TestAmerica St. Louis

RECEIVED NOVEMBER 21, 2008

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

# ANALYTICAL REPORT

S08-007

Lot #: F8J230173
SDG #: SL763

Mike Neely

CH2M Hill Plateau Remediation
PO Box 1600, MS B6-06
Richland, WA 99352

TESTAMERICA LABORATORIES, INC.

Michael C. Franks
Project Manager

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EDMC

November 20, 2008



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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

CASE NARRATIVE

CH2MHill Plateau Remediation Company
P.O. Box 1600
MSIN B6-06
Richland, Washington 99352
November 21, 2008
Attention: Mike Neely

| | |
|---|---|
| SDG | : SL763 |
| Number of Samples | : eight samples |
| Sample Matrix | : water |
| Data Deliverable | : Summary |
| Date SDG Closed | : November 6, 2008 |

II. Introduction

Between October 23, 2008 and November 6, 2008, eight water samples were received by TestAmerica - St. Louis for chemical analysis. The samples were received within temperature criteria. See the COC and CUR forms for documentation of any variations on receipt conditions and temperature. Upon receipt, the samples were given laboratory Ids to correspond with specific client Ids. Please refer to the Sample Summary sheets attached to this case narrative. This report is incomplete without the narrative.

III. Analytical Results/ Methodology

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

Deviation from Request: None

IV. Definitions

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

V. Comments

**General**

The following SAFs are associated with this SDG: S08-007, I08-059, W08-005, I09-002, and S09-010

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

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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

***CH2MHill Plateau Remediation Company***

November 21, 2008

SDG: SL763

## Volatiles

**Batch: 8312146**

The D% CCV is (higher recovered) outside the Method criteria (greater than 20% D) for Acetone (52.8%), Tetrahydrofuran (23.5%), Propionitrile (50.3%), 1,4-Dioxane (38.9%), and 4-Methyl-2-pentanone (24.4% high), indicating a potential high bias for these analytes in the samples associated with this CCV. These analytes are not detected above the reporting limits in the associated samples.

**Affected Samples:**

F8J310136 (1): B1VHJ2 F8K010185 (1): B1X8W5

F8J310138 (1): B1X619 F8K050212 (1): B1X8W6

The LCS/LCSD RPD for Tetrahydrofuran is not within method acceptance criteria. LCS/LCSD recoveries are within QC limits demonstrating good extraction performance in the sample matrix.

**Affected Samples:**

F8J310136 (1): B1VHJ2 F8K010185 (1): B1X8W5

F8J310138 (1): B1X619 F8K050212 (1): B1X8W6

The MS/MSD RPDs for 1,4-Dioxane is not within method acceptance criteria. MS/MSD recoveries are within QC limits demonstrating good extraction performance in the sample matrix.

**Affected Samples:**

F8J310136 (1): B1VHJ2 F8K010185 (1): B1X8W5

F8J310138 (1): B1X619 F8K050212 (1): B1X8W6

**Batch: 8324243**

The D% CCV is (higher recovered) outside the Method criteria (greater than 20% D) for 1,4-Dioxane (25.9%), indicating a potential high bias for this analyte in the samples associated with this CCV. This analyte was not detected above the reporting limits in the associated samples.

**Affected Samples:**

F8K060260 (1): B1X8W7

**Batch: 8323284**

The D% CCV is (higher recovered) outside the Method criteria (greater than 20% D) for Propionitrile (25.9%) and 1,4-Dioxane (33.0%), indicating a potential high bias for these analytes in the samples associated with this CCV. These analytes are not detected above the reporting limits in the associated samples.

**Affected Samples:**

F8K050212 (1): B1X8W6



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THE LEADER IN ENVIRONMENTAL TESTING

***CH2MHill Plateau Remediation Company***

November 21, 2008
SDG: SL763

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**ICP Metals**

**Batch: 8315307**

The samples were analyzed at a dilution for Calcium and Strontium due to high concentrations of target and interfering analytes. The reporting limit has been adjusted only for those targets reported from the dilution run.
**Affected Samples:**
F8J230174 (1): B1WXX8
F8J230174 (2): B1WXX9

There were no observations or nonconformances for the following methods:

Pesticides
Total Organic Carbon
Total Organic Halogens
Total Sulfide
Total Phenol

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

Reviewed and approved:

Michael Franks
St. Louis Project Manager



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

# METHODS SUMMARY

SL763

| PARAMETER | ANALYTICAL METHOD | PREPARATION METHOD |
|---|---|---|
| Inductively Coupled Plasma (ICP) Metals | SW846 6010B | |
| Organochlorine Pesticides | SW846 8081A | SW846 3510C |
| Phenolics | MCAWW 420.2 | MCAWW 420.2 |
| Semivolatile Organic Compounds by GC/MS | SW846 8270C | SW846 3510C |
| Sulfide | SW846 9030 | |
| Total Organic Carbon | SW846 9060 | SW846 9060 |
| Total Organic Halogens | SW846 9020B | SW846 9020B |
| Volatile Organics by GC/MS | SW846 8260B | SW846 5030B/826 |

**References:**

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

# SAMPLE SUMMARY

SL763 : F8J230173

| WO # | SAMPLE# | CLIENT SAMPLE ID | SAMPLED DATE | SAMP TIME |
|---|---|---|---|---|
| K1FDL | 001 | B1W210 | 10/21/08 | 09:31 |

**NOTE(S):**

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

(Continued on next page)

# SAMPLE SUMMARY

SL763 : F8J230174

| WO # | SAMPLE# | CLIENT SAMPLE ID | SAMPLED DATE | SAMP TIME |
|---|---|---|---|---|
| K1FEF | 001 | B1WXX8 | 10/21/08 | 09:18 |
| K1FEN | 002 | B1WXX9 | 10/21/08 | 09:18 |

**NOTE(S):**

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- All calculations are performed before rounding to avoid round-off errors in calculated results.
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- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

(Continued on next page)

# SAMPLE SUMMARY

SL763 : F8J310136

| WO # | SAMPLE# | CLIENT SAMPLE ID | SAMPLED DATE | SAMP TIME |
|---|---|---|---|---|
| K11N8 | 001 | B1VHJ2 | 10/28/08 | 12:10 |

**NOTE(S):**

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- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

(Continued on next page)

# SAMPLE SUMMARY

SL763 : F8J310138

| WO # | SAMPLE# | CLIENT SAMPLE ID | SAMPLED DATE | SAMP TIME |
|---|---|---|---|---|
| K11PF | 001 | B1X619 | 10/28/08 | 12:10 |

**NOTE(S):**

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

(Continued on next page)

# SAMPLE SUMMARY

SL763 : F8K010185

| WO # | SAMPLE# | CLIENT SAMPLE ID | SAMPLED DATE | SAMP TIME |
|---|---|---|---|---|
| K14C6 | 001 | B1X8W5 | 10/31/08 | 09:36 |

**NOTE(S):**

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

(Continued on next page)

# SAMPLE SUMMARY

SL763 : F8K050212

| WO # | SAMPLE# | CLIENT SAMPLE ID | SAMPLED DATE | SAMP TIME |
|---|---|---|---|---|
| K19XD | 001 | B1X8W6 | 11/03/08 | 11:34 |

**NOTE(S):**

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

(Continued on next page)

# SAMPLE SUMMARY

SL763 : F8K060260

| WO # | SAMPLE# | CLIENT SAMPLE ID | SAMPLED DATE | SAMP TIME |
|---|---|---|---|---|
| K2DLW | 001 | B1X8W7 | 11/04/08 | 13:16 |

**NOTE(S):**

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

SDG# SL763

SL763

# FLUOR HANFORD

# CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # S08-007-100

Page 1 of 1

| | | |
|---|---|---|
| Collector: Roy Sickle | Contact/Requester: Steve Trent | Telephone No.: 509-373-5869 MSIN FAX |
| SAF No.: S08-007 | Sampling Origin: Hanford Site | Purchase Order/Charge Code |
| Project Title: SURV, JULY 2008 | HNF-N-SOL-18 | Ice Chest No.: GWO-07-002 Temp. |
| Shipped To (Lab): TestAmerica St. Louis | Method of Shipment: Govt. Vehicle | Bill of Lading/Air Bill No.: 799398807307 |
| Protocol: SURV | Priority: 30 Days PRIORITY | Offsite Property No. |

**POSSIBLE SAMPLE HAZARDS/REMARKS**
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

**SPECIAL INSTRUCTIONS** Hold Time
Site-Wide Generator Knowledge Information Form applies.

Total Activity Exemption: Yes ☑ No ☐

| Sample No. | Lab ID | * | Date | Time | No/Type Container | Sample Analysis | Preservative |
|---|---|---|---|---|---|---|---|
| B1W210 | | W | 10-21-08 | 0931 | 2x1000-mL aG | 8081_PEST_GC: List-1 (19) | Cool~4C |
| B1W210 | | W | 1 | 1 | 1x20-mL P | Activity Scan | None |

| Relinquished By (Print / Sign) | Date/Time | Received By (Print / Sign) | Date/Time |
|---|---|---|---|
| Roy Sickle | 1000 10-22-08 | R. D. Julian | 1000 10-22-08 |
| R. D. Julian | 1400 10-22-08 | FED EX | |
| FED EX | | | 10-23-08 0915 |
| | | | |

