits | RPD | RPD Limit | RQ | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **BLANK** | | | **QC Sample #47785** | | | | | | | |
| 1,1-Dichloroethene | 75-35-4 | | <1 | ug/kg | | | | | U | 01/30/11 |
| Trichloroethene | 79-01-6 | | <1 | ug/kg | | | | | U | 01/30/11 |
| Benzene | 71-43-2 | | <1 | ug/kg | | | | | U | 01/30/11 |
| Toluene | 108-88-3 | | <1 | ug/kg | | | | | U | 01/30/11 |
| Chlorobenzene | 108-90-7 | | <1 | ug/kg | | | | | U | 01/30/11 |
| 1,1-Dichloroethane | 75-34-3 | | <1 | ug/kg | | | | | U | 01/30/11 |
| Methyl isobutyl ketone | 108-10-1 | | <1 | ug/kg | | | | | U | 01/30/11 |
| Carbon tetrachloride | 56-23-5 | | <1 | ug/kg | | | | | U | 01/30/11 |
| Acetone | 67-64-1 | | <1 | ug/kg | | | | | U | 01/30/11 |
| 1,1,1-Trichloroethane | 71-55-6 | | <1 | ug/kg | | | | | U | 01/30/11 |
| Methylene chloride | 75-09-2 | | <1 | ug/kg | | | | | U | 01/30/11 |
| Methyl ethyl ketone | 78-93-3 | | <1 | ug/kg | | | | | U | 01/30/11 |
| **LCS** | | | **QC Sample #47786** | | | | | | | |
| 1,1-Dichloroethene | 75-35-4 | | 20 | ug/kg | 79.3 | 50 - 131 | | | | 01/30/11 |
| Trichloroethene | 79-01-6 | | 20 | ug/kg | 81.4 | 66 - 119 | | | | 01/30/11 |
| Benzene | 71-43-2 | | 23 | ug/kg | 90.4 | 73 - 123 | | | | 01/30/11 |
| Toluene | 108-88-3 | | 21 | ug/kg | 83.8 | 77 - 128 | | | | 01/30/11 |
| Chlorobenzene | 108-90-7 | | 21 | ug/kg | 84.2 | 81 - 126 | | | | 01/30/11 |

## Quality Control Report

**Attention** Michael Neely
**Department** Organic, Volatiles

**Group #** WSCF111310

| Analyte | CAS # | Original Found | QC Found | Units | % Recov | Limits | RPD | RPD Limit | RQ | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **MS** | | | **QC Sample #47787** | | | | | | | |
| | | | **Original 111310029** | | | | | | | |
| 1,1-Dichloroethene | 75-35-4 | <1 | 17 | ug/kg | 77.3 | 70 - 130 | | | | 01/31/11 |
| Trichloroethene | 79-01-6 | <1 | 21 | ug/kg | 93.3 | 70 - 130 | | | | 01/31/11 |
| Benzene | 71-43-2 | <1 | 21 | ug/kg | 92.6 | 70 - 130 | | | | 01/31/11 |
| Toluene | 108-88-3 | <1 | 19 | ug/kg | 86.1 | 70 - 130 | | | | 01/31/11 |
| Chlorobenzene | 108-90-7 | <1 | 19 | ug/kg | 83.7 | 70 - 130 | | | | 01/31/11 |
| **MSD** | | | **QC Sample #47788** | | | | | | | |
| | | | **Original 111310029** | | | | | **Paired** | **47787** | |
| 1,1-Dichloroethene | 75-35-4 | <1 | 18 | ug/kg | 81.3 | 70 - 130 | 5.00 | 30 | | 01/31/11 |
| Trichloroethene | 79-01-6 | <1 | 20 | ug/kg | 90.4 | 70 - 130 | 3.20 | 30 | | 01/31/11 |
| Benzene | 71-43-2 | <1 | 21 | ug/kg | 95.6 | 70 - 130 | 3.20 | 30 | | 01/31/11 |
| Toluene | 108-88-3 | <1 | 18 | ug/kg | 83.1 | 70 - 130 | 3.50 | 30 | | 01/31/11 |
| Chlorobenzene | 108-90-7 | <1 | 18 | ug/kg | 81.7 | 70 - 130 | 2.40 | 30 | | 01/31/11 |

## Quality Control Report

**Attention** Michael Neely
**Department** Organic, Volatiles

**Group #** WSCF111310

**QC Batch** 175344 **Test** SW-846 8260B Volatiles, separate prep
**Associated Samples** 111310018, 111310019, 111310020, 111310021, 111310022, 111310023, 111310024, 111310025, 111310026, 111310027, 111310028

| Analyte | CAS # | Original Found | QC Found | Units | % Recov | Limits | RPD | RPD Limit | RQ | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **SAMPLE** | | | **Sample #111310018** | | | | | | | |
| 1,2-Dichloroethane-d4 | 17060-07-0 | | | | 106 | 77 - 137 | | | | 01/30/11 |
| Toluene-d8 | 2037-26-5 | | | | 94.5 | 78 - 122 | | | | 01/30/11 |
| 4-Bromofluorobenzene | 460-00-4 | | | | 87.6 | 66 - 125 | | | | 01/30/11 |
| **SAMPLE** | | | **Sample #111310019** | | | | | | | |
| 1,2-Dichloroethane-d4 | 17060-07-0 | | | | 105.7 | 77 - 137 | | | | 01/30/11 |
| Toluene-d8 | 2037-26-5 | | | | 92.9 | 78 - 122 | | | | 01/30/11 |
| 4-Bromofluorobenzene | 460-00-4 | | | | 87 | 66 - 125 | | | | 01/30/11 |
| **SAMPLE** | | | **Sample #111310020** | | | | | | | |
| 1,2-Dichloroethane-d4 | 17060-07-0 | | | | 107.5 | 77 - 137 | | | | 01/30/11 |
| Toluene-d8 | 2037-26-5 | | | | 95.9 | 78 - 122 | | | | 01/30/11 |
| 4-Bromofluorobenzene | 460-00-4 | | | | 88.5 | 66 - 125 | | | | 01/30/11 |
| **SAMPLE** | | | **Sample #111310021** | | | | | | | |
| 1,2-Dichloroethane-d4 | 17060-07-0 | | | | 109.3 | 77 - 137 | | | | 01/30/11 |
| Toluene-d8 | 2037-26-5 | | | | 96.3 | 78 - 122 | | | | 01/30/11 |

## Quality Control Report

**Attention** Michael Neely
**Department** Organic, Volatiles

**Group #** WSCF111310

| Analyte | CAS # | Original Found | QC Found | Units | % Recov | Limits | RPD | RPD Limit | RQ | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| 4-Bromofluorobenzene | 460-00-4 | | | | 86.4 | 66 - 125 | | | | 01/30/11 |
| **SAMPLE** | | | **Sample #111310022** | | | | | | | |
| 1,2-Dichloroethane-d4 | 17060-07-0 | | | | 105.5 | 77 - 137 | | | | 01/30/11 |
| Toluene-d8 | 2037-26-5 | | | | 95 | 78 - 122 | | | | 01/30/11 |
| 4-Bromofluorobenzene | 460-00-4 | | | | 86.7 | 66 - 125 | | | | 01/30/11 |
| **SAMPLE** | | | **Sample #111310023** | | | | | | | |
| 1,2-Dichloroethane-d4 | 17060-07-0 | | | | 109.4 | 77 - 137 | | | | 01/30/11 |
| Toluene-d8 | 2037-26-5 | | | | 97.4 | 78 - 122 | | | | 01/30/11 |
| 4-Bromofluorobenzene | 460-00-4 | | | | 87.8 | 66 - 125 | | | | 01/30/11 |
| **SAMPLE** | | | **Sample #111310024** | | | | | | | |
| 1,2-Dichloroethane-d4 | 17060-07-0 | | | | 110.4 | 77 - 137 | | | | 01/30/11 |
| Toluene-d8 | 2037-26-5 | | | | 96.1 | 78 - 122 | | | | 01/30/11 |
| 4-Bromofluorobenzene | 460-00-4 | | | | 85.6 | 66 - 125 | | | | 01/30/11 |
| **SAMPLE** | | | **Sample #111310025** | | | | | | | |
| 1,2-Dichloroethane-d4 | 17060-07-0 | | | | 110.6 | 77 - 137 | | | | 01/30/11 |
| Toluene-d8 | 2037-26-5 | | | | 96.1 | 78 - 122 | | | | 01/30/11 |
| 4-Bromofluorobenzene | 460-00-4 | | | | 89.3 | 66 - 125 | | | | 01/30/11 |
| **SAMPLE** | | | **Sample #111310026** | | | | | | | |

## Quality Control Report

**Attention** Michael Neely
**Department** Organic, Volatiles

**Group #** WSCF111310

| Analyte | CAS # | Original Found | QC Found | Units | % Recov | Limits | RPD | RPD Limit | RQ | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 | 17060-07-0 | | | | 107.9 | 77 - 137 | | | | 01/30/11 |
| Toluene-d8 | 2037-26-5 | | | | 96.7 | 78 - 122 | | | | 01/30/11 |
| 4-Bromofluorobenzene | 460-00-4 | | | | 86.6 | 66 - 125 | | | | 01/30/11 |
| **SAMPLE** | | | **Sample #111310027** | | | | | | | |
| 1,2-Dichloroethane-d4 | 17060-07-0 | | | | 110.1 | 77 - 137 | | | | 01/30/11 |
| Toluene-d8 | 2037-26-5 | | | | 93.8 | 78 - 122 | | | | 01/30/11 |
| 4-Bromofluorobenzene | 460-00-4 | | | | 83.2 | 66 - 125 | | | | 01/30/11 |
| **SAMPLE** | | | **Sample #111310028** | | | | | | | |
| 1,2-Dichloroethane-d4 | 17060-07-0 | | | | 108.8 | 77 - 137 | | | | 01/30/11 |
| Toluene-d8 | 2037-26-5 | | | | 98.8 | 78 - 122 | | | | 01/30/11 |
| 4-Bromofluorobenzene | 460-00-4 | | | | 85.8 | 66 - 125 | | | | 01/30/11 |
| **BLANK** | | | **QC Sample #47781** | | | | | | | |
| 1,2-Dichloroethane-d4 | 17060-07-0 | | | | 109.3 | 77 - 137 | | | | 01/30/11 |
| Toluene-d8 | 2037-26-5 | | | | 95.2 | 78 - 122 | | | | 01/30/11 |
| 4-Bromofluorobenzene | 460-00-4 | | | | 93.2 | 66 - 125 | | | | 01/30/11 |
| **LCS** | | | **QC Sample #47782** | | | | | | | |
| 1,2-Dichloroethane-d4 | 17060-07-0 | | | | 104.4 | 77 - 137 | | | | 01/30/11 |
| Toluene-d8 | 2037-26-5 | | | | 96 | 78 - 122 | | | | 01/30/11 |
| 4-Bromofluorobenzene | 460-00-4 | | | | 98.6 | 66 - 125 | | | | 01/30/11 |

## Quality Control Report

**Attention** Michael Neely
**Department** Organic, Volatiles

**Group #** WSCF111310

| Analyte | CAS # | Original Found | QC Found | Units | % Recov | Limits | RPD | RPD Limit | RQ | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **MS** | | | **QC Sample #47783** | | | | | | | |
| | | | **Original** | **111310018** | | | | | | |
| 1,2-Dichloroethane-d4 | 17060-07-0 | | | | 106.8 | 77 - 137 | | | | 01/30/11 |
| Toluene-d8 | 2037-26-5 | | | | 97 | 78 - 122 | | | | 01/30/11 |
| 4-Bromofluorobenzene | 460-00-4 | | | | 97.3 | 66 - 125 | | | | 01/30/11 |
| **MSD** | | | **QC Sample #47784** | | | | | | | |
| | | | **Original** | **111310018** | | | | **Paired** | **47783** | |
| 1,2-Dichloroethane-d4 | 17060-07-0 | | | | 108.3 | 77 - 137 | 1.40 | 30 | | 01/30/11 |
| Toluene-d8 | 2037-26-5 | | | | 96.8 | 78 - 122 | 0.20 | 30 | | 01/30/11 |
| 4-Bromofluorobenzene | 460-00-4 | | | | 96.7 | 66 - 125 | 0.60 | 30 | | 01/30/11 |

## Quality Control Report

**Attention** Michael Neely
**Department** Organic, Volatiles

**Group #** WSCF111310

**QC Batch** 175346 **Test** SW-846 8260B Volatiles, separate prep
**Associated Samples** 111310029, 111310030, 111310031, 111310032, 111310033, 111310034

| Analyte | CAS # | Original Found | QC Found | Units | % Recov | Limits | RPD | RPD Limit | RQ | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **SAMPLE** | | | **Sample #111310029** | | | | | | | |
| 1,2-Dichloroethane-d4 | 17060-07-0 | | | | 106.6 | 77 - 137 | | | | 01/30/11 |
| Toluene-d8 | 2037-26-5 | | | | 96.5 | 78 - 122 | | | | 01/30/11 |
| 4-Bromofluorobenzene | 460-00-4 | | | | 87.4 | 66 - 125 | | | | 01/30/11 |
| **SAMPLE** | | | **Sample #111310030** | | | | | | | |
| 1,2-Dichloroethane-d4 | 17060-07-0 | | | | 105.7 | 77 - 137 | | | | 01/31/11 |
| Toluene-d8 | 2037-26-5 | | | | 97.3 | 78 - 122 | | | | 01/31/11 |
| 4-Bromofluorobenzene | 460-00-4 | | | | 86.7 | 66 - 125 | | | | 01/31/11 |
| **SAMPLE** | | | **Sample #111310031** | | | | | | | |
| 1,2-Dichloroethane-d4 | 17060-07-0 | | | | 101.8 | 77 - 137 | | | | 01/31/11 |
| Toluene-d8 | 2037-26-5 | | | | 95.8 | 78 - 122 | | | | 01/31/11 |
| 4-Bromofluorobenzene | 460-00-4 | | | | 88.2 | 66 - 125 | | | | 01/31/11 |
| **SAMPLE** | | | **Sample #111310032** | | | | | | | |
| 1,2-Dichloroethane-d4 | 17060-07-0 | | | | 114.9 | 77 - 137 | | | | 01/31/11 |
| Toluene-d8 | 2037-26-5 | | | | 98.8 | 78 - 122 | | | | 01/31/11 |

## Quality Control Report

**Attention** Michael Neely
**Department** Organic, Volatiles

**Group #** WSCF111310

| Analyte | CAS # | Original Found | QC Found | Units | % Recov | Limits | RPD | RPD Limit | RQ | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| 4-Bromofluorobenzene | 460-00-4 | | | | 86.2 | 66 - 125 | | | | 01/31/11 |
| **SAMPLE** | | | **Sample #111310033** | | | | | | | |
| 1,2-Dichloroethane-d4 | 17060-07-0 | | | | 113.2 | 77 - 137 | | | | 01/31/11 |
| Toluene-d8 | 2037-26-5 | | | | 97.7 | 78 - 122 | | | | 01/31/11 |
| 4-Bromofluorobenzene | 460-00-4 | | | | 86 | 66 - 125 | | | | 01/31/11 |
| **SAMPLE** | | | **Sample #111310034** | | | | | | | |
| 1,2-Dichloroethane-d4 | 17060-07-0 | | | | 110.1 | 77 - 137 | | | | 01/31/11 |
| Toluene-d8 | 2037-26-5 | | | | 94.9 | 78 - 122 | | | | 01/31/11 |
| 4-Bromofluorobenzene | 460-00-4 | | | | 85.8 | 66 - 125 | | | | 01/31/11 |
| **BLANK** | | | **QC Sample #47785** | | | | | | | |
| 1,2-Dichloroethane-d4 | 17060-07-0 | | | | 104.6 | 77 - 137 | | | | 01/30/11 |
| Toluene-d8 | 2037-26-5 | | | | 95 | 78 - 122 | | | | 01/30/11 |
| 4-Bromofluorobenzene | 460-00-4 | | | | 91 | 66 - 125 | | | | 01/30/11 |
| **LCS** | | | **QC Sample #47786** | | | | | | | |
| 1,2-Dichloroethane-d4 | 17060-07-0 | | | | 106.2 | 77 - 137 | | | | 01/30/11 |
| Toluene-d8 | 2037-26-5 | | | | 97.9 | 78 - 122 | | | | 01/30/11 |
| 4-Bromofluorobenzene | 460-00-4 | | | | 96.2 | 66 - 125 | | | | 01/30/11 |
| **MS** | | | **QC Sample #47787** | | | | | | | |
| | | | **Original** | **111310029** | | | | | | |

## Quality Control Report

**Attention** Michael Neely
**Department** Organic, Volatiles

**Group #** WSCF111310

| Analyte | CAS # | Original Found | QC Found | Units | % Recov | Limits | RPD | RPD Limit | RQ | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 | 17060-07-0 | | | | 108.1 | 77 - 137 | | | | 01/31/11 |
| Toluene-d8 | 2037-26-5 | | | | 99.6 | 78 - 122 | | | | 01/31/11 |
| 4-Bromofluorobenzene | 460-00-4 | | | | 92.7 | 66 - 125 | | | | 01/31/11 |
| **MSD** | | | **QC Sample #47788** | | | | | | | |
| | | | **Original** | **111310029** | | | | **Paired** | **47787** | |
| 1,2-Dichloroethane-d4 | 17060-07-0 | | | | 106.5 | 77 - 137 | 1.50 | 30 | | 01/31/11 |
| Toluene-d8 | 2037-26-5 | | | | 98.4 | 78 - 122 | 1.20 | 30 | | 01/31/11 |
| 4-Bromofluorobenzene | 460-00-4 | | | | 91.7 | 66 - 125 | 1.10 | 30 | | 01/31/11 |

## Quality Control Report

**Attention** Michael Neely
**Department** Organic, Volatiles

**Group #** WSCF111311

**QC Batch** 175330
**Associated Samples** 111311001, 111311002, 111311003

**Test** SW-846 8260B Volatiles, separate prep

| Analyte | CAS # | Original Found | QC Found | Units | % Recov | Limits | RPD | RPD Limit | RQ | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **BLANK** | | | **QC Sample #47744** | | | | | | | |
| 1,1-Dichloroethene | 75-35-4 | | <1 | ug/L | | | | | U | 01/28/11 |
| Trichloroethene | 79-01-6 | | <1 | ug/L | | | | | U | 01/28/11 |
| Benzene | 71-43-2 | | <1 | ug/L | | | | | U | 01/28/11 |
| Toluene | 108-88-3 | | <1 | ug/L | | | | | U | 01/28/11 |
| 1,1-Dichloroethane | 75-34-3 | | <1 | ug/L | | | | | U | 01/28/11 |
| Methyl isobutyl ketone | 108-10-1 | | <1 | ug/L | | | | | U | 01/28/11 |
| Carbon tetrachloride | 56-23-5 | | <1 | ug/L | | | | | U | 01/28/11 |
| Acetone | 67-64-1 | | <1 | ug/L | | | | | U | 01/28/11 |
| 1,1,1-Trichloroethane | 71-55-6 | | <1 | ug/L | | | | | U | 01/28/11 |
| Methylene chloride | 75-09-2 | | <1 | ug/L | | | | | U | 01/28/11 |
| Methyl ethyl ketone | 78-93-3 | | <1 | ug/L | | | | | U | 01/28/11 |
| **LCS** | | | **QC Sample #47745** | | | | | | | |
| 1,1-Dichloroethene | 75-35-4 | | 29 | ug/L | 117.4 | 75 - 125 | | | | 01/28/11 |
| Trichloroethene | 79-01-6 | | 22 | ug/L | 87.5 | 75 - 125 | | | | 01/28/11 |
| Benzene | 71-43-2 | | 22 | ug/L | 89.6 | 75 - 125 | | | | 01/28/11 |
| Toluene | 108-88-3 | | 22 | ug/L | 89.6 | 75 - 125 | | | | 01/28/11 |
| **MS** | | | **QC Sample #47746** | | | | | | | |
| | | | **Original 111301001** | | | | | | | |

## Quality Control Report

**Attention** Michael Neely
**Department** Organic, Volatiles

**Group #** WSCF111311

| Analyte | CAS # | Original Found | QC Found | Units | % Recov | Limits | RPD | RPD Limit | RQ | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 75-35-4 | | 28 | ug/L | 113.4 | 75 - 125 | | | | 01/28/11 |
| Trichloroethene | 79-01-6 | | 20 | ug/L | 79.5 | 75 - 125 | | | | 01/28/11 |
| Benzene | 71-43-2 | | 22 | ug/L | 87.2 | 75 - 125 | | | | 01/28/11 |
| Toluene | 108-88-3 | | 21 | ug/L | 82.4 | 75 - 125 | | | | 01/28/11 |
| **MSD** | | | **QC Sample #47747** | | | | | | | |
| | | | **Original 111301001** | | | | | **Paired** | **47746** | |
| 1,1-Dichloroethene | 75-35-4 | | 31 | ug/L | 123 | 75 - 125 | 8.10 | 20 | | 01/28/11 |
| Trichloroethene | 79-01-6 | | 20 | ug/L | 79.2 | 75 - 125 | 0.40 | 20 | | 01/28/11 |
| Benzene | 71-43-2 | | 22 | ug/L | 86.6 | 75 - 125 | 0.70 | 20 | | 01/28/11 |
| Toluene | 108-88-3 | | 21 | ug/L | 85.5 | 75 - 125 | 3.70 | 20 | | 01/28/11 |

## Quality Control Report

**Attention** Michael Neely
**Department** Organic, Volatiles

**Group #** WSCF111311

**QC Batch** 175330
**Associated Samples** 111311001, 111311002, 111311003

**Test** SW-846 8260B Volatiles, separate prep

| Analyte | CAS # | Original Found | QC Found | Units | % Recov | Limits | RPD | RPD Limit | RQ | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **SAMPLE** | | | **Sample #111311001** | | | | | | | |
| 1,2-Dichloroethane-d4 | 17060-07-0 | | | | 103.6 | 75 - 125 | | | | 01/28/11 |
| Toluene-d8 | 2037-26-5 | | | | 93.6 | 75 - 125 | | | | 01/28/11 |
| 4-Bromofluorobenzene | 460-00-4 | | | | 76.7 | 75 - 125 | | | | 01/28/11 |
| **SAMPLE** | | | **Sample #111311002** | | | | | | | |
| 1,2-Dichloroethane-d4 | 17060-07-0 | | | | 105 | 75 - 125 | | | | 01/28/11 |
| Toluene-d8 | 2037-26-5 | | | | 94.8 | 75 - 125 | | | | 01/28/11 |
| 4-Bromofluorobenzene | 460-00-4 | | | | 77.6 | 75 - 125 | | | | 01/28/11 |
| **SAMPLE** | | | **Sample #111311003** | | | | | | | |
| 1,2-Dichloroethane-d4 | 17060-07-0 | | | | 100.5 | 75 - 125 | | | | 01/28/11 |
| Toluene-d8 | 2037-26-5 | | | | 95.3 | 75 - 125 | | | | 01/28/11 |
| 4-Bromofluorobenzene | 460-00-4 | | | | 77.1 | 75 - 125 | | | | 01/28/11 |
| **BLANK** | | | **QC Sample #47744** | | | | | | | |
| 1,2-Dichloroethane-d4 | 17060-07-0 | | | | 103.3 | 75 - 125 | | | | 01/28/11 |
| Toluene-d8 | 2037-26-5 | | | | 93.8 | 75 - 125 | | | | 01/28/11 |

## Quality Control Report

**Attention** Michael Neely
**Department** Organic, Volatiles

**Group #** WSCF111311

| Analyte | CAS # | Original Found | QC Found | Units | % Recov | Limits | RPD | RPD Limit | RQ | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| 4-Bromofluorobenzene | 460-00-4 | | | | 76.7 | 75 - 125 | | | | 01/28/11 |
| **LCS** | | | **QC Sample #47745** | | | | | | | |
| 1,2-Dichloroethane-d4 | 17060-07-0 | | | | 99.8 | 75 - 125 | | | | 01/28/11 |
| Toluene-d8 | 2037-26-5 | | | | 99.8 | 75 - 125 | | | | 01/28/11 |
| 4-Bromofluorobenzene | 460-00-4 | | | | 100.4 | 75 - 125 | | | | 01/28/11 |
| **MS** | | | **QC Sample #47746** | | | | | | | |
| | | | **Original** | **111301001** | | | | | | |
| 1,2-Dichloroethane-d4 | 17060-07-0 | | | | 102.5 | 75 - 125 | | | | 01/28/11 |
| Toluene-d8 | 2037-26-5 | | | | 98.7 | 75 - 125 | | | | 01/28/11 |
| 4-Bromofluorobenzene | 460-00-4 | | | | 100.6 | 75 - 125 | | | | 01/28/11 |
| **MSD** | | | **QC Sample #47747** | | | | | | | |
| | | | **Original** | **111301001** | | | | | **Paired** | **47746** |
| 1,2-Dichloroethane-d4 | 17060-07-0 | | | | 99 | 75 - 125 | 3.50 | 20 | | 01/28/11 |
| Toluene-d8 | 2037-26-5 | | | | 100.4 | 75 - 125 | 1.70 | 20 | | 01/28/11 |
| 4-Bromofluorobenzene | 460-00-4 | | | | 101.5 | 75 - 125 | 0.90 | 20 | | 01/28/11 |

Date: 28 February 2011
To: CH2M Hill (technical representative)
From: Analytical Quality Associates, Inc.
Project: CPP 600 Area
Subject: Semivolatile Organics - Sample Data Groups (SDGs) WSCF111310 and WSCF111311

## INTRODUCTION

This memorandum presents the results of data validation for SDGs WSCF111310 and WSCF111311 prepared by WSCF. 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 |
|---|---|---|---|---|
| B2BBH0 | 1/26/2011 | Soil | C | 8270D |
| B2BBH1 | 1/26/2011 | Soil | C | 8270D |
| B2BBH2 | 1/26/2011 | Soil | C | 8270D |
| B2BBH3 | 1/26/2011 | Soil | C | 8270D |
| B2BBH4 | 1/26/2011 | Soil | C | 8270D |
| B2BBF0 | 1/26/2011 | Soil | C | 8270D |
| B2BBF1 | 1/26/2011 | Soil | C | 8270D |
| B2BBF2 | 1/26/2011 | Soil | C | 8270D |
| B2BBF3 | 1/26/2011 | Soil | C | 8270D |
| B2BBF4 | 1/26/2011 | Soil | C | 8270D |
| B2BBF5 | 1/26/2011 | Soil | C | 8270D |
| B2BBF6 | 1/26/2011 | Soil | C | 8270D |
| B2BBF7 | 1/26/2011 | Soil | C | 8270D |
| B2BBF8 | 1/26/2011 | Soil | C | 8270D |
| B2BBF9 | 1/26/2011 | Soil | C | 8270D |
| B2BBD8 | 1/26/2011 | Soil | C | 8270D |
| B2BBD9 | 1/26/2011 | Soil | C | 8270D |
| B2BBK4 | 1/26/2011 | Water | C | 8270D |

Data validation was conducted in accordance with the CHPRC validation statement of work and the Hanford Facility Dangerous Waste Closure/Postclosure Plan for the 600 Area Purgewater Storage and Treatment Facility, DOE/RL-2008-73, Rev. 0 (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 semivolatile organics in soil are extraction within 14 days of sample collection and analysis within 40 days of sample extraction. The holding time requirements for semivolatile organics in water are extraction within 7 days of sample collection and analysis within 40 days 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 with the following exception. Laboratory blank data for total methylphenols was not provided. All total methylphenols sample results were non-detects and should be qualified as estimates and flagged "UJ."

### 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 70% to 130%. The limits for reported analytes not listed in the SAP are specified by the DV procedure.

**Surrogates**

All surrogate recoveries were acceptable with the following exceptions.

For sample B2BBH0, the 2-fluorobiphenyl recovery was below the lower acceptance limit. The 1,4-dichlorobenzene and 1,2,4-trichlorobenzene results for sample B2BBH0 were non-detects and should be qualified as estimates and flagged "UJ."

For samples B2BBH1 and B2BBF2, the 2-fluorophenol, phenol-d5, nitrobenzene-d5 and 2-fluorobiphenyl recoveries were below the lower acceptance limits, and the recoveries for 2,4,6-tribromophenol were <20%. The 2-chlorophenol, 4-chloro-3-methylphenol, phenol, 4-nitrophenol, total methylphenols, n-nitroso-di-n-propylamine, 2,4-dinitrotoluene, 1,4-dichlorobenzene and 1,2,4-trichlorobenzene results for samples B2BBH1 and B2BBF2 were non-detects and should be qualified as estimates and flagged "UJ." The pentachlorophenol results for samples B2BBH1 and B2BBF2 were non-detects and should be qualified as unusable and flagged "UR."

For sample B2BBF3, the nitrobenzene-d5 and 2-fluorobiphenyl recoveries were below the lower acceptance limits. The n-nitroso-di-n-propylamine, 2,4-dinitrotoluene, 4-nitrophenol, 1,4-dichlorobenzene and 1,2,4-trichlorobenzene results for sample B2BBF3 were non-detects and should be qualified as estimates and flagged "UJ."

For sample B2BBF4, the 2-fluorobiphenyl recovery was below the lower acceptance limit. The 1,4-dichlorobenzene and 1,2,4-trichlorobenzene results for sample B2BBF4 were non-detects and should be qualified as estimates and flagged "UJ."

For sample B2BBK4, the phenol-d5 recovery was below the lower acceptance limit. The phenol, 4-nitrophenol and total methylphenols results for sample B2BBK4 were non-detects and should be qualified as estimates and flagged "UJ."

It should be noted that per client request DV procedure HNF-20433, Rev 0 was used for target analyte associations to the surrogates.

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

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

For SDG WSCF111311, the phenol (that represents SAP analyte total methylphenols) MS/MSD recoveries were below the SAP lower acceptance limit. The total methylphenols result for sample B2BBK4 was a non-detect and should be qualified as an estimate and flagged "UJ."

**Laboratory Control Samples (LCSs)**

All LCS recoveries were acceptable with the following exceptions.

For SDG WSCF111311, the phenol (that represents SAP analyte total methylphenols) LCS recovery was below the SAP lower acceptance limit. The total methylphenols result for sample B2BBK4 was a non-detect and should be qualified as an estimate and flagged "UJ."

- **Precision**

Precision is evaluated by reviewing MS/MSD results, field duplicate sample results, field split sample results. These QC results provide information on the laboratory reproducibility and whether sampling activities are adequate to acquire consistent sample results. According to the SAP, the relative percent difference (RPD) limits are ±30%. The limits for reported analytes not listed in the SAP are specified by the DV procedure.