Matrix *

| | | | |
|---|---|---|---|
| S = Soil | | DS = Drum Solid | |
| SE = Sediment | | DL = Drum Liquid | |
| SO = Solid | | T = Tissue | |
| SL = Sludge | | WI = Wine | |
| W = Water | | L = Liquid | |
| O = Oil | | V = Vegetation | |
| A = Air | | X = Other | |

**FINAL SAMPLE DISPOSITION** Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

TestAmerica St. Louis

Track Shipments/FedEx Kinko's Orders

# Detailed Results

| | | | |
|---|---|---|---|
| **Tracking number** | 799398807307 | **Reference** | GWO-07-002 |
| **Signed for by** | S.WILSON | **Destination** | Earth City, MO |
| **Ship date** | Oct 22, 2008 | **Delivered to** | Shipping/Receiving |
| **Delivery date** | Oct 23, 2008 9:23 AM | **Service type** | Priority Overnight |
| | | **Weight** | 62.0 lbs. |

**Status** Delivered

**Signature image available** Yes

| Date/Time | | Activity | Location |
|---|---|---|---|
| **Oct 23, 2008** | 9:23 AM | **Delivered** | Earth City, MO |
| | 7:12 AM | On FedEx vehicle for delivery | EARTH CITY, MO |
| | 7:07 AM | At local FedEx facility | EARTH CITY, MO |
| | 6:27 AM | At dest sort facility | BERKELEY, MO |
| | 4:41 AM | Departed FedEx location | MEMPHIS, TN |
| | 1:08 AM | Arrived at FedEx location | MEMPHIS, TN |
| **Oct 22, 2008** | 5:33 PM | Left FedEx origin facility | PASCO, WA |
| | 4:07 PM | Picked up | PASCO, WA |
| | 11:34 AM | Package data transmitted to FedEx | |

Signature proof E-mail results Track more shipments/o

**Subscribe to tracking updates (optional)**

**Your name:** **Your e-mail address:**

| **E-mail address** | **Language** | **Exception updates** |
|---|---|---|
| | English | ☐ |
| | English | ☐ |
| | English | ☐ |
| | English | ☐ |

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**Add personal message:**

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☐ By selecting this check box and the Submit button, I agree to these Terms and Conditions

Track Shipments/FedEx Kinko's Orders

# Detailed Results

| | | | |
|---|---|---|---|
| **Tracking number** | 799398806160 | **Reference** | GWSC-050 |
| **Signed for by** | S.WILSON | **Destination** | Earth City, MO |
| **Ship date** | Oct 22, 2008 | **Delivered to** | Shipping/Receiving |
| **Delivery date** | Oct 23, 2008 9:23 AM | **Service type** | Priority Overnight |
| | | **Weight** | 62.0 lbs. |
| **Status** | Delivered | | |
| **Signature image available** | Yes | | |

| Date/Time | | Activity | Location |
|---|---|---|---|
| **Oct 23, 2008** | 9:23 AM | **Delivered** | Earth City, MO |
| | 7:12 AM | On FedEx vehicle for delivery | EARTH CITY, MO |
| | 7:06 AM | At local FedEx facility | EARTH CITY, MO |
| | 6:27 AM | At dest sort facility | BERKELEY, MO |
| | 4:41 AM | Departed FedEx location | MEMPHIS, TN |
| **Oct 22, 2008** | 5:33 PM | Left FedEx origin facility | PASCO, WA |
| | 4:07 PM | Picked up | PASCO, WA |
| | 11:33 AM | Package data transmitted to FedEx | |

Signature proof  E-mail results  Track more shipments/o

Subscribe to tracking updates (optional)

**Your name:**  **Your e-mail address:**

| E-mail address | Language | Exception updates |
|---|---|---|
| | English | ☐ |
| | English | ☐ |
| | English | ☐ |
| | English | ☐ |

**Select format:** HTML  Text  Wireless

**Add personal message:**

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☐ By selecting this check box and the Submit button, I agree to these Terms and Conditions

TestAmerica St. Louis

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Lot #(s): F8J230167, 173, 174

- 313 -

**Condition Upon Receipt Form**

Client: CH2MPR
Quote No: 81099/80071/80693
COC/RFA No: below
Initiated By: [illegible]
Date: 10.23.08
Time: 0915

**Shipping Information**

Shipper Name: Fedex
Shipping # (s):*
1. 7993 9880 7307
2. ↓ 6160
3.
4.
5.
6.
7.
8.
9.
10.

Multiple Packages (Y) N
Sample Temperature (s):**
1. 3
2. 2
3.
4.
5.
6.
7.
8.
9.
10.

*Numbered shipping lines correspond to Numbered Sample Temp lines

**Sample must be received at 4°C ± 2°C- If not, note contents below. Temperature variance does NOT affect the following: Metals-Liquid or Rad tests- Liquid or Solids

**Condition** (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

| | | | | | |
|---|---|---|---|---|---|
| 1. | (Y) N | Are there custody seals present on the cooler? | 8. | (Y) N | Are there custody seals present on bottles? |
| 2. | Y (N) N/A | Do custody seals on cooler appear to be tampered with? | 9. | Y (N) N/A | Do custody seals on bottles appear to be tampered with? |
| 3. | (Y) N | Were contents of cooler frisked after opening, but before unpacking? | 10. | (Y) N N/A | Was sample received with proper pH[1]? (If not, make note below) |
| 4. | (Y) N | Sample received with Chain of Custody? | 11. | Y N | If N/A- Was pH taken by original TestAmerica lab? |
| 5. | (Y) N N/A | Does the Chain of Custody match sample ID's on the container(s)? | 12. | (Y) N | Sample received in proper containers? |
| 6. | Y (N) | Was sample received broken? | 13. | Y N (N/A) | Headspace in VOA or TOX liquid samples? (If Yes, note sample ID's below) |
| 7. | (Y) N | Is sample volume sufficient for analysis? | 14. | Y N | Was Internal COC/Workshare received? |

[1] For DOE-AL (Pantex, LANL, Sandia) sites, pH of ALL containers received must be verified, EXCEPT VOA, TOX and soils.

Notes:
S08-007-100
W09-010-352, 353, 357
I08-059-51

Corrective Action:
☐ Client Contact Name: _____ Informed by: _____
☐ Sample(s) processed "as is"
☐ Sample(s) on hold until: _____ If released, notify: _____
Project Management Review: [signature] Date: 10-24-08

THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED IN. IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY THEIR INITIAL AND THE DATE NEXT TO THAT ITEM.

SDG# SL763

**FLUOR HANFORD** SL763 WF 313

# CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **I08-059-51**

Page 1 of 1

| | | |
|---|---|---|
| **Collector** D. Woehle | **Contact/Requester** Mike Neely | **Telephone No.** 509-373-0654 **MSIN** **FAX** |
| **SAF No.** I08-059 | **Sampling Origin** Hanford Site | **Purchase Order/Charge Code** |
| **Project Title** 2UP1, SEPTEMBER 2008 | HWF-N-006-19 | **Ice Chest No.** GWSC-050 **Temp.** |
| **Shipped To (Lab)** TestAmerica St. Louis | **Method of Shipment** Govt. Vehicle | **Bill of Lading/Air Bill No.** |
| **Protocol** SURV | **Priority:** 30 Days **PRIORITY** | **Offsite Property No.** |

**POSSIBLE SAMPLE HAZARDS/REMARKS**
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

**SPECIAL INSTRUCTIONS** **Hold Time** Total Activity Exemption: Yes ☑ No ☐
200 Area Generator Knowledge Information Form applies.

| Sample No. | Lab ID | * | Date | Time | No/Type Container | Sample Analysis | Holding Time | Preservative |
|---|---|---|---|---|---|---|---|---|
| B1WXX8 (F) | | W | 10/21/08 | 0918 | 1x500-mL G/P | 6010_METALS_ICP: List-1 + Lithium (20) | 6 Months | HNO3 to pH <2 |
| B1WXX9 | | W | | | 3x1000-mL aG | 8270_SVOA_GCMS: 1,4 Dioxane (1) | 7/40 Days | Cool~4C |
| B1WXX9 | | W | | | 1x20-mL P | Activity Scan | 6 Months | None |
| B1WXX9 | | W | | | 3x1000-mL aG | 8270_SVOA_GCMS: List-1 + Cresol (14) | 7/40 Days | Cool~4C |
| B1WXX9 | | W | | | 1x500-mL G/P | 6010_METALS_ICP: List-1 + Lithium (20) | 6 Months | HNO3 to pH <2 |
| B1WXX9 | | W | | | 3x500-mL G/P | 9030_SULFIDE: Sulfide (1) | 7 Days | ZnAc+NaOH to pH >9 Cool~4C |
| B1WXX9 | | W | | | 1x500-mL aG | 420.2_PHENOL: Phenol total(1) | 28 Days | H2SO4 to pH <2 Cool~4C |
| B1WXX9 | | W | | | 1x1000-mL aGs* | 9020_TOX: TOX (1) | 28 Days | H2SO4 to pH <2 Cool~4C |
| B1WXX9 | | W | | | 1x250-mL aGs* | 9060_TOC: TOC (1) | 28 Days | HCl or H2SO4 to pH <2 Cool~4C |

| Relinquished By | Print | Sign | Date/Time | Received By | Print | Sign | Date/Time |
|---|---|---|---|---|---|---|---|
| D. Woehle | | | 1000 10-22-08 | R. D. Julian | | | 1000 10-22-08 |
| R. D. Julian | | | 1400 10-22-08 | FED EX | | | |
| FEDEX | | | | | | | 10-23-08 0915 |
| | | | | | | | |