**MS/MSD Samples**

All MS/MSD relative percent difference values were acceptable.

**Field Duplicate Samples**

No field duplicates were submitted for validation.

**Field Split Samples**

No field splits were submitted for validation.

- **Internal Standards**

Internal standard performance criteria ensure that GC/MS sensitivity and response are stable during each analysis. Internal standards are added to all samples, including QC samples, prior to analysis.

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 were below the CRDLs.

- **Completeness**

SDGs WSCF111310 and WSCF111311 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 99%.

## MAJOR DEFICIENCIES

Major deficiencies leading to qualification of pentachlorophenol results for samples B2BBH1 and B2BBF2 as unusable were due to severe surrogate recovery infractions.

## MINOR DEFICIENCIES

Multiple minor deficiencies leading to qualification of sample results as estimates occurred. See the table in Appendix 2 for a listing of all affected sample results.

## REFERENCES

HNF-20433, Rev. 0, *Data Validation Procedure for Chemical Analyses*, June 2004

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

DOE/RL-2008-73, Rev. 0, *Hanford Facility Dangerous Waste Closure/Postclosure Plan for the 600 Area Purgewater Storage and Treatment Facility*, February 2010

# 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

| Semivolatile Organics Data Qualification Summary | | | |
|---|---|---|---|
| SDGs: WSCF111310, WSCF111311 | Reviewer: AQA | Project: CPP 600 AREA | Page 1 of 1 |
| **Analyte(s)** | **Qualifier** | **Samples Affected** | **Reason** |
| Methylphenols, Total | UJ | B2BBH0, B2BBH2, B2BBH3, B2BBH4, B2BBF0, B2BBF1, B2BBF3, B2BBF4, B2BBF5, B2BBF6, B2BBF7, B2BBF8, B2BBF9, B2BBD8, B2BBD9 | Lack of laboratory blank data |
| Methylphenols, Total | UJ | B2BBH1, B2BBF2 | Lack of laboratory blank data and low surrogate recovery |
| 1,4-Dichlorobenzene<br>1,2,4-Trichlorobenzene | UJ | B2BBH0 | Low surrogate recovery |
| 2-Chlorophenol<br>4-Chloro-3-methylphenol<br>Phenol<br>4-Nitrophenol<br>n-Nitroso-di-n-propylamine<br>2,4-Dinitrotoluene<br>1,4-Dichlorobenzene<br>1,2,4-Trichlorobenzene | UJ | B2BBH1, B2BBF2 | Low surrogate recoveries |
| Pentachlorophenol | **UR** | B2BBH1, B2BBF2 | Very low surrogate recoveries |
| 4-Nitrophenol<br>n-Nitroso-di-n-propylamine<br>2,4-Dinitrotoluene<br>1,4-Dichlorobenzene<br>1,2,4-Trichlorobenzene | UJ | B2BBF3 | Low surrogate recoveries |
| 1,4-Dichlorobenzene<br>1,2,4-Trichlorobenzene | UJ | B2BBF4 | Low surrogate recovery |
| Methylphenols, Total | UJ | B2BBK4 | Lack of laboratory blank data, low surrogate recovery, and low MS/MSD and LCS recoveries |
| Phenol<br>4-Nitrophenol | UJ | B2BBK4 | Low surrogate recovery |

Comments: None

# Appendix 3

Annotated Laboratory Reports

# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Organic, Semivolatiles

**Group #** WSCF111310

**Sample #** 111310001
**SAF#** F11-042
**Sample ID** B2BBH0

**Matrix** SOIL
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **8270 Prep** | | | | | | | | | | **01/27/11** |
| **SW-846 8270D** | | | | | | | | | | |
| 4-Nitrophenol | 100-02-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 1,4-Dichlorobenzene | 106-46-7 | LA-523-456 | U | <200 UJ | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Phenol | 108-95-2 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 1,2,4-Trichlorobenzene | 120-82-1 | LA-523-456 | U | <200 UJ | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 2,4-Dinitrotoluene | 121-14-2 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Pyrene | 129-00-0 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 4-Chloro-3-methylphenol | 59-50-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| n-Nitroso-di-n-propylamine | 621-64-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Acenaphthene | 83-32-9 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Pentachlorophenol | 87-86-5 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 2-Chlorophenol | 95-57-8 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Methylphenols, Total | 1319-77-3 | LA-523-456 | U | <200 UJ | | ug/kg | 1 | 200 | 900 | 02/01/11 |

LS
2-28-2011

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

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

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

# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Organic, Semivolatiles

**Group #** WSCF111310

**Sample #** 111310002
**SAF#** F11-042
**Sample ID** B2BBH1

**Matrix** SOIL
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **8270 Prep** | | | | | | | | | | **01/27/11** |
| **SW-846 8270D** | | | | | | | | | | |
| 4-Nitrophenol | 100-02-7 | LA-523-456 | U | <200 UJ | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 1,4-Dichlorobenzene | 106-46-7 | LA-523-456 | U | <200 UJ | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Phenol | 108-95-2 | LA-523-456 | U | <200 UJ | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 1,2,4-Trichlorobenzene | 120-82-1 | LA-523-456 | U | <200 UJ | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 2,4-Dinitrotoluene | 121-14-2 | LA-523-456 | U | <200 UJ | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Pyrene | 129-00-0 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 4-Chloro-3-methylphenol | 59-50-7 | LA-523-456 | U | <200 UJ | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| n-Nitroso-di-n-propylamine | 621-64-7 | LA-523-456 | U | <200 UJ | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Acenaphthene | 83-32-9 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Pentachlorophenol | 87-86-5 | LA-523-456 | U | <200 UR | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 2-Chlorophenol | 95-57-8 | LA-523-456 | U | <200 UJ | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Methylphenols, Total | 1319-77-3 | LA-523-456 | U | <200 UJ | | ug/kg | 1 | 200 | 900 | 02/01/11 |

LS
2-28-2011

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

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

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

# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Organic, Semivolatiles

**Group #** WSCF111310

**Sample #** 111310003
**SAF#** F11-042
**Sample ID** B2BBH2

**Matrix** SOIL
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **8270 Prep** | | | | | | | | | | **01/27/11** |
| **SW-846 8270D** | | | | | | | | | | |
| 4-Nitrophenol | 100-02-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 1,4-Dichlorobenzene | 106-46-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Phenol | 108-95-2 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 1,2,4-Trichlorobenzene | 120-82-1 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 2,4-Dinitrotoluene | 121-14-2 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Pyrene | 129-00-0 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 4-Chloro-3-methylphenol | 59-50-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| n-Nitroso-di-n-propylamine | 621-64-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Acenaphthene | 83-32-9 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Pentachlorophenol | 87-86-5 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 2-Chlorophenol | 95-57-8 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Methylphenols, Total | 1319-77-3 | LA-523-456 | U | <200 | UJ | ug/kg | 1 | 200 | 900 | 02/01/11 |

LS
2-28-2011

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

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

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

# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Organic, Semivolatiles

**Group #** WSCF111310

**Sample #** 111310004
**SAF#** F11-042
**Sample ID** B2BBH3

**Matrix** SOIL
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **8270 Prep** | | | | | | | | | | **01/27/11** |
| **SW-846 8270D** | | | | | | | | | | |
| 4-Nitrophenol | 100-02-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 1,4-Dichlorobenzene | 106-46-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Phenol | 108-95-2 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 1,2,4-Trichlorobenzene | 120-82-1 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 2,4-Dinitrotoluene | 121-14-2 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Pyrene | 129-00-0 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 4-Chloro-3-methylphenol | 59-50-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| n-Nitroso-di-n-propylamine | 621-64-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Acenaphthene | 83-32-9 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Pentachlorophenol | 87-86-5 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 2-Chlorophenol | 95-57-8 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Methylphenols, Total | 1319-77-3 | LA-523-456 | U | <200 | UJ | ug/kg | 1 | 200 | 900 | 02/01/11 |

LS
2-28-2011

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

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

# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Organic, Semivolatiles

**Group #** WSCF111310

**Sample #** 111310005
**SAF#** F11-042
**Sample ID** B2BBH4

**Matrix** SOIL
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **8270 Prep** | | | | | | | | | | **01/27/11** |
| **SW-846 8270D** | | | | | | | | | | |
| 4-Nitrophenol | 100-02-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 1,4-Dichlorobenzene | 106-46-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Phenol | 108-95-2 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 1,2,4-Trichlorobenzene | 120-82-1 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 2,4-Dinitrotoluene | 121-14-2 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Pyrene | 129-00-0 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 4-Chloro-3-methylphenol | 59-50-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| n-Nitroso-di-n-propylamine | 621-64-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Acenaphthene | 83-32-9 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Pentachlorophenol | 87-86-5 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 2-Chlorophenol | 95-57-8 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Methylphenols, Total | 1319-77-3 | LA-523-456 | U | <200 | UJ | ug/kg | 1 | 200 | 900 | 02/01/11 |

LS
2-28-2011

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

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E - The calibration exceeds the calibration range (GC/MS).
J - Analyte < lowest calibration but >= MDL.
N - Presumed evidence based on MS library search(GC/MS only)

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

# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Organic, Semivolatiles

**Group #** WSCF111310

**Sample #** 111310006
**SAF#** F11-042
**Sample ID** B2BBF0

**Matrix** SOIL
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **8270 Prep** | | | | | | | | | | **01/27/11** |
| **SW-846 8270D** | | | | | | | | | | |
| 4-Nitrophenol | 100-02-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 01/31/11 |
| 1,4-Dichlorobenzene | 106-46-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 01/31/11 |
| Phenol | 108-95-2 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 01/31/11 |
| 1,2,4-Trichlorobenzene | 120-82-1 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 01/31/11 |
| 2,4-Dinitrotoluene | 121-14-2 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 01/31/11 |
| Pyrene | 129-00-0 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 01/31/11 |
| 4-Chloro-3-methylphenol | 59-50-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 01/31/11 |
| n-Nitroso-di-n-propylamine | 621-64-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 01/31/11 |
| Acenaphthene | 83-32-9 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 01/31/11 |
| Pentachlorophenol | 87-86-5 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 01/31/11 |
| 2-Chlorophenol | 95-57-8 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 01/31/11 |
| Methylphenols, Total | 1319-77-3 | LA-523-456 | U | <200 | UJ | ug/kg | 1 | 200 | 900 | 01/31/11 |

LS
2-28-2011

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

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

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

# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Organic, Semivolatiles

**Group #** WSCF111310

**Sample #** 111310007
**SAF#** F11-042
**Sample ID** B2BBF1

**Matrix** SOIL
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **8270 Prep** | | | | | | | | | | **01/27/11** |
| **SW-846 8270D** | | | | | | | | | | |
| 4-Nitrophenol | 100-02-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 01/31/11 |
| 1,4-Dichlorobenzene | 106-46-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 01/31/11 |
| Phenol | 108-95-2 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 01/31/11 |
| 1,2,4-Trichlorobenzene | 120-82-1 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 01/31/11 |
| 2,4-Dinitrotoluene | 121-14-2 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 01/31/11 |
| Pyrene | 129-00-0 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 01/31/11 |
| 4-Chloro-3-methylphenol | 59-50-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 01/31/11 |
| n-Nitroso-di-n-propylamine | 621-64-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 01/31/11 |
| Acenaphthene | 83-32-9 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 01/31/11 |
| Pentachlorophenol | 87-86-5 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 01/31/11 |
| 2-Chlorophenol | 95-57-8 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 01/31/11 |
| Methylphenols, Total | 1319-77-3 | LA-523-456 | U | <200 | UJ | ug/kg | 1 | 200 | 900 | 01/31/11 |

LS
2-28-2011

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

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

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

# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Organic, Semivolatiles

**Group #** WSCF111310

**Sample #** 111310008
**SAF#** F11-042
**Sample ID** B2BBF2

**Matrix** SOIL
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **8270 Prep** | | | | | | | | | | **01/27/11** |
| **SW-846 8270D** | | | | | | | | | | |
| 4-Nitrophenol | 100-02-7 | LA-523-456 | U | <200 UJ | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 1,4-Dichlorobenzene | 106-46-7 | LA-523-456 | U | <200 UJ | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Phenol | 108-95-2 | LA-523-456 | U | <200 UJ | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 1,2,4-Trichlorobenzene | 120-82-1 | LA-523-456 | U | <200 UJ | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 2,4-Dinitrotoluene | 121-14-2 | LA-523-456 | U | <200 UJ | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Pyrene | 129-00-0 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 4-Chloro-3-methylphenol | 59-50-7 | LA-523-456 | U | <200 UJ | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| n-Nitroso-di-n-propylamine | 621-64-7 | LA-523-456 | U | <200 UJ | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Acenaphthene | 83-32-9 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Pentachlorophenol | 87-86-5 | LA-523-456 | U | <200 UR | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 2-Chlorophenol | 95-57-8 | LA-523-456 | U | <200 UJ | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Methylphenols, Total | 1319-77-3 | LA-523-456 | U | <200 UJ | | ug/kg | 1 | 200 | 900 | 02/01/11 |

LS
2-28-2011

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

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

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

# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Organic, Semivolatiles

**Group #** WSCF111310

**Sample #** 111310009
**SAF#** F11-042
**Sample ID** B2BBF3

**Matrix** SOIL
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **8270 Prep** | | | | | | | | | | **01/27/11** |
| **SW-846 8270D** | | | | | | | | | | |
| 4-Nitrophenol | 100-02-7 | LA-523-456 | U | <200 UJ | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 1,4-Dichlorobenzene | 106-46-7 | LA-523-456 | U | <200 UJ | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Phenol | 108-95-2 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 1,2,4-Trichlorobenzene | 120-82-1 | LA-523-456 | U | <200 UJ | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 2,4-Dinitrotoluene | 121-14-2 | LA-523-456 | U | <200 UJ | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Pyrene | 129-00-0 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 4-Chloro-3-methylphenol | 59-50-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| n-Nitroso-di-n-propylamine | 621-64-7 | LA-523-456 | U | <200 UJ | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Acenaphthene | 83-32-9 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Pentachlorophenol | 87-86-5 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 2-Chlorophenol | 95-57-8 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Methylphenols, Total | 1319-77-3 | LA-523-456 | U | <200 UJ | | ug/kg | 1 | 200 | 900 | 02/01/11 |

LS
2-28-2011

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

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

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

# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Organic, Semivolatiles

**Group #** WSCF111310

**Sample #** 111310010
**SAF#** F11-042
**Sample ID** B2BBF4

**Matrix** SOIL
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **8270 Prep** | | | | | | | | | | **01/27/11** |
| **SW-846 8270D** | | | | | | | | | | |
| 4-Nitrophenol | 100-02-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 1,4-Dichlorobenzene | 106-46-7 | LA-523-456 | U | <200 UJ | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Phenol | 108-95-2 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 1,2,4-Trichlorobenzene | 120-82-1 | LA-523-456 | U | <200 UJ | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 2,4-Dinitrotoluene | 121-14-2 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Pyrene | 129-00-0 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 4-Chloro-3-methylphenol | 59-50-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| n-Nitroso-di-n-propylamine | 621-64-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Acenaphthene | 83-32-9 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Pentachlorophenol | 87-86-5 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 2-Chlorophenol | 95-57-8 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Methylphenols, Total | 1319-77-3 | LA-523-456 | U | <200 UJ | | ug/kg | 1 | 200 | 900 | 02/01/11 |

LS
2-28-2011

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

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

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

# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Organic, Semivolatiles

**Group #** WSCF111310

**Sample #** 111310011
**SAF#** F11-042
**Sample ID** B2BBF5

**Matrix** SOIL
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **8270 Prep** | | | | | | | | | | **01/27/11** |
| **SW-846 8270D** | | | | | | | | | | |
| 4-Nitrophenol | 100-02-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 1,4-Dichlorobenzene | 106-46-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Phenol | 108-95-2 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 1,2,4-Trichlorobenzene | 120-82-1 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 2,4-Dinitrotoluene | 121-14-2 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Pyrene | 129-00-0 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 4-Chloro-3-methylphenol | 59-50-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| n-Nitroso-di-n-propylamine | 621-64-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Acenaphthene | 83-32-9 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Pentachlorophenol | 87-86-5 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 2-Chlorophenol | 95-57-8 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Methylphenols, Total | 1319-77-3 | LA-523-456 | U | <200 | UJ | ug/kg | 1 | 200 | 900 | 02/01/11 |

LS
2-28-2011

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

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

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

# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Organic, Semivolatiles

**Group #** WSCF111310

**Sample #** 111310012
**SAF#** F11-042
**Sample ID** B2BBF6

**Matrix** SOIL
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **8270 Prep** | | | | | | | | | | **01/27/11** |
| **SW-846 8270D** | | | | | | | | | | |
| 4-Nitrophenol | 100-02-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 1,4-Dichlorobenzene | 106-46-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Phenol | 108-95-2 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 1,2,4-Trichlorobenzene | 120-82-1 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 2,4-Dinitrotoluene | 121-14-2 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Pyrene | 129-00-0 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 4-Chloro-3-methylphenol | 59-50-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| n-Nitroso-di-n-propylamine | 621-64-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Acenaphthene | 83-32-9 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Pentachlorophenol | 87-86-5 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 2-Chlorophenol | 95-57-8 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Methylphenols, Total | 1319-77-3 | LA-523-456 | U | <200 | UJ | ug/kg | 1 | 200 | 900 | 02/01/11 |

LS
2-28-2011

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

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D - Analyte was reported at a secondary diltution factor.
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J - Analyte < lowest calibration but >= MDL.
N - Presumed evidence based on MS library search(GC/MS only)

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

# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Organic, Semivolatiles

**Group #** WSCF111310

**Sample #** 111310013
**SAF#** F11-042
**Sample ID** B2BBF7

**Matrix** SOIL
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **8270 Prep** | | | | | | | | | | **01/27/11** |
| **SW-846 8270D** | | | | | | | | | | |
| 4-Nitrophenol | 100-02-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 1,4-Dichlorobenzene | 106-46-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Phenol | 108-95-2 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 1,2,4-Trichlorobenzene | 120-82-1 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 2,4-Dinitrotoluene | 121-14-2 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Pyrene | 129-00-0 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 4-Chloro-3-methylphenol | 59-50-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| n-Nitroso-di-n-propylamine | 621-64-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Acenaphthene | 83-32-9 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Pentachlorophenol | 87-86-5 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| 2-Chlorophenol | 95-57-8 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 02/01/11 |
| Methylphenols, Total | 1319-77-3 | LA-523-456 | U | <200 | UJ | ug/kg | 1 | 200 | 900 | 02/01/11 |

LS
2-28-2011

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

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

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

# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Organic, Semivolatiles

**Group #** WSCF111310

**Sample #** 111310014
**SAF#** F11-042
**Sample ID** B2BBF8

**Matrix** SOIL
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **8270 Prep** | | | | | | | | | | **01/27/11** |
| **SW-846 8270D** | | | | | | | | | | |
| 4-Nitrophenol | 100-02-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 800 | 02/01/11 |
| 1,4-Dichlorobenzene | 106-46-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 800 | 02/01/11 |
| Phenol | 108-95-2 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 800 | 02/01/11 |
| 1,2,4-Trichlorobenzene | 120-82-1 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 800 | 02/01/11 |
| 2,4-Dinitrotoluene | 121-14-2 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 800 | 02/01/11 |
| Pyrene | 129-00-0 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 800 | 02/01/11 |
| 4-Chloro-3-methylphenol | 59-50-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 800 | 02/01/11 |
| n-Nitroso-di-n-propylamine | 621-64-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 800 | 02/01/11 |
| Acenaphthene | 83-32-9 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 800 | 02/01/11 |
| Pentachlorophenol | 87-86-5 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 800 | 02/01/11 |
| 2-Chlorophenol | 95-57-8 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 800 | 02/01/11 |
| Methylphenols, Total | 1319-77-3 | LA-523-456 | U | <200 | UJ | ug/kg | 1 | 200 | 800 | 02/01/11 |

LS
2-28-2011

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

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

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

# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Organic, Semivolatiles

**Group #** WSCF111310

**Sample #** 111310015
**SAF#** F11-042
**Sample ID** B2BBF9

**Matrix** SOIL
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **8270 Prep** | | | | | | | | | | **01/27/11** |
| **SW-846 8270D** | | | | | | | | | | |
| 4-Nitrophenol | 100-02-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 800 | 02/01/11 |
| 1,4-Dichlorobenzene | 106-46-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 800 | 02/01/11 |
| Phenol | 108-95-2 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 800 | 02/01/11 |
| 1,2,4-Trichlorobenzene | 120-82-1 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 800 | 02/01/11 |
| 2,4-Dinitrotoluene | 121-14-2 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 800 | 02/01/11 |
| Pyrene | 129-00-0 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 800 | 02/01/11 |
| 4-Chloro-3-methylphenol | 59-50-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 800 | 02/01/11 |
| n-Nitroso-di-n-propylamine | 621-64-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 800 | 02/01/11 |
| Acenaphthene | 83-32-9 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 800 | 02/01/11 |
| Pentachlorophenol | 87-86-5 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 800 | 02/01/11 |
| 2-Chlorophenol | 95-57-8 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 800 | 02/01/11 |
| Methylphenols, Total | 1319-77-3 | LA-523-456 | U | <200 | UJ | ug/kg | 1 | 200 | 800 | 02/01/11 |

LS
2-28-2011

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

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

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

# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Organic, Semivolatiles

**Group #** WSCF111310

**Sample #** 111310016
**SAF#** F11-042
**Sample ID** B2BBD8

**Matrix** SOIL
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **8270 Prep** | | | | | | | | | | **01/27/11** |
| **SW-846 8270D** | | | | | | | | | | |
| 4-Nitrophenol | 100-02-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 01/31/11 |
| 1,4-Dichlorobenzene | 106-46-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 01/31/11 |
| Phenol | 108-95-2 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 01/31/11 |
| 1,2,4-Trichlorobenzene | 120-82-1 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 01/31/11 |
| 2,4-Dinitrotoluene | 121-14-2 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 01/31/11 |
| Pyrene | 129-00-0 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 01/31/11 |
| 4-Chloro-3-methylphenol | 59-50-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 01/31/11 |
| n-Nitroso-di-n-propylamine | 621-64-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 01/31/11 |
| Acenaphthene | 83-32-9 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 01/31/11 |
| Pentachlorophenol | 87-86-5 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 01/31/11 |
| 2-Chlorophenol | 95-57-8 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 01/31/11 |
| Methylphenols, Total | 1319-77-3 | LA-523-456 | U | <200 | UJ | ug/kg | 1 | 200 | 900 | 01/31/11 |

LS
2-28-2011

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

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

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

# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Organic, Semivolatiles

**Group #** WSCF111310

**Sample #** 111310017
**SAF#** F11-042
**Sample ID** B2BBD9

**Matrix** SOIL
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **8270 Prep** | | | | | | | | | | **01/27/11** |
| **SW-846 8270D** | | | | | | | | | | |
| 4-Nitrophenol | 100-02-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 01/31/11 |
| 1,4-Dichlorobenzene | 106-46-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 01/31/11 |
| Phenol | 108-95-2 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 01/31/11 |
| 1,2,4-Trichlorobenzene | 120-82-1 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 01/31/11 |
| 2,4-Dinitrotoluene | 121-14-2 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 01/31/11 |
| Pyrene | 129-00-0 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 01/31/11 |
| 4-Chloro-3-methylphenol | 59-50-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 01/31/11 |
| n-Nitroso-di-n-propylamine | 621-64-7 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 01/31/11 |
| Acenaphthene | 83-32-9 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 01/31/11 |
| Pentachlorophenol | 87-86-5 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 01/31/11 |
| 2-Chlorophenol | 95-57-8 | LA-523-456 | U | <200 | | ug/kg | 1 | 200 | 900 | 01/31/11 |
| Methylphenols, Total | 1319-77-3 | LA-523-456 | U | <200 | UJ | ug/kg | 1 | 200 | 900 | 01/31/11 |

LS
2-28-2011

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

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D - Analyte was reported at a secondary diltution factor.
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PQL is equivalent to Estimated Quantitation Limit (EQL)

# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Organic, Semivolatiles

**Group #** WSCF111311

**Sample #** 111311001
**SAF#** F11-043
**Sample ID** B2BBK4

**Matrix** WATER
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **8270 Prep** | | | | | | | | | | **02/02/11** |
| **SW-846 8270D** | | | | | | | | | | |
| 4-Nitrophenol | 100-02-7 | LA-523-456 | U | <0.9 UJ | | ug/L | 1 | 0.9 | 4 | 02/07/11 |
| 1,4-Dichlorobenzene | 106-46-7 | LA-523-456 | U | <0.9 | | ug/L | 1 | 0.9 | 4 | 02/07/11 |
| Phenol | 108-95-2 | LA-523-456 | U | <0.9 UJ | | ug/L | 1 | 0.9 | 4 | 02/07/11 |
| 1,2,4-Trichlorobenzene | 120-82-1 | LA-523-456 | U | <0.9 | | ug/L | 1 | 0.9 | 4 | 02/07/11 |
| 2,4-Dinitrotoluene | 121-14-2 | LA-523-456 | U | <0.9 | | ug/L | 1 | 0.9 | 4 | 02/07/11 |
| Pyrene | 129-00-0 | LA-523-456 | U | <0.9 | | ug/L | 1 | 0.9 | 4 | 02/07/11 |
| 4-Chloro-3-methylphenol | 59-50-7 | LA-523-456 | U | <0.9 | | ug/L | 1 | 0.9 | 4 | 02/07/11 |
| n-Nitroso-di-n-propylamine | 621-64-7 | LA-523-456 | U | <0.9 | | ug/L | 1 | 0.9 | 4 | 02/07/11 |
| Acenaphthene | 83-32-9 | LA-523-456 | U | <0.9 | | ug/L | 1 | 0.9 | 4 | 02/07/11 |
| Pentachlorophenol | 87-86-5 | LA-523-456 | U | <0.9 | | ug/L | 1 | 0.9 | 4 | 02/07/11 |
| 2-Chlorophenol | 95-57-8 | LA-523-456 | U | <0.9 | | ug/L | 1 | 0.9 | 4 | 02/07/11 |
| Methylphenols, Total | 1319-77-3 | LA-523-456 | U | <0.9 UJ | | ug/L | 1 | 0.9 | 4 | 02/07/11 |

LS
2-28-2011

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

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

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

# Appendix 4

Laboratory Narrative and Chain-of-Custody Documentation

Attachment 2
**Narrative**
WSCF111310

## Introduction

Samples were received at the WSCF laboratory as referenced on the WSCF SAF Number Cross Reference table included in the final report. The samples were analyzed for the analytes indicated on the attached copy of the chain of custody (COC) form in accordance with the *Statement of Work (SOW), Modification No. 2 to Agreement 36587, Release 3, "FH WSCF ANALYTICAL SERVICES FOR GROUNDWATER."*

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

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

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

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

## Analytical Methodology for Requested Analyses

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

## Inorganic Comments

**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):

- All applicable QC controls are within the established limits.

Attachment 2
**Narrative**
WSCF111310

**Organic Comments**

**Semi-VOA** – 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):

- B2BBH0 (111310001) did not meet the acceptance limits for surrogate 2-Fluorobiphenyl. Sample results were not flagged. The quality control report was flagged for surrogate recovery failure.
- B2BBH1 (111310002) did not meet the acceptance limits for surrogates 2-Fluorophenol, Phenol-d5, Nitrobenzene-d5, 2-Fluorobiphenyl and 2,4,6-Tribromophenol. Sample results were not flagged. The quality control report was flagged for surrogate recovery failure.
- B2BBF2 (111310008) did not meet the acceptance limits for surrogates 2-Fluorophenol, Phenol-d5, Nitrobenzene-d5, 2-Fluorobiphenyl and 2,4,6-Tribromophenol. Sample results were not flagged. The quality control report was flagged for surrogate recovery failure.
- B2BBF3 (111310009) did not meet the acceptance limits for surrogates Nitrobenzene-d5 and 2-Fluorobiphenyl. Sample results were not flagged. The quality control report was flagged for surrogate recovery failure.
- B2BBF4 (111310010) did not meet the acceptance limits for surrogate 2-Fluorobiphenyl. Sample results were not flagged. The quality control report was flagged for surrogate recovery failure.
- All other applicable QC controls are within the established limits.

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

- 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 | | | F11-042-013 | PAGE 1 OF 1 |
|---|---|---|---|---|---|
| COLLECTOR: J. Scales | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-13a | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: | |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-N-507-16-2 | ACTUAL SAMPLE DEPTH: 0-4" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

| MATRIX* | POSSIBLE SAMPLE HAZARDS/ REMARKS | PRESERVATION | Cool~4C | None |
|---|---|---|---|---|
| A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegetation, W=Water, WI=Wipe, X=Other | Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993) | HOLDING TIME | 14/40 Days | 6 Months |
| | | TYPE OF CONTAINER | aG | G/P |
| | | NO. OF CONTAINER(S) | 1 | 1 |
| | 111310 | VOLUME | 250mL | 60mL |
| | SPECIAL HANDLING AND/OR STORAGE | SAMPLE ANALYSIS | Semi-VOA - 8270 (Add-On) (Total cresols); | ICP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | |
|---|---|---|---|---|---|
| B2BBH0 1 | SOIL | 1-26-11 | 1000 | X | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J. Scales | DATE/TIME: 1-26-11 1000 | RECEIVED BY/STORED IN: Victor Sims | DATE/TIME: 1-26-11 1002 | ** The CACN for all analytical work at WSCF laboratory is 401880ES20. ** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. ** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C. |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-014 | PAGE 1 OF 1 |
|---|---|---|---|---|---|
| COLLECTOR: J. Scales | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-14a | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-N-507-16.23 | ACTUAL SAMPLE DEPTH: 0-4" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

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

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

SPECIAL HANDLING AND/OR STORAGE

| PRESERVATION | Cool~4C | None |
|---|---|---|
| HOLDING TIME | 14/40 Days | 6 Months |
| TYPE OF CONTAINER | aG | G/P |
| NO. OF CONTAINER(S) | 1 | 1 |
| VOLUME | 250mL | 60mL |
| SAMPLE ANALYSIS | Semi-VOA - 8270 (Add-On) (Total cresols); | ICP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | |
|---|---|---|---|---|---|
| B2BBH1 2 | SOIL | 1-26-11 | 0957 | X | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J. Scales | DATE/TIME: 1-26-11 2000 | RECEIVED BY/STORED IN: Victor Sing | DATE/TIME: 1-26-11 2000 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |

SPECIAL INSTRUCTIONS

* The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.

ORIGINAL

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-015 | PAGE 1 OF 1 |
|---|---|---|---|---|---|
| COLLECTOR 1-26-11 C. Chamberlain | COMPANY CONTACT WIDRIG, DL | TELEPHONE NO. 376-2858 | PROJECT COORDINATOR WIDRIG, DL | PRICE CODE 8C / AIR QUALITY ☐ | DATA TURNAROUND 15 Days / 15 Days |
| SAMPLING LOCATION PSTFUNIT1-VS-15a | PROJECT DESIGNATION 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO. F11-042 | | |
| ICE CHEST NO. AM | FIELD LOGBOOK NO. HNF-N-507. 16273 | ACTUAL SAMPLE DEPTH 0-4" | COA 300068ES10 | METHOD OF SHIPMENT GOVERNMENT VEHICLE | |
| SHIPPED TO Waste Sampling & Characterization | OFFSITE PROPERTY NO. N/A | | BILL OF LADING/AIR BILL NO. N/A | | |

| MATRIX* | POSSIBLE SAMPLE HAZARDS/ REMARKS | PRESERVATION | Cool<4C | None |
|---|---|---|---|---|
| A=Air<br>DL=Drum Liquids<br>DS=Drum Solids<br>L=Liquid<br>O=Oil<br>S=Soil<br>SE=Sediment<br>T=Tissue<br>V=Vegetation<br>W=Water<br>WI=Wipe<br>X=Other | Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993) | HOLDING TIME | 14/40 Days | 6 Months |
| | | TYPE OF CONTAINER | aG | G/P |
| | | NO. OF CONTAINER(S) | 1 | 1 |
| | | VOLUME | 250mL | 60mL |
| | SPECIAL HANDLING AND/OR STORAGE | SAMPLE ANALYSIS | Semi-VOA - 8270 (Add-On) (Total vesols); | ICP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | | MATRIX* | SAMPLE DATE | SAMPLE TIME | | |
|---|---|---|---|---|---|---|
| B2BBH2 | 3 | SOIL | 1-26-11 | 0951 | X | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM C. Chamberlain | DATE/TIME 1-26-11 1200 | RECEIVED BY/STORED IN Victor Sims | DATE/TIME 1-26-11 1200 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |

SPECIAL INSTRUCTIONS

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.

ORIGINAL

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | F11-042-016 | PAGE 1 OF 1 |
|---|---|---|---|---|
| COLLECTOR: C. Chamberlain | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C; DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-16a | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-N-507-16.23 | ACTUAL SAMPLE DEPTH: 0-4' | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | |

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

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

SPECIAL HANDLING AND/OR STORAGE

| PRESERVATION | Cool~4C | None |
|---|---|---|
| HOLDING TIME | 14/10 Days | 6 Months |
| TYPE OF CONTAINER | aG | G/P |
| NO. OF CONTAINER(S) | 1 | 1 |
| VOLUME | 250ml | 60ml |
| SAMPLE ANALYSIS | Semi-VOA - 8270 (Add-On) (Total cresols); | ICP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | |
|---|---|---|---|---|---|
| B2BBH3 4 | SOIL | 1-26-11 | 0945 | X | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: C. Chamberlain | DATE/TIME: 1-26-11 | RECEIVED BY/STORED IN: Victor Sims | DATE/TIME: 1-26-11 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |

SPECIAL INSTRUCTIONS

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKT applies to this SAF.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | F11-042-017 | PAGE 1 OF 1 |
|---|---|---|---|
| COLLECTOR: J. Stalos | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL |
| PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days | | |
| SAMPLING LOCATION: PSTFUNIT1-VS-17a | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | SAF NO.: F11-042 | AIR QUALITY: |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-N-507-16-23 | ACTUAL SAMPLE DEPTH: 0-4' | COA: 300068ES10 |
| METHOD OF SHIPMENT: GOVERNMENT VEHICLE | SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | BILL OF LADING/AIR BILL NO.: N/A |

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

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

SPECIAL HANDLING AND/OR STORAGE

| PRESERVATION | Cool~4C | None |
|---|---|---|
| HOLDING TIME | 14/40 Days | 6 Months |
| TYPE OF CONTAINER | aG | G/P |
| NO. OF CONTAINER(S) | 1 | 1 |
| VOLUME | 250mL | 50mL |
| SAMPLE ANALYSIS | Semi-VOA - 8270 (Add-On) (Total cresols); | ICP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | |
|---|---|---|---|---|---|
| B2BBH4 5 | SOIL | 1-26-11 | 0856 | X | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J. Stalos | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: Victor Sims | DATE/TIME: 1-26-11 1200 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |

SPECIAL INSTRUCTIONS

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis CKI applies to this SAF.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-003 | PAGE 1 OF 1 |
|---|---|---|---|---|---|
| COLLECTOR: J Scales | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-3a | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: MA | FIELD LOGBOOK NO.: HNF-N-507-16-23 | ACTUAL SAMPLE DEPTH: 0-4" | COA: 300088ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

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

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

SPECIAL HANDLING AND/OR STORAGE

| | | |
|---|---|---|
| PRESERVATION | Cool-4C | None |
| HOLDING TIME | 14/40 Days | 6 Months |
| TYPE OF CONTAINER | aG | G/P |
| NO. OF CONTAINER(S) | 1 | 1 |
| VOLUME | 250mL | 60mL |
| SAMPLE ANALYSIS | Semi-VOA - 8270 (Add-On) (Total cresols); | ICP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | |
|---|---|---|---|---|---|
| B2BBF0 6 | SOIL | 1-26-11 | 0840 | X | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J Scales | DATE/TIME: 1200 1-26-11 | RECEIVED BY/STORED IN: Victor Bins | DATE/TIME: 1200 1-26-11 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |

SPECIAL INSTRUCTIONS

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.

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

A 6003 618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | F11-042-004 | PAGE 1 OF 1 |
|---|---|---|---|---|
| COLLECTOR: C. Chamberlain | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C; DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1 VS 4a | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-N-507-16-23 | ACTUAL SAMPLE DEPTH: 0-4' | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | |

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

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

SPECIAL HANDLING AND/OR STORAGE

| | | |
|---|---|---|
| PRESERVATION | Cool~4C | None |
| HOLDING TIME | 14/40 Days | 6 Months |
| TYPE OF CONTAINER | aG | G/P |
| NO. OF CONTAINER(S) | 1 | 1 |
| VOLUME | 250mL | 60mL |
| SAMPLE ANALYSIS | Semi-VOA - 8270 (Add-On) (Total dioxin); | TOP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | |
|---|---|---|---|---|---|
| B2BBF1 7 | SOIL | 1-26-11 | 0854 | X | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: C. Chamberlain | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: VISTOV/SMS | DATE/TIME: 1-26-11 1200 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |

SPECIAL INSTRUCTIONS

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.

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

A-6003-618 (REV 2)

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-005 | PAGE 1 OF 1 |
|---|---|---|---|---|---|
| COLLECTOR: J Scales | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2853 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-Sa | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: FINF-N-507-10.23 | ACTUAL SAMPLE DEPTH: 0-4" | COA: 300069ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

MATRIX*: A=Air; DL=Drum Liquids; DS=Drum Solids; L=Liquid; O=Oil; S=Soil; SE=Sediment; T=Tissue; V=Vegetation; W=Water; W1=Wipe; X=Other

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

SPECIAL HANDLING AND/OR STORAGE

| | | |
|---|---|---|
| PRESERVATION | Cool~4C | None |
| HOLDING TIME | 14/40 Days | 6 Months |
| TYPE OF CONTAINER | aG | C/P |
| NO. OF CONTAINER(S) | 1 | 1 |
| VOLUME | 250mL | 60mL |
| SAMPLE ANALYSIS | Semi-VOA - 8270 (Add-On) (Total cresols); | ICP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | |
|---|---|---|---|---|---|
| B2BBF2 8 | SOIL | 1-26-11 | 0856 | X | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J Scales | DATE/TIME: 1-26-11 | RECEIVED BY/STORED IN: Victor Sing | DATE/TIME: 1-26-11 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |

SPECIAL INSTRUCTIONS

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.

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

A-6001-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | F11-042-006 | PAGE 1 OF 1 |
|---|---|---|---|---|
| COLLECTOR: C. Chamberlain | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2853 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C; AIR QUALITY: [ ] | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-6a | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-N-507-16-23 | ACTUAL SAMPLE DEPTH: 0.4" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | |

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

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

SPECIAL HANDLING AND/OR STORAGE

| PRESERVATION | Cool~4C | None |
|---|---|---|
| HOLDING TIME | 14/40 Days | 6 Months |
| TYPE OF CONTAINER | aG | G/P |
| NO. OF CONTAINER(S) | 1 | 1 |
| VOLUME | 250mL | 60mL |
| SAMPLE ANALYSIS | Semi-VOA - 8270 (Add-On (Total cresols); | ICP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | |
|---|---|---|---|---|---|
| B2BBF3 9 | SOIL | 1-26-11 | 0906 | X | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: C. Chamberlain | DATE/TIME: 1-26-11 | RECEIVED BY/STORED IN: VICTOR SIMS | DATE/TIME: 1-26-11 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |

SPECIAL INSTRUCTIONS

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.

ORIGINAL

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

A-5003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-007 | PAGE 1 OF 1 |
|---|---|---|---|---|---|
| COLLECTOR: J. Scalog | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2853 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-7a | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: | FIELD LOGBOOK NO.: ~~HNF-N-507-~~ 16-2 | ACTUAL SAMPLE DEPTH: 0-4" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

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

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

**SPECIAL HANDLING AND/OR STORAGE**

| | | |
|---|---|---|
| PRESERVATION | Cool~4C | None |
| HOLDING TIME | 14/40 Days | 6 Months |
| TYPE OF CONTAINER | aG | G/P |
| NO. OF CONTAINER(S) | 1 | 1 |
| VOLUME | 250mL | 60mL |
| SAMPLE ANALYSIS | Semi-VOA - 8270 (Add-On) (Total cresols); | ICP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | |
|---|---|---|---|---|---|
| B2BBF4 10 | SOIL | 1-26-11 | 0909 | X | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J. Scalog | DATE/TIME: 1-26-11 2000 | RECEIVED BY/STORED IN: Victor Bim | DATE/TIME: 1-26-11 2000 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-008 | PAGE 1 OF 1 |
|---|---|---|---|---|---|
| COLLECTOR: C. Chamberlain | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTT1UNIT1-VS-Ra | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11 042 | AIR QUALITY: L | |
| ICE CHEST NO.: MA | FIELD LOGBOOK NO.: HNF-N-507-16-23 | ACTUAL SAMPLE DEPTH: 0-4" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

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

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

SPECIAL HANDLING AND/OR STORAGE

| PRESERVATION | Cool<4C | None |
|---|---|---|
| HOLDING TIME | 14/40 Days | 6 Months |
| TYPE OF CONTAINER | aG | G/P |
| NO. OF CONTAINER(S) | 1 | 1 |
| VOLUME | 250mL | 60mL |
| SAMPLE ANALYSIS | Semi-VOA - 8270 (add-On) (Total cresols); | ICP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | |
|---|---|---|---|---|---|
| B2BBF5 11 | SOIL | 1-26-11 | 0917 | X | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: C. Chamberlain | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: Victor Bing | DATE/TIME: 1-26-11 1200 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |

SPECIAL INSTRUCTIONS

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.

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

A 6003-618 (REV 2)

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-009 | PAGE 1 OF 1 |
|---|---|---|---|---|---|
| COLLECTOR: J Scales | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-9a | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-N-507-16-23 | ACTUAL SAMPLE DEPTH: 0-4" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

MATRIX*: A=Air, 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 | None |
|---|---|---|
| HOLDING TIME | 14/40 Days | 6 Months |
| TYPE OF CONTAINER | aG | G/P |
| NO. OF CONTAINER(S) | 1 | 1 |
| VOLUME | 250mL | 60mL |
| SAMPLE ANALYSIS | Semi-VOA - 8270 (Add-On) (Total cresols); | ICP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | |
|---|---|---|---|---|---|
| B2BBF6 12 | SOIL | 1-26-11 | 0946 | X | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J Scales | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: V L Hawkins | DATE/TIME: 1-26-11 1200 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |

SPECIAL INSTRUCTIONS
** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GK1 applies to this SAF.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-010 | PAGE 1 OF 1 |
|---|---|---|---|---|---|
| COLLECTOR: J. Stubbs | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1 VS 10a | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-N-507-16-22 | ACTUAL SAMPLE DEPTH: 0-4" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

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

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

SPECIAL HANDLING AND/OR STORAGE

| | | |
|---|---|---|
| PRESERVATION | Cool~4C | None |
| HOLDING TIME | 14/40 Days | 6 Months |
| TYPE OF CONTAINER | aG | G/P |
| NO. OF CONTAINER(S) | 1 | 1 |
| VOLUME | 250mL | 60mL |
| SAMPLE ANALYSIS | Semi-VOA - 8270 (Add-On) (Total cresols); | ICP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | |
|---|---|---|---|---|---|
| B2BBF7 13 | SOIL | 1-26-11 | 0932 | X | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J. Stubbs | DATE/TIME: 1200 1-26-11 | RECEIVED BY/STORED IN: Vicki Sims | DATE/TIME: 1200 1-26-11 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |

SPECIAL INSTRUCTIONS

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-011 | PAGE 1 OF 1 |
|---|---|---|---|---|---|
| COLLECTOR: J Scales | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, D. | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-11a | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-N-507-16.23 | ACTUAL SAMPLE DEPTH: 0-4" | COA: 300068ES1D | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

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

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

SPECIAL HANDLING AND/OR STORAGE

| PRESERVATION | Cool-4C | None |
|---|---|---|
| HOLDING TIME | 14/40 Days | 6 Months |
| TYPE OF CONTAINER | eG | G/P |
| NO. OF CONTAINER(S) | 1 | 1 |
| VOLUME | 250mL | 60mL |
| SAMPLE ANALYSIS | Semi VOA - 8270 (Add-On) (Total cresols); | ICP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | |
|---|---|---|---|---|---|
| B2BBF8 14 | SOIL | 1-26-11 | 0926 | X | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J. Scales | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: Victor Bings | DATE/TIME: 1-26-11 1200 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |

SPECIAL INSTRUCTIONS

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-012 | PAGE 1 OF 1 |
|---|---|---|---|---|---|
| COLLECTOR: C. Chamberlain | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-12a | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-N-507-16.23 | ACTUAL SAMPLE DEPTH: 0-4" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

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

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

SPECIAL HANDLING AND/OR STORAGE

| | | | | | |
|---|---|---|---|---|---|
| PRESERVATION | | | | Cool<4C | None |
| HOLDING TIME | | | | 14/40 Days | 6 Months |
| TYPE OF CONTAINER | | | | aG | G/P |
| NO. OF CONTAINER(S) | | | | 1 | 1 |
| VOLUME | | | | 250mL | 60mL |
| SAMPLE ANALYSIS | | | | Semi VOA - 8270 (Add-On) (Total cresols); | ICP/MS - 200.8 (TAL) (Chromium); |
| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | |
| B2BBF9 15 | SOIL | 1-26-11 | 0929 | X | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: C. Chamberlain | DATE/TIME: 1200 1-26-11 | RECEIVED BY/STORED IN: Victor Bins | DATE/TIME: 1200 1-26-11 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |

SPECIAL INSTRUCTIONS

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | F11-042-001 | PAGE 1 OF 1 |
|---|---|---|---|---|
| COLLECTOR: J Scalozzi | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C; DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-1a | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: ~~HNF-N-507-~~ 16-23 | ACTUAL SAMPLE DEPTH: 6-4" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | |

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

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

SPECIAL HANDLING AND/OR STORAGE

| PRESERVATION | Cool~4C | None |
|---|---|---|
| HOLDING TIME | 14/40 Days | 6 Months |
| TYPE OF CONTAINER | aG | G/F |
| NO. OF CONTAINER(S) | 1 | 1 |
| VOLUME | 250mL | 60mL |
| SAMPLE ANALYSIS | Semi-VOA - 8270 (Add-On) (Total Cresols); | ICP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | |
|---|---|---|---|---|---|
| B2BBD8 16 | SOIL | 1-26-11 | 0832 | X | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J. Scalozzi | DATE/TIME: 1-26 1200 | RECEIVED BY/STORED IN: Victor Gomez | DATE/TIME: 1-26-11 1200 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |

SPECIAL INSTRUCTIONS

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GK1 applies to this SAF.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.

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

A-5003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-002 | PAGE 1 OF 1 |
|---|---|---|---|---|---|
| COLLECTOR: J. Sanlez | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2838 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-2a | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: MA | FIELD INPUT SCT NO.: 6.23 | ACTUAL SAMPLE DEPTH: 0-4" | COA: 300068E510 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

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

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

SPECIAL HANDLING AND/OR STORAGE

| PRESERVATION | Cool-4C | None |
|---|---|---|
| HOLDING TIME | 14/40 Days | 6 Months |
| TYPE OF CONTAINER | aG | G/P |
| NO. OF CONTAINER(S) | 1 | 1 |
| VOLUME | 250mL | 60mL |
| SAMPLE ANALYSIS | Semi-VOA - 8270 (Add-On) (Total cresols); | ICP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | |
|---|---|---|---|---|---|
| B2BBD9 17 | SOIL | 1-26-11 | 0840 | X | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J. Sanlez | DATE/TIME: 1200 1-26-11 | RECEIVED BY/STORED IN: Victor Bing | DATE/TIME: 1200 1-26-11 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |

SPECIAL INSTRUCTIONS

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-023 | PAGE 1 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR: C. Chamberlain | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND |
| SAMPLING LOCATION: PSTFUNIT1-VS-6b | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | 15 Days / 15 Days |
| ICE CHEST NO.: N/A | FIELD LOGBOOK NO.: HNF-N-507-162 27 | ACTUAL SAMPLE DEPTH: 4.8' | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

| MATRIX* | POSSIBLE SAMPLE HAZARDS/ REMARKS | PRESERVATION | Cool <-7C and >-20C |
|---|---|---|---|
| A=Air<br>DL=Drum Liquids<br>DS=Drum Solids<br>L=Liquid<br>O=Oil<br>S=Soil<br>SE=Sediment<br>T=Tissue<br>V=Vegetation<br>W=Water<br>WI=Wipe<br>X=Other | Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993) | HOLDING TIME | 14 Days |
| | | TYPE OF CONTAINER | aGs |
| | | NO. OF CONTAINER(S) | 5 |
| | | VOLUME | 40mL |
| | SPECIAL HANDLING AND/OR STORAGE | SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | | MATRIX* | SAMPLE DATE | SAMPLE TIME | |
|---|---|---|---|---|---|
| B2BBJ0 | 18 | SOIL | 1-26-11 | 0908 | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: C. Chamberlain | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: Victor Sims | DATE/TIME: 1-26-11 1200 | SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | F11-042-023 | PAGE 2 OF 2 |
|---|---|---|---|---|
| COLLECTOR<br>C. Chamberlain | COMPANY CONTACT<br>WIDRIG, DL | TELEPHONE NO.<br>376-2858 | PROJECT COORDINATOR<br>WIDRIG, DL | PRICE CODE 8C<br>DATA TURNAROUND<br>15 Days / 15 Days |
| SAMPLING LOCATION<br>PSTFUNIT1-VS-6b | PROJECT DESIGNATION<br>600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.<br>F11-042 | AIR QUALITY ☐ |
| ICE CHEST NO.<br>NA | FIELD LOGBOOK NO.<br>HNF-N-507-16.23 | ACTUAL SAMPLE DEPTH<br>4.8" | COA<br>300068ES10 | METHOD OF SHIPMENT<br>GOVERNMENT VEHICLE |
| SHIPPED TO<br>Waste Sampling & Characterization | OFFSITE PROPERTY NO.<br>N/A | | BILL OF LADING/AIR BILL NO.<br>N/A | |

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

** All VOA samples will be collected using EPA Method 5035A.
** VOA sample bottle sets will include 5 bottles for low level analysis.
** The laboratory is to use one of the low level VOA bottles for moisture content determination.
** VOA bottles will be labeled with an appended suffix of K, L, M, N, or P for low level. These suffixes are for the purpose of providing bottle weights to the laboratories. These suffixes should not be include as part of the sample ID reported in the final data packages.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.
(1) VOA - 5035/8260 (LOW LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-024 | PAGE 1 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR: J Scales | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-7b | PROJECT DESIGNATION: 600 Area PSTF Unt 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: NX | FIELD LOGBOOK NO.: HNF-N-507-16-23 | ACTUAL SAMPLE DEPTH: 4-8" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

| MATRIX* | POSSIBLE SAMPLE HAZARDS/ REMARKS | | |
|---|---|---|---|
| A=Air<br>DL=Drum Liquids<br>DS=Drum Solids<br>L=Liquid<br>O=Oil<br>S=Soil<br>SE=Sediment<br>T=Tissue<br>V=Vegetation<br>W=Water<br>WI=Wipe<br>X=Other | Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993) | PRESERVATION | Cool <-7C and >-20C |
| | | HOLDING TIME | 14 Days |
| | | TYPE OF CONTAINER | aGs |
| | | NO. OF CONTAINER(S) | 5 |
| | | VOLUME | 40mL |
| | SPECIAL HANDLING AND/OR STORAGE | SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | |
|---|---|---|---|---|
| B2BBJ1 19 | SOIL | 1-26-11 | 0911 | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J Scales | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: Vilay Bjing | DATE/TIME: 1-26-11 1200 | SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

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

A-5003-613 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-024 | PAGE 2 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR<br>J. Scales | COMPANY CONTACT<br>WIDRIG, DL | TELEPHONE NO.<br>376-2858 | PROJECT COORDINATOR<br>WIDRIG, DL | PRICE CODE 8C<br>AIR QUALITY ☐ | DATA TURNAROUND<br>15 Days / 15 Days |
| SAMPLING LOCATION<br>PSTFUNIT1-V5-7b | PROJECT DESIGNATION<br>600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.<br>F11-042 | | |
| ICE CHEST NO.<br>LM | FIELD LOGBOOK NO.<br>HNF-N-502-16 p.27 | ACTUAL SAMPLE DEPTH<br>4-8' | COA<br>300068ES10 | METHOD OF SHIPMENT<br>GOVERNMENT VEHICLE | |
| SHIPPED TO<br>Waste Sampling & Characterization | OFFSITE PROPERTY NO.<br>N/A | | BILL OF LADING/AIR BILL NO.<br>N/A | | |

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

** All VOA samples will be collected using EPA Method 5035A.
** VOA sample bottle sets will include 5 bottles for low level analysis.
** The laboratory is to use one of the low level VOA bottles for moisture content determination.
** VOA bottles will be labeled with an appended suffix of K, L, M, N, or P for low level. These suffixes are for the purpose of providing bottle weights to the laboratories. These suffixes should not be include as part of the sample ID reported in the final data packages.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.
(1) VOA - 5035/8260 (LOW LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

A-6003-616 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-025 | PAGE 1 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR: C. Chamberlain | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-8b | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-N-507-16.23 | ACTUAL SAMPLE DEPTH: 4.8" | COA: 300068E510 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

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

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

SPECIAL HANDLING AND/OR STORAGE

| | |
|---|---|
| PRESERVATION | Cool <-7C and >-20C |
| HOLDING TIME | 14 Days |
| TYPE OF CONTAINER | aGs |
| NO. OF CONTAINER(S) | 5 |
| VOLUME | 40mL |
| SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | |
|---|---|---|---|---|
| B2BBJ2 20 | SOIL | 1-26-11 | 0920 | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: C. Chamberlain | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: Victor Bivins | DATE/TIME: 1-26-11 1200 | SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-025 | PAGE 2 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR<br>P. Chamberlain | COMPANY CONTACT<br>WIDRIG, DL | TELEPHONE NO.<br>376-2858 | PROJECT COORDINATOR<br>WIDRIG, DL | PRICE CODE 8C<br>AIR QUALITY ☐ | DATA TURNAROUND<br>15 Days / 15 Days |
| SAMPLING LOCATION<br>PSTFUNIT1-VS-85 | PROJECT DESIGNATION<br>600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.<br>F11-042 | | |
| ICE CHEST NO.<br>N/A | FIELD LOGBOOK NO.<br>HNF-N-507-76-23 | ACTUAL SAMPLE DEPTH<br>4-8" | COA<br>300068ES10 | METHOD OF SHIPMENT<br>GOVERNMENT VEHICLE | |
| SHIPPED TO<br>Waste Sampling & Characterization | OFFSITE PROPERTY NO.<br>N/A | | BILL OF LADING/AIR BILL NO.<br>N/A | | |

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

** All VOA samples will be collected using EPA Method 5035A.
** VOA sample bottle sets will include 5 bottles for low level analysis.
** The laboratory is to use one of the low level VOA bottles for moisture content determination.
** VOA bottles will be labeled with an appended suffix of K, L, M, N, or P for low level. These suffixes are for the purpose of providing bottle weights to the laboratories. These suffixes should not be include as part of the sample ID reported in the final data packages.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.
(1) VOA - 5035/8260 (LOW LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-026 | PAGE 1 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR: J. Scales | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-9b | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: N/A | FIELD LOGBOOK NO.: HNF-N-507-16.23 | ACTUAL SAMPLE DEPTH: 4-8" | COA: 300068E510 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

| MATRIX* | POSSIBLE SAMPLE HAZARDS/ REMARKS | PRESERVATION | Cool <-7C and > -20C |
|---|---|---|---|
| A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegetation, W=Water, W=Wipe, X=Other | Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993) | HOLDING TIME | 14 Days |
| | | TYPE OF CONTAINER | aGs |
| | | NO. OF CONTAINER(S) | 5 |
| | | VOLUME | 40mL |
| | SPECIAL HANDLING AND/OR STORAGE | SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | |
|---|---|---|---|---|
| B2BBJ3 21 | SOIL | 1-26-11 | 0948 | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J. Scales | DATE/TIME: 1-26-11 2000 | RECEIVED BY/STORED IN: Victor Sims | DATE/TIME: 1-26-11 2000 | SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | F11-042-026 | PAGE 2 OF 2 |
|---|---|---|---|---|
| COLLECTOR: J Scales | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C; DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-9b | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ |
| ICE CHEST NO.: RM | FIELD LOGBOOK NO.: HNF-N-507-16-23 | ACTUAL SAMPLE DEPTH: 4-8" | COA: 300058ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | |

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

** All VOA samples will be collected using EPA Method 5035A.
** VOA sample bottle sets will include 5 bottles for low level analysis.
** The laboratory is to use one of the low level VOA bottles for moisture content determination.
** VOA bottles will be labeled with an appended suffix of K, L, M, N, or P for low level. These suffixes are for the purpose of providing bottle weights to the laboratories. These suffixes should not be include as part of the sample ID reported in the final data packages.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.
(1) VOA - 5035/8260 (LOW LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-027 | PAGE 1 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR: J Scalos | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-100 | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-N-507-16-23 | ACTUAL SAMPLE DEPTH: 4.5 | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

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

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

SPECIAL HANDLING AND/OR STORAGE

| PRESERVATION | Cool <-7C and >-20C |
|---|---|
| HOLDING TIME | 14 Days |
| TYPE OF CONTAINER | vGs |
| NO. OF CONTAINER(S) | 5 |
| VOLUME | 40mL |
| SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | |
|---|---|---|---|---|
| B2BBJ4 22 | SOIL | 1-26-11 | 0934 | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J. Scalos | DATE/TIME: 1-26-11 200 | RECEIVED BY/STORED IN: Victor | DATE/TIME: 1-26-11 200 | SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-027 | PAGE 2 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR<br>J. Scalora | COMPANY CONTACT<br>WIDRIG, DL | TELEPHONE NO.<br>376-2858 | PROJECT COORDINATOR<br>WIDRIG, DL | PRICE CODE 8C<br>AIR QUALITY ☐ | DATA TURNAROUND<br>15 Days / 15 Days |
| SAMPLING LOCATION<br>PSTFUNIT1-VS-10b | PROJECT DESIGNATION<br>600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.<br>F11-042 | | |
| ICE CHEST NO.<br>KM | FIELD LOGBOOK NO.<br>~~HNF-N-507-~~16-23 | ACTUAL SAMPLE DEPTH<br>4-8" | COA<br>300068ES10 | METHOD OF SHIPMENT<br>GOVERNMENT VEHICLE | |
| SHIPPED TO<br>Waste Sampling & Characterization | OFFSITE PROPERTY NO.<br>N/A | | BILL OF LADING/AIR BILL NO.<br>N/A | | |

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

** All VOA samples will be collected using EPA Method 5035A.
** VOA sample bottle sets will include 5 bottles for low level analysis.
** The laboratory is to use one of the low level VOA bottles for moisture content determination.
** VOA bottles will be labeled with an appended suffix of K, L, M, N, or P for low level. These suffixes are for the purpose of providing bottle weights to the laboratories. These suffixes should not be include as part of the sample ID reported in the final data packages.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.
(1) VOA - 5035/8260 (LOW LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | F11-042-028 | PAGE 1 OF 2 |
|---|---|---|---|---|
| COLLECTOR: J. Scales | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C; DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-11b | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ |
| ICE CHEST NO.: N/A | FIELD LOGBOOK NO.: HNF-N-507-16-23 | ACTUAL SAMPLE DEPTH: 4-5" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | |

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

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

SPECIAL HANDLING AND/OR STORAGE

| | |
|---|---|
| PRESERVATION | Cool <-7C and >-20C |
| HOLDING TIME | 14 Days |
| TYPE OF CONTAINER | aGs |
| NO. OF CONTAINER(S) | 5 |
| VOLUME | 40mL |
| SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | |
|---|---|---|---|---|
| B2BBJ5 23 | SOIL | 1-26-11 | 0928 | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J. Scales | DATE/TIME: 1200 1-26-11 | RECEIVED BY/STORED IN: VICTOR SIMS | DATE/TIME: 1200 1-26-11 | SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

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

A 6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-028 | PAGE 2 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR<br>J. Beaulo | COMPANY CONTACT<br>WIDRIG, DL | TELEPHONE NO.<br>376-2858 | PROJECT COORDINATOR<br>WIDRIG, DL | PRICE CODE 8C<br>AIR QUALITY ☐ | DATA TURNAROUND<br>15 Days / 15 Days |
| SAMPLING LOCATION<br>PSTFUNIT1-VS-11b | PROJECT DESIGNATION<br>600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.<br>F11-042 | | |
| ICE CHEST NO.<br>N/A | FIELD LOGBOOK NO.<br>HNF-N-507-16-23 | ACTUAL SAMPLE DEPTH<br>c/- 8" | COA<br>3000G8ES10 | METHOD OF SHIPMENT<br>GOVERNMENT VEHICLE | |
| SHIPPED TO<br>Waste Sampling & Characterization | OFFSITE PROPERTY NO.<br>N/A | | BILL OF LADING/AIR BILL NO.<br>N/A | | |