**Matrix ***

| | | | |
|---|---|---|---|
| S = Soil | | DS = Drum Solid | |
| SE = Sediment | | DL = Drum Liqui | |
| SO = Solid | | T = Tissue | |
| SL = Sludge | | WI = Wine | |
| W = Water | | L = Liquid | |
| O = Oil | | V = Vegetation | |
| A = Air | | X = Other | |

**FINAL SAMPLE DISPOSITION** Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

TestAmerica St. Louis

Track Shipments/FedEx Kinko's Orders

# Detailed Results

| | | | |
|---|---|---|---|
| **Tracking number** | 799398807307 | **Reference** | GWO-07-002 |
| **Signed for by** | S.WILSON | **Destination** | Earth City, MO |
| **Ship date** | Oct 22, 2008 | **Delivered to** | Shipping/Receiving |
| **Delivery date** | Oct 23, 2008 9:23 AM | **Service type** | Priority Overnight |
| | | **Weight** | 62.0 lbs. |
| **Status** | Delivered | | |
| **Signature image available** | Yes | | |

| Date/Time | | Activity | Location |
|---|---|---|---|
| **Oct 23, 2008** | 9:23 AM | **Delivered** | Earth City, MO |
| | 7:12 AM | On FedEx vehicle for delivery | EARTH CITY, MO |
| | 7:07 AM | At local FedEx facility | EARTH CITY, MO |
| | 6:27 AM | At dest sort facility | BERKELEY, MO |
| | 4:41 AM | Departed FedEx location | MEMPHIS, TN |
| | 1:08 AM | Arrived at FedEx location | MEMPHIS, TN |
| **Oct 22, 2008** | 5:33 PM | Left FedEx origin facility | PASCO, WA |
| | 4:07 PM | Picked up | PASCO, WA |
| | 11:34 AM | Package data transmitted to FedEx | |

Signature proof  E-mail results  Track more shipments/o

**Subscribe to tracking updates (optional)**

**Your name:**  **Your e-mail address:**

| **E-mail address** | **Language** | **Exception updates** |
|---|---|---|
| | English | ☐ |
| | English | ☐ |
| | English | ☐ |
| | English | ☐ |

**Select format:** HTML  Text  Wireless

**Add personal message:**

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☐ By selecting this check box and the Submit button, I agree to these Terms and Conditions

Track Shipments/FedEx Kinko's Orders

# Detailed Results

| | | | |
|---|---|---|---|
| **Tracking number** | 799398806160 | **Reference** | GWSC-050 |
| **Signed for by** | S.WILSON | **Destination** | Earth City, MO |
| **Ship date** | Oct 22, 2008 | **Delivered to** | Shipping/Receiving |
| **Delivery date** | Oct 23, 2008 9:23 AM | **Service type** | Priority Overnight |
| | | **Weight** | 62.0 lbs. |

**Status** Delivered

**Signature image available** Yes

| Date/Time | | Activity | Location |
|---|---|---|---|
| **Oct 23, 2008** | 9:23 AM | **Delivered** | Earth City, MO |
| | 7:12 AM | On FedEx vehicle for delivery | EARTH CITY, MO |
| | 7:06 AM | At local FedEx facility | EARTH CITY, MO |
| | 6:27 AM | At dest sort facility | BERKELEY, MO |
| | 4:41 AM | Departed FedEx location | MEMPHIS, TN |
| **Oct 22, 2008** | 5:33 PM | Left FedEx origin facility | PASCO, WA |
| | 4:07 PM | Picked up | PASCO, WA |
| | 11:33 AM | Package data transmitted to FedEx | |

Signature proof E-mail results Track more shipments/o

Subscribe to tracking updates (optional)

**Your name:** **Your e-mail address:**

| E-mail address | Language | Exception updates |
|---|---|---|
| | English | ☐ |
| | English | ☐ |
| | English | ☐ |
| | English | ☐ |

**Select format:** HTML Text Wireless

**Add personal message:**

Not available for Wireless or non-English characters.

By selecting this check box and the Submit button, I agree to these Terms and Conditions

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica St. Louis

Lot #(s): F8J230167 173 174

- 313 -

## Condition Upon Receipt Form

Client: CH2MPR COC/RFA No: below Date: 10.23.08
Quote No: 81099/80071/80693 Initiated By: Time: 0915

### Shipping Information

Shipper Name: Fedex

Multiple Packages (Y) N

| Shipping # (s):* | | Sample Temperature (s):** | |
|---|---|---|---|
| 1. 7993 9880 7307 | 6. | 1. 3 | 6. |
| 2. ↓ 6160 | 7. | 2. 2 | 7. |
| 3. | 8. | 3. | 8. |
| 4. | 9. | 4. | 9. |
| 5. | 10. | 5. | 10. |

*Numbered shipping lines correspond to Numbered Sample Temp lines

**Sample must be received at 4°C ± 2°C- If not, note contents below. Temperature variance does NOT affect the following: Metals-Liquid or Rad tests- Liquid or Solids

**Condition** (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

| | | | | | |
|---|---|---|---|---|---|
| 1. | (Y) N | Are there custody seals present on the cooler? | 8. | (Y) N | Are there custody seals present on bottles? |
| 2. | Y (N) N/A | Do custody seals on cooler appear to be tampered with? | 9. | Y (N) N/A | Do custody seals on bottles appear to be tampered with? |
| 3. | (Y) N | Were contents of cooler frisked after opening, but before unpacking? | 10. | (Y) N N/A | Was sample received with proper pH[1]? (If not, make note below) |
| 4. | (Y) N | Sample received with Chain of Custody? | 11. | Y N | If N/A- Was pH taken by original TestAmerica lab? |
| 5. | (Y) N N/A | Does the Chain of Custody match sample ID's on the container(s)? | 12. | (Y) N | Sample received in proper containers? |
| 6. | Y (N) | Was sample received broken? | 13. | Y N (N/A) | Headspace in VOA or TOX liquid samples? (If Yes, note sample ID's below) |
| 7. | (Y) N | Is sample volume sufficient for analysis? | 14. | Y N | Was Internal COC/Workshare received? |

[1] For DOE-AL (Pantex, LANL, Sandia) sites, pH of ALL containers received must be verified, EXCEPT VOA, TOX and soils.

Notes:

S08-007-100
W09-010-352, 353, 357
I08-059-51

Corrective Action:

- ☐ Client Contact Name: Informed by:
- ☐ Sample(s) processed "as is"
- ☐ Sample(s) on hold until: If released, notify:

Project Management Review: Date: 10-24-08

THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED IN. IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY THEIR INITIAL AND THE DATE NEXT TO THAT ITEM.

SDG# SL763

ICR 531

**FLUOR HANFORD**

SL-763

# CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

60

C.O.C. # **W08-005-459**

Page 1 of 1

| | | |
|---|---|---|
| **Collector** R. D. Julian | **Contact/Requester** Steve Trent | **Telephone No.** 509-373-5869 **MSIN** **FAX** |
| **SAF No.** W08-005 | **Sampling Origin** Hanford Site | **Purchase Order/Charge Code** |
| **Project Title** RCRA, MAY 2008 | HNF-N-506-20/3 | **Ice Chest No.** ERC-1 **Temp.** |
| **Shipped To (Lab)** TestAmerica St. Louis | **Method of Shipment** Govt. Vehicle | **Bill of Lading/Air Bill No.** 7906 1675 9195 |
| **Protocol** RCRA | **Priority:** 45 Days | **Offsite Property No.** |

**POSSIBLE SAMPLE HAZARDS/REMARKS**
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

**SPECIAL INSTRUCTIONS** **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Site-Wide Generator Knowledge Information Form applies.

| Sample No. | Lab ID | * | Date | Time | No/Type Container | Sample Analysis | Preservative |
|---|---|---|---|---|---|---|---|
| B1VHJ2 | | W | 10/28/08 | 1210 | 1x20-mL P | Activity Scan | None |
| B1VHJ2 | | W | 10/28/08 | 1210 | 4x40-mL aGs* | 8260_VOA_GCMS: List-2 (26) | HCl or H2SO4 to pH <2 Cool~4C |

| Relinquished By (Print / Sign) | Date/Time | Received By (Print / Sign) | Date/Time |
|---|---|---|---|
| R. D. Julian | 10/30/08 1200 | FedEx | |
| FedEx | | B-R-l | 10/31/08 0920 |
| | | | |
| | | | |

**Matrix ***

| | | | |
|---|---|---|---|
| S | = Soil | DS | = Drum Solid |
| SE | = Sediment | DL | = Drum Liqui |
| SO | = Solid | T | = Tissue |
| SL | = Sludge | WI | = Wine |
| W | = Water | L | = Liquid |
| O | = Oil | V | = Vegetation |
| A | = Air | X | = Other |

**FINAL SAMPLE DISPOSITION** Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

TestAmerica St. Louis

Track Shipments/FedEx Kinko's Orders

# Detailed Results

| | | | |
|---|---|---|---|
| **Tracking number** | 790616759195 | **Reference** | ERC-1 |
| **Signed for by** | B.DANIELS | **Destination** | Earth City, MO |
| **Ship date** | Oct 30, 2008 | **Delivered to** | Shipping/Receiving |
| **Delivery date** | Oct 31, 2008 9:15 AM | **Service type** | Priority Overnight |
| | | **Weight** | 60.0 lbs. |

**Status** Delivered

**Signature image available** Yes

| Date/Time | | Activity | Location |
|---|---|---|---|
| **Oct 31, 2008** | 9:15 AM | **Delivered** | Earth City, MO |
| | 7:19 AM | On FedEx vehicle for delivery | EARTH CITY, MO |
| | 7:12 AM | At local FedEx facility | EARTH CITY, MO |
| | 5:08 AM | At dest sort facility | BERKELEY, MO |
| | 4:04 AM | Departed FedEx location | MEMPHIS, TN |
| | 12:37 AM | Arrived at FedEx location | MEMPHIS, TN |
| **Oct 30, 2008** | 5:38 PM | Left FedEx origin facility | PASCO, WA |
| | 4:22 PM | Picked up | PASCO, WA |
| | 12:13 PM | Package data transmitted to FedEx | |

Signature proof E-mail results Track more shipments/o

Subscribe to tracking updates (optional)

**Your name:** **Your e-mail address:**

| E-mail address | Language | Exception updates |
|---|---|---|
| | English | ☐ |
| | English | ☐ |
| | English | ☐ |
| | English | ☐ |

**Select format:** HTML Text Wireless

**Add personal message:**

Not available for Wireless or non-English characters.

☐ By selecting this check box and the Submit button, I agree to these Terms and Conditions

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Lot #(s): FBJ310136
136
139

- 531 -

**Condition Upon Receipt Form**

Client: CHL PR
Quote No: 79461, 81102, 81099
COC/RFA No: W09-010-342 cont'd below
Initiated By: BD
Date: 10/31/08
Time: 0920

**Shipping Information**

Shipper Name: FE
Multiple Packages (Y) N

Shipping # (s):*

| | | | |
|---|---|---|---|
| 1. | 7911 7750 8930 | 6. | |
| 2. | 7906 1475 9195 | 7. | |
| 3. | | 8. | |
| 4. | | 9. | |
| 5. | | 10. | |

Sample Temperature (s):**

| | | | |
|---|---|---|---|
| 1. | 2 | 6. | |
| 2. | 4 | 7. | |
| 3. | | 8. | |
| 4. | | 9. | |
| 5. | | 10. | |

*Numbered shipping lines correspond to Numbered Sample Temp lines

**Sample must be received at 4°C ± 2°C- If not, note contents below. Temperature variance does NOT affect the following: Metals-Liquid or Rad tests- Liquid or Solids

**Condition** (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

| | | | | | |
|---|---|---|---|---|---|
| 1. | (Y) N | Are there custody seals present on the cooler? | 8. | (Y) N | Are there custody seals present on bottles? |
| 2. | Y (N) N/A | Do custody seals on cooler appear to be tampered with? | 9. | Y (N) N/A | Do custody seals on bottles appear to be tampered with? |
| 3. | (Y) N | Were contents of cooler frisked after opening, but before unpacking? | 10. | Y N N/A | Was sample received with proper pH[1]? (If not, make note below) |
| 4. | (Y) N | Sample received with Chain of Custody? | 11. | (Y) N | If N/A- Was pH taken by original TestAmerica lab? |
| 5. | (Y) N N/A | Does the Chain of Custody match sample ID's on the container(s)? | 12. | (Y) N | Sample received in proper containers? |
| 6. | Y (N) | Was sample received broken? | 13. | Y (N) N/A | Headspace in VOA or TOX liquid samples? (If Yes, note sample ID's below) |
| 7. | (Y) N | Is sample volume sufficient for analysis? | 14. | Y N | Was Internal COC/Workshare received? |

[1] For DOE-AL (Pantex, LANL, Sandia) sites, pH of ALL containers received must be verified, EXCEPT VOA, TOX and soils.

Notes:

W09-010-342, I09-002-66, W08-005-459

Corrective Action:

- ☐ Client Contact Name: Informed by:
- ☐ Sample(s) processed "as is"
- ☐ Sample(s) on hold until: If released, notify:

Project Management Review: Date: 11-09-08

THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED IN. IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY THEIR INITIAL AND THE DATE NEXT TO THAT ITEM.

SDG# SL763

COC 531

FLUOR HANFORD

SL763

# CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # I09-002-66

Page 1 of 1

| | | |
|---|---|---|
| Collector: R. D. Julian | Contact/Requester: Mike Neely | Telephone No.: 509-373-0654 MSIN FAX |
| SAF No.: 109-002 | Sampling Origin: Hanford Site | Purchase Order/Charge Code |
| Project Title: 100KR4IAM(1/2). OCTOBER 2008 | HNF-N-506-20/3 | Ice Chest No.: ERC-1 Temp. |
| Shipped To (Lab): TestAmerica St. Louis | Method of Shipment: Govt. Vehicle | Bill of Lading/Air Bill No.: 7906 1675 9195 |
| Protocol: CERCLA | Priority: 45 Days | Offsite Property No. |

**POSSIBLE SAMPLE HAZARDS/REMARKS**
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

**SPECIAL INSTRUCTIONS** Hold Time
FY08 and FY09 samples cannot be in the same SDG.
100 Area Generator Knowledge Information Form applies.

Total Activity Exemption: Yes ☑ No ☐

| Sample No. | Lab ID | * | Date | Time | No/Type Container | Sample Analysis | Holding Time | Preservative |
|---|---|---|---|---|---|---|---|---|
| B1X619 | | W | 10/28/08 | 1210 | 1x20-mL P | Activity Scan | 6 Months | None |
| B1X619 | | W | ↓ | ↓ | 4x40-mL aGs* | 8260_VOA_GCMS: List-2 (26) | 14 Days | HCl or H2SO4 to pH <2 Cool~4C |

| Relinquished By (Print / Sign) | Date/Time | Received By (Print / Sign) | Date/Time |
|---|---|---|---|
| R. D. Julian | 10-30-08 1200 | FedEx | |
| FedEx | | | 10/30/08 0920 |
| | | | |
| | | | |

Matrix *

| | | | |
|---|---|---|---|
| S = Soil | | DS = Drum Solid | |
| SB = Sediment | | DL = Drum Liqui | |
| SO = Solid | | T = Tissue | |
| SL = Sludge | | WI = Wine | |
| W = Water | | L = Liquid | |
| O = Oil | | V = Vegetation | |
| A = Air | | X = Other | |

| FINAL SAMPLE DISPOSITION | Disposal Method (e.g., Return to customer, per lab procedure, used in process) | Disposed By | Date/Time |
|---|---|---|---|
| | | | |

TestAmerica St. Louis

24 of 102

Track Shipments/FedEx Kinko's Orders

# Detailed Results

| | | | |
|---|---|---|---|
| **Tracking number** | 790616759195 | **Reference** | ERC-1 |
| **Signed for by** | B.DANIELS | **Destination** | Earth City, MO |
| **Ship date** | Oct 30, 2008 | **Delivered to** | Shipping/Receiving |
| **Delivery date** | Oct 31, 2008 9:15 AM | **Service type** | Priority Overnight |
| | | **Weight** | 60.0 lbs. |

**Status** Delivered

**Signature image available** Yes

| Date/Time | | Activity | Location |
|---|---|---|---|
| **Oct 31, 2008** | 9:15 AM | **Delivered** | Earth City, MO |
| | 7:19 AM | On FedEx vehicle for delivery | EARTH CITY, MO |
| | 7:12 AM | At local FedEx facility | EARTH CITY, MO |
| | 5:08 AM | At dest sort facility | BERKELEY, MO |
| | 4:04 AM | Departed FedEx location | MEMPHIS, TN |
| | 12:37 AM | Arrived at FedEx location | MEMPHIS, TN |
| **Oct 30, 2008** | 5:38 PM | Left FedEx origin facility | PASCO, WA |
| | 4:22 PM | Picked up | PASCO, WA |
| | 12:13 PM | Package data transmitted to FedEx | |

Signature proof E-mail results Track more shipments/o

**Subscribe to tracking updates (optional)**

**Your name:** **Your e-mail address:**

| E-mail address | Language | Exception updates |
|---|---|---|
| | English | ☐ |
| | English | ☐ |
| | English | ☐ |
| | English | ☐ |

**Select format:** HTML Text Wireless

**Add personal message:**

Not available for Wireless or non-English characters.

☐ By selecting this check box and the Submit button, I agree to these Terms and Conditions

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Lot #(s): F8J310136 (136) 139

- 531 -

**Condition Upon Receipt Form**

Client: CH2 PR
Quote No: 79481, 81102, 81099
COC/RFA No: W09-010-342 cont'd below
Initiated By: BD
Date: 10/31/08
Time: 0920

**Shipping Information**

Shipper Name: FE
Multiple Packages (Y) N

Shipping # (s):*
1. 7911 7750 8930
2. 7906 1475 9195
3.
4.
5.
6.
7.
8.
9.
10.

Sample Temperature (s):**
1. 2
2. 4
3.
4.
5.
6.
7.
8.
9.
10.