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

** All VOA samples will be collected using EPA Method 5035A.
** VOA sample bottle sets will include 5 bottles for low level analysis.
** The laboratory is to use one of the low level VOA bottles for moisture content determination.
** VOA bottles will be labeled with an appended suffix of K, L, M, N, or P for low level. These suffixes are for the purpose of providing bottle weights to the laboratories. These suffixes should not be include as part of the sample ID reported in the final data packages.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.
(1) VOA - 5035/8260 (LOW LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-029 | PAGE 1 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR: C. Chamberlain | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-12b | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO. | FIELD LOGBOOK NO.: HNF-N-507-16.23 | ACTUAL SAMPLE DEPTH: 4.5" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

| MATRIX* | POSSIBLE SAMPLE HAZARDS/ REMARKS | | |
|---|---|---|---|
| A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegetation, W=Water, WI=Wipe, X=Other | Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993) | PRESERVATION | Cool <-7C and >-20C |
| | | HOLDING TIME | 14 Days |
| | | TYPE OF CONTAINER | aGs |
| | | NO. OF CONTAINER(S) | 5 |
| | | VOLUME | 40mL |
| | SPECIAL HANDLING AND/OR STORAGE | SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | |
|---|---|---|---|---|
| B2BBJ6 24 | SOIL | 1-26-1 | 0933 | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: C. Chamberlain | DATE/TIME: 1200 1-26-11 | RECEIVED BY/STORED IN: [illegible] | DATE/TIME: 1200 1-26-11 | SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

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

A 6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-029 | PAGE 2 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR<br>C. Chamberlain | COMPANY CONTACT<br>WIDRIG, DL | TELEPHONE NO.<br>376-2858 | PROJECT COORDINATOR<br>WIDRIG, DL | PRICE CODE 8C | DATA TURNAROUND<br>15 Days / 15 Days |
| SAMPLING LOCATION<br>PSTFUNIT1-VS-12b | PROJECT DESIGNATION<br>600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.<br>F11-042 | AIR QUALITY ☐ | |
| ICE CHEST NO.<br>N/A | FIELD LOGBOOK NO.<br>HNF-N-507-16-23 | ACTUAL SAMPLE DEPTH<br>4-5" | COA<br>300068ES10 | METHOD OF SHIPMENT<br>GOVERNMENT VEHICLE | |
| SHIPPED TO<br>Waste Sampling & Characterization | OFFSITE PROPERTY NO.<br>N/A | | BILL OF LADING/AIR BILL NO.<br>N/A | | |

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

** All VOA samples will be collected using EPA Method 5035A.
** VOA sample bottle sets will include 5 bottles for low level analysis.
** The laboratory is to use one of the low level VOA bottles for moisture content determination.
** VOA bottles will be labeled with an appended suffix of K, L, M, N, or P for low level. These suffixes are for the purpose of providing bottle weights to the laboratories. These suffixes should not be include as part of the sample ID reported in the final data packages.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.
(1) VOA - 5035/8260 (LOW LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | F11-042-030 | PAGE 1 OF 2 |
|---|---|---|---|---|
| COLLECTOR: J. Scales | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C / AIR QUALITY: ☐ / DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-13b | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | |
| ICE CHEST NO.: RM | FIELD LOGBOOK NO.: HNF-N-507-16-23 | ACTUAL SAMPLE DEPTH: 4-5' | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | |

| MATRIX* | POSSIBLE SAMPLE HAZARDS/ REMARKS | | |
|---|---|---|---|
| A=Air, DI=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegetation, W=Water, WI=Wipe, X=Other | Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993) | PRESERVATION | Cool <-7C and > 20C |
| | | HOLDING TIME | 14 Days |
| | | TYPE OF CONTAINER | eGs |
| | | NO. OF CONTAINER(S) | 5 |
| | | VOLUME | 40mL |
| | SPECIAL HANDLING AND/OR STORAGE | SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | |
|---|---|---|---|---|
| B2BBJ7 25 | SOIL | 1-26-11 | 1005 | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J. Scales | DATE/TIME: 1200 1-26-11 | RECEIVED BY/STORED IN: Victor Ryan | DATE/TIME: 1200 1-26-11 | SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-030 | PAGE 2 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR: J Scales | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: BC | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-13b | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: AA | FIELD LOGBOOK NO.: HNF-N-507-16-23 | ACTUAL SAMPLE DEPTH: 4-8" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

** All VOA samples will be collected using EPA Method 5035A.
** VOA sample bottle sets will include 5 bottles for low level analysis.
** The laboratory is to use one of the low level VOA bottles for moisture content determination.
** VOA bottles will be labeled with an appended suffix of K, L, M, N, or P for low level. These suffixes are for the purpose of providing bottle weights to the laboratories. These suffixes should not be include as part of the sample ID reported in the final data packages.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.
(1) VOA - 5035/8260 (LOW LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

A-6003-61B (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-031 | PAGE 1 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR: J. Scales | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-14b | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: | |
| ICE CHEST NO.: M- | FIELD LOGBOOK NO.: ~~HNF-N-807-~~ 1623 | ACTUAL SAMPLE DEPTH: 4-8" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

| MATRIX* | POSSIBLE SAMPLE HAZARDS/ REMARKS | | |
|---|---|---|---|
| A=Air<br>DL=Drum Liquids<br>DS=Drum Solids<br>L=Liquid<br>O=Oil<br>S=Soil<br>SE=Sediment<br>T=Tissue<br>V=Vegetation<br>W=Water<br>WI=Wipe<br>X=Other | Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993) | PRESERVATION | Cool < 7C and >-20C |
| | | HOLDING TIME | 14 Days |
| | | TYPE OF CONTAINER | aGs |
| | | NO. OF CONTAINER(S) | 5 |
| | | VOLUME | 40mL |
| | SPECIAL HANDLING AND/OR STORAGE | SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | |
|---|---|---|---|---|
| B2BBJ8 26 | SOIL | 1-26-11 | 0958 | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J. Scales | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: Victor Sing | DATE/TIME: 1-26-11 1200 | SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-031 | PAGE 2 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR<br>J. Scales | COMPANY CONTACT<br>WIDRIG, DL | TELEPHONE NO.<br>376-2858 | PROJECT COORDINATOR<br>WIDRIG, DL | PRICE CODE 8C<br>AIR QUALITY ☐ | DATA TURNAROUND<br>15 Days / 15 Days |
| SAMPLING LOCATION<br>PSTFUNIT1-VS-14b | PROJECT DESIGNATION<br>600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.<br>F11-042 | | |
| ICE CHEST NO.<br>N/A | FIELD LOGBOOK NO.<br>HNF-N-507-16.23 | ACTUAL SAMPLE DEPTH<br>4.5' | COA<br>300068ES10 | METHOD OF SHIPMENT<br>GOVERNMENT VEHICLE | |
| SHIPPED TO<br>Waste Sampling & Characterization | OFFSITE PROPERTY NO.<br>N/A | | BILL OF LADING/AIR BILL NO.<br>N/A | | |

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

** All VOA samples will be collected using EPA Method 5035A.
** VOA sample bottle sets will include 5 bottles for low level analysis.
** The laboratory is to use one of the low level VOA bottles for moisture content determination.
** VOA bottles will be labeled with an appended suffix of K, L, M, N, or P for low level. These suffixes are for the purpose of providing bottle weights to the laboratories. These suffixes should not be include as part of the sample ID reported in the final data packages.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.
(1) VOA - 5035/8260 (LOW LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

ORIGINAL

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | F11-042-032 | PAGE 1 OF 2 |
|---|---|---|---|---|
| COLLECTOR: C. Chamberlain | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C; DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-15b | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-N-507-16.23 | ACTUAL SAMPLE DEPTH: 4-8" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | |

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

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

SPECIAL HANDLING AND/OR STORAGE

| PRESERVATION | Cool <-7C and >-20C |
|---|---|
| HOLDING TIME | 14 Days |
| TYPE OF CONTAINER | aGs |
| NO. OF CONTAINER(S) | 5 |
| VOLUME | 40mL |
| SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | |
|---|---|---|---|---|
| B2BBJ9 27 | SOIL | 1-26-11 | 0957 | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: C. Chamberlain | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: Victor Byers | DATE/TIME: 1-26-11 1200 | SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

ORIGINAL

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

A-6003-613 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | F11-042-032 | PAGE 2 OF 2 |
|---|---|---|---|---|
| COLLECTOR: C. Chamberlain | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C; DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-150 | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-N-507-623 | ACTUAL SAMPLE DEPTH: 4.5' | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | |

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

** All VOA samples will be collected using EPA Method 5035A.
** VOA sample bottle sets will include 5 bottles for low level analysis.
** The laboratory is to use one of the low level VOA bottles for moisture content determination.
** VOA bottles will be labeled with an appended suffix of K, L, M, N, or P for low level. These suffixes are for the purpose of providing bottle weights to the laboratories. These suffixes should not be include as part of the sample ID reported in the final data packages.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.
(1) VOA - 5035/8260 (LOW LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

ORIGINAL

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-033 | PAGE 1 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR: C. L. Chamberlain | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-16b | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-N-507-16.23 | ACTUAL SAMPLE DEPTH: 4.8' | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

| MATRIX* | POSSIBLE SAMPLE HAZARDS/ REMARKS | PRESERVATION | Cool <-7C and >-20C |
|---|---|---|---|
| A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegetation, W=Water, WI=Wipe, X=Other | Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993) | HOLDING TIME | 14 Days |
| | | TYPE OF CONTAINER | aGs |
| | | NO. OF CONTAINER(S) | 5 |
| | | VOLUME | 40mL |
| | SPECIAL HANDLING AND/OR STORAGE | SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | |
|---|---|---|---|---|
| B2BBK0 28 | SOIL | 1-26-11 | 0948 | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: C. L. Chamberlain | DATE/TIME: 1-26-11 | RECEIVED BY/STORED IN: Victor Binns | DATE/TIME: 1-26-11 | SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-033 | PAGE 2 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR<br>C. Chamberlain | COMPANY CONTACT<br>WIDRIG, DL | TELEPHONE NO.<br>376-2858 | PROJECT COORDINATOR<br>WIDRIG, DL | PRICE CODE 8C<br>AIR QUALITY ☐ | DATA TURNAROUND<br>15 Days / 15 Days |
| SAMPLING LOCATION<br>PSTFUNIT1-VS-16b | PROJECT DESIGNATION<br>600 Area PSTF Unit 1 Closure/Postclosure Soil | | SAF NO.<br>F11-042 | | |
| ICE CHEST NO.<br>N/A | FIELD LOGBOOK NO.<br>HNF-N-507-16.22 | ACTUAL SAMPLE DEPTH<br>4.8' | COA<br>300068ES10 | METHOD OF SHIPMENT<br>GOVERNMENT VEHICLE | |
| SHIPPED TO<br>Waste Sampling & Characterization | OFFSITE PROPERTY NO.<br>N/A | | BILL OF LADING/AIR BILL NO.<br>N/A | | |

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

** All VOA samples will be collected using EPA Method 5035A.
** VOA sample bottle sets will include 5 bottles for low level analysis.
** The laboratory is to use one of the low level VOA bottles for moisture content determination.
** VOA bottles wil be labeled with an appended suffix of K, L, M, N, or P for low level. These suffixes are for the purpose of providing bottle weights to the laboratories. These suffixes should not be include as part of the sample ID reported in the final data packages.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.
(1) VOA - 5035/8260 (LOW LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachlorice, Methylene chloride};

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | F11-042-034 | PAGE 1 OF 2 |
|---|---|---|---|---|
| COLLECTOR: J Scale 8 | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C; AIR QUALITY: ☐ | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-17b | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-IN-507-19.2 | ACTUAL SAMPLE DEPTH: 4.5" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | |

| MATRIX* | POSSIBLE SAMPLE HAZARDS/ REMARKS | PRESERVATION | Cool <-7C and >-20C |
|---|---|---|---|
| A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegetation, W=Water, WI=Wipe, X=Other | Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993) | HOLDING TIME | 14 Days |
| | | TYPE OF CONTAINER | aGs |
| | | NO. OF CONTAINER(S) | 5 |
| | | VOLUME | 40mL |
| | SPECIAL HANDLING AND/OR STORAGE | SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | |
|---|---|---|---|---|
| B2BBK1 29 | SOIL | 1-26-11 | CALC | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J Xalang | DATE/TIME: 1-26-11 2000 | RECEIVED BY/STORED IN: Victor | DATE/TIME: 1-26-11 2000 | SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

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

A-6003-618 (REV 2)

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-034 | PAGE 2 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR<br>J Scalo 3 | COMPANY CONTACT<br>WIDRIG, DL | TELEPHONE NO.<br>376-2858 | PROJECT COORDINATOR<br>WIDRIG, DL | PRICE CODE 8C | DATA TURNAROUND |
| SAMPLING LOCATION<br>PSTFUNIT1-VS-17b | PROJECT DESIGNATION<br>600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.<br>F11-042 | AIR QUALITY ☐ | 15 Days / 15 Days |
| ICE CHEST NO.<br>N/A | FIELD LOGBOOK NO.<br>HNF-N-507-6-2-3 | ACTUAL SAMPLE DEPTH<br>4-8' | COA<br>300068ES10 | METHOD OF SHIPMENT<br>GOVERNMENT VEHICLE | |
| SHIPPED TO<br>Waste Sampling & Characterization | OFFSITE PROPERTY NO.<br>N/A | | BILL OF LADING/AIR BILL NO.<br>N/A | | |

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

** All VOA samples will be collected using EPA Method 5035A.
** VOA sample bottle sets will include 5 bottles for low level analysis.
** The laboratory is to use one of the low level VOA bottles for moisture content determination.
** VOA bottles will be labeled with an appended suffix of K, L, M, N, or P for low level. These suffixes are for the purpose of providing bottle weights to the laboratories. These suffixes should not be include as part of the sample ID reported in the final data packages.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.
(1) VOA - 5035/8260 (LOW LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

A-6002-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | F11-042-018 | PAGE 1 OF 2 |
|---|---|---|---|

| COLLECTOR | COMPANY CONTACT | TELEPHONE NO. | PROJECT COORDINATOR | PRICE CODE 8C | DATA TURNAROUND |
|---|---|---|---|---|---|
| J. Scales | WIDRIG, DL | 376-2858 | WIDRIG, DL | AIR QUALITY ☐ | 15 Days / 15 Days |

| SAMPLING LOCATION | PROJECT DESIGNATION | SAF NO. |
|---|---|---|
| PSTFUNIT1-VS-1b | 600 Area PSTF Unit 1 Closure/Postclosure - Soil | F11-042 |

| ICE CHEST NO. | FIELD LOGBOOK NO. | ACTUAL SAMPLE DEPTH | COA | METHOD OF SHIPMENT |
|---|---|---|---|---|
| NA | HNF-N-607-16-23 | 4"-8" | 300068ES10 | GOVERNMENT VEHICLE |

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

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

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

**SPECIAL HANDLING AND/OR STORAGE**

| | |
|---|---|
| PRESERVATION | Cool <-7C and >-20C |
| HOLDING TIME | 14 Days |
| TYPE OF CONTAINER | aGs |
| NO. OF CONTAINER(S) | 5 |
| VOLUME | 40mL |
| SAMPLE ANALYSIS | SEE ITEM (3) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | |
|---|---|---|---|---|
| B28BH5 30 | SOIL | 1-26-11 | 0834 | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J Scales | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: Victor Bins | DATE/TIME: 1-26-11 1200 | SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

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

A-5003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CHZMHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-018 | PAGE 2 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR: J Beale | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND |
| SAMPLING LOCATION: PSTFUNIT1-VS-1b | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | 15 Days / 15 Days |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-N-507-16 . 23 | ACTUAL SAMPLE DEPTH: 4-8' | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880E520.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

** All VOA samples will be collected using EPA Method 5035A.
** VOA sample bottle sets will include 5 bottles for low level analysis.
** The laboratory is to use one of the low level VOA bottles for moisture content determination.
** VOA bottles will be labeled with an appended suffix of K, L, M, N, or P for low level. These suffixes are for the purpose of providing bottle weights to the laboratories. These suffixes should not be include as part of the sample ID reported in the final data packages.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.
(1) VOA - 5035/8260 (LOW LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

A-6003-618 (REV 2)

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | F11-042-019 | PAGE 1 OF 2 |
|---|---|---|---|---|
| COLLECTOR: J. Scalez | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: BC / DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-2b | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ |
| ICE CHEST NO.: MA | FIELD LOGBOOK NO.: HNF-N-807-16.23 | ACTUAL SAMPLE DEPTH: 4-8" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | |

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

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

SPECIAL HANDLING AND/OR STORAGE

| | |
|---|---|
| PRESERVATION | Cool <-7C and >-20C |
| HOLDING TIME | 14 Days |
| TYPE OF CONTAINER | aGs |
| NO. OF CONTAINER(S) | 5 |
| VOLUME | 40ml |
| SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | | MATRIX* | SAMPLE DATE | SAMPLE TIME |
|---|---|---|---|---|
| B2BBH6 | 31 | SOIL | 1-26-11 | ~~0843~~ 0840 |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J Scalez | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: Victor Sims | DATE/TIME: 1-26-11 1200 | SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | F11-042-019 | PAGE 2 OF 2 |
|---|---|---|---|---|
| COLLECTOR: J. Scalang | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C; DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-2h | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-N-507-12-23 | ACTUAL SAMPLE DEPTH: 4-8' | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | |

SPECIAL INSTRUCTIONS

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

** All VOA samples will be collected using EPA Method 5035A.
** VOA sample bottle sets will include 5 bottles for low level analysis.
** The laboratory is to use one of the low level VOA bottles for moisture content determination.
** VOA bottles will be labeled with an appended suffix of K, L, M, N, or P for low level. These suffixes are for the purpose of providing bottle weights to the laboratories. These suffixes should not be include as part of the sample ID reported in the final data packages.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.
(1) VOA - 5035/8260 (LOW LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-020 | PAGE 1 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR: J Seeley | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-3b | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: ~~HNF-N-507~~-16-23 | ACTUAL SAMPLE DEPTH: 4-8' | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

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

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

SPECIAL HANDLING AND/OR STORAGE

| PRESERVATION | Cool <-7C and >-20C |
|---|---|
| HOLDING TIME | 14 Days |
| TYPE OF CONTAINER | aGs |
| NO. OF CONTAINER(S) | 5 |
| VOLUME | 40mL |
| SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | |
|---|---|---|---|---|
| B2BBH7 32 | SOIL | 1-26-11 | 0846 | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J Seeley | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: VL Gro / Sims | DATE/TIME: 1-26-11 1200 | SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-020 | PAGE 2 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR<br>S. Scarlett | COMPANY CONTACT<br>WIDRIG, DL | TELEPHONE NO.<br>376-2858 | PROJECT COORDINATOR<br>WIDRIG, DL | PRICE CODE 8C<br>AIR QUALITY ☐ | DATA TURNAROUND<br>15 Days / 15 Days |
| SAMPLING LOCATION<br>PSTFUNIT1-VS-3b | PROJECT DESIGNATION<br>600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.<br>F11-042 | | |
| ICE CHEST NO.<br>NA | FIELD LOGBOOK NO.<br>NNF-N-507-22 | ACTUAL SAMPLE DEPTH<br>4.5' | COA<br>300068ES10 | METHOD OF SHIPMENT<br>GOVERNMENT VEHICLE | |
| SHIPPED TO<br>Waste Sampling & Characterization | OFFSITE PROPERTY NO.<br>N/A | | BILL OF LADING/AIR BILL NO.<br>N/A | | |

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

** All VOA samples will be collected using EPA Method 5035A.
** VOA sample bottle sets will include 5 bottles for low level analysis.
** The laboratory is to use one of the low level VOA bottles for moisture content determination.
** VOA bottles will be labeled with an appended suffix of K, L, M, N, or P for low level. These suffixes are for the purpose of providing bottle weights to the laboratories. These suffixes should not be include as part of the sample ID reported in the final data packages.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.
(1) VOA - 5035/8260 (LOW LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

A-6033-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-021 | PAGE 1 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR: C. Chamberlain | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-4b | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: NN | FIELD LOGBOOK NO.: ~~HNF-14-507~~ D-23 | ACTUAL SAMPLE DEPTH: 4'-8" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

| MATRIX* | POSSIBLE SAMPLE HAZARDS/ REMARKS | | |
|---|---|---|---|
| A=Air<br>DL=Drum Liquids<br>DS=Drum Solids<br>L=Liquid<br>O=Oil<br>S=Soil<br>SE=Sediment<br>T=Tissue<br>V=Vegetation<br>W=Water<br>WI=Wipe<br>X=Other | Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993) | PRESERVATION | Cool <-7C and >-20C |
| | | HOLDING TIME | 14 Days |
| | | TYPE OF CONTAINER | aGs |
| | | NO. OF CONTAINER(S) | 5 |
| | | VOLUME | 40mL |
| | SPECIAL HANDLING AND/OR STORAGE | SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | |
|---|---|---|---|---|
| B2BBH8 | SOIL 33 | 1-26-11 | 0855 | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: C. Chamberlain | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: [illegible] | DATE/TIME: 1-26-11 1200 | SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

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

A 6003 618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-021 | PAGE 2 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR<br>C. Chamberlain | COMPANY CONTACT<br>WIDRIG, DL | TELEPHONE NO.<br>376-2858 | PROJECT COORDINATOR<br>WIDRIG, DL | PRICE CODE 8C<br>AIR QUALITY ☐ | DATA TURNAROUND<br>15 Days / 15 Days |
| SAMPLING LOCATION<br>PSTFUNIT1-V5-4b | PROJECT DESIGNATION<br>600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.<br>F11-042 | | |
| ICE CHEST NO.<br>NA | FIELD LOGBOOK NO.<br>HNF-N-607- 22 | ACTUAL SAMPLE DEPTH<br>4.8" | COA<br>300068ES10 | METHOD OF SHIPMENT<br>GOVERNMENT VEHICLE | |
| SHIPPED TO<br>Waste Sampling & Characterization | OFFSITE PROPERTY NO.<br>N/A | | BILL OF LADING/AIR BILL NO.<br>N/A | | |

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

** All VOA samples will be collected using EPA Method 5035A.
** VOA sample bottle sets will include 5 bottles for low level analysis.
** The laboratory is to use one of the low level VOA bottles for moisture content determination.
** VOA bottles will be labeled with an appended suffix of K, L, M, N, or P for low level. These suffixes are for the purpose of providing bottle weights to the laboratories. These suffixes should not be include as part of the sample ID reported in the final data packages.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.
(1) VOA - 5035/8260 (LOW LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-022 | PAGE 1 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR: J. Scalos | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-5b | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-N-807-16-27 | ACTUAL SAMPLE DEPTH: 4-8" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

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

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

**SPECIAL HANDLING AND/OR STORAGE**

| | |
|---|---|
| PRESERVATION | Cool <-7C and >-20C |
| HOLDING TIME | 14 Days |
| TYPE OF CONTAINER | 8Gs |
| NO. OF CONTAINER(S) | 5 |
| VOLUME | 40mL |
| SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | |
|---|---|---|---|---|
| B2BBH9 34 | SOIL | 1-26-11 | 0900 | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J. Scalos | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: Victor Bing | DATE/TIME: 1-26-11 1200 | SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-022 | PAGE 2 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR<br>J. Scales | COMPANY CONTACT<br>WIDRIG, DL | TELEPHONE NO.<br>376-2858 | PROJECT COORDINATOR<br>WIDRIG, DL | PRICE CODE 8C | DATA TURNAROUND<br>15 Days / 15 Days |
| SAMPLING LOCATION<br>PSTFUNIT1-V5-5b | PROJECT DESIGNATION<br>600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.<br>F11-042 | AIR QUALITY ☐ | |
| ICE CHEST NO.<br>MA | FIELD LOGBOOK NO.<br>HNF-N-507-16-23 | ACTUAL SAMPLE DEPTH<br>1-8' | COA<br>300068ES10 | METHOD OF SHIPMENT<br>GOVERNMENT VEHICLE | |
| SHIPPED TO<br>Waste Sampling & Characterization | OFFSITE PROPERTY NO.<br>N/A | | BILL OF LADING/AIR BILL NO.<br>N/A | | |

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

** All VOA samples will be collected using EPA Method 5035A.
** VOA sample bottle sets will include 5 bottles for low level analysis.
** The laboratory is to use one of the low level VOA bottles for moisture content determination.
** VOA bottles will be labeled with an appended suffix of K, L, M, N, or P for low level. These suffixes are for the purpose of providing bottle weights to the laboratories. These suffixes should not be include as part of the sample ID reported in the final data packages.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.
(1) VOA - 5035/8260 (LOW LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

ORIGINAL

A-5003-618 (REV 2)

Attachment 2
**Narrative**
WSCF111311

## Introduction

Samples were received at the WSCF laboratory as referenced on the WSCF SAF Number Cross Reference table included in the final report. The samples were analyzed for the analytes indicated on the attached copy of the chain of custody (COC) form in accordance with the *Statement of Work (SOW), Modification No. 2 to Agreement 36587, Release 3, "FH WSCF ANALYTICAL SERVICES FOR GROUNDWATER."*

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

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

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

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

## Analytical Methodology for Requested Analyses

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

## Inorganic Comments

**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):

- All applicable QC controls are within the established limits.

Attachment 2
**Narrative**
WSCF111311

**Organic Comments**

**Semi-VOA** – 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):

- B2BBK4 (111311001) did not meet the acceptance limits for surrogate Phenol-d5. Sample results were not flagged. The quality control report was flagged for surrogate recovery failure.
- All other applicable QC controls are within the established limits.

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

- 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 | | | F11-043-003 | PAGE 1 OF 1 |
|---|---|---|---|---|---|
| COLLECTOR: Chamberlain | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 7C | DATA TURNAROUND |
| SAMPLING LOCATION: PSTFUNIT1-EB | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - QC Sampling | | SAF NO.: F11-043 | AIR QUALITY: ☐ | 15 Days / 15 Days |
| ICE CHEST NO.: | FIELD LOGBOOK NO.: HNF-N-502-16 | ACTUAL SAMPLE DEPTH: N/A | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

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

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

111311

**SPECIAL HANDLING AND/OR STORAGE**

| PRESERVATION | HCl or H2SO4 to pH <2/Cool~4C | Cool~4C | HNO3 to pH <2 |
|---|---|---|---|
| HOLDING TIME | 14 Days | 7/40 Days | 6 Months |
| TYPE OF CONTAINER | aGs* | aG | G/P |
| NO. OF CONTAINER(S) | 3 | 4 | 1 |
| VOLUME | 40mL | 1L | 500mL |
| SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS | Semi-VOA - 8270 (Add-On) (Total cresols); | ICP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | | |
|---|---|---|---|---|---|---|
| B2BBK4 001 | WATER | 1-26-11 | 0650 | X | X | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| Craig Chamberlain | 1-26-11 / 1200 | VICTOR [illegible] | 1/26/11 1200 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| 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.

** The appropriate GKI will be provided to the laboratories prior to sample collection.

(1) VOA - 8260 (TCL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

☐ ORIGINAL

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

A-6003-618 (REV 2)

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-043-001 | PAGE 1 OF 1 |
|---|---|---|---|---|---|
| COLLECTOR: C. Chamberlain | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 7C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-FXR | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - QC Sampling | | SAF NO.: F11-043 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: N/A | FIELD LOGBOOK NO.: HNF-N-507-16-23 | ACTUAL SAMPLE DEPTH: N/A | COA: 300068E510 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

| MATRIX* | POSSIBLE SAMPLE HAZARDS/ REMARKS | | |
|---|---|---|---|
| A=Air<br>DI=Drum Liquids<br>DS=Drum Solids<br>L=Liquid<br>O=Oil<br>S=Soil<br>SE=Sediment<br>T=Tissue<br>V=Vegetation<br>W=Water<br>WI=Wipe<br>X=Other | Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993) | PRESERVATION | HCl or H2SO4 to pH <2/Cool≈4C |
| | | HOLDING TIME | 14 Days |
| | | TYPE OF CONTAINER | oGs* |
| | | NO. OF CONTAINER(S) | 3 |
| | | VOLUME | 40mL |
| | SPECIAL HANDLING AND/OR STORAGE | SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | |
|---|---|---|---|---|
| B2BBK2 003 | WATER | 1-26-11 | 0840 | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: C. Chamberlain | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: Victor Jung | DATE/TIME: 1-26-11 1200 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| 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.

** The appropriate GKI will be provided to the laboratories prior to sample collection.

(1) VOA - 8260 (TCL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | F11-043-002 | PAGE 1 OF 1 |
|---|---|---|---|
| COLLECTOR: Chamberlain | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL |
| PRICE CODE: 7C | DATA TURNAROUND: 15 Days / 15 Days | SAMPLING LOCATION: PSTFUNIT1-FB | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - QC Sampling |
| SAF NO.: F11-043 | AIR QUALITY: ☐ | ICE CHEST NO.: — | FIELD LOGBOOK NO.: HNF-N-507-16 |
| ACTUAL SAMPLE DEPTH: N/A | COA: 300068E510 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | SHIPPED TO: Waste Sampling & Characterization |
| OFFSITE PROPERTY NO.: N/A | BILL OF LADING/AIR BILL NO.: N/A | | |

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

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

SPECIAL HANDLING AND/OR STORAGE

| PRESERVATION | HCl or H2SO4 to pH <2/Cool<4C | Cool<4C | HNO3 to pH<2 |
|---|---|---|---|
| HOLDING TIME | 14 Days | 7/40 Days | 6 Months |
| TYPE OF CONTAINER | aGs* | aG | G/P |
| NO. OF CONTAINER(S) | 3 | | |
| VOLUME | 40mL | 1L | 500mL |
| SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS | Semi-VOA 8270 (Non-Chlorinated) (TCL) (cresols); | ICP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | | |
|---|---|---|---|---|---|---|
| B2BBK3 003 | WATER | 1-26-11 | 0655 | X | | |

PMGENT 21JAN11

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: Greg Chamberlain | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: Victor Simon | DATE/TIME: 1/24/11 1200 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| 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.