*Numbered shipping lines correspond to Numbered Sample Temp lines

**Sample must be received at 4°C ± 2°C- If not, note contents below. Temperature variance does NOT affect the following: Metals-Liquid or Rad tests- Liquid or Solids

**Condition** (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

| | | | | | |
|---|---|---|---|---|---|
| 1. | (Y) N | Are there custody seals present on the cooler? | 8. | (Y) N | Are there custody seals present on bottles? |
| 2. | Y (N) N/A | Do custody seals on cooler appear to be tampered with? | 9. | Y (N) N/A | Do custody seals on bottles appear to be tampered with? |
| 3. | (Y) N | Were contents of cooler frisked after opening, but before unpacking? | 10. | Y N N/A | Was sample received with proper pH[1]? (If not, make note below) |
| 4. | (Y) N | Sample received with Chain of Custody? | 11. | (Y) N | If N/A- Was pH taken by original TestAmerica lab? |
| 5. | (Y) N N/A | Does the Chain of Custody match sample ID's on the container(s)? | 12. | (Y) N | Sample received in proper containers? |
| 6. | Y (N) | Was sample received broken? | 13. | Y (N) N/A | Headspace in VOA or TOX liquid samples? (If Yes, note sample ID's below) |
| 7. | (Y) N | Is sample volume sufficient for analysis? | 14. | Y N | Was Internal COC/Workshare received? |

[1] For DOE-AL (Pantex, LANL, Sandia) sites, pH of ALL containers received must be verified, EXCEPT VOA, TOX and soils.

Notes:
W09-010-342, I09-002-66, W08-005-459

Corrective Action:
☐ Client Contact Name: Informed by:
☐ Sample(s) processed "as is"
☐ Sample(s) on hold until: If released, notify:
Project Management Review: Date: 11-05-08

THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED IN. IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY THEIR INITIAL AND THE DATE NEXT TO THAT ITEM.

SDG# S1763

FLUOR HANFORD SL763

# CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # S09-010-276



| | | |
|---|---|---|
| Collector: R.F. CARRIGAN | Contact/Requester: Mike Neely | Telephone No.: 509-373-0654 MSIN FAX |
| SAF No.: S09-010 | Sampling Origin: Hanford Site | Purchase Order/Charge Code |
| Project Title: SURV, OCTOBER 2008 | HNF-N-506-17 Pg 66 | Ice Chest No.: GW-609 Temp. |
| Shipped To (Lab): TestAmerica St. Louis | Method of Shipment: Govt. Vehicle | Bill of Lading/Air Bill No.: 7927 8156 2050 |
| Protocol: SURV | Priority: 45 Days | Offsite Property No. |

POSSIBLE SAMPLE HAZARDS/REMARKS
** **

SPECIAL INSTRUCTIONS Hold Time
FY08 and FY09 samples cannot be in the same SDG.
Site-Wide Generator Knowledge Form applies.

Total Activity Exemption: Yes ☑ No ☐

| Sample No. | Lab ID | * | Date | Time | No/Type Container | Sample Analysis | Holding Time | Preservative |
|---|---|---|---|---|---|---|---|---|
| B1X8W5 | | W | 10/31/08 | 0936 | 4x40-mL aGs* | 8260_VOA_GCMS: List-2 (26) | 14 Days | HCl or H2SO4 to pH <2 Cool~4C |
| B1X8W5 | | W | ↓ | ↓ | 1x20-mL P | Activity Scan | 6 Months | None |

| Relinquished By (Print / Sign) | Date/Time | Received By (Print / Sign) | Date/Time |
|---|---|---|---|
| R.F. CARRIGAN R.F. Carrigan | 10/31/08 1432 | FEDEX | |
| FEDEX | | B-[illegible] | 11/1/08 0830 |
| | | | |
| | | | |

Matrix *

| | | | |
|---|---|---|---|
| S = Soil | | DS = Drum Solid | |
| SB = Sediment | | DL = Drum Liqui | |
| SO = Solid | | T = Tissue | |
| SL = Sludge | | WI = Wipe | |
| W = Water | | L = Liquid | |
| O = Oil | | V = Vegetation | |
| A = Air | | X = Other | |

FINAL SAMPLE DISPOSITION: Disposal Method (e.g., Return to customer, per lab procedure, used in process) | Disposed By | Date/Time

TestAmerica St. Louis

Track Shipments/FedEx Kinko's Orders

# Detailed Results

| | | | |
|---|---|---|---|
| **Tracking number** | 792781562050 | **Reference** | GW-069 |
| **Signed for by** | B.DANIELS | **Destination** | Earth City, MO |
| **Ship date** | Oct 31, 2008 | **Delivered to** | Shipping/Receiving |
| **Delivery date** | Nov 1, 2008 8:21 AM | **Service type** | Priority Overnight |
| | | **Weight** | 48.0 lbs. |

| | |
|---|---|
| **Status** | Delivered |
| **Signature image available** | Yes |

| Date/Time | | Activity | Location |
|---|---|---|---|
| **Nov 1, 2008** | 8:21 AM | **Delivered** | Earth City, MO |
| | 7:10 AM | On FedEx vehicle for delivery | EARTH CITY, MO |
| | 7:09 AM | At local FedEx facility | EARTH CITY, MO |
| | 5:20 AM | At dest sort facility | BERKELEY, MO |
| **Oct 31, 2008** | 5:24 PM | Left FedEx origin facility | PASCO, WA |
| | 3:55 PM | Package data transmitted to FedEx | |
| | 3:47 PM | Picked up | PASCO, WA |

Signature proof  E-mail results  Track more shipments/o

**Subscribe to tracking updates (optional)**

**Your name:**  **Your e-mail address:**

| E-mail address | Language | Exception updates |
|---|---|---|
| | English | ☐ |
| | English | ☐ |
| | English | ☐ |
| | English | ☐ |

**Select format:** HTML  Text  Wireless

**Add personal message:**

Not available for Wireless or non-English characters.

☐ By selecting this check box and the Submit button, I agree to these Terms and Conditions

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Lot #(s): F8K010181 (185)

- 591 -

**Condition Upon Receipt Form**

Client: CH2 PR
Quote No: 80162, 81100
COC/RFA No: see below
Initiated By: DJ
Date: 11/1/08
Time: 0830

**Shipping Information**

Shipper Name: FE
Shipping # (s):*
1. 7921 8156 2050
2. 7921 3792 0260
3.
4.
5.
6.
7.
8.
9.
10.

Multiple Packages (Y) N
Sample Temperature (s):**
1. 2
2. 2
3.
4.
5.
6.
7.
8.
9.
10.

*Numbered shipping lines correspond to Numbered Sample Temp lines

**Sample must be received at 4°C ± 2°C- If not, note contents below. Temperature variance does NOT affect the following: Metals-Liquid or Rad tests- Liquid or Solids

**Condition** (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

| | | | | | |
|---|---|---|---|---|---|
| 1. | (Y) N | Are there custody seals present on the cooler? | 8. | (Y) N | Are there custody seals present on bottles? |
| 2. | Y (N) N/A | Do custody seals on cooler appear to be tampered with? | 9. | Y (N) N/A | Do custody seals on bottles appear to be tampered with? |
| 3. | (Y) N | Were contents of cooler frisked after opening, but before unpacking? | 10. | Y N (N/A) | Was sample received with proper pH[1]? (If not, make note below) |
| 4. | (Y) N | Sample received with Chain of Custody? | 11. | Y N | If N/A- Was pH taken by original TestAmerica lab? |
| 5. | (Y) N N/A | Does the Chain of Custody match sample ID's on the container(s)? | 12. | (Y) N | Sample received in proper containers? |
| 6. | Y (N) | Was sample received broken? | 13. | Y (N) N/A | Headspace in VOA or TOX liquid samples? (If Yes, note sample ID's below) |
| 7. | (Y) N | Is sample volume sufficient for analysis? | 14. | Y N | Was Internal COC/Workshare received? |

[1] For DOE-AL (Pantex, LANL, Sandia) sites, pH of ALL containers received must be verified, EXCEPT VOA, TOX and soils.

Notes: 1. S09-010-276, X08-048-154
2. X08-048-119, 149

Corrective Action:
☐ Client Contact Name: Informed by:
☐ Sample(s) processed "as is"
☐ Sample(s) on hold until: If released, notify:
Project Management Review: Date: 11-09-08

THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED IN. IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY THEIR INITIAL AND THE DATE NEXT TO THAT ITEM.

SDG# SL763

CVR 641

**FLUOR HANFORD** SL763

# CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **S09-010-277**

Page 1 of 1

| | | |
|---|---|---|
| Collector: D. Woehle | Contact/Requester: Mike Neely | Telephone No.: 509-373-0654 MSIN FAX |
| SAF No.: S09-010 | Sampling Origin: Hanford Site | Purchase Order/Charge Code |
| Project Title: SURV. OCTOBER 2008 | HNF-N-506-19/35 | Ice Chest No.: EWS-021 Temp. |
| Shipped To (Lab): TestAmerica St. Louis | Method of Shipment: Govt. Vehicle | Bill of Lading/Air Bill No.: 7970 9306 4662 |
| Protocol: SURV | Priority: 45 Days | Offsite Property No. |

**POSSIBLE SAMPLE HAZARDS/REMARKS**
** **

**SPECIAL INSTRUCTIONS** **Hold Time**
FY08 and FY09 samples cannot be in the same SDG.
Site-Wide Generator Knowledge Form applies.

Total Activity Exemption: Yes ☑ No ☐

| Sample No. | Lab ID | * | Date | Time | No/Type Container | Sample Analysis | Holding Time | Preservative |
|---|---|---|---|---|---|---|---|---|
| B1X8W6 | | W | 11/03/08 | 1134 | 4x40-mL aGs* | 8260_VOA_GCMS: List-2 (26) | 14 Days | HCl or H2SO4 to pH <2 Cool~4C |
| B1X8W6 | | W | " | 1134 | 1x20-mL P | Activity Scan | 6 Months | None |

| Relinquished By | Print | Sign | Date/Time | Received By | Print | Sign | Date/Time |
|---|---|---|---|---|---|---|---|
| D. Woehle | | | 11/04/08 1000 | KE Hamilton | | | 11/04/08 1000 |
| KE Hamilton | | | 11/04/08 1430 | FED EX | | | |
| FED EX | | | | | | | 11/5/08 0930 |
| | | | | | | | |

Matrix *

| | | | |
|---|---|---|---|
| S = Soil | | DS = Drum Solid | |
| SE = Sediment | | DL = Drum Liquid | |
| SO = Solid | | T = Tissue | |
| SL = Sludge | | WI = Wine | |
| W = Water | | L = Liquid | |
| O = Oil | | V = Vegetation | |
| A = Air | | X = Other | |

**FINAL SAMPLE DISPOSITION** Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

TestAmerica St. Louis

Track Shipments/FedEx Kinko's Orders

# Detailed Results

| | | | |
|---|---|---|---|
| **Tracking number** | 797093064662 | **Reference** | GWS-021 |
| **Signed for by** | C.BRUNSON | **Destination** | Earth City, MO |
| **Ship date** | Nov 4, 2008 | **Delivered to** | Shipping/Receiving |
| **Delivery date** | Nov 5, 2008 9:20 AM | **Service type** | Priority Overnight |
| | | **Weight** | 80.0 lbs. |
| **Status** | Delivered | | |
| **Signature image available** | Yes | | |

| Date/Time | | Activity | Location |
|---|---|---|---|
| **Nov 5, 2008** | 9:20 AM | **Delivered** | Earth City, MO |
| | 6:25 AM | On FedEx vehicle for delivery | EARTH CITY, MO |
| | 6:20 AM | At local FedEx facility | EARTH CITY, MO |
| | 5:17 AM | At dest sort facility | BERKELEY, MO |
| | 4:06 AM | Departed FedEx location | MEMPHIS, TN |
| | 1:04 AM | Arrived at FedEx location | MEMPHIS, TN |
| **Nov 4, 2008** | 5:10 PM | Left FedEx origin facility | PASCO, WA |
| | 4:05 PM | Picked up | PASCO, WA |
| | 12:30 PM | Package data transmitted to FedEx | |

Signature proof  E-mail results  Track more shipments/o

Subscribe to tracking updates (optional)

**Your name:**  **Your e-mail address:**

| E-mail address | Language | Exception updates |
|---|---|---|
| | English | ☐ |
| | English | ☐ |
| | English | ☐ |
| | English | ☐ |

**Select format:** HTML  Text  Wireless

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TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Lot #(s): F8K050209 (212)

- 641 -

## Condition Upon Receipt Form

Client: CH2MPR
Quote No: 80162 81100
COC/RFA No: See below
Initiated By: bb
Date: 11/5/08
Time: 1930

### Shipping Information

Shipper Name: FE

Multiple Packages (Y) N

Shipping # (s):*

1. 7970 9306 4662
2. 7960 9645 5992
3. 7970 9306 6702
4. 7970 9306 9436
5.
6.
7.
8.
9.
10.

Sample Temperature (s):**

1. 2
2. 4
3. 2
4. 5
5.
6.
7.
8.
9.
10.

*Numbered shipping lines correspond to Numbered Sample Temp lines

**Sample must be received at 4°C ± 2°C- If not, note contents below. Temperature variance does NOT affect the following: Metals-Liquid or Rad tests- Liquid or Solids

**Condition** (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

| | | | | | |
|---|---|---|---|---|---|
| 1. | (Y) N | Are there custody seals present on the cooler? | 8. | (Y) N | Are there custody seals present on bottles? |
| 2. | Y (N) N/A | Do custody seals on cooler appear to be tampered with? | 9. | Y (N) N/A | Do custody seals on bottles appear to be tampered with? |
| 3. | (Y) N | Were contents of cooler frisked after opening, but before unpacking? | 10. | Y N (N/A) | Was sample received with proper pH[1]? (If not, make note below) |
| 4. | (Y) N | Sample received with Chain of Custody? | 11. | Y N | If N/A- Was pH taken by original TestAmerica lab? |
| 5. | (Y) N N/A | Does the Chain of Custody match sample ID's on the container(s)? | 12. | (Y) N | Sample received in proper containers? |
| 6. | Y (N) | Was sample received broken? | 13. | Y (N) N/A | Headspace in VOA or TOX liquid samples? (If Yes, note sample ID's below) |
| 7. | (Y) N | Is sample volume sufficient for analysis? | 14. | Y N | Was Internal COC/Workshare received? |

[1] For DOE-AL (Pantex, LANL, Sandia) sites, pH of ALL containers received must be verified, EXCEPT VOA, TOX and soils.

Notes:
1. X08-048-139, 144, S09-010-277
2. X08-048-54, 164
3. X08-048-124, 174
4. X08-048-99, 189

Corrective Action:
☐ Client Contact Name: _____ Informed by: _____
☐ Sample(s) processed "as is"
☐ Sample(s) on hold until: _____ If released, notify: _____
Project Management Review: [signature] Date: 11-09-08

THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED IN. IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY THEIR INITIAL AND THE DATE NEXT TO THAT ITEM.

ADMIN-0004, REVISED 08/06/07\\Slsvr01\QA\FORMS\ST-LOUIS\ADMIN\Admin004 rev11.doc

SDG# SL763

| FLUOR HANFORD SL763 | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | C.O.C. # S09-010-278 |
|---|---|---|
| | | Page 1 of 1 |

| | | |
|---|---|---|
| Collector: Roy Sickle | Contact/Requester: Mike Neely | Telephone No.: 509-373-0654 MSIN FAX |
| SAF No.: S09-010 | Sampling Origin: Hanford Site | Purchase Order/Charge Code |
| Project Title: SURV. OCTOBER 2008 | AWF-W-506-16 | Ice Chest No.: GWS-043 Temp. |
| Shipped To (Lab): TestAmerica St. Louis | Method of Shipment: Govt. Vehicle | Bill of Lading/Air Bill No. |
| Protocol: SURV | Priority: 45 Days | Offsite Property No.: 7960 9774 0446 |

POSSIBLE SAMPLE HAZARDS/REMARKS
** **

SPECIAL INSTRUCTIONS Hold Time
FY08 and FY09 samples cannot be in the same SDG.
Site-Wide Generator Knowledge Form applies.

Total Activity Exemption: Yes ☑ No ☐

| Sample No. | Lab ID | * | Date | Time | No/Type Container | Sample Analysis | Holding Time | Preservative |
|---|---|---|---|---|---|---|---|---|
| B1X8W7 | | W | 11/4/08 | 1316 | 4x40-mL aGs* | 8260_VOA_GCMS: List-2 (26) | 14 Days | HCl or H2SO4 to pH <2 Cool~4C |
| B1X8W7 | | W | ↓ | ↓ | 1x20-mL P | Activity Scan | 6 Months | None |

| Relinquished By | Print | Sign | Date/Time | Received By | Print | Sign | Date/Time |
|---|---|---|---|---|---|---|---|
| Roy Sickle | | | 11/5/08 1430 | FedEx | | | |
| FEDEX | | | | | | | 11.06.08 0930 |
| | | | | | | | |
| | | | | | | | |

Matrix *

| | | | |
|---|---|---|---|
| S = Soil | | DS = Drum Solid | |
| SE = Sediment | | DL = Drum Liqui | |
| SO = Solid | | T = Tissue | |
| SL = Sludge | | WI = Wine | |
| W = Water | | L = Liquid | |
| O = Oil | | V = Vegetation | |
| A = Air | | X = Other | |

| FINAL SAMPLE DISPOSITION | Disposal Method (e.g., Return to customer, per lab procedure, used in process) | Disposed By | Date/Time |
|---|---|---|---|

TestAmerica St. Louis

Track Shipments/FedEx Kinko's Orders

## Detailed Results

| | | | |
|---|---|---|---|
| **Tracking number** | 796097740446 | **Reference** | GWS-043 |
| **Signed for by** | B.DANIELS | **Destination** | Earth City, MO |
| **Ship date** | Nov 5, 2008 | **Delivered to** | Shipping/Receiving |
| **Delivery date** | Nov 6, 2008 9:17 AM | **Service type** | Priority Overnight |
| | | **Weight** | 107.0 lbs. |

**Status** Delivered

**Signature image available** Yes

| Date/Time | | Activity | Location |
|---|---|---|---|
| **Nov 6, 2008** | 9:17 AM | **Delivered** | Earth City, MO |
| | 6:59 AM | On FedEx vehicle for delivery | EARTH CITY, MO |
| | 6:53 AM | At local FedEx facility | EARTH CITY, MO |
| | 5:22 AM | At dest sort facility | BERKELEY, MO |
| | 4:34 AM | Departed FedEx location | MEMPHIS, TN |
| | 2:26 AM | In transit | MEMPHIS, TN |
| | 1:39 AM | Arrived at FedEx location | MEMPHIS, TN |
| **Nov 5, 2008** | 5:17 PM | Left FedEx origin facility | PASCO, WA |
| | 3:59 PM | Picked up | PASCO, WA |
| | 12:07 PM | Package data transmitted to FedEx | |

Signature proof E-mail results Track more shipments/o

Subscribe to tracking updates (optional)

**Your name:** **Your e-mail address:**

| E-mail address | Language | Exception updates |
|---|---|---|
| | English | ☐ |
| | English | ☐ |
| | English | ☐ |
| | English | ☐ |

**Select format:** HTML Text Wireless

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☐ By selecting this check box and the Submit button, I agree to these Terms and Conditions

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Lot #(s): F8L060259 (260)

- 657 -

## Condition Upon Receipt Form

Client: CH2MHR
Quote No: 80162/81100
COC/RFA No: below
Initiated By: [illegible]
Date: 11-06-08
Time: 0930

### Shipping Information

Shipper Name: FedEx
Shipping # (s):*
1. 7960 9774 0446
2.
3.
4.
5.
6.
7.
8.
9.
10.