** The appropriate GKI will be provided to the laboratories prior to sample collection.

(1) VOA - 8260 (TCL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

ORIGINAL

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

A-6003-618 (REV 2)

# Appendix 5

Data Validation Supporting Documentation

## Appendix A - Chemical Data Validation Checklist

| VALIDATION LEVEL: | A | B | (C) | D | E |
|---|---|---|---|---|---|
| PROJECT: CPP 600 AREA | | | DATA PACKAGE: VSR11-033 | | |
| VALIDATOR: Carl Schloesslin | | LAB: WSCF | | DATE: 2-28-2011 | |
| | | | SDG: WSCF111310, WSCF111311 | | |
| ANALYSES PERFORMED | | | | | |
| SW-846 8260 | | SW-846 8260 (TCLP) | SW-846 8270 X | | SW-846 8270 (TCLP) |
| | | | | | |

SAMPLES/MATRIX

SDG WSCF111310 (soil samples): B2BBH0, B2BBH1, B2BBH2, B2BBH3, B2BBH4, B2BBF0, B2BBF1, B2BBF2, B2BBF3, B2BBF4, B2BBF5, B2BBF6, B2BBF7, B2BBF8, B2BBF9, B2BBD8, B2BBD9

SDG WSCF111311 (water sample): B2BBK4

### 1. DATA PACKAGE COMPLETENESS AND CASE NARRATIVE

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

Comments: None

**2. INSTRUMENT TUNING AND CALIBRATION (Levels D and E)**

GC/MS tuning/performance check acceptable? ..... Yes No N/A

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

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:

MB results for total methylphenols not reported.

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

Surrogates/system monitoring compounds analyzed? ..... (Yes) No N/A

Surrogate/system monitoring compound 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? (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:

<u>WSCF111310 surrogate recovery infractions</u>
B2BBH0: 2-fluorobiphenyl 30%
B2BBH1: 2-fluorophenol 36%, phenol-d5 33%, nitrobenzene-d5 41%, 2-fluorobiphenyl 24%, 2,4,6-tribromophenol 6.5%
B2BBF2: 2-fluorophenol 43%, phenol-d5 38%, nitrobenzene-d5 47%, 2-fluorobiphenyl 30%, 2,4,6-tribromophenol 13%
B2BBF3: nitrobenzene-d5 48%, 2-fluorobiphenyl 30%
B2BBF4: 2-fluorobiphenyl 33%

<u>WSCF111311 surrogate recovery infraction</u>
B2BBK4: phenol-d5 34%

WSCF111311: phenol (represents SAP target analyte total methylphenols) LCS %R = 53%, MS/MSD %Rs = 42%/46%

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

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

MS/MSD RPD values 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)**

Internal standards analyzed? ..... Yes No N/A

Internal standard areas acceptable? ..... Yes No N/A

Internal standard retention times 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. 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)

Laboratory properly identified and coded all TIC? (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

**9. SAMPLE CLEANUP (Levels D and E)**

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 (attach additional sheets as necessary): None

# Appendix 6

Additional Documentation Requested By Client

## Quality Control Report

**Attention** Michael Neely
**Department** Organic, Semivolatiles

**Group #** WSCF111310

**QC Batch** 175225 **Test** SW-846 8270D Semivolatiles
**Associated Samples** 111310001, 111310002, 111310003, 111310004, 111310005, 111310006, 111310007, 111310008, 111310009, 111310010, 111310011, 111310012, 111310013, 111310014, 111310015, 111310016, 111310017

| Analyte | CAS # | Original Found | QC Found | Units | % Recov | Limits | RPD | RPD Limit | RQ | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **BLANK** | | | **QC Sample #47612** | | | | | | | |
| 4-Nitrophenol | 100-02-7 | | <200 | ug/kg | | | | | U | 01/31/11 |
| 1,4-Dichlorobenzene | 106-46-7 | | <200 | ug/kg | | | | | U | 01/31/11 |
| Phenol | 108-95-2 | | <200 | ug/kg | | | | | U | 01/31/11 |
| 1,2,4-Trichlorobenzene | 120-82-1 | | <200 | ug/kg | | | | | U | 01/31/11 |
| 2,4-Dinitrotoluene | 121-14-2 | | <200 | ug/kg | | | | | U | 01/31/11 |
| Pyrene | 129-00-0 | | <200 | ug/kg | | | | | U | 01/31/11 |
| 4-Chloro-3-methylphenol | 59-50-7 | | <200 | ug/kg | | | | | U | 01/31/11 |
| n-Nitroso-di-n-propylamine | 621-64-7 | | <200 | ug/kg | | | | | U | 01/31/11 |
| Acenaphthene | 83-32-9 | | <200 | ug/kg | | | | | U | 01/31/11 |
| Pentachlorophenol | 87-86-5 | | <200 | ug/kg | | | | | U | 01/31/11 |
| 2-Chlorophenol | 95-57-8 | | <200 | ug/kg | | | | | U | 01/31/11 |
| **LCS** | | | **QC Sample #47613** | | | | | | | |
| 4-Nitrophenol | 100-02-7 | | 4400 | ug/kg | 73.8 | 49 - 128 | | | | 01/31/11 |
| 1,4-Dichlorobenzene | 106-46-7 | | 3700 | ug/kg | 91.6 | 71 - 122 | | | | 01/31/11 |
| Phenol | 108-95-2 | | 5600 | ug/kg | 93.1 | 72 - 123 | | | | 01/31/11 |

## Quality Control Report

**Attention** Michael Neely
**Department** Organic, Semivolatiles

**Group #** WSCF111310

| Analyte | CAS # | Original Found | QC Found | Units | % Recov | Limits | RPD | RPD Limit | RQ | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| 1,2,4-Trichlorobenzene | 120-82-1 | | 5700 | ug/kg | 94.3 | 73 - 127 | | | | 01/31/11 |
| 2,4-Dinitrotoluene | 121-14-2 | | 5400 | ug/kg | 89.8 | 68 - 121 | | | | 01/31/11 |
| Pyrene | 129-00-0 | | 6000 | ug/kg | 99.5 | 75 - 137 | | | | 01/31/11 |
| 4-Chloro-3-methylphenol | 59-50-7 | | 5600 | ug/kg | 93.1 | 69 - 127 | | | | 01/31/11 |
| n-Nitroso-di-n-propylamine | 621-64-7 | | 5600 | ug/kg | 94.1 | 73 - 125 | | | | 01/31/11 |
| Acenaphthene | 83-32-9 | | 5700 | ug/kg | 94.9 | 73 - 122 | | | | 01/31/11 |
| Pentachlorophenol | 87-86-5 | | 4100 | ug/kg | 67.5 | 42 - 132 | | | | 01/31/11 |
| 2-Chlorophenol | 95-57-8 | | 5500 | ug/kg | 92.4 | 71 - 123 | | | | 01/31/11 |
| **MS** | | | **QC Sample #47614** | | | | | | | |
| | | | **Original 111310016** | | | | | | | |
| 4-Nitrophenol | 100-02-7 | <200 | 4500 | ug/kg | 75.8 | 53 - 130 | | | | 01/31/11 |
| 1,4-Dichlorobenzene | 106-46-7 | <200 | 3800 | ug/kg | 94.1 | 75 - 117 | | | | 01/31/11 |
| Phenol | 108-95-2 | <200 | 5800 | ug/kg | 97.2 | 76 - 123 | | | | 01/31/11 |
| 1,2,4-Trichlorobenzene | 120-82-1 | <200 | 5600 | ug/kg | 93.2 | 76 - 125 | | | | 01/31/11 |
| 2,4-Dinitrotoluene | 121-14-2 | <200 | 5600 | ug/kg | 93.8 | 73 - 120 | | | | 01/31/11 |
| Pyrene | 129-00-0 | <200 | 6000 | ug/kg | 100 | 78 - 134 | | | | 01/31/11 |
| 4-Chloro-3-methylphenol | 59-50-7 | <200 | 5600 | ug/kg | 93.4 | 71 - 129 | | | | 01/31/11 |
| n-Nitroso-di-n-propylamine | 621-64-7 | <200 | 5800 | ug/kg | 97.1 | 75 - 124 | | | | 01/31/11 |
| Acenaphthene | 83-32-9 | <200 | 5700 | ug/kg | 95.1 | 75 - 121 | | | | 01/31/11 |
| Pentachlorophenol | 87-86-5 | <200 | 4800 | ug/kg | 79.8 | 39 - 140 | | | | 01/31/11 |
| 2-Chlorophenol | 95-57-8 | <200 | 5700 | ug/kg | 96 | 75 - 123 | | | | 01/31/11 |

## Quality Control Report

**Attention** Michael Neely
**Department** Organic, Semivolatiles

**Group #** WSCF111310

| Analyte | CAS # | Original Found | QC Found | Units | % Recov | Limits | RPD | RPD Limit | RQ | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **MSD** | | | **QC Sample #47615** | | | | | | | |
| | | | **Original** | **111310016** | | | | | **Paired** | **47614** |
| 4-Nitrophenol | 100-02-7 | <200 | 4700 | ug/kg | 78.8 | 53 - 130 | 3.90 | 30 | | 01/31/11 |
| 1,4-Dichlorobenzene | 106-46-7 | <200 | 3900 | ug/kg | 96.9 | 75 - 117 | 2.90 | 30 | | 01/31/11 |
| Phenol | 108-95-2 | <200 | 6000 | ug/kg | 100.8 | 76 - 123 | 3.60 | 30 | | 01/31/11 |
| 1,2,4-Trichlorobenzene | 120-82-1 | <200 | 6000 | ug/kg | 100.4 | 76 - 125 | 7.40 | 30 | | 01/31/11 |
| 2,4-Dinitrotoluene | 121-14-2 | <200 | 5700 | ug/kg | 94.8 | 73 - 120 | 1.10 | 30 | | 01/31/11 |
| Pyrene | 129-00-0 | <200 | 6400 | ug/kg | 106.8 | 78 - 134 | 6.60 | 30 | | 01/31/11 |
| 4-Chloro-3-methylphenol | 59-50-7 | <200 | 6000 | ug/kg | 100.9 | 71 - 129 | 7.70 | 30 | | 01/31/11 |
| n-Nitroso-di-n-propylamine | 621-64-7 | <200 | 6200 | ug/kg | 102.9 | 75 - 124 | 5.80 | 30 | | 01/31/11 |
| Acenaphthene | 83-32-9 | <200 | 6100 | ug/kg | 101.3 | 75 - 121 | 6.30 | 30 | | 01/31/11 |
| Pentachlorophenol | 87-86-5 | <200 | 5400 | ug/kg | 90.6 | 39 - 140 | 12.70 | 30 | | 01/31/11 |
| 2-Chlorophenol | 95-57-8 | <200 | 6000 | ug/kg | 100.1 | 75 - 123 | 4.20 | 30 | | 01/31/11 |

## Quality Control Report

**Attention** Michael Neely
**Department** Organic, Semivolatiles

**Group #** WSCF111310

**QC Batch** 175225 **Test** SW-846 8270D Semivolatiles
**Associated Samples** 111310001, 111310002, 111310003, 111310004, 111310005, 111310006, 111310007, 111310008, 111310009, 111310010, 111310011, 111310012, 111310013, 111310014, 111310015, 111310016, 111310017

| Analyte | CAS # | Original Found | QC Found | Units | % Recov | Limits | RPD | RPD Limit | RQ | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **SAMPLE** | | | **Sample #111310001** | | | | | | | |
| 2-Fluorophenol | 367-12-4 | | | | 46.8 | 44 - 135 | | | | 02/01/11 |
| Phenol-d5 | 4165-62-2 | | | | 46.9 | 41 - 136 | | | | 02/01/11 |
| Nitrobenzene-d5 | 4165-60-0 | | | | 53.4 | 53 - 129 | | | | 02/01/11 |
| 2-Fluorobiphenyl | 321-60-8 | | | | 29.9 | 36 - 141 | | | X | 02/01/11 |
| 2,4,6-Tribromophenol | 118-79-6 | | | | 18.2 | 17 - 142 | | | | 02/01/11 |
| Terphenyl-d14 | 98904-43-9 | | | | 110.8 | 61 - 142 | | | | 02/01/11 |
| **SAMPLE** | | | **Sample #111310002** | | | | | | | |
| 2-Fluorophenol | 367-12-4 | | | | 35.9 | 44 - 135 | | | X | 02/01/11 |
| Phenol-d5 | 4165-62-2 | | | | 33.1 | 41 - 136 | | | X | 02/01/11 |
| Nitrobenzene-d5 | 4165-60-0 | | | | 41.4 | 53 - 129 | | | X | 02/01/11 |
| 2-Fluorobiphenyl | 321-60-8 | | | | 24.4 | 36 - 141 | | | X | 02/01/11 |
| 2,4,6-Tribromophenol | 118-79-6 | | | | 6.5 | 17 - 142 | | | X | 02/01/11 |
| Terphenyl-d14 | 98904-43-9 | | | | 107.6 | 61 - 142 | | | | 02/01/11 |
| **SAMPLE** | | | **Sample #111310003** | | | | | | | |
| 2-Fluorophenol | 367-12-4 | | | | 60.7 | 44 - 135 | | | | 02/01/11 |
| Phenol-d5 | 4165-62-2 | | | | 58.5 | 41 - 136 | | | | 02/01/11 |
| Nitrobenzene-d5 | 4165-60-0 | | | | 64.6 | 53 - 129 | | | | 02/01/11 |

## Quality Control Report

**Attention** Michael Neely
**Department** Organic, Semivolatiles

**Group #** WSCF111310

| Analyte | CAS # | Original Found | QC Found | Units | % Recov | Limits | RPD | RPD Limit | RQ | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| 2-Fluorobiphenyl | 321-60-8 | | | | 46.1 | 36 - 141 | | | | 02/01/11 |
| 2,4,6-Tribromophenol | 118-79-6 | | | | 32.4 | 17 - 142 | | | | 02/01/11 |
| Terphenyl-d14 | 98904-43-9 | | | | 106.9 | 61 - 142 | | | | 02/01/11 |
| **SAMPLE** | | | **Sample #111310004** | | | | | | | |
| 2-Fluorophenol | 367-12-4 | | | | 68.7 | 44 - 135 | | | | 02/01/11 |
| Phenol-d5 | 4165-62-2 | | | | 65.4 | 41 - 136 | | | | 02/01/11 |
| Nitrobenzene-d5 | 4165-60-0 | | | | 69 | 53 - 129 | | | | 02/01/11 |
| 2-Fluorobiphenyl | 321-60-8 | | | | 44.5 | 36 - 141 | | | | 02/01/11 |
| 2,4,6-Tribromophenol | 118-79-6 | | | | 31.9 | 17 - 142 | | | | 02/01/11 |
| Terphenyl-d14 | 98904-43-9 | | | | 109.5 | 61 - 142 | | | | 02/01/11 |
| **SAMPLE** | | | **Sample #111310005** | | | | | | | |
| 2-Fluorophenol | 367-12-4 | | | | 68.8 | 44 - 135 | | | | 02/01/11 |
| Phenol-d5 | 4165-62-2 | | | | 63.4 | 41 - 136 | | | | 02/01/11 |
| Nitrobenzene-d5 | 4165-60-0 | | | | 72.7 | 53 - 129 | | | | 02/01/11 |
| 2-Fluorobiphenyl | 321-60-8 | | | | 48 | 36 - 141 | | | | 02/01/11 |
| 2,4,6-Tribromophenol | 118-79-6 | | | | 35.1 | 17 - 142 | | | | 02/01/11 |
| Terphenyl-d14 | 98904-43-9 | | | | 106.4 | 61 - 142 | | | | 02/01/11 |
| **SAMPLE** | | | **Sample #111310006** | | | | | | | |
| 2-Fluorophenol | 367-12-4 | | | | 87.8 | 44 - 135 | | | | 01/31/11 |
| Phenol-d5 | 4165-62-2 | | | | 81.9 | 41 - 136 | | | | 01/31/11 |
| Nitrobenzene-d5 | 4165-60-0 | | | | 88 | 53 - 129 | | | | 01/31/11 |
| 2-Fluorobiphenyl | 321-60-8 | | | | 75.6 | 36 - 141 | | | | 01/31/11 |

## Quality Control Report

**Attention** Michael Neely
**Department** Organic, Semivolatiles

**Group #** WSCF111310

| Analyte | CAS # | Original Found | QC Found | Units | % Recov | Limits | RPD | RPD Limit | RQ | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| 2,4,6-Tribromophenol | 118-79-6 | | | | 59.4 | 17 - 142 | | | | 01/31/11 |
| Terphenyl-d14 | 98904-43-9 | | | | 118.3 | 61 - 142 | | | | 01/31/11 |
| **SAMPLE** | | | **Sample #111310007** | | | | | | | |
| 2-Fluorophenol | 367-12-4 | | | | 99 | 44 - 135 | | | | 01/31/11 |
| Phenol-d5 | 4165-62-2 | | | | 91.5 | 41 - 136 | | | | 01/31/11 |
| Nitrobenzene-d5 | 4165-60-0 | | | | 99.1 | 53 - 129 | | | | 01/31/11 |
| 2-Fluorobiphenyl | 321-60-8 | | | | 88.6 | 36 - 141 | | | | 01/31/11 |
| 2,4,6-Tribromophenol | 118-79-6 | | | | 58.2 | 17 - 142 | | | | 01/31/11 |
| Terphenyl-d14 | 98904-43-9 | | | | 124.3 | 61 - 142 | | | | 01/31/11 |
| **SAMPLE** | | | **Sample #111310008** | | | | | | | |
| 2-Fluorophenol | 367-12-4 | | | | 42.5 | 44 - 135 | | | X | 02/01/11 |
| Phenol-d5 | 4165-62-2 | | | | 37.7 | 41 - 136 | | | X | 02/01/11 |
| Nitrobenzene-d5 | 4165-60-0 | | | | 47.1 | 53 - 129 | | | X | 02/01/11 |
| 2-Fluorobiphenyl | 321-60-8 | | | | 30.2 | 36 - 141 | | | X | 02/01/11 |
| 2,4,6-Tribromophenol | 118-79-6 | | | | 13.3 | 17 - 142 | | | X | 02/01/11 |
| Terphenyl-d14 | 98904-43-9 | | | | 92.6 | 61 - 142 | | | | 02/01/11 |
| **SAMPLE** | | | **Sample #111310009** | | | | | | | |
| 2-Fluorophenol | 367-12-4 | | | | 48.8 | 44 - 135 | | | | 02/01/11 |
| Phenol-d5 | 4165-62-2 | | | | 46.2 | 41 - 136 | | | | 02/01/11 |
| Nitrobenzene-d5 | 4165-60-0 | | | | 48 | 53 - 129 | | | X | 02/01/11 |
| 2-Fluorobiphenyl | 321-60-8 | | | | 30 | 36 - 141 | | | X | 02/01/11 |
| 2,4,6-Tribromophenol | 118-79-6 | | | | 20.7 | 17 - 142 | | | | 02/01/11 |

## Quality Control Report

**Attention** Michael Neely
**Department** Organic, Semivolatiles

**Group #** WSCF111310

| Analyte | CAS # | Original Found | QC Found | Units | % Recov | Limits | RPD | RPD Limit | RQ | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| Terphenyl-d14 | 98904-43-9 | | | | 80.1 | 61 - 142 | | | | 02/01/11 |
| **SAMPLE** | | | **Sample #111310010** | | | | | | | |
| 2-Fluorophenol | 367-12-4 | | | | 47.1 | 44 - 135 | | | | 02/01/11 |
| Phenol-d5 | 4165-62-2 | | | | 42.6 | 41 - 136 | | | | 02/01/11 |
| Nitrobenzene-d5 | 4165-60-0 | | | | 54.8 | 53 - 129 | | | | 02/01/11 |
| 2-Fluorobiphenyl | 321-60-8 | | | | 33.4 | 36 - 141 | | | X | 02/01/11 |
| 2,4,6-Tribromophenol | 118-79-6 | | | | 20.3 | 17 - 142 | | | | 02/01/11 |
| Terphenyl-d14 | 98904-43-9 | | | | 91.5 | 61 - 142 | | | | 02/01/11 |
| **SAMPLE** | | | **Sample #111310011** | | | | | | | |
| 2-Fluorophenol | 367-12-4 | | | | 72.3 | 44 - 135 | | | | 02/01/11 |
| Phenol-d5 | 4165-62-2 | | | | 64.5 | 41 - 136 | | | | 02/01/11 |
| Nitrobenzene-d5 | 4165-60-0 | | | | 74.1 | 53 - 129 | | | | 02/01/11 |
| 2-Fluorobiphenyl | 321-60-8 | | | | 55.4 | 36 - 141 | | | | 02/01/11 |
| 2,4,6-Tribromophenol | 118-79-6 | | | | 35.4 | 17 - 142 | | | | 02/01/11 |
| Terphenyl-d14 | 98904-43-9 | | | | 92.6 | 61 - 142 | | | | 02/01/11 |
| **SAMPLE** | | | **Sample #111310012** | | | | | | | |
| 2-Fluorophenol | 367-12-4 | | | | 75.1 | 44 - 135 | | | | 02/01/11 |
| Phenol-d5 | 4165-62-2 | | | | 73.9 | 41 - 136 | | | | 02/01/11 |
| Nitrobenzene-d5 | 4165-60-0 | | | | 84.5 | 53 - 129 | | | | 02/01/11 |
| 2-Fluorobiphenyl | 321-60-8 | | | | 57 | 36 - 141 | | | | 02/01/11 |
| 2,4,6-Tribromophenol | 118-79-6 | | | | 38.6 | 17 - 142 | | | | 02/01/11 |
| Terphenyl-d14 | 98904-43-9 | | | | 126.2 | 61 - 142 | | | | 02/01/11 |

## Quality Control Report

**Attention** Michael Neely
**Department** Organic, Semivolatiles

**Group #** WSCF111310

| Analyte | CAS # | Original Found | QC Found | Units | % Recov | Limits | RPD | RPD Limit | RQ | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **SAMPLE** | | | **Sample #111310013** | | | | | | | |
| 2-Fluorophenol | 367-12-4 | | | | 62.4 | 44 - 135 | | | | 02/01/11 |
| Phenol-d5 | 4165-62-2 | | | | 58.9 | 41 - 136 | | | | 02/01/11 |
| Nitrobenzene-d5 | 4165-60-0 | | | | 64.9 | 53 - 129 | | | | 02/01/11 |
| 2-Fluorobiphenyl | 321-60-8 | | | | 46.2 | 36 - 141 | | | | 02/01/11 |
| 2,4,6-Tribromophenol | 118-79-6 | | | | 27.1 | 17 - 142 | | | | 02/01/11 |
| Terphenyl-d14 | 98904-43-9 | | | | 92.7 | 61 - 142 | | | | 02/01/11 |
| **SAMPLE** | | | **Sample #111310014** | | | | | | | |
| 2-Fluorophenol | 367-12-4 | | | | 51.8 | 44 - 135 | | | | 02/01/11 |
| Phenol-d5 | 4165-62-2 | | | | 46.5 | 41 - 136 | | | | 02/01/11 |
| Nitrobenzene-d5 | 4165-60-0 | | | | 60.8 | 53 - 129 | | | | 02/01/11 |
| 2-Fluorobiphenyl | 321-60-8 | | | | 37.9 | 36 - 141 | | | | 02/01/11 |
| 2,4,6-Tribromophenol | 118-79-6 | | | | 18.5 | 17 - 142 | | | | 02/01/11 |
| Terphenyl-d14 | 98904-43-9 | | | | 92.7 | 61 - 142 | | | | 02/01/11 |
| **SAMPLE** | | | **Sample #111310015** | | | | | | | |
| 2-Fluorophenol | 367-12-4 | | | | 57.4 | 44 - 135 | | | | 02/01/11 |
| Phenol-d5 | 4165-62-2 | | | | 57.8 | 41 - 136 | | | | 02/01/11 |
| Nitrobenzene-d5 | 4165-60-0 | | | | 59.1 | 53 - 129 | | | | 02/01/11 |
| 2-Fluorobiphenyl | 321-60-8 | | | | 39.4 | 36 - 141 | | | | 02/01/11 |
| 2,4,6-Tribromophenol | 118-79-6 | | | | 25.5 | 17 - 142 | | | | 02/01/11 |
| Terphenyl-d14 | 98904-43-9 | | | | 108.9 | 61 - 142 | | | | 02/01/11 |
| **SAMPLE** | | | **Sample #111310016** | | | | | | | |

## Quality Control Report

**Attention** Michael Neely
**Department** Organic, Semivolatiles

**Group #** WSCF111310

| Analyte | CAS # | Original Found | QC Found | Units | % Recov | Limits | RPD | RPD Limit | RQ | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| 2-Fluorophenol | 367-12-4 | | | | 122.4 | 44 - 135 | | | | 01/31/11 |
| Phenol-d5 | 4165-62-2 | | | | 119.6 | 41 - 136 | | | | 01/31/11 |
| Nitrobenzene-d5 | 4165-60-0 | | | | 119.5 | 53 - 129 | | | | 01/31/11 |
| 2-Fluorobiphenyl | 321-60-8 | | | | 117.5 | 36 - 141 | | | | 01/31/11 |
| 2,4,6-Tribromophenol | 118-79-6 | | | | 97.4 | 17 - 142 | | | | 01/31/11 |
| Terphenyl-d14 | 98904-43-9 | | | | 136.6 | 61 - 142 | | | | 01/31/11 |
| **SAMPLE** | | | **Sample #111310017** | | | | | | | |
| 2-Fluorophenol | 367-12-4 | | | | 58.7 | 44 - 135 | | | | 01/31/11 |
| Phenol-d5 | 4165-62-2 | | | | 54.3 | 41 - 136 | | | | 01/31/11 |
| Nitrobenzene-d5 | 4165-60-0 | | | | 59.5 | 53 - 129 | | | | 01/31/11 |
| 2-Fluorobiphenyl | 321-60-8 | | | | 42.3 | 36 - 141 | | | | 01/31/11 |
| 2,4,6-Tribromophenol | 118-79-6 | | | | 26.7 | 17 - 142 | | | | 01/31/11 |
| Terphenyl-d14 | 98904-43-9 | | | | 99.8 | 61 - 142 | | | | 01/31/11 |
| **BLANK** | | | **QC Sample #47612** | | | | | | | |
| 2-Fluorophenol | 367-12-4 | | | | 110.2 | 44 - 135 | | | | 01/31/11 |
| Phenol-d5 | 4165-62-2 | | | | 102.2 | 41 - 136 | | | | 01/31/11 |
| Nitrobenzene-d5 | 4165-60-0 | | | | 110.1 | 53 - 129 | | | | 01/31/11 |
| 2-Fluorobiphenyl | 321-60-8 | | | | 109.7 | 36 - 141 | | | | 01/31/11 |
| 2,4,6-Tribromophenol | 118-79-6 | | | | 83.2 | 17 - 142 | | | | 01/31/11 |
| Terphenyl-d14 | 98904-43-9 | | | | 126.7 | 61 - 142 | | | | 01/31/11 |
| **LCS** | | | **QC Sample #47613** | | | | | | | |
| 2-Fluorophenol | 367-12-4 | | | | 112.6 | 19 - 140 | | | | 01/31/11 |

## Quality Control Report

**Attention** Michael Neely
**Department** Organic, Semivolatiles

**Group #** WSCF111310

| Analyte | CAS # | Original Found | QC Found | Units | % Recov | Limits | RPD | RPD Limit | RQ | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| Phenol-d5 | 4165-62-2 | | | | 106.9 | 32 - 134 | | | | 01/31/11 |
| Nitrobenzene-d5 | 4165-60-0 | | | | 109.8 | 60 - 122 | | | | 01/31/11 |
| 2-Fluorobiphenyl | 321-60-8 | | | | 108.7 | 57 - 122 | | | | 01/31/11 |
| 2,4,6-Tribromophenol | 118-79-6 | | | | 101.7 | 34 - 139 | | | | 01/31/11 |
| Terphenyl-d14 | 98904-43-9 | | | | 117.2 | 49 - 147 | | | | 01/31/11 |
| **MS** | | | **QC Sample #47614** | | | | | | | |
| | | | **Original** | **111310016** | | | | | | |
| 2-Fluorophenol | 367-12-4 | | | | 112.6 | 44 - 135 | | | | 01/31/11 |
| Phenol-d5 | 4165-62-2 | | | | 110 | 41 - 136 | | | | 01/31/11 |
| Nitrobenzene-d5 | 4165-60-0 | | | | 108.3 | 53 - 129 | | | | 01/31/11 |
| 2-Fluorobiphenyl | 321-60-8 | | | | 106.4 | 36 - 141 | | | | 01/31/11 |
| 2,4,6-Tribromophenol | 118-79-6 | | | | 96.3 | 17 - 142 | | | | 01/31/11 |
| Terphenyl-d14 | 98904-43-9 | | | | 115.8 | 61 - 142 | | | | 01/31/11 |
| **MSD** | | | **QC Sample #47615** | | | | | | | |
| | | | **Original** | **111310016** | | | | | **Paired** | **47614** |
| 2-Fluorophenol | 367-12-4 | | | | 105.9 | 44 - 135 | 6.10 | 30 | | 01/31/11 |
| Phenol-d5 | 4165-62-2 | | | | 109.9 | 41 - 136 | 0.10 | 30 | | 01/31/11 |
| Nitrobenzene-d5 | 4165-60-0 | | | | 114.6 | 53 - 129 | 5.70 | 30 | | 01/31/11 |
| 2-Fluorobiphenyl | 321-60-8 | | | | 118.6 | 36 - 141 | 10.80 | 30 | | 01/31/11 |
| 2,4,6-Tribromophenol | 118-79-6 | | | | 110.6 | 17 - 142 | 13.80 | 30 | | 01/31/11 |
| Terphenyl-d14 | 98904-43-9 | | | | 122 | 61 - 142 | 5.20 | 30 | | 01/31/11 |

## Quality Control Report

**Attention** Michael Neely
**Department** Organic, Semivolatiles

**Group #** WSCF111311

**QC Batch** 175981
**Associated Samples** 111311001

**Test** SW-846 8270D Semivolatiles

| Analyte | CAS # | Original Found | QC Found | Units | % Recov | Limits | RPD | RPD Limit | RQ | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **BLANK** | | | **QC Sample #48304** | | | | | | | |
| 4-Nitrophenol | 100-02-7 | | <1 | ug/L | | | | | U | 02/07/11 |
| 1,4-Dichlorobenzene | 106-46-7 | | <1 | ug/L | | | | | U | 02/07/11 |
| Phenol | 108-95-2 | | <1 | ug/L | | | | | U | 02/07/11 |
| 1,2,4-Trichlorobenzene | 120-82-1 | | <1 | ug/L | | | | | U | 02/07/11 |
| 2,4-Dinitrotoluene | 121-14-2 | | <1 | ug/L | | | | | U | 02/07/11 |
| Pyrene | 129-00-0 | | <1 | ug/L | | | | | U | 02/07/11 |
| 4-Chloro-3-methylphenol | 59-50-7 | | <1 | ug/L | | | | | U | 02/07/11 |
| n-Nitroso-di-n-propylamine | 621-64-7 | | <1 | ug/L | | | | | U | 02/07/11 |
| Acenaphthene | 83-32-9 | | <1 | ug/L | | | | | U | 02/07/11 |
| Pentachlorophenol | 87-86-5 | | <1 | ug/L | | | | | U | 02/07/11 |
| 2-Chlorophenol | 95-57-8 | | <1 | ug/L | | | | | U | 02/07/11 |
| **LCS** | | | **QC Sample #48305** | | | | | | | |
| 4-Nitrophenol | 100-02-7 | | 8.3 | ug/L | 27.7 | 25 - 126 | | | | 02/07/11 |
| 1,4-Dichlorobenzene | 106-46-7 | | 14 | ug/L | 71.8 | 41 - 118 | | | | 02/07/11 |
| Phenol | 108-95-2 | | 16 | ug/L | 52.8 | 25 - 147 | | | | 02/07/11 |
| 1,2,4-Trichlorobenzene | 120-82-1 | | 23 | ug/L | 75.2 | 57 - 120 | | | | 02/07/11 |