Multiple Packages Y (N)
Sample Temperature (s):**
1. 2
2.
3.
4.
5.
6.
7.
8.
9.
10.

*Numbered shipping lines correspond to Numbered Sample Temp lines

**Sample must be received at 4°C ± 2°C- If not, note contents below. Temperature variance does NOT affect the following: Metals-Liquid or Rad tests- Liquid or Solids

**Condition** (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

| | | | | | |
|---|---|---|---|---|---|
| 1. | (Y) N | Are there custody seals present on the cooler? | 8. | (Y) N | Are there custody seals present on bottles? |
| 2. | Y (N) N/A | Do custody seals on cooler appear to be tampered with? | 9. | Y (N) N/A | Do custody seals on bottles appear to be tampered with? |
| 3. | (Y) N | Were contents of cooler frisked after opening, but before unpacking? | 10. | Y N (N/A) | Was sample received with proper pH[1]? (If not, make note below) |
| 4. | (Y) N | Sample received with Chain of Custody? | 11. | Y N | If N/A- Was pH taken by original TestAmerica lab? |
| 5. | (Y) N N/A | Does the Chain of Custody match sample ID's on the container(s)? | 12. | (Y) N | Sample received in proper containers? |
| 6. | Y (N) | Was sample received broken? | 13. | Y (N) N/A | Headspace in VOA or TOX liquid samples? (If Yes, note sample ID's below) |
| 7. | (Y) N | Is sample volume sufficient for analysis? | 14. | Y N | Was Internal COC/Workshare received? |

[1] For DOE-AL (Pantex, LANL, Sandia) sites, pH of ALL containers received must be verified, EXCEPT VOA, TOX and soils.

Notes:
X08-048-69, 159, 169
S09-010-278

Corrective Action:
☐ Client Contact Name: Informed by:
☐ Sample(s) processed "as is"
☐ Sample(s) on hold until: If released, notify:
Project Management Review: [signature] Date: 11-09-08

THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED IN. IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY THEIR INITIAL AND THE DATE NEXT TO THAT ITEM.

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# GC/MS VOLATILES

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1VHJ2

GC/MS Volatiles

Lot-Sample #...: F8J310136-001 Work Order #...: K11N81AC Matrix.....: WATER
Date Sampled...: 10/28/08 Date Received..: 10/31/08
Prep Date.....: 11/06/08 Analysis Date..: 11/06/08
Prep Batch #...: 8312146
Dilution Factor: 1 Method.....: SW846 8260B

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | MDL |
|---|---|---|---|---|
| 1,1-Dichloroethene | ND | 1.0 | ug/L | 0.085 |
| 1,4-Dioxane | ND | 80 | ug/L | 7.0 |
| Ethylbenzene | ND | 1.0 | ug/L | 0.061 |
| Vinyl chloride | ND | 2.0 | ug/L | 0.13 |
| Acetone | ND | 2.0 | ug/L | 0.56 |
| **Methylene chloride** | **21 B** | **1.0** | **ug/L** | **0.091** |
| Carbon disulfide | ND | 1.0 | ug/L | 0.029 |
| 1,1-Dichloroethane | ND | 1.0 | ug/L | 0.070 |
| 2-Butanone | ND | 5.0 | ug/L | 0.96 |
| Chloroform | ND | 1.0 | ug/L | 0.080 |
| cis-1,2-Dichloroethene | ND | 1.0 | ug/L | 0.13 |
| Propionitrile | ND | 5.0 | ug/L | 4.7 |
| trans-1,2-Dichloroethene | ND | 1.0 | ug/L | 0.089 |
| 1,1,1-Trichloroethane | ND | 1.0 | ug/L | 0.099 |
| Carbon tetrachloride | ND | 1.0 | ug/L | 0.042 |
| 1,2-Dichloroethane | ND | 1.0 | ug/L | 0.18 |
| Benzene | ND | 1.0 | ug/L | 0.032 |
| Trichloroethene | ND | 1.0 | ug/L | 0.11 |
| 4-Methyl-2-pentanone | ND | 5.0 | ug/L | 0.72 |
| 1,1,2-Trichloroethane | ND | 1.0 | ug/L | 0.19 |
| Tetrachloroethene | ND | 1.0 | ug/L | 0.14 |
| Tetrahydrofuran | ND | 10 | ug/L | 3.2 |
| Xylenes (total) | ND | 3.0 | ug/L | 1.6 |
| 1,4-Dichlorobenzene | ND | 1.0 | ug/L | 0.10 |
| 1-Butanol | ND | 40 | ug/L | 14 |
| Toluene | ND | 1.0 | ug/L | 0.029 |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| Toluene-d8 | 105 | (76 - 115) |
| Dibromofluoromethane | 95 | (81 - 123) |
| 1,2-Dichloroethane-d4 | 96 | (70 - 130) |
| 4-Bromofluorobenzene | 106 | (79 - 115) |

**NOTE(S):**

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

CH2M Hill Plateau Remediation DOE RL

B1VHJ2

GC/MS Volatiles

**Lot-Sample #:** F8J310136-001 **Work Order #:** K11N81AC **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

| PARAMETER | CAS # | ESTIMATED RESULT | RETENTION TIME | UNITS |
|---|---|---|---|---|
| None | | | | ug/L |

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1X619

GC/MS Volatiles

Lot-Sample #...: F8J310138-001 Work Order #...: K11PF1AC Matrix.....: WATER
Date Sampled...: 10/28/08 Date Received..: 10/31/08
Prep Date.....: 11/06/08 Analysis Date..: 11/06/08
Prep Batch #...: 8312146
Dilution Factor: 1 Method.....: SW846 8260B

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | MDL |
|---|---|---|---|---|
| 1,1-Dichloroethene | ND | 1.0 | ug/L | 0.085 |
| 1,4-Dioxane | ND | 80 | ug/L | 7.0 |
| Ethylbenzene | ND | 1.0 | ug/L | 0.061 |
| Vinyl chloride | ND | 2.0 | ug/L | 0.13 |
| Acetone | ND | 2.0 | ug/L | 0.56 |
| **Methylene chloride** | **0.13 J,B** | **1.0** | **ug/L** | **0.091** |
| Carbon disulfide | ND | 1.0 | ug/L | 0.029 |
| 1,1-Dichloroethane | ND | 1.0 | ug/L | 0.070 |
| 2-Butanone | ND | 5.0 | ug/L | 0.96 |
| **Chloroform** | **0.32 J** | **1.0** | **ug/L** | **0.080** |
| cis-1,2-Dichloroethene | ND | 1.0 | ug/L | 0.13 |
| Propionitrile | ND | 5.0 | ug/L | 4.7 |
| trans-1,2-Dichloroethene | ND | 1.0 | ug/L | 0.089 |
| 1,1,1-Trichloroethane | ND | 1.0 | ug/L | 0.099 |
| Carbon tetrachloride | ND | 1.0 | ug/L | 0.042 |
| 1,2-Dichloroethane | ND | 1.0 | ug/L | 0.18 |
| Benzene | ND | 1.0 | ug/L | 0.032 |
| **Trichloroethene** | **4.7** | **1.0** | **ug/L** | **0.11** |
| 4-Methyl-2-pentanone | ND | 5.0 | ug/L | 0.72 |
| 1,1,2-Trichloroethane | ND | 1.0 | ug/L | 0.19 |
| Tetrachloroethene | ND | 1.0 | ug/L | 0.14 |
| Tetrahydrofuran | ND | 10 | ug/L | 3.2 |
| Xylenes (total) | ND | 3.0 | ug/L | 1.6 |
| 1,4-Dichlorobenzene | ND | 1.0 | ug/L | 0.10 |
| 1-Butanol | ND | 40 | ug/L | 14 |
| Toluene | ND | 1.0 | ug/L | 0.029 |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| Toluene-d8 | 104 | (76 - 115) |
| Dibromofluoromethane | 95 | (81 - 123) |
| 1,2-Dichloroethane-d4 | 99 | (70 - 130) |
| 4-Bromofluorobenzene | 104 | (79 - 115) |

**NOTE(S):**

J Estimated result. Result is less than RL.