## Quality Control Report

**Attention** Michael Neely
**Department** Organic, Semivolatiles

**Group #** WSCF111311

| Analyte | CAS # | Original Found | QC Found | Units | % Recov | Limits | RPD | RPD Limit | RQ | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| 2,4-Dinitrotoluene | 121-14-2 | | 26 | ug/L | 85.5 | 62 - 113 | | | | 02/07/11 |
| Pyrene | 129-00-0 | | 26 | ug/L | 87.3 | 56 - 135 | | | | 02/07/11 |
| 4-Chloro-3-methylphenol | 59-50-7 | | 24 | ug/L | 79.4 | 59 - 117 | | | | 02/07/11 |
| n-Nitroso-di-n-propylamine | 621-64-7 | | 24 | ug/L | 80.7 | 64 - 118 | | | | 02/07/11 |
| Acenaphthene | 83-32-9 | | 25 | ug/L | 83.3 | 60 - 115 | | | | 02/07/11 |
| Pentachlorophenol | 87-86-5 | | 17 | ug/L | 57.4 | 25 - 132 | | | | 02/07/11 |
| 2-Chlorophenol | 95-57-8 | | 23 | ug/L | 76.9 | 60 - 110 | | | | 02/07/11 |
| **MS** | | | **QC Sample #48306** | | | | | | | |
| | | | **Original** | **111311001** | | | | | | |
| 4-Nitrophenol | 100-02-7 | <0.9 | 8.5 | ug/L | 30.2 | 25 - 149 | | | | 02/07/11 |
| 1,4-Dichlorobenzene | 106-46-7 | <0.9 | 14 | ug/L | 72.2 | 52 - 116 | | | | 02/07/11 |
| Phenol | 108-95-2 | <0.9 | 12 | ug/L | 42 | 25 - 153 | | | | 02/07/11 |
| 1,2,4-Trichlorobenzene | 120-82-1 | <0.9 | 21 | ug/L | 73.5 | 62 - 122 | | | | 02/07/11 |
| 2,4-Dinitrotoluene | 121-14-2 | <0.9 | 24 | ug/L | 83 | 59 - 116 | | | | 02/07/11 |
| Pyrene | 129-00-0 | <0.9 | 26 | ug/L | 92.4 | 67 - 123 | | | | 02/07/11 |
| 4-Chloro-3-methylphenol | 59-50-7 | <0.9 | 23 | ug/L | 80.2 | 57 - 118 | | | | 02/07/11 |
| n-Nitroso-di-n-propylamine | 621-64-7 | <0.9 | 23 | ug/L | 82.3 | 64 - 121 | | | | 02/07/11 |
| Acenaphthene | 83-32-9 | <0.9 | 23 | ug/L | 80.8 | 62 - 116 | | | | 02/07/11 |
| Pentachlorophenol | 87-86-5 | <0.9 | 19 | ug/L | 67.3 | 25 - 144 | | | | 02/07/11 |
| 2-Chlorophenol | 95-57-8 | <0.9 | 21 | ug/L | 73.4 | 54 - 117 | | | | 02/07/11 |
| **MSD** | | | **QC Sample #48307** | | | | | | | |
| | | | **Original** | **111311001** | | | | | **Paired** | **48306** |
| 4-Nitrophenol | 100-02-7 | <0.9 | 7.4 | ug/L | 26.2 | 25 - 149 | 14.20 | 20 | | 02/07/11 |

## Quality Control Report

**Attention** Michael Neely
**Department** Organic, Semivolatiles

**Group #** WSCF111311

| Analyte | CAS # | Original Found | QC Found | Units | % Recov | Limits | RPD | RPD Limit | RQ | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dichlorobenzene | 106-46-7 | <0.9 | 14 | ug/L | 75 | 52 - 116 | 3.80 | 20 | | 02/07/11 |
| Phenol | 108-95-2 | <0.9 | 13 | ug/L | 46 | 25 - 153 | 9.10 | 20 | | 02/07/11 |
| 1,2,4-Trichlorobenzene | 120-82-1 | <0.9 | 22 | ug/L | 77.4 | 62 - 122 | 5.20 | 20 | | 02/07/11 |
| 2,4-Dinitrotoluene | 121-14-2 | <0.9 | 24 | ug/L | 83.5 | 59 - 116 | 0.60 | 20 | | 02/07/11 |
| Pyrene | 129-00-0 | <0.9 | 26 | ug/L | 91.9 | 67 - 123 | 0.50 | 20 | | 02/07/11 |
| 4-Chloro-3-methylphenol | 59-50-7 | <0.9 | 23 | ug/L | 80 | 57 - 118 | 0.20 | 20 | | 02/07/11 |
| n-Nitroso-di-n-propylamine | 621-64-7 | <0.9 | 23 | ug/L | 82.4 | 64 - 121 | 0.10 | 20 | | 02/07/11 |
| Acenaphthene | 83-32-9 | <0.9 | 23 | ug/L | 82.4 | 62 - 116 | 2.00 | 20 | | 02/07/11 |
| Pentachlorophenol | 87-86-5 | <0.9 | 16 | ug/L | 55.9 | 25 - 144 | 18.50 | 20 | | 02/07/11 |
| 2-Chlorophenol | 95-57-8 | <0.9 | 22 | ug/L | 76 | 54 - 117 | 3.50 | 20 | | 02/07/11 |

## Quality Control Report

**Attention** Michael Neely
**Department** Organic, Semivolatiles

**Group #** WSCF111311

**QC Batch** 175981
**Associated Samples** 111311001

**Test** SW-846 8270D Semivolatiles

| Analyte | CAS # | Original Found | QC Found | Units | % Recov | Limits | RPD | RPD Limit | RQ | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **SAMPLE** | | | **Sample #111311001** | | | | | | | |
| 2-Fluorophenol | 367-12-4 | | | | 46.4 | 44 - 135 | | | | 02/07/11 |
| Phenol-d5 | 4165-62-2 | | | | 33.8 | 41 - 136 | | | X | 02/07/11 |
| Nitrobenzene-d5 | 4165-60-0 | | | | 63.4 | 53 - 129 | | | | 02/07/11 |
| 2-Fluorobiphenyl | 321-60-8 | | | | 67.2 | 36 - 141 | | | | 02/07/11 |
| 2,4,6-Tribromophenol | 118-79-6 | | | | 51.8 | 17 - 142 | | | | 02/07/11 |
| Terphenyl-d14 | 98904-43-9 | | | | 84 | 61 - 142 | | | | 02/07/11 |
| **BLANK** | | | **QC Sample #48304** | | | | | | | |
| 2-Fluorophenol | 367-12-4 | | | | 68.6 | 44 - 135 | | | | 02/07/11 |
| Phenol-d5 | 4165-62-2 | | | | 55.1 | 41 - 136 | | | | 02/07/11 |
| Nitrobenzene-d5 | 4165-60-0 | | | | 76 | 53 - 129 | | | | 02/07/11 |
| 2-Fluorobiphenyl | 321-60-8 | | | | 79.8 | 36 - 141 | | | | 02/07/11 |
| 2,4,6-Tribromophenol | 118-79-6 | | | | 59.7 | 17 - 142 | | | | 02/07/11 |
| Terphenyl-d14 | 98904-43-9 | | | | 100.3 | 61 - 142 | | | | 02/07/11 |
| **LCS** | | | **QC Sample #48305** | | | | | | | |
| 2-Fluorophenol | 367-12-4 | | | | 67 | 25 - 122 | | | | 02/07/11 |
| Phenol-d5 | 4165-62-2 | | | | 49.7 | 25 - 144 | | | | 02/07/11 |
| Nitrobenzene-d5 | 4165-60-0 | | | | 77.9 | 63 - 112 | | | | 02/07/11 |

## Quality Control Report

**Attention** Michael Neely
**Department** Organic, Semivolatiles

**Group #** WSCF111311

| Analyte | CAS # | Original Found | QC Found | Units | % Recov | Limits | RPD | RPD Limit | RQ | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| 2-Fluorobiphenyl | 321-60-8 | | | | 77.8 | 52 - 113 | | | | 02/07/11 |
| 2,4,6-Tribromophenol | 118-79-6 | | | | 71.2 | 26 - 131 | | | | 02/07/11 |
| Terphenyl-d14 | 98904-43-9 | | | | 84.2 | 63 - 132 | | | | 02/07/11 |
| **MS** | | | **QC Sample #48306** | | | | | | | |
| | | | **Original** | **111311001** | | | | | | |
| 2-Fluorophenol | 367-12-4 | | | | 55.5 | 25 - 122 | | | | 02/07/11 |
| Phenol-d5 | 4165-62-2 | | | | 39.2 | 25 - 144 | | | | 02/07/11 |
| Nitrobenzene-d5 | 4165-60-0 | | | | 73.3 | 63 - 112 | | | | 02/07/11 |
| 2-Fluorobiphenyl | 321-60-8 | | | | 74.9 | 52 - 113 | | | | 02/07/11 |
| 2,4,6-Tribromophenol | 118-79-6 | | | | 69.5 | 26 - 131 | | | | 02/07/11 |
| Terphenyl-d14 | 98904-43-9 | | | | 82.9 | 63 - 132 | | | | 02/07/11 |
| **MSD** | | | **QC Sample #48307** | | | | | | | |
| | | | **Original** | **111311001** | | | | | **Paired** | **48306** |
| 2-Fluorophenol | 367-12-4 | | | | 54 | 25 - 122 | 2.70 | 20 | | 02/07/11 |
| Phenol-d5 | 4165-62-2 | | | | 43.5 | 25 - 144 | 10.40 | 20 | | 02/07/11 |
| Nitrobenzene-d5 | 4165-60-0 | | | | 75.6 | 63 - 112 | 3.10 | 20 | | 02/07/11 |
| 2-Fluorobiphenyl | 321-60-8 | | | | 77 | 52 - 113 | 2.80 | 20 | | 02/07/11 |
| 2,4,6-Tribromophenol | 118-79-6 | | | | 73.3 | 26 - 131 | 5.30 | 20 | | 02/07/11 |
| Terphenyl-d14 | 98904-43-9 | | | | 86.5 | 63 - 132 | 4.30 | 20 | | 02/07/11 |

Date: 28 February 2011
To: CH2M Hill (technical representative)
From: Analytical Quality Associates, Inc.
Project: CPP 600 Area
Subject: Inorganics - Sample Data Groups (SDGs) WSCF111310 and WSCF111311

## INTRODUCTION

This memorandum presents the results of data validation for SDGs WSCF111310 and WSCF111311 prepared by WSCF. 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 |
|---|---|---|---|---|
| B2BBH0 | 1/26/2011 | Soil | C | 200.8 |
| B2BBH1 | 1/26/2011 | Soil | C | 200.8 |
| B2BBH2 | 1/26/2011 | Soil | C | 200.8 |
| B2BBH3 | 1/26/2011 | Soil | C | 200.8 |
| B2BBH4 | 1/26/2011 | Soil | C | 200.8 |
| B2BBF0 | 1/26/2011 | Soil | C | 200.8 |
| B2BBF1 | 1/26/2011 | Soil | C | 200.8 |
| B2BBF2 | 1/26/2011 | Soil | C | 200.8 |
| B2BBF3 | 1/26/2011 | Soil | C | 200.8 |
| B2BBF4 | 1/26/2011 | Soil | C | 200.8 |
| B2BBF5 | 1/26/2011 | Soil | C | 200.8 |
| B2BBF6 | 1/26/2011 | Soil | C | 200.8 |
| B2BBF7 | 1/26/2011 | Soil | C | 200.8 |
| B2BBF8 | 1/26/2011 | Soil | C | 200.8 |
| B2BBF9 | 1/26/2011 | Soil | C | 200.8 |
| B2BBD8 | 1/26/2011 | Soil | C | 200.8 |
| B2BBD9 | 1/26/2011 | Soil | C | 200.8 |
| B2BBK4 | 1/26/2011 | Water | C | 200.8 |

Data validation was conducted in accordance with the CHPRC validation statement of work and the Hanford Facility Dangerous Waste Closure/Postclosure Plan for the 600 Area Purgewater Storage and Treatment Facility, DOE/RL-2008-73, Rev. 0 (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. Sample preservation for water samples requires acid preservation with nitric acid to pH <2.

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

- **Blanks**

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

### Laboratory Blanks

All laboratory blank results were acceptable.

### Trip Blanks

No trip blanks were submitted for validation.

### Field Blanks

No field blanks were submitted for validation.

### Equipment Blanks

The equipment blank result was acceptable.

- **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 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.

### 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 serial dilution limits are ones specified by the DV procedure.

**MS/MSD Samples**

All MS/MSD RPD values were acceptable.

**Field Duplicate Samples**

No field duplicates were submitted for validation.

**Field Split Samples**

No field splits were submitted for validation.

**ICP Serial Dilution Samples**

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

- **ICP-MS Internal Standards**

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

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

- **Detection Limits**

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

All reported sample MDLs were below the CRDLs.

- **Completeness**

SDGs WSCF111310 and WSCF111311 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-2008-73, Rev. 0, *Hanford Facility Dangerous Waste Closure/Postclosure Plan for the 600 Area Purgewater Storage and Treatment Facility*, February 2010

# 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: WSCF111310, WSCF111311 | Reviewer: AQA | Project: CPP 600 AREA | Page 1 of 1 |
| **Analyte(s)** | **Qualifier** | **Samples Affected** | **Reason** |
| Cr | None | NA | NA |

Comments: None

# Appendix 3

Annotated Laboratory Reports

# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Inorganic

**Group #** WSCF111310

**Sample #** 111310001
**SAF#** F11-042
**Sample ID** B2BBH0

**Matrix** SOIL
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **ICPMS Prep** | | | | | | | | | | **02/02/11** |
| **ICP-MS** | | | | | | | | | | |
| Chromium | 7440-47-3 | LA-505-412 | | 9.88 | | mg/kg | 1 | 0.55 | 5.5 | 02/03/11 |

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

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

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

# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Inorganic

**Group #** WSCF111310

**Sample #** 111310002
**SAF#** F11-042
**Sample ID** B2BBH1

**Matrix** SOIL
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **ICPMS Prep** | | | | | | | | | | **02/02/11** |
| **ICP-MS** | | | | | | | | | | |
| Chromium | 7440-47-3 | LA-505-412 | | 11.8 | | mg/kg | 1 | 0.55 | 5.5 | 02/03/11 |

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

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

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

# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Inorganic

**Group #** WSCF111310

**Sample #** 111310003
**SAF#** F11-042
**Sample ID** B2BBH2

**Matrix** SOIL
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **ICPMS Prep** | | | | | | | | | | **02/02/11** |
| **ICP-MS** | | | | | | | | | | |
| Chromium | 7440-47-3 | LA-505-412 | | 12.9 | | mg/kg | 1 | 0.56 | 5.6 | 02/03/11 |

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

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

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

# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Inorganic

**Group #** WSCF111310

**Sample #** 111310004
**SAF#** F11-042
**Sample ID** B2BBH3

**Matrix** SOIL
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **ICPMS Prep** | | | | | | | | | | **02/02/11** |
| **ICP-MS** | | | | | | | | | | |
| Chromium | 7440-47-3 | LA-505-412 | | 12.9 | | mg/kg | 1 | 0.52 | 5.2 | 02/03/11 |

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

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

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

# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Inorganic

**Group #** WSCF111310

**Sample #** 111310005
**SAF#** F11-042
**Sample ID** B2BBH4

**Matrix** SOIL
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **ICPMS Prep** | | | | | | | | | | **02/02/11** |
| **ICP-MS** | | | | | | | | | | |
| Chromium | 7440-47-3 | LA-505-412 | | 10.6 | | mg/kg | 1 | 0.54 | 5.4 | 02/03/11 |

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

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

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

# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Inorganic

**Group #** WSCF111310

**Sample #** 111310006
**SAF#** F11-042
**Sample ID** B2BBF0

**Matrix** SOIL
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **ICPMS Prep** | | | | | | | | | | **02/02/11** |
| **ICP-MS** | | | | | | | | | | |
| Chromium | 7440-47-3 | LA-505-412 | | 13.2 | | mg/kg | 1 | 0.55 | 5.5 | 02/03/11 |

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

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

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

# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Inorganic

**Group #** WSCF111310

**Sample #** 111310007
**SAF#** F11-042
**Sample ID** B2BBF1

**Matrix** SOIL
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **ICPMS Prep** | | | | | | | | | | **02/02/11** |
| **ICP-MS** | | | | | | | | | | |
| Chromium | 7440-47-3 | LA-505-412 | | 10.3 | | mg/kg | 1 | 0.55 | 5.5 | 02/03/11 |

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

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

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

# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Inorganic

**Group #** WSCF111310

**Sample #** 111310008
**SAF#** F11-042
**Sample ID** B2BBF2

**Matrix** SOIL
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **ICPMS Prep** | | | | | | | | | | **02/02/11** |
| **ICP-MS** | | | | | | | | | | |
| Chromium | 7440-47-3 | LA-505-412 | | 10.7 | | mg/kg | 1 | 0.55 | 5.5 | 02/03/11 |

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

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

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

# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Inorganic

**Group #** WSCF111310

**Sample #** 111310009
**SAF#** F11-042
**Sample ID** B2BBF3

**Matrix** SOIL
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **ICPMS Prep** | | | | | | | | | | **02/02/11** |
| **ICP-MS** | | | | | | | | | | |
| Chromium | 7440-47-3 | LA-505-412 | | 7.54 | | mg/kg | 1 | 0.55 | 5.5 | 02/03/11 |

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

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

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

# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Inorganic

**Group #** WSCF111310

**Sample #** 111310010
**SAF#** F11-042
**Sample ID** B2BBF4

**Matrix** SOIL
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **ICPMS Prep** | | | | | | | | | | **02/02/11** |
| **ICP-MS** | | | | | | | | | | |
| Chromium | 7440-47-3 | LA-505-412 | | 12.0 | | mg/kg | 1 | 0.54 | 5.4 | 02/03/11 |

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

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

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

# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Inorganic

**Group #** WSCF111310

**Sample #** 111310011
**SAF#** F11-042
**Sample ID** B2BBF5

**Matrix** SOIL
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **ICPMS Prep** | | | | | | | | | | **02/02/11** |
| **ICP-MS** | | | | | | | | | | |
| Chromium | 7440-47-3 | LA-505-412 | | 12.4 | | mg/kg | 1 | 0.53 | 5.3 | 02/03/11 |

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

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

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

# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Inorganic

**Group #** WSCF111310

**Sample #** 111310012
**SAF#** F11-042
**Sample ID** B2BBF6

**Matrix** SOIL
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **ICPMS Prep** | | | | | | | | | | **02/02/11** |
| **ICP-MS** | | | | | | | | | | |
| Chromium | 7440-47-3 | LA-505-412 | | 12.7 | | mg/kg | 1 | 0.53 | 5.3 | 02/03/11 |

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

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

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

# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Inorganic

**Group #** WSCF111310

**Sample #** 111310013
**SAF#** F11-042
**Sample ID** B2BBF7

**Matrix** SOIL
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **ICPMS Prep** | | | | | | | | | | **02/02/11** |
| **ICP-MS** | | | | | | | | | | |
| Chromium | 7440-47-3 | LA-505-412 | | 12.6 | | mg/kg | 1 | 0.54 | 5.4 | 02/03/11 |

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

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

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

# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Inorganic

**Group #** WSCF111310

**Sample #** 111310014
**SAF#** F11-042
**Sample ID** B2BBF8

**Matrix** SOIL
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **ICPMS Prep** | | | | | | | | | | **02/02/11** |
| **ICP-MS** | | | | | | | | | | |
| Chromium | 7440-47-3 | LA-505-412 | | 11.3 | | mg/kg | 1 | 0.52 | 5.2 | 02/03/11 |

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

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

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

# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Inorganic

**Group #** WSCF111310

**Sample #** 111310015
**SAF#** F11-042
**Sample ID** B2BBF9

**Matrix** SOIL
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **ICPMS Prep** | | | | | | | | | | **02/02/11** |
| **ICP-MS** | | | | | | | | | | |
| Chromium | 7440-47-3 | LA-505-412 | | 7.41 | | mg/kg | 1 | 0.51 | 5.1 | 02/03/11 |

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

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

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

# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Inorganic

**Group #** WSCF111310

**Sample #** 111310016
**SAF#** F11-042
**Sample ID** B2BBD8

**Matrix** SOIL
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **ICPMS Prep** | | | | | | | | | | **02/02/11** |
| **ICP-MS** | | | | | | | | | | |
| Chromium | 7440-47-3 | LA-505-412 | | 12.7 | | mg/kg | 1 | 0.53 | 5.3 | 02/03/11 |

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

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

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

# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Inorganic

**Group #** WSCF111310

**Sample #** 111310017
**SAF#** F11-042
**Sample ID** B2BBD9

**Matrix** SOIL
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **ICPMS Prep** | | | | | | | | | | **02/02/11** |
| **ICP-MS** | | | | | | | | | | |
| Chromium | 7440-47-3 | LA-505-412 | | 13.3 | | mg/kg | 1 | 0.54 | 5.4 | 02/03/11 |

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

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

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

# WSCF Analytical Results Report

**Attention** Michael Neely
**Department** Inorganic

**Group #** WSCF111311

**Sample #** 111311001
**SAF#** F11-043
**Sample ID** B2BBK4

**Matrix** WATER
**Sampled** 01/26/11
**Received** 01/26/11

| Test Performed | CAS # | Method | RQ | Result | TP Err | Units | DF | MDL | PQL | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **ICPMS Prep** | | | | | | | | | | **02/07/11** |
| **ICP-MS** | | | | | | | | | | |
| Chromium | 7440-47-3 | LA-505-412 | UD | <1.0 | | ug/L | 2 | 1.0 | 10 | 02/07/11 |

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

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

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

# Appendix 4

Laboratory Narrative and Chain-of-Custody Documentation

Attachment 2
**Narrative**
WSCF111310

## Introduction

Samples were received at the WSCF laboratory as referenced on the WSCF SAF Number Cross Reference table included in the final report. The samples were analyzed for the analytes indicated on the attached copy of the chain of custody (COC) form in accordance with the *Statement of Work (SOW), Modification No. 2 to Agreement 36587, Release 3, "FH WSCF ANALYTICAL SERVICES FOR GROUNDWATER."*

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

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

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

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

## Analytical Methodology for Requested Analyses

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

## Inorganic Comments

**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):

- All applicable QC controls are within the established limits.

Attachment 2
**Narrative**
WSCF111310

**Organic Comments**

**Semi-VOA** – 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):

- B2BBH0 (111310001) did not meet the acceptance limits for surrogate 2-Fluorobiphenyl. Sample results were not flagged. The quality control report was flagged for surrogate recovery failure.
- B2BBH1 (111310002) did not meet the acceptance limits for surrogates 2-Fluorophenol, Phenol-d5, Nitrobenzene-d5, 2-Fluorobiphenyl and 2,4,6-Tribromophenol. Sample results were not flagged. The quality control report was flagged for surrogate recovery failure.
- B2BBF2 (111310008) did not meet the acceptance limits for surrogates 2-Fluorophenol, Phenol-d5, Nitrobenzene-d5, 2-Fluorobiphenyl and 2,4,6-Tribromophenol. Sample results were not flagged. The quality control report was flagged for surrogate recovery failure.
- B2BBF3 (111310009) did not meet the acceptance limits for surrogates Nitrobenzene-d5 and 2-Fluorobiphenyl. Sample results were not flagged. The quality control report was flagged for surrogate recovery failure.
- B2BBF4 (111310010) did not meet the acceptance limits for surrogate 2-Fluorobiphenyl. Sample results were not flagged. The quality control report was flagged for surrogate recovery failure.
- All other applicable QC controls are within the established limits.

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

- 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 | | | F11-042-013 | PAGE 1 OF 1 |
|---|---|---|---|---|---|
| COLLECTOR: J. Scales | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-13a | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: | |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-N-507-16-2 | ACTUAL SAMPLE DEPTH: 0-4" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

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

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

111310

SPECIAL HANDLING AND/OR STORAGE

| PRESERVATION | Cool~4C | None |
|---|---|---|
| HOLDING TIME | 14/40 Days | 6 Months |
| TYPE OF CONTAINER | aG | G/P |
| NO. OF CONTAINER(S) | 1 | 1 |
| VOLUME | 250mL | 60mL |
| SAMPLE ANALYSIS | Semi-VOA - 8270 (Add-On) (Total cresols); | ICP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | |
|---|---|---|---|---|---|
| B2BBH0 1 | SOIL | 1-26-11 | 1000 | X | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J. Scales | DATE/TIME: 1-26-11 1000 | RECEIVED BY/STORED IN: Victor Sims | DATE/TIME: 1-26-11 1002 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |

SPECIAL INSTRUCTIONS

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-014 | PAGE 1 OF 1 |
|---|---|---|---|---|---|
| COLLECTOR: J. Scales | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-14a | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-N-507-16.23 | ACTUAL SAMPLE DEPTH: 0-4" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

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

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

**SPECIAL HANDLING AND/OR STORAGE:**

| PRESERVATION | Cool~4C | None |
|---|---|---|
| HOLDING TIME | 14/40 Days | 6 Months |
| TYPE OF CONTAINER | aG | G/P |
| NO. OF CONTAINER(S) | 1 | 1 |
| VOLUME | 250mL | 60mL |
| SAMPLE ANALYSIS | Semi-VOA - 8270 (Add-On) (Total cresols); | ICP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | |
|---|---|---|---|---|---|
| B2BBH1 2 | SOIL | 1-26-11 | 0957 | X | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J. Scales | DATE/TIME: 1-26-11 2000 | RECEIVED BY/STORED IN: Victor Sing | DATE/TIME: 1-26-11 2000 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |

**SPECIAL INSTRUCTIONS**

* The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.

ORIGINAL

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-015 | PAGE 1 OF 1 |
|---|---|---|---|---|---|
| COLLECTOR 1-26-11 C. Chamberlain | COMPANY CONTACT WIDRIG, DL | TELEPHONE NO. 376-2858 | PROJECT COORDINATOR WIDRIG, DL | PRICE CODE 8C / AIR QUALITY ☐ | DATA TURNAROUND 15 Days / 15 Days |
| SAMPLING LOCATION PSTFUNIT1-VS-15a | PROJECT DESIGNATION 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO. F11-042 | | |
| ICE CHEST NO. AM | FIELD LOGBOOK NO. HNF-N-507. 16273 | ACTUAL SAMPLE DEPTH 0-4" | COA 300068ES10 | METHOD OF SHIPMENT GOVERNMENT VEHICLE | |
| SHIPPED TO Waste Sampling & Characterization | OFFSITE PROPERTY NO. N/A | | BILL OF LADING/AIR BILL NO. N/A | | |

| MATRIX* | POSSIBLE SAMPLE HAZARDS/ REMARKS | PRESERVATION | Cool<4C | None |
|---|---|---|---|---|
| A=Air<br>DL=Drum Liquids<br>DS=Drum Solids<br>L=Liquid<br>O=Oil<br>S=Soil<br>SE=Sediment<br>T=Tissue<br>V=Vegetation<br>W=Water<br>WI=Wipe<br>X=Other | Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993) | HOLDING TIME | 14/40 Days | 6 Months |
| | | TYPE OF CONTAINER | aG | G/P |
| | | NO. OF CONTAINER(S) | 1 | 1 |
| | | VOLUME | 250mL | 60mL |
| | SPECIAL HANDLING AND/OR STORAGE | SAMPLE ANALYSIS | Semi-VOA - 8270 (Add-On) (Total vesols); | ICP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | | MATRIX* | SAMPLE DATE | SAMPLE TIME | | |
|---|---|---|---|---|---|---|
| B2BBH2 | 3 | SOIL | 1-26-11 | 0951 | X | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM C. Chamberlain | DATE/TIME 1-26-11 1200 | RECEIVED BY/STORED IN Victor Bjim | DATE/TIME 1-26-11 1200 | ** The CACN for all analytical work at WSCF laboratory is 401880ES20.<br>** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.<br>** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C. |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

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

A-6003-618 (REV 2)

ORIGINAL

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | F11-042-016 | PAGE 1 OF 1 |
|---|---|---|---|---|
| COLLECTOR: C. Chamberlain | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C; DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-16a | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-N-507-16.23 | ACTUAL SAMPLE DEPTH: 0-4' | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | |

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

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

SPECIAL HANDLING AND/OR STORAGE

| PRESERVATION | Cool~4C | None |
|---|---|---|
| HOLDING TIME | 14/10 Days | 6 Months |
| TYPE OF CONTAINER | aG | G/P |
| NO. OF CONTAINER(S) | 1 | 1 |
| VOLUME | 250ml | 60ml |
| SAMPLE ANALYSIS | Semi-VOA - 8270 (Add-On) (Total cresols); | ICP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | |
|---|---|---|---|---|---|
| B2BBH3 4 | SOIL | 1-26-11 | 0945 | X | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: C. Chamberlain | DATE/TIME: 1-26-11 | RECEIVED BY/STORED IN: Victor Sims | DATE/TIME: 1-26-11 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |

SPECIAL INSTRUCTIONS

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKT applies to this SAF.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | F11-042-017 | PAGE 1 OF 1 |
|---|---|---|---|
| COLLECTOR: J. Stalos | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL |
| PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days | | |
| SAMPLING LOCATION: PSTFUNIT1-VS-17a | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | SAF NO.: F11-042 | AIR QUALITY: |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-N-507-16-23 | ACTUAL SAMPLE DEPTH: 0-4' | COA: 300068ES10 |
| METHOD OF SHIPMENT: GOVERNMENT VEHICLE | SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | BILL OF LADING/AIR BILL NO.: N/A |

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

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

SPECIAL HANDLING AND/OR STORAGE

| PRESERVATION | Cool~4C | None |
|---|---|---|
| HOLDING TIME | 14/40 Days | 6 Months |
| TYPE OF CONTAINER | aG | G/P |
| NO. OF CONTAINER(S) | 1 | 1 |
| VOLUME | 250mL | 50mL |
| SAMPLE ANALYSIS | Semi-VOA - 8270 (Add-On) (Total cresols); | ICP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | |
|---|---|---|---|---|---|
| B2BBH4 5 | SOIL | 1-26-11 | 0856 | X | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J. Stalos | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: Victor Sims | DATE/TIME: 1-26-11 1200 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |

SPECIAL INSTRUCTIONS

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis CKI applies to this SAF.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-003 | PAGE 1 OF 1 |
|---|---|---|---|---|---|
| COLLECTOR: J Scales | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-3a | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: MA | FIELD LOGBOOK NO.: HNF-N-507-16-23 | ACTUAL SAMPLE DEPTH: 0-4" | COA: 300088ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

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

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

**SPECIAL HANDLING AND/OR STORAGE**

| | | |
|---|---|---|
| PRESERVATION | Cool-4C | None |
| HOLDING TIME | 14/40 Days | 6 Months |
| TYPE OF CONTAINER | aG | G/P |
| NO. OF CONTAINER(S) | 1 | 1 |
| VOLUME | 250mL | 60mL |
| SAMPLE ANALYSIS | Semi-VOA - 8270 (Add-On) (Total cresols); | ICP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | |
|---|---|---|---|---|---|
| B2BBF0 6 | SOIL | 1-26-11 | 0840 | X | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J Scales | DATE/TIME: 1200 1-26-11 | RECEIVED BY/STORED IN: Victor Bins | DATE/TIME: 1200 1-26-11 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.

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

A 6003 618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | F11-042-004 | PAGE 1 OF 1 |
|---|---|---|---|---|
| COLLECTOR: C. Chamberlain | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C; AIR QUALITY: ☐ | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1 VS 4a | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-N-507-16-23 | ACTUAL SAMPLE DEPTH: 0-4' | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | |

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

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

SPECIAL HANDLING AND/OR STORAGE

| | | |
|---|---|---|
| PRESERVATION | Cool-4C | None |
| HOLDING TIME | 14/40 Days | 6 Months |
| TYPE OF CONTAINER | aG | G/P |
| NO. OF CONTAINER(S) | 1 | 1 |
| VOLUME | 250mL | 60mL |
| SAMPLE ANALYSIS | Semi-VOA - 8270 (Add-On) (Total dioxin); | TOP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | |
|---|---|---|---|---|---|
| B2BBF1 7 | SOIL | 1-26-11 | 0854 | X | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: C. Chamberlain | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: VISTOR/SMS | DATE/TIME: 1-26-11 1200 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |

SPECIAL INSTRUCTIONS

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-005 | PAGE 1 OF 1 |
|---|---|---|---|---|---|
| COLLECTOR: J Scales | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2853 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-Sa | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: ~~FINF-N-507-~~ 10.23 | ACTUAL SAMPLE DEPTH: 0-4" | COA: 300069ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

MATRIX*: A=Air; DL=Drum Liquids; DS=Drum Solids; L=Liquid; O=Oil; S=Soil; SE=Sediment; T=Tissue; V=Vegetation; W=Water; W1=Wipe; X=Other

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

SPECIAL HANDLING AND/OR STORAGE

| PRESERVATION | Cool~4C | None |
|---|---|---|
| HOLDING TIME | 14/40 Days | 6 Months |
| TYPE OF CONTAINER | aG | C/P |
| NO. OF CONTAINER(S) | 1 | 1 |
| VOLUME | 250mL | 60mL |
| SAMPLE ANALYSIS | Semi-VOA - 8270 (Add-On) (Total cresols); | ICP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | |
|---|---|---|---|---|---|
| B2BBF2 8 | SOIL | 1-26-11 | 0856 | X | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J Scales | DATE/TIME: 1-26-11 | RECEIVED BY/STORED IN: Victor Sing | DATE/TIME: 1-26-11 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |

SPECIAL INSTRUCTIONS

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.

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

A-6001-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | F11-042-006 | PAGE 1 OF 1 |
|---|---|---|---|---|
| COLLECTOR: C. Chamberlain | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2853 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C; AIR QUALITY: [ ] | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-6a | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-N-507-16-23 | ACTUAL SAMPLE DEPTH: 0.4" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | |

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

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

SPECIAL HANDLING AND/OR STORAGE

| PRESERVATION | Cool~4C | None |
|---|---|---|
| HOLDING TIME | 14/40 Days | 6 Months |
| TYPE OF CONTAINER | aG | G/P |
| NO. OF CONTAINER(S) | 1 | 1 |
| VOLUME | 250mL | 60mL |
| SAMPLE ANALYSIS | Semi-VOA - 8270 (Add-On (Total cresols); | ICP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | |
|---|---|---|---|---|---|
| B2BBF3 9 | SOIL | 1-26-11 | 0906 | X | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: C. Chamberlain | DATE/TIME: 1-26-11 | RECEIVED BY/STORED IN: VICTOR SIMS | DATE/TIME: 1-26-11 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |

SPECIAL INSTRUCTIONS

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.

ORIGINAL

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

A-5003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-007 | PAGE 1 OF 1 |
|---|---|---|---|---|---|
| COLLECTOR: J. Scalog | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2853 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-7a | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: | FIELD LOGBOOK NO.: HNF-N-507-16-2 | ACTUAL SAMPLE DEPTH: 0-4" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

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

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

**SPECIAL HANDLING AND/OR STORAGE**

| | | |
|---|---|---|
| PRESERVATION | Cool~4C | None |
| HOLDING TIME | 14/40 Days | 6 Months |
| TYPE OF CONTAINER | aG | G/P |
| NO. OF CONTAINER(S) | 1 | 1 |
| VOLUME | 250mL | 60mL |
| SAMPLE ANALYSIS | Semi-VOA - 8270 (Add-On) (Total cresols); | ICP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | |
|---|---|---|---|---|---|
| B2BBF4 10 | SOIL | 1-26-11 | 0909 | X | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J. Scalog | DATE/TIME: 1-26-11 2003 | RECEIVED BY/STORED IN: Victor Bim | DATE/TIME: 1-26-11 2003 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-008 | PAGE 1 OF 1 |
|---|---|---|---|---|---|
| COLLECTOR: C. Chamberlain | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTT1UNIT1-VS-Ra | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11 042 | AIR QUALITY: L | |
| ICE CHEST NO.: MA | FIELD LOGBOOK NO.: HNF-N-507-16-23 | ACTUAL SAMPLE DEPTH: 0-4" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

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

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

SPECIAL HANDLING AND/OR STORAGE

| PRESERVATION | Cool~4C | None |
|---|---|---|
| HOLDING TIME | 14/40 Days | 6 Months |
| TYPE OF CONTAINER | aG | G/P |
| NO. OF CONTAINER(S) | 1 | 1 |
| VOLUME | 250mL | 60mL |
| SAMPLE ANALYSIS | Semi-VOA - 8270 (add-On) (Total cresols); | ICP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | |
|---|---|---|---|---|---|
| B2BBF5 11 | SOIL | 1-26-11 | 0917 | X | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: C. Chamberlain | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: Victor Bing | DATE/TIME: 1-26-11 1200 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |

SPECIAL INSTRUCTIONS

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.

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

A 6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-009 | PAGE 1 OF 1 |
|---|---|---|---|---|---|
| COLLECTOR: J Scales | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-9a | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-N-507-16-23 | ACTUAL SAMPLE DEPTH: 0-4" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

MATRIX*: A=Air, 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 | None |
|---|---|---|
| HOLDING TIME | 14/40 Days | 6 Months |
| TYPE OF CONTAINER | aG | G/P |
| NO. OF CONTAINER(S) | 1 | 1 |
| VOLUME | 250mL | 60mL |
| SAMPLE ANALYSIS | Semi-VOA - 8270 (Add-On) (Total cresols); | ICP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | |
|---|---|---|---|---|---|
| B2BBF6 12 | SOIL | 1-26-11 | 0946 | X | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J Scales | DATE/TIME: 1200 1-26-11 | RECEIVED BY/STORED IN: V L Hall / J Sing | DATE/TIME: 1200 1-26-11 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |

SPECIAL INSTRUCTIONS

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GK1 applies to this SAF.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-010 | PAGE 1 OF 1 |
|---|---|---|---|---|---|
| COLLECTOR: J. Sloboda | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1 VS 10a | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-N-507-16-22 | ACTUAL SAMPLE DEPTH: 0-4" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

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

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

**SPECIAL HANDLING AND/OR STORAGE**:

| | | |
|---|---|---|
| PRESERVATION | Cool~4C | None |
| HOLDING TIME | 14/40 Days | 6 Months |
| TYPE OF CONTAINER | aG | G/P |
| NO. OF CONTAINER(S) | 1 | 1 |
| VOLUME | 250mL | 60mL |
| SAMPLE ANALYSIS | Semi VOA - 8270 (Add-On) (Total cresols); | ICP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | |
|---|---|---|---|---|---|
| B2BBF7 13 | SOIL | 1-26-11 | 0932 | X | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J. Sloboda | DATE/TIME: 1200 1-26-11 | RECEIVED BY/STORED IN: Vicki Sims | DATE/TIME: 1200 1-26-11 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-011 | PAGE 1 OF 1 |
|---|---|---|---|---|---|
| COLLECTOR: J Scales | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, D. | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-11a | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-N-507-16.23 | ACTUAL SAMPLE DEPTH: 0-4" | COA: 300068ES1D | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

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

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

SPECIAL HANDLING AND/OR STORAGE

| PRESERVATION | Cool-4C | None |
|---|---|---|
| HOLDING TIME | 14/40 Days | 6 Months |
| TYPE OF CONTAINER | eG | G/P |
| NO. OF CONTAINER(S) | 1 | 1 |
| VOLUME | 250mL | 60mL |
| SAMPLE ANALYSIS | Semi VOA - 8270 (Add-On) (Total cresols); | ICP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | |
|---|---|---|---|---|---|
| B2BBF8 14 | SOIL | 1-26-11 | 0926 | X | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J. Scales | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: Victor Bings | DATE/TIME: 1-26-11 1200 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |

SPECIAL INSTRUCTIONS

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-012 | PAGE 1 OF 1 |
|---|---|---|---|---|---|
| COLLECTOR: C. Chamberlain | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-12a | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-N-507-16.23 | ACTUAL SAMPLE DEPTH: 0-4" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

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

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

SPECIAL HANDLING AND/OR STORAGE

| PRESERVATION | Cool<4C | None |
|---|---|---|
| HOLDING TIME | 14/40 Days | 6 Months |
| TYPE OF CONTAINER | aG | G/P |
| NO. OF CONTAINER(S) | 1 | 1 |
| VOLUME | 250mL | 60mL |
| SAMPLE ANALYSIS | Semi VOA - 8270 (Add-On) (Total cresols); | ICP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | |
|---|---|---|---|---|---|
| B2BBF9 15 | SOIL | 1-26-11 | 0929 | X | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: C. Chamberlain | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: Victor Bins | DATE/TIME: 1-26-11 1200 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |

SPECIAL INSTRUCTIONS

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | F11-042-001 | PAGE 1 OF 1 |
|---|---|---|---|---|
| COLLECTOR: J Scalozzi | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C; DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-1a | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: ~~HNF-N-507-~~ 16-23 | ACTUAL SAMPLE DEPTH: 6-4" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | |

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

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

SPECIAL HANDLING AND/OR STORAGE

| PRESERVATION | Cool~4C | None |
|---|---|---|
| HOLDING TIME | 14/40 Days | 6 Months |
| TYPE OF CONTAINER | aG | G/F |
| NO. OF CONTAINER(S) | 1 | 1 |
| VOLUME | 250mL | 60mL |
| SAMPLE ANALYSIS | Semi-VOA - 8270 (Add-On) (Total Cresols); | ICP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | |
|---|---|---|---|---|---|
| B2BBD8 16 | SOIL | 1-26-11 | 0832 | X | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J. Scalozzi | DATE/TIME: 1-26 1200 | RECEIVED BY/STORED IN: Victor Gomez | DATE/TIME: 1-26-11 1200 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |

SPECIAL INSTRUCTIONS

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GK1 applies to this SAF.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.

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

A-5003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-002 | PAGE 1 OF 1 |
|---|---|---|---|---|---|
| COLLECTOR: J. Scalozz | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2838 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-2a | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: MA | FIELD INPUT SET NO.: 06.23 | ACTUAL SAMPLE DEPTH: 0-4" | COA: 300068E510 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

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

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

SPECIAL HANDLING AND/OR STORAGE

| PRESERVATION | Cool-4C | None |
|---|---|---|
| HOLDING TIME | 14/40 Days | 6 Months |
| TYPE OF CONTAINER | aG | G/P |
| NO. OF CONTAINER(S) | 1 | 1 |
| VOLUME | 250mL | 60mL |
| SAMPLE ANALYSIS | Semi-VOA - 8270 (Add-On) (Total cresols); | ICP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | |
|---|---|---|---|---|---|
| B2BBD9 17 | SOIL | 1-26-11 | 0840 | X | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J. Scalozz | DATE/TIME: 1200 1-26-11 | RECEIVED BY/STORED IN: Victor Bing | DATE/TIME: 1200 1-26-11 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |

SPECIAL INSTRUCTIONS

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-023 | PAGE 1 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR: C. Chamberlain | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND |
| SAMPLING LOCATION: PSTFUNIT1-VS-6b | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | 15 Days / 15 Days |
| ICE CHEST NO.: N/A | FIELD LOGBOOK NO.: HNF-N-507-162 27 | ACTUAL SAMPLE DEPTH: 4.8' | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

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

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

SPECIAL HANDLING AND/OR STORAGE

| PRESERVATION | Cool <-7C and >-20C |
|---|---|
| HOLDING TIME | 14 Days |
| TYPE OF CONTAINER | aGs |
| NO. OF CONTAINER(S) | 5 |
| VOLUME | 40mL |
| SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | | MATRIX* | SAMPLE DATE | SAMPLE TIME | |
|---|---|---|---|---|---|
| B2BBJ0 | 18 | SOIL | 1-26-11 | 0908 | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: C. Chamberlain | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: Victor Sims | DATE/TIME: 1-26-11 1200 | SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | F11-042-023 | PAGE 2 OF 2 |
|---|---|---|---|---|
| COLLECTOR: C. Chamberlain | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C; DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-6b | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-N-507-16.23 | ACTUAL SAMPLE DEPTH: 4.8" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | |

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

** All VOA samples will be collected using EPA Method 5035A.
** VOA sample bottle sets will include 5 bottles for low level analysis.
** The laboratory is to use one of the low level VOA bottles for moisture content determination.
** VOA bottles will be labeled with an appended suffix of K, L, M, N, or P for low level. These suffixes are for the purpose of providing bottle weights to the laboratories. These suffixes should not be include as part of the sample ID reported in the final data packages.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.
(1) VOA - 5035/8260 (LOW LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-024 | PAGE 1 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR: J Scales | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-7b | PROJECT DESIGNATION: 600 Area PSTF Unt 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: NX | FIELD LOGBOOK NO.: HNF-N-507-16-23 | ACTUAL SAMPLE DEPTH: 4-8" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

| MATRIX* | POSSIBLE SAMPLE HAZARDS/ REMARKS | | |
|---|---|---|---|
| A=Air<br>DL=Drum Liquids<br>DS=Drum Solids<br>L=Liquid<br>O=Oil<br>S=Soil<br>SE=Sediment<br>T=Tissue<br>V=Vegetation<br>W=Water<br>WI=Wipe<br>X=Other | Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993) | PRESERVATION | Cool <-7C and >-20C |
| | | HOLDING TIME | 14 Days |
| | | TYPE OF CONTAINER | aGs |
| | | NO. OF CONTAINER(S) | 5 |
| | | VOLUME | 40mL |
| | SPECIAL HANDLING AND/OR STORAGE | SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | |
|---|---|---|---|---|
| B2BBJ1 19 | SOIL | 1-26-11 | 0911 | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J Scales | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: Vilay Bjing | DATE/TIME: 1-26-11 1200 | SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

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

A-5003-613 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-024 | PAGE 2 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR<br>J. Scalo3 | COMPANY CONTACT<br>WIDRIG, DL | TELEPHONE NO.<br>376-2858 | PROJECT COORDINATOR<br>WIDRIG, DL | PRICE CODE 8C<br>AIR QUALITY ☐ | DATA TURNAROUND<br>15 Days / 15 Days |
| SAMPLING LOCATION<br>PSTFUNIT1-V5-7b | PROJECT DESIGNATION<br>600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.<br>F11-042 | | |
| ICE CHEST NO.<br>LM | FIELD LOGBOOK NO.<br>HNF-N-502-16 p.27 | ACTUAL SAMPLE DEPTH<br>4-8" | COA<br>300068ES10 | METHOD OF SHIPMENT<br>GOVERNMENT VEHICLE | |
| SHIPPED TO<br>Waste Sampling & Characterization | OFFSITE PROPERTY NO.<br>N/A | | BILL OF LADING/AIR BILL NO.<br>N/A | | |

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

** All VOA samples will be collected using EPA Method 5035A.
** VOA sample bottle sets will include 5 bottles for low level analysis.
** The laboratory is to use one of the low level VOA bottles for moisture content determination.
** VOA bottles will be labeled with an appended suffix of K, L, M, N, or P for low level. These suffixes are for the purpose of providing bottle weights to the laboratories. These suffixes should not be include as part of the sample ID reported in the final data packages.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.
(1) VOA - 5035/8260 (LOW LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

A-6003-616 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-025 | PAGE 1 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR: C. Chamberlain | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-8b | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-N-507-16.23 | ACTUAL SAMPLE DEPTH: 4.8" | COA: 300068E510 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

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

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

SPECIAL HANDLING AND/OR STORAGE

| | |
|---|---|
| PRESERVATION | Cool <-7C and >-20C |
| HOLDING TIME | 14 Days |
| TYPE OF CONTAINER | aGs |
| NO. OF CONTAINER(S) | 5 |
| VOLUME | 40mL |
| SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | |
|---|---|---|---|---|
| B2BBJ2 20 | SOIL | 1-26-11 | 0900 | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: C. Chamberlain | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: Victor Bivins | DATE/TIME: 1-26-11 1200 | SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-025 | PAGE 2 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR<br>P. Chamberlain | COMPANY CONTACT<br>WIDRIG, DL | TELEPHONE NO.<br>376-2858 | PROJECT COORDINATOR<br>WIDRIG, DL | PRICE CODE 8C<br>AIR QUALITY ☐ | DATA TURNAROUND<br>15 Days / 15 Days |
| SAMPLING LOCATION<br>PSTFUNIT1-VS-B5 | PROJECT DESIGNATION<br>600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.<br>F11-042 | | |
| ICE CHEST NO.<br>N/A | FIELD LOGBOOK NO.<br>HNF-N-507-76-23 | ACTUAL SAMPLE DEPTH<br>4-8" | COA<br>300068ES10 | METHOD OF SHIPMENT<br>GOVERNMENT VEHICLE | |
| SHIPPED TO<br>Waste Sampling & Characterization | OFFSITE PROPERTY NO.<br>N/A | | BILL OF LADING/AIR BILL NO.<br>N/A | | |

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

** All VOA samples will be collected using EPA Method 5035A.
** VOA sample bottle sets will include 5 bottles for low level analysis.
** The laboratory is to use one of the low level VOA bottles for moisture content determination.
** VOA bottles will be labeled with an appended suffix of K, L, M, N, or P for low level. These suffixes are for the purpose of providing bottle weights to the laboratories. These suffixes should not be include as part of the sample ID reported in the final data packages.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.
(1) VOA - 5035/8260 (LOW LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-026 | PAGE 1 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR: J. Scales | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-9b | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: N/A | FIELD LOGBOOK NO.: HNF-N-507-16.23 | ACTUAL SAMPLE DEPTH: 4-8" | COA: 300068E510 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

| MATRIX* | POSSIBLE SAMPLE HAZARDS/ REMARKS | | |
|---|---|---|---|
| A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegetation, W=Water, WI=Wipe, X=Other | Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993) | PRESERVATION | Cool <-7C and >-20C |
| | | HOLDING TIME | 14 Days |
| | | TYPE OF CONTAINER | aGs |
| | | NO. OF CONTAINER(S) | 5 |
| | | VOLUME | 40mL |
| | SPECIAL HANDLING AND/OR STORAGE | SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | |
|---|---|---|---|---|
| B2BBJ3 21 | SOIL | 1-26-11 | 0948 | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J. Scales | DATE/TIME: 1-26-11 2008 | RECEIVED BY/STORED IN: Victor Sims | DATE/TIME: 1-26-11 2008 | SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | F11-042-026 | PAGE 2 OF 2 |
|---|---|---|---|---|
| COLLECTOR: J Scales | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C; DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-9b | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ |
| ICE CHEST NO.: RM | FIELD LOGBOOK NO.: HNF-N-507-16-23 | ACTUAL SAMPLE DEPTH: 4-8" | COA: 300058ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | |

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

** All VOA samples will be collected using EPA Method 5035A.
** VOA sample bottle sets will include 5 bottles for low level analysis.
** The laboratory is to use one of the low level VOA bottles for moisture content determination.
** VOA bottles will be labeled with an appended suffix of K, L, M, N, or P for low level. These suffixes are for the purpose of providing bottle weights to the laboratories. These suffixes should not be include as part of the sample ID reported in the final data packages.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.
(1) VOA - 5035/8260 (LOW LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-027 | PAGE 1 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR: J Scalos | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-100 | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-N-507-16-23 | ACTUAL SAMPLE DEPTH: 4.5 | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

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

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

SPECIAL HANDLING AND/OR STORAGE

| PRESERVATION | Cool <-7C and >-20C |
|---|---|
| HOLDING TIME | 14 Days |
| TYPE OF CONTAINER | aGs |
| NO. OF CONTAINER(S) | 5 |
| VOLUME | 40mL |
| SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | |
|---|---|---|---|---|
| B2BBJ4 22 | SOIL | 1-26-11 | 0934 | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J. Scalos | DATE/TIME: 1-26-11 200 | RECEIVED BY/STORED IN: Victor | DATE/TIME: 1-26-11 200 | SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-027 | PAGE 2 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR<br>J. Scalos | COMPANY CONTACT<br>WIDRIG, DL | TELEPHONE NO.<br>376-2858 | PROJECT COORDINATOR<br>WIDRIG, DL | PRICE CODE 8C<br>AIR QUALITY ☐ | DATA TURNAROUND<br>15 Days / 15 Days |
| SAMPLING LOCATION<br>PSTFUNIT1-VS-10b | PROJECT DESIGNATION<br>600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.<br>F11-042 | | |
| ICE CHEST NO.<br>KM | FIELD LOGBOOK NO.<br>HNF-N-507-16-23 | ACTUAL SAMPLE DEPTH<br>4-8" | COA<br>300068ES10 | METHOD OF SHIPMENT<br>GOVERNMENT VEHICLE | |
| SHIPPED TO<br>Waste Sampling & Characterization | OFFSITE PROPERTY NO.<br>N/A | | BILL OF LADING/AIR BILL NO.<br>N/A | | |

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

** All VOA samples will be collected using EPA Method 5035A.
** VOA sample bottle sets will include 5 bottles for low level analysis.
** The laboratory is to use one of the low level VOA bottles for moisture content determination.
** VOA bottles will be labeled with an appended suffix of K, L, M, N, or P for low level. These suffixes are for the purpose of providing bottle weights to the laboratories. These suffixes should not be include as part of the sample ID reported in the final data packages.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.
(1) VOA - 5035/8260 (LOW LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-028 | PAGE 1 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR: J. Scales | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-11b | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: N/A | FIELD LOGBOOK NO.: HNF-N-507-16-23 | ACTUAL SAMPLE DEPTH: 4-5" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

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

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

SPECIAL HANDLING AND/OR STORAGE

| | |
|---|---|
| PRESERVATION | Cool <-7C and >-20C |
| HOLDING TIME | 14 Days |
| TYPE OF CONTAINER | aGs |
| NO. OF CONTAINER(S) | 5 |
| VOLUME | 40mL |
| SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | |
|---|---|---|---|---|
| B2BBJ5 23 | SOIL | 1-26-11 | 0928 | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J. Scales | DATE/TIME: 1200 1-26-11 | RECEIVED BY/STORED IN: VICTOR SIMS | DATE/TIME: 1200 1-26-11 | SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

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

A 6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-028 | PAGE 2 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR<br>J. Beaulo | COMPANY CONTACT<br>WIDRIG, DL | TELEPHONE NO.<br>376-2858 | PROJECT COORDINATOR<br>WIDRIG, DL | PRICE CODE 8C<br>AIR QUALITY ☐ | DATA TURNAROUND<br>15 Days / 15 Days |
| SAMPLING LOCATION<br>PSTFUNIT1-VS-11b | PROJECT DESIGNATION<br>600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.<br>F11-042 | | |
| ICE CHEST NO.<br>N/A | FIELD LOGBOOK NO.<br>HNF-N-507-16-23 | ACTUAL SAMPLE DEPTH<br>c/- 8" | COA<br>3000G8ES10 | METHOD OF SHIPMENT<br>GOVERNMENT VEHICLE | |
| SHIPPED TO<br>Waste Sampling & Characterization | OFFSITE PROPERTY NO.<br>N/A | | BILL OF LADING/AIR BILL NO.<br>N/A | | |

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

** All VOA samples will be collected using EPA Method 5035A.
** VOA sample bottle sets will include 5 bottles for low level analysis.
** The laboratory is to use one of the low level VOA bottles for moisture content determination.
** VOA bottles will be labeled with an appended suffix of K, L, M, N, or P for low level. These suffixes are for the purpose of providing bottle weights to the laboratories. These suffixes should not be include as part of the sample ID reported in the final data packages.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.
(1) VOA - 5035/8260 (LOW LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-029 | PAGE 1 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR: C. Chamberlain | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-12b | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO. | FIELD LOGBOOK NO.: HNF-N-507-16.23 | ACTUAL SAMPLE DEPTH: 4.5" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

| MATRIX* | POSSIBLE SAMPLE HAZARDS/ REMARKS | | |
|---|---|---|---|
| A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegetation, W=Water, WI=Wipe, X=Other | Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993) | PRESERVATION | Cool <-7C and >-20C |
| | | HOLDING TIME | 14 Days |
| | | TYPE OF CONTAINER | aGs |
| | | NO. OF CONTAINER(S) | 5 |
| | | VOLUME | 40mL |
| | SPECIAL HANDLING AND/OR STORAGE | SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | |
|---|---|---|---|---|
| B2BBJ6 24 | SOIL | 1-26-1 | 0933 | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: C. Chamberlain | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: [illegible] | DATE/TIME: 1-26-11 1200 | SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

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

A 6003-618 (REV 2)

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-029 | PAGE 2 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR<br>C. Chamberlain | COMPANY CONTACT<br>WIDRIG, DL | TELEPHONE NO.<br>376-2858 | PROJECT COORDINATOR<br>WIDRIG, DL | PRICE CODE 8C<br>AIR QUALITY ☐ | DATA TURNAROUND<br>15 Days / 15 Days |
| SAMPLING LOCATION<br>PSTFUNIT1-VS-12b | PROJECT DESIGNATION<br>600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.<br>F11-042 | | |
| ICE CHEST NO.<br>N/A | FIELD LOGBOOK NO.<br>HNF-N-507-16-23 | ACTUAL SAMPLE DEPTH<br>4-5" | COA<br>300068ES10 | METHOD OF SHIPMENT<br>GOVERNMENT VEHICLE | |
| SHIPPED TO<br>Waste Sampling & Characterization | OFFSITE PROPERTY NO.<br>N/A | | BILL OF LADING/AIR BILL NO.<br>N/A | | |

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

** All VOA samples will be collected using EPA Method 5035A.
** VOA sample bottle sets will include 5 bottles for low level analysis.
** The laboratory is to use one of the low level VOA bottles for moisture content determination.
** VOA bottles will be labeled with an appended suffix of K, L, M, N, or P for low level. These suffixes are for the purpose of providing bottle weights to the laboratories. These suffixes should not be include as part of the sample ID reported in the final data packages.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.
(1) VOA - 5035/8260 (LOW LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | F11-042-030 | PAGE 1 OF 2 |
|---|---|---|---|---|
| COLLECTOR: J. Scales | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: BC / AIR QUALITY: ☐ / DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-13b | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | |
| ICE CHEST NO.: RM | FIELD LOGBOOK NO.: HNF-N-507-16-23 | ACTUAL SAMPLE DEPTH: 4-5' | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | |

| MATRIX* | POSSIBLE SAMPLE HAZARDS/ REMARKS | | |
|---|---|---|---|
| A=Air, DI=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegetation, W=Water, WI=Wipe, X=Other | Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993) | PRESERVATION | Cool <-7C and > 20C |
| | | HOLDING TIME | 14 Days |
| | | TYPE OF CONTAINER | eGs |
| | | NO. OF CONTAINER(S) | 5 |
| | | VOLUME | 40mL |
| | SPECIAL HANDLING AND/OR STORAGE | SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | |
|---|---|---|---|---|
| B2BBJ7 25 | SOIL | 1-26-11 | 1005 | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J. Scales | DATE/TIME: 1200 1-26-11 | RECEIVED BY/STORED IN: Victor Bjorn | DATE/TIME: 1200 1-26-11 | SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-030 | PAGE 2 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR: J Scales | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: BC | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-13b | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: AN | FIELD LOGBOOK NO.: HNF-N-507-16-23 | ACTUAL SAMPLE DEPTH: 4-8" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

** All VOA samples will be collected using EPA Method 5035A.
** VOA sample bottle sets will include 5 bottles for low level analysis.
** The laboratory is to use one of the low level VOA bottles for moisture content determination.
** VOA bottles will be labeled with an appended suffix of K, L, M, N, or P for low level. These suffixes are for the purpose of providing bottle weights to the laboratories. These suffixes should not be include as part of the sample ID reported in the final data packages.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.
(1) VOA - 5035/8260 (LOW LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