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

CH2M Hill Plateau Remediation DOE RL

B1X619

GC/MS Volatiles

**Lot-Sample #:** F8J310138-001 **Work Order #:** K11PF1AC **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

| PARAMETER | CAS # | ESTIMATED RESULT | RETENTION TIME | UNITS |
|---|---|---|---|---|
| None | | | | ug/L |

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1X8W5

GC/MS Volatiles

**Lot-Sample #...:** F8K010185-001 **Work Order #...:** K14C61AC **Matrix.....:** WATER
**Date Sampled...:** 10/31/08 **Date Received..:** 11/01/08
**Prep Date.....:** 11/06/08 **Analysis Date..:** 11/06/08
**Prep Batch #...:** 8312146
**Dilution Factor:** 1 **Method.....:** SW846 8260B

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | MDL |
|---|---|---|---|---|
| 1,1-Dichloroethene | ND | 1.0 | ug/L | 0.085 |
| 1,4-Dioxane | ND | 80 | ug/L | 7.0 |
| Ethylbenzene | ND | 1.0 | ug/L | 0.061 |
| Vinyl chloride | ND | 2.0 | ug/L | 0.13 |
| Acetone | ND | 2.0 | ug/L | 0.56 |
| **Methylene chloride** | **6.9 B** | **1.0** | **ug/L** | **0.091** |
| Carbon disulfide | ND | 1.0 | ug/L | 0.029 |
| 1,1-Dichloroethane | ND | 1.0 | ug/L | 0.070 |
| 2-Butanone | ND | 5.0 | ug/L | 0.96 |
| Chloroform | ND | 1.0 | ug/L | 0.080 |
| cis-1,2-Dichloroethene | ND | 1.0 | ug/L | 0.13 |
| Propionitrile | ND | 5.0 | ug/L | 4.7 |
| trans-1,2-Dichloroethene | ND | 1.0 | ug/L | 0.089 |
| 1,1,1-Trichloroethane | ND | 1.0 | ug/L | 0.099 |
| Carbon tetrachloride | ND | 1.0 | ug/L | 0.042 |
| 1,2-Dichloroethane | ND | 1.0 | ug/L | 0.18 |
| Benzene | ND | 1.0 | ug/L | 0.032 |
| Trichloroethene | ND | 1.0 | ug/L | 0.11 |
| 4-Methyl-2-pentanone | ND | 5.0 | ug/L | 0.72 |
| 1,1,2-Trichloroethane | ND | 1.0 | ug/L | 0.19 |
| Tetrachloroethene | ND | 1.0 | ug/L | 0.14 |
| Tetrahydrofuran | ND | 10 | ug/L | 3.2 |
| Xylenes (total) | ND | 3.0 | ug/L | 1.6 |
| 1,4-Dichlorobenzene | ND | 1.0 | ug/L | 0.10 |
| 1-Butanol | ND | 40 | ug/L | 14 |
| Toluene | ND | 1.0 | ug/L | 0.029 |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| Toluene-d8 | 106 | (76 - 115) |
| Dibromofluoromethane | 95 | (81 - 123) |
| 1,2-Dichloroethane-d4 | 103 | (70 - 130) |
| 4-Bromofluorobenzene | 103 | (79 - 115) |

**NOTE(S):**

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

CH2M Hill Plateau Remediation DOE RL

B1X8W5

GC/MS Volatiles

**Lot-Sample #:** F8K010185-001 **Work Order #:** K14C61AC **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

| PARAMETER | CAS # | ESTIMATED RESULT | RETENTION TIME | UNITS |
|---|---|---|---|---|
| None | | | | ug/L |

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1X8W6

GC/MS Volatiles

**Lot-Sample #...:** F8K050212-001 **Work Order #...:** K19XD2AC **Matrix.....:** WATER
**Date Sampled...:** 11/03/08 **Date Received..:** 11/05/08
**Prep Date.....:** 11/13/08 **Analysis Date..:** 11/13/08
**Prep Batch #...:** 8323284
**Dilution Factor:** 1 **Method.....:** SW846 8260B

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | MDL |
|---|---|---|---|---|
| 1,1-Dichloroethene | ND | 1.0 | ug/L | 0.085 |
| 1,4-Dioxane | ND | 80 | ug/L | 7.0 |
| Ethylbenzene | ND | 1.0 | ug/L | 0.061 |
| Vinyl chloride | ND | 2.0 | ug/L | 0.13 |
| Acetone | ND | 2.0 | ug/L | 0.56 |
| **Methylene chloride** | **4.0 B** | **1.0** | **ug/L** | **0.091** |
| Carbon disulfide | ND | 1.0 | ug/L | 0.029 |
| 1,1-Dichloroethane | ND | 1.0 | ug/L | 0.070 |
| 2-Butanone | ND | 5.0 | ug/L | 0.96 |
| Chloroform | ND | 1.0 | ug/L | 0.080 |
| cis-1,2-Dichloroethene | ND | 1.0 | ug/L | 0.13 |
| Propionitrile | ND | 5.0 | ug/L | 4.7 |
| trans-1,2-Dichloroethene | ND | 1.0 | ug/L | 0.089 |
| 1,1,1-Trichloroethane | ND | 1.0 | ug/L | 0.099 |
| Carbon tetrachloride | ND | 1.0 | ug/L | 0.042 |
| 1,2-Dichloroethane | ND | 1.0 | ug/L | 0.18 |
| Benzene | ND | 1.0 | ug/L | 0.032 |
| Trichloroethene | ND | 1.0 | ug/L | 0.11 |
| 4-Methyl-2-pentanone | ND | 5.0 | ug/L | 0.72 |
| 1,1,2-Trichloroethane | ND | 1.0 | ug/L | 0.19 |
| Tetrachloroethene | ND | 1.0 | ug/L | 0.14 |
| Tetrahydrofuran | ND | 10 | ug/L | 3.2 |
| Xylenes (total) | ND | 3.0 | ug/L | 1.6 |
| 1,4-Dichlorobenzene | ND | 1.0 | ug/L | 0.10 |
| 1-Butanol | ND | 40 | ug/L | 14 |
| Toluene | ND | 1.0 | ug/L | 0.029 |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| Toluene-d8 | 99 | (76 - 115) |
| Dibromofluoromethane | 101 | (81 - 123) |
| 1,2-Dichloroethane-d4 | 99 | (70 - 130) |
| 4-Bromofluorobenzene | 100 | (79 - 115) |

**NOTE(S):**

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

CH2M Hill Plateau Remediation DOE RL

B1X8W6

GC/MS Volatiles

**Lot-Sample #:** F8K050212-001 **Work Order #:** K19XD2AC **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

| PARAMETER | CAS # | ESTIMATED RESULT | RETENTION TIME | UNITS |
|---|---|---|---|---|
| None | | | | ug/L |

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1X8W7

GC/MS Volatiles

Lot-Sample #...: F8K060260-001 Work Order #...: K2DLW1AC Matrix.....: WATER
Date Sampled...: 11/04/08 Date Received..: 11/06/08
Prep Date.....: 11/17/08 Analysis Date..: 11/17/08
Prep Batch #...: 8324243
Dilution Factor: 1 Method.....: SW846 8260B

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | MDL |
|---|---|---|---|---|
| 1,1-Dichloroethene | ND | 1.0 | ug/L | 0.085 |
| 1,4-Dioxane | ND | 80 | ug/L | 7.0 |
| Ethylbenzene | ND | 1.0 | ug/L | 0.061 |
| Vinyl chloride | ND | 2.0 | ug/L | 0.13 |
| Acetone | ND | 2.0 | ug/L | 0.56 |
| **Methylene chloride** | **1.8** | **1.0** | **ug/L** | **0.091** |
| Carbon disulfide | ND | 1.0 | ug/L | 0.029 |
| 1,1-Dichloroethane | ND | 1.0 | ug/L | 0.070 |
| 2-Butanone | ND | 5.0 | ug/L | 0.96 |
| Chloroform | ND | 1.0 | ug/L | 0.080 |
| cis-1,2-Dichloroethene | ND | 1.0 | ug/L | 0.13 |
| Propionitrile | ND | 5.0 | ug/L | 4.7 |
| trans-1,2-Dichloroethene | ND | 1.0 | ug/L | 0.089 |
| 1,1,1-Trichloroethane | ND | 1.0 | ug/L | 0.099 |
| Carbon tetrachloride | ND | 1.0 | ug/L | 0.042 |
| 1,2-Dichloroethane | ND | 1.0 | ug/L | 0.18 |
| Benzene | ND | 1.0 | ug/L | 0.032 |
| Trichloroethene | ND | 1.0 | ug/L | 0.11 |
| 4-Methyl-2-pentanone | ND | 5.0 | ug/L | 0.72 |
| 1,1,2-Trichloroethane | ND | 1.0 | ug/L | 0.19 |
| Tetrachloroethene | ND | 1.0 | ug/L | 0.14 |
| Tetrahydrofuran | ND | 10 | ug/L | 3.2 |
| Xylenes (total) | ND | 3.0 | ug/L | 1.6 |
| 1,4-Dichlorobenzene | ND | 1.0 | ug/L | 0.10 |
| 1-Butanol | ND | 40 | ug