A-6003-61B (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-031 | PAGE 1 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR: J. Scales | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-14b | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: | |
| ICE CHEST NO.: M- | FIELD LOGBOOK NO.: ~~HNF-N-807-~~ 1623 | ACTUAL SAMPLE DEPTH: 4-8" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

| MATRIX* | POSSIBLE SAMPLE HAZARDS/ REMARKS | | |
|---|---|---|---|
| A=Air<br>DL=Drum Liquids<br>DS=Drum Solids<br>L=Liquid<br>O=Oil<br>S=Soil<br>SE=Sediment<br>T=Tissue<br>V=Vegetation<br>W=Water<br>WI=Wipe<br>X=Other | Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993) | PRESERVATION | Cool < 7C and >-20C |
| | | HOLDING TIME | 14 Days |
| | | TYPE OF CONTAINER | aGs |
| | | NO. OF CONTAINER(S) | 5 |
| | | VOLUME | 40mL |
| | SPECIAL HANDLING AND/OR STORAGE | SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | |
|---|---|---|---|---|
| B2BBJ8 26 | SOIL | 1-26-11 | 0958 | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J. Scales | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: Victor Sing | DATE/TIME: 1-26-11 1200 | SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-031 | PAGE 2 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR<br>J. Scales | COMPANY CONTACT<br>WIDRIG, DL | TELEPHONE NO.<br>376-2858 | PROJECT COORDINATOR<br>WIDRIG, DL | PRICE CODE 8C<br>AIR QUALITY ☐ | DATA TURNAROUND<br>15 Days / 15 Days |
| SAMPLING LOCATION<br>PSTFUNIT1-VS-14b | PROJECT DESIGNATION<br>600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.<br>F11-042 | | |
| ICE CHEST NO.<br>N/A | FIELD LOGBOOK NO.<br>HNF-N-507-16.23 | ACTUAL SAMPLE DEPTH<br>4.5' | COA<br>300068ES10 | METHOD OF SHIPMENT<br>GOVERNMENT VEHICLE | |
| SHIPPED TO<br>Waste Sampling & Characterization | OFFSITE PROPERTY NO.<br>N/A | | BILL OF LADING/AIR BILL NO.<br>N/A | | |

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

** All VOA samples will be collected using EPA Method 5035A.
** VOA sample bottle sets will include 5 bottles for low level analysis.
** The laboratory is to use one of the low level VOA bottles for moisture content determination.
** VOA bottles will be labeled with an appended suffix of K, L, M, N, or P for low level. These suffixes are for the purpose of providing bottle weights to the laboratories. These suffixes should not be include as part of the sample ID reported in the final data packages.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.
(1) VOA - 5035/8260 (LOW LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

ORIGINAL

A-6003-618 (REV 2)

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | F11-042-032 | PAGE 1 OF 2 |
|---|---|---|---|---|
| COLLECTOR: C. Chamberlain | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C / DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-15b | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-N-507-16.23 | ACTUAL SAMPLE DEPTH: 4-8" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | |

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

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

SPECIAL HANDLING AND/OR STORAGE

| PRESERVATION | Cool <-7C and >-20C |
|---|---|
| HOLDING TIME | 14 Days |
| TYPE OF CONTAINER | aGs |
| NO. OF CONTAINER(S) | 5 |
| VOLUME | 40mL |
| SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | |
|---|---|---|---|---|
| B2BBJ9 27 | SOIL | 1-26-11 | 0957 | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: C. Chamberlain | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: Victor Byers | DATE/TIME: 1-26-11 1200 | SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

ORIGINAL

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

A-6003-613 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | F11-042-032 | PAGE 2 OF 2 |
|---|---|---|---|---|
| COLLECTOR: C. Chamberlain | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C |
| SAMPLING LOCATION: PSTFUNIT1-VS-150 | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-N-507-623 | ACTUAL SAMPLE DEPTH: 4.5' | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | |

DATA TURNAROUND: 15 Days / 15 Days

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

** All VOA samples will be collected using EPA Method 5035A.
** VOA sample bottle sets will include 5 bottles for low level analysis.
** The laboratory is to use one of the low level VOA bottles for moisture content determination.
** VOA bottles will be labeled with an appended suffix of K, L, M, N, or P for low level. These suffixes are for the purpose of providing bottle weights to the laboratories. These suffixes should not be include as part of the sample ID reported in the final data packages.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.
(1) VOA - 5035/8260 (LOW LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

ORIGINAL

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-033 | PAGE 1 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR: C. L. Chamberlain | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-16b | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-N-507-16.23 | ACTUAL SAMPLE DEPTH: 4.8' | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

| MATRIX* | POSSIBLE SAMPLE HAZARDS/ REMARKS | PRESERVATION | Cool <-7C and >-20C |
|---|---|---|---|
| A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegetation, W=Water, WI=Wipe, X=Other | Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993) | HOLDING TIME | 14 Days |
| | | TYPE OF CONTAINER | aGs |
| | | NO. OF CONTAINER(S) | 5 |
| | | VOLUME | 40mL |
| | SPECIAL HANDLING AND/OR STORAGE | SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | |
|---|---|---|---|---|
| B2BBK0 28 | SOIL | 1-26-11 | 0948 | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: C. L. Chamberlain | DATE/TIME: 1-26-11 | RECEIVED BY/STORED IN: Victor Binns | DATE/TIME: 1-26-11 | SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-033 | PAGE 2 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR<br>C. Chamberlain | COMPANY CONTACT<br>WIDRIG, DL | TELEPHONE NO.<br>376-2858 | PROJECT COORDINATOR<br>WIDRIG, DL | PRICE CODE 8C<br>AIR QUALITY ☐ | DATA TURNAROUND<br>15 Days / 15 Days |
| SAMPLING LOCATION<br>PSTFUNIT1-VS-16b | PROJECT DESIGNATION<br>600 Area PSTF Unit 1 Closure/Postclosure Soil | | SAF NO.<br>F11-042 | | |
| ICE CHEST NO.<br>N/A | FIELD LOGBOOK NO.<br>HNF-N-507-16.22 | ACTUAL SAMPLE DEPTH<br>4.8' | COA<br>300068ES10 | METHOD OF SHIPMENT<br>GOVERNMENT VEHICLE | |
| SHIPPED TO<br>Waste Sampling & Characterization | OFFSITE PROPERTY NO.<br>N/A | | BILL OF LADING/AIR BILL NO.<br>N/A | | |

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

** All VOA samples will be collected using EPA Method 5035A.
** VOA sample bottle sets will include 5 bottles for low level analysis.
** The laboratory is to use one of the low level VOA bottles for moisture content determination.
** VOA bottles wil be labeled with an appended suffix of K, L, M, N, or P for low level. These suffixes are for the purpose of providing bottle weights to the laboratories. These suffixes should not be include as part of the sample ID reported in the final data packages.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.
(1) VOA - 5035/8260 (LOW LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachlorice, Methylene chloride};

A-6003-618 (REV 2)

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | F11-042-034 | PAGE 1 OF 2 |
|---|---|---|---|---|
| COLLECTOR: J Scale 8 | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C; AIR QUALITY: ☐ | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-17b | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-IN-507-19.2 | ACTUAL SAMPLE DEPTH: 4.5" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | |

| MATRIX* | POSSIBLE SAMPLE HAZARDS/ REMARKS | PRESERVATION | Cool <-7C and >-20C |
|---|---|---|---|
| A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegetation, W=Water, WI=Wipe, X=Other | Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993) | HOLDING TIME | 14 Days |
| | | TYPE OF CONTAINER | aGs |
| | | NO. OF CONTAINER(S) | 5 |
| | | VOLUME | 40mL |
| | SPECIAL HANDLING AND/OR STORAGE | SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | |
|---|---|---|---|---|
| B2BBK1 29 | SOIL | 1-26-11 | CALC | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J Xalang | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: Victor | DATE/TIME: 1-26-11 1200 | SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-034 | PAGE 2 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR<br>J Scalo 3 | COMPANY CONTACT<br>WIDRIG, DL | TELEPHONE NO.<br>376-2858 | PROJECT COORDINATOR<br>WIDRIG, DL | PRICE CODE 8C | DATA TURNAROUND |
| SAMPLING LOCATION<br>PSTFUNIT1-VS-17b | PROJECT DESIGNATION<br>600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.<br>F11-042 | AIR QUALITY ☐ | 15 Days / 15 Days |
| ICE CHEST NO.<br>N/A | FIELD LOGBOOK NO.<br>HNF-N-507-6-2-3 | ACTUAL SAMPLE DEPTH<br>4-8' | COA<br>300068ES10 | METHOD OF SHIPMENT<br>GOVERNMENT VEHICLE | |
| SHIPPED TO<br>Waste Sampling & Characterization | OFFSITE PROPERTY NO.<br>N/A | | BILL OF LADING/AIR BILL NO.<br>N/A | | |

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

** All VOA samples will be collected using EPA Method 5035A.
** VOA sample bottle sets will include 5 bottles for low level analysis.
** The laboratory is to use one of the low level VOA bottles for moisture content determination.
** VOA bottles will be labeled with an appended suffix of K, L, M, N, or P for low level. These suffixes are for the purpose of providing bottle weights to the laboratories. These suffixes should not be include as part of the sample ID reported in the final data packages.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.
(1) VOA - 5035/8260 (LOW LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

A-6002-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | F11-042-018 | PAGE 1 OF 2 |
|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| COLLECTOR: J. Scales | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C; DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-1b | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-N-607-16-23 | ACTUAL SAMPLE DEPTH: 4"-8" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | |

| MATRIX* | POSSIBLE SAMPLE HAZARDS/ REMARKS | | |
|---|---|---|---|
| A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegetation, W=Water, WI=Wipe, X=Other | Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993) | PRESERVATION | Cool <-7C and >-20C |
| | | HOLDING TIME | 14 Days |
| | | TYPE OF CONTAINER | aGs |
| | | NO. OF CONTAINER(S) | 5 |
| | | VOLUME | 40mL |
| | SPECIAL HANDLING AND/OR STORAGE | SAMPLE ANALYSIS | SEE ITEM (3) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | |
|---|---|---|---|---|
| B28BH5 30 | SOIL | 1-26-11 | 0834 | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J. Scales | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: Victor Bins | DATE/TIME: 1-26-11 1200 | SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

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

A-5003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CHZMHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-018 | PAGE 2 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR: J Beale | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND |
| SAMPLING LOCATION: PSTFUNIT1-VS-1b | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | 15 Days / 15 Days |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-N-507-16 . 23 | ACTUAL SAMPLE DEPTH: 4-8' | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880E520.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

** All VOA samples will be collected using EPA Method 5035A.
** VOA sample bottle sets will include 5 bottles for low level analysis.
** The laboratory is to use one of the low level VOA bottles for moisture content determination.
** VOA bottles will be labeled with an appended suffix of K, L, M, N, or P for low level. These suffixes are for the purpose of providing bottle weights to the laboratories. These suffixes should not be include as part of the sample ID reported in the final data packages.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.
(1) VOA - 5035/8260 (LOW LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

A-6003-618 (REV 2)

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | F11-042-019 | PAGE 1 OF 2 |
|---|---|---|---|---|
| COLLECTOR: J. Scalez | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C; AIR QUALITY: ☐ | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-2b | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | |
| ICE CHEST NO.: MA | FIELD LOGBOOK NO.: HNF-N-807-16.23 | ACTUAL SAMPLE DEPTH: 4-8" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | |

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

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

SPECIAL HANDLING AND/OR STORAGE

| | |
|---|---|
| PRESERVATION | Cool <-7C and >-20C |
| HOLDING TIME | 14 Days |
| TYPE OF CONTAINER | aGs |
| NO. OF CONTAINER(S) | 5 |
| VOLUME | 40ml |
| SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME |
|---|---|---|---|
| B2BBH6 31 | SOIL | 1-26-11 | ~~0843~~ 0840 |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J Scalez | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: Victor Sims | DATE/TIME: 1-26-11 1200 | SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | F11-042-019 | PAGE 2 OF 2 |
|---|---|---|---|---|
| COLLECTOR: J. Scalang | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C; DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-2h | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-N-507-12-23 | ACTUAL SAMPLE DEPTH: 4-8' | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | |

SPECIAL INSTRUCTIONS

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

** All VOA samples will be collected using EPA Method 5035A.
** VOA sample bottle sets will include 5 bottles for low level analysis.
** The laboratory is to use one of the low level VOA bottles for moisture content determination.
** VOA bottles will be labeled with an appended suffix of K, L, M, N, or P for low level. These suffixes are for the purpose of providing bottle weights to the laboratories. These suffixes should not be include as part of the sample ID reported in the final data packages.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.
(1) VOA - 5035/8260 (LOW LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

A-6003-618 (REV 2)

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-020 | PAGE 1 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR: J Sealey | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-3b | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: ~~HNF-N-507~~-16-23 | ACTUAL SAMPLE DEPTH: 4-5' | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

| MATRIX* | POSSIBLE SAMPLE HAZARDS/ REMARKS | | |
|---|---|---|---|
| A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegetation, W=Water, WI=Wipe, X=Other | Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993) | PRESERVATION | Cool <-7C and >-20C |
| | | HOLDING TIME | 14 Days |
| | | TYPE OF CONTAINER | aGs |
| | | NO. OF CONTAINER(S) | 5 |
| | | VOLUME | 40mL |
| | SPECIAL HANDLING AND/OR STORAGE | SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | |
|---|---|---|---|---|
| B2BBH7 32 | SOIL | 1-26-11 | 0846 | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J Sealey | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: VL Gro / Sims | DATE/TIME: 1-26-11 1200 | SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

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

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-020 | PAGE 2 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR<br>S. Scarlett | COMPANY CONTACT<br>WIDRIG, DL | TELEPHONE NO.<br>376-2858 | PROJECT COORDINATOR<br>WIDRIG, DL | PRICE CODE 8C<br>AIR QUALITY ☐ | DATA TURNAROUND<br>15 Days / 15 Days |
| SAMPLING LOCATION<br>PSTFUNIT1-VS-3b | PROJECT DESIGNATION<br>600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.<br>F11-042 | | |
| ICE CHEST NO.<br>NA | FIELD LOGBOOK NO.<br>NNF-N-507-72 | ACTUAL SAMPLE DEPTH<br>4.5' | COA<br>300068ES10 | METHOD OF SHIPMENT<br>GOVERNMENT VEHICLE | |
| SHIPPED TO<br>Waste Sampling & Characterization | OFFSITE PROPERTY NO.<br>N/A | | BILL OF LADING/AIR BILL NO.<br>N/A | | |

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

** All VOA samples will be collected using EPA Method 5035A.
** VOA sample bottle sets will include 5 bottles for low level analysis.
** The laboratory is to use one of the low level VOA bottles for moisture content determination.
** VOA bottles will be labeled with an appended suffix of K, L, M, N, or P for low level. These suffixes are for the purpose of providing bottle weights to the laboratories. These suffixes should not be include as part of the sample ID reported in the final data packages.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.
(1) VOA - 5035/8260 (LOW LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

A-6033-618 (REV 2)

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-021 | PAGE 1 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR: C. Chamberlain | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-4b | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: NN | FIELD LOGBOOK NO.: ~~HNF-14-507~~ D-23 | ACTUAL SAMPLE DEPTH: 4'-8" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

| MATRIX* | POSSIBLE SAMPLE HAZARDS/ REMARKS | | |
|---|---|---|---|
| A=Air<br>DL=Drum Liquids<br>DS=Drum Solids<br>L=Liquid<br>O=Oil<br>S=Soil<br>SE=Sediment<br>T=Tissue<br>V=Vegetation<br>W=Water<br>WI=Wipe<br>X=Other | Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993) | PRESERVATION | Cool <-7C and >-20C |
| | | HOLDING TIME | 14 Days |
| | | TYPE OF CONTAINER | aGs |
| | | NO. OF CONTAINER(S) | 5 |
| | | VOLUME | 40mL |
| | SPECIAL HANDLING AND/OR STORAGE | SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | MATRIX* | | SAMPLE DATE | SAMPLE TIME | |
|---|---|---|---|---|---|
| B2BBH8 | SOIL | 33 | 1-26-11 | 0855 | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: C. Chamberlain | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: [illegible] | DATE/TIME: 1-26-11 1200 | SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

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

A 6003 618 (REV 2)

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-021 | PAGE 2 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR C. Chamberlain | COMPANY CONTACT WIDRIG, DL | TELEPHONE NO. 376-2858 | PROJECT COORDINATOR WIDRIG, DL | PRICE CODE 8C | DATA TURNAROUND |
| SAMPLING LOCATION PSTFUNIT1-V5-4b | PROJECT DESIGNATION 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO. F11-042 | AIR QUALITY ☐ | 15 Days / 15 Days |
| ICE CHEST NO. NA | FIELD LOGBOOK NO. HNF-N-607- 22 | ACTUAL SAMPLE DEPTH 4.8" | COA 300068ES10 | METHOD OF SHIPMENT GOVERNMENT VEHICLE | |
| SHIPPED TO Waste Sampling & Characterization | OFFSITE PROPERTY NO. N/A | | BILL OF LADING/AIR BILL NO. N/A | | |

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

** All VOA samples will be collected using EPA Method 5035A.
** VOA sample bottle sets will include 5 bottles for low level analysis.
** The laboratory is to use one of the low level VOA bottles for moisture content determination.
** VOA bottles will be labeled with an appended suffix of K, L, M, N, or P for low level. These suffixes are for the purpose of providing bottle weights to the laboratories. These suffixes should not be include as part of the sample ID reported in the final data packages.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.
(1) VOA - 5035/8260 (LOW LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

A-6003-618 (REV 2)

# Sample Receipt

## Chain of Custody

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-022 | PAGE 1 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR: J. Scalos | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 8C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-VS-5b | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.: F11-042 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: NA | FIELD LOGBOOK NO.: HNF-N-807-16-27 | ACTUAL SAMPLE DEPTH: 4-8" | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

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

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

SPECIAL HANDLING AND/OR STORAGE

| | |
|---|---|
| PRESERVATION | Cool <-7C and >-20C |
| HOLDING TIME | 14 Days |
| TYPE OF CONTAINER | 8Gs |
| NO. OF CONTAINER(S) | 5 |
| VOLUME | 40mL |
| SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | |
|---|---|---|---|---|
| B2BBH9 34 | SOIL | 1-26-11 | 0900 | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: J. Scalos | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: Victor Bing | DATE/TIME: 1-26-11 1200 | SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | |

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

A-6003-618 (REV 2)

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-042-022 | PAGE 2 OF 2 |
|---|---|---|---|---|---|
| COLLECTOR<br>J. Scale? | COMPANY CONTACT<br>WIDRIG, DL | TELEPHONE NO.<br>376-2858 | PROJECT COORDINATOR<br>WIDRIG, DL | PRICE CODE 8C | DATA TURNAROUND<br>15 Days / 15 Days |
| SAMPLING LOCATION<br>PSTFUNIT1-VS-5b | PROJECT DESIGNATION<br>600 Area PSTF Unit 1 Closure/Postclosure - Soil | | SAF NO.<br>F11-042 | AIR QUALITY ☐ | |
| ICE CHEST NO.<br>MA | FIELD LOGBOOK NO.<br>HNF-N-507-16-23 | ACTUAL SAMPLE DEPTH<br>1-8' | COA<br>300068ES10 | METHOD OF SHIPMENT<br>GOVERNMENT VEHICLE | |
| SHIPPED TO<br>Waste Sampling & Characterization | OFFSITE PROPERTY NO.<br>N/A | | BILL OF LADING/AIR BILL NO.<br>N/A | | |

**SPECIAL INSTRUCTIONS**

** The CACN for all analytical work at WSCF laboratory is 401880ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

** All VOA samples will be collected using EPA Method 5035A.
** VOA sample bottle sets will include 5 bottles for low level analysis.
** The laboratory is to use one of the low level VOA bottles for moisture content determination.
** VOA bottles will be labeled with an appended suffix of K, L, M, N, or P for low level. These suffixes are for the purpose of providing bottle weights to the laboratories. These suffixes should not be include as part of the sample ID reported in the final data packages.
** All VOA samples can be shipped to off-site laboratory on cool 4 degrees C.
(1) VOA - 5035/8260 (LOW LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

ORIGINAL

A-5003-618 (REV 2)

Attachment 2
**Narrative**
WSCF111311

## Introduction

Samples were received at the WSCF laboratory as referenced on the WSCF SAF Number Cross Reference table included in the final report. The samples were analyzed for the analytes indicated on the attached copy of the chain of custody (COC) form in accordance with the *Statement of Work (SOW), Modification No. 2 to Agreement 36587, Release 3, "FH WSCF ANALYTICAL SERVICES FOR GROUNDWATER."*

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

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

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

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

## Analytical Methodology for Requested Analyses

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

## Inorganic Comments

**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):

- All applicable QC controls are within the established limits.

Attachment 2
**Narrative**
WSCF111311

**Organic Comments**

**Semi-VOA** – 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):

- B2BBK4 (111311001) did not meet the acceptance limits for surrogate Phenol-d5. Sample results were not flagged. The quality control report was flagged for surrogate recovery failure.
- All other applicable QC controls are within the established limits.

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

- 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 | | | F11-043-003 | PAGE 1 OF 1 |
|---|---|---|---|---|---|
| COLLECTOR: Chamberlain | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 7C | DATA TURNAROUND |
| SAMPLING LOCATION: PSTFUNIT1-EB | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - QC Sampling | | SAF NO.: F11-043 | AIR QUALITY: ☐ | 15 Days / 15 Days |
| ICE CHEST NO. | FIELD LOGBOOK NO.: HNF-N-502-16 | ACTUAL SAMPLE DEPTH: N/A | COA: 300068ES10 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

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

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

111311

SPECIAL HANDLING AND/OR STORAGE

| PRESERVATION | HCl or H2SO4 to pH <2/Cool~4C | Cool~4C | HNO3 to pH <2 |
|---|---|---|---|
| HOLDING TIME | 14 Days | 7/40 Days | 6 Months |
| TYPE OF CONTAINER | aGs* | aG | G/P |
| NO. OF CONTAINER(S) | 3 | 4 | 1 |
| VOLUME | 40mL | 1L | 500mL |
| SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS | Semi-VOA - 8270 (Add-On) (Total cresols); | ICP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | | |
|---|---|---|---|---|---|---|
| B2BBK4 001 | WATER | 1-26-11 | 0650 | X | X | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| Craig Chamberlain | 1-26-11 / 1200 | VICTOR [illegible] | 1/26/11 1200 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| 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.

** The appropriate GKI will be provided to the laboratories prior to sample collection.

(1) VOA - 8260 (TCL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

☐ ORIGINAL

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

A-6003-618 (REV 2)

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | F11-043-001 | PAGE 1 OF 1 |
|---|---|---|---|---|---|
| COLLECTOR: C. Chamberlain | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL | PRICE CODE: 7C | DATA TURNAROUND: 15 Days / 15 Days |
| SAMPLING LOCATION: PSTFUNIT1-FXR | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - QC Sampling | | SAF NO.: F11-043 | AIR QUALITY: ☐ | |
| ICE CHEST NO.: N/A | FIELD LOGBOOK NO.: HNF-N-507-16-23 | ACTUAL SAMPLE DEPTH: N/A | COA: 300068E510 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | |
| SHIPPED TO: Waste Sampling & Characterization | OFFSITE PROPERTY NO.: N/A | | BILL OF LADING/AIR BILL NO.: N/A | | |

| MATRIX* | POSSIBLE SAMPLE HAZARDS/ REMARKS | | |
|---|---|---|---|
| A=Air<br>DI=Drum Liquids<br>DS=Drum Solids<br>L=Liquid<br>O=Oil<br>S=Soil<br>SE=Sediment<br>T=Tissue<br>V=Vegetation<br>W=Water<br>WI=Wipe<br>X=Other | Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993) | PRESERVATION | HCl or H2SO4 to pH <2/Cool≈4C |
| | | HOLDING TIME | 14 Days |
| | | TYPE OF CONTAINER | oGs* |
| | | NO. OF CONTAINER(S) | 3 |
| | | VOLUME | 40mL |
| | SPECIAL HANDLING AND/OR STORAGE | SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | |
|---|---|---|---|---|
| B2BBK2 003 | WATER | 1-26-11 | 0840 | X |

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: C. Chamberlain | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: Victor Jung | DATE/TIME: 1-26-11 1200 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| 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.
** The appropriate GKI will be provided to the laboratories prior to sample collection.
(1) VOA - 8260 (TCL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

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

A-6003-618 (REV 2)

| CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | F11-043-002 | PAGE 1 OF 1 |
|---|---|---|---|
| COLLECTOR: Chamberlain | COMPANY CONTACT: WIDRIG, DL | TELEPHONE NO.: 376-2858 | PROJECT COORDINATOR: WIDRIG, DL |
| PRICE CODE: 7C | DATA TURNAROUND: 15 Days / 15 Days | SAMPLING LOCATION: PSTFUNIT1-FB | PROJECT DESIGNATION: 600 Area PSTF Unit 1 Closure/Postclosure - QC Sampling |
| SAF NO.: F11-043 | AIR QUALITY: ☐ | ICE CHEST NO.: — | FIELD LOGBOOK NO.: HNF-N-507-16 |
| ACTUAL SAMPLE DEPTH: N/A | COA: 300068E510 | METHOD OF SHIPMENT: GOVERNMENT VEHICLE | SHIPPED TO: Waste Sampling & Characterization |
| OFFSITE PROPERTY NO.: N/A | BILL OF LADING/AIR BILL NO.: N/A | | |

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

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

SPECIAL HANDLING AND/OR STORAGE

| PRESERVATION | HCl or H2SO4 to pH <2/Cool<4C | Cool<4C | HNO3 to pH<2 |
|---|---|---|---|
| HOLDING TIME | 14 Days | 7/40 Days | 6 Months |
| TYPE OF CONTAINER | aGs* | aG | G/P |
| NO. OF CONTAINER(S) | 3 | 1 | 1 |
| VOLUME | 40mL | 1L | 500mL |
| SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS | Semi-VOA 8270 (Non-Chlorinated) (TCL) (cresols); | ICP/MS - 200.8 (TAL) (Chromium); |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | | |
|---|---|---|---|---|---|---|
| B2BBK3 003 | WATER | 1-26-11 | 0655 | X | | |

PMGENT 21JAN11

| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
|---|---|---|---|
| RELINQUISHED BY/REMOVED FROM: Greg Chamberlain | DATE/TIME: 1-26-11 1200 | RECEIVED BY/STORED IN: Victor Simon | DATE/TIME: 1/24/11 1200 |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME |
| 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.
** The appropriate GKI will be provided to the laboratories prior to sample collection.
(1) VOA - 8260 (TCL) {1,1,1-Trichloroethane, 1,1-Dichloroethane, 2-Butanone, 4-Methyl-2-pentanone, Acetone, Carbon tetrachloride, Methylene chloride};

ORIGINAL

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

A-5003-518 (REV 2)

# Appendix 5

Data Validation Supporting Documentation

| VALIDATION LEVEL: | A | B | (C) | D | E |
|---|---|---|---|---|---|
| PROJECT: CPP 600 AREA | | | DATA PACKAGE: VSR11-033 | | |
| VALIDATOR: Carl Schloesslin | | LAB: WSCF | | DATE: 2-28-2011 | |
| | | | SDG: WSCF111310, WSCF111311 | | |
| ANALYSES PERFORMED | | | | | |
| SW-846/ICP | SW-846/GFAA | SW-846/Hg | | EPA 200.8 X | |
| | | | | | |

SAMPLES/MATRIX

SDG WSCF111310 (soil samples): B2BBH0, B2BBH1, B2BBH2, B2BBH3, B2BBH4, B2BBF0, B2BBF1, B2BBF2, B2BBF3, B2BBF4, B2BBF5, B2BBF6, B2BBF7, B2BBF8, B2BBF9, B2BBD8, B2BBD9

SDG WSCF111311 (water sample): B2BBK4

## 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: None

**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: 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: None

**6. ICP QUALITY CONTROL (Levels D and E)**

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

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

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

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

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

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

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

Comments:

**7. HOLDING TIMES (all levels)**

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

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

Comments: None

**8. RESULT QUANTITATION AND DETECTION LIMITS (all levels)**

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

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

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

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

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

Comments: None

# Appendix 6

Additional Documentation Requested By Client

## Quality Control Report

**Attention** Michael Neely
**Department** Inorganic

**Group #** WSCF111310

**QC Batch** 175849 **Test** ICP-2008 MS All possible metal
**Associated Samples** 111310001, 111310002, 111310003, 111310004, 111310005, 111310006, 111310007, 111310008, 111310009, 111310010, 111310011, 111310012, 111310013, 111310014, 111310015, 111310016, 111310017

| Analyte | CAS # | Original Found | QC Found | Units | % Recov | Limits | RPD | RPD Limit | RQ | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **LCS** | | | **QC Sample #48161** | | | | | | | |
| Chromium | 7440-47-3 | | 72.6 | mg/kg | 101.2 | 68 - 119 | | | | 02/03/11 |
| **MS** | | | **QC Sample #48166** | | | | | | | |
| | | | **Original 111310001** | | | | | | | |
| Chromium | 7440-47-3 | 9.88 | 100 | mg/kg | 98.8 | 70 - 130 | | | | 02/03/11 |
| **MSD** | | | **QC Sample #48167** | | | | | | | |
| | | | **Original 111310001** | | | | | **Paired** | **48166** | |
| Chromium | 7440-47-3 | 9.88 | 104 | mg/kg | 104.5 | 70 - 130 | 5.60 | 30 | | 02/03/11 |
| **BLANK** | | | **QC Sample #48160** | | | | | | | |
| Chromium | 7440-47-3 | | <0.50 | ug/L | | | | | U | 02/03/11 |

## Quality Control Report

**Attention** Michael Neely
**Department** Inorganic

**Group #** WSCF111311

**QC Batch** 175966
**Associated Samples** 111311001

**Test** ICP-2008 MS All possible metal

| Analyte | CAS # | Original Found | QC Found | Units | % Recov | Limits | RPD | RPD Limit | RQ | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| **BLANK** | | | **QC Sample #48280** | | | | | | | |
| Chromium | 7440-47-3 | | <0.50 | ug/L | | | | | U | 02/07/11 |
| **LCS** | | | **QC Sample #48281** | | | | | | | |
| Chromium | 7440-47-3 | | 40.1 | ug/L | 100.2 | 85 - 115 | | | | 02/07/11 |
| **MS** | | | **QC Sample #48282** | | | | | | | |
| | | | **Original 111167005** | | | | | | | |
| Chromium | 7440-47-3 | | 39.3 | ug/L | 98.3 | 70 - 130 | | | | 02/07/11 |
| **MSD** | | | **QC Sample #48283** | | | | | | | |
| | | | **Original 111167005** | | | | | **Paired** | **48282** | |
| Chromium | 7440-47-3 | | 39.3 | ug/L | 98.4 | 70 - 130 | 0.10 | 20 | | 02/07/11 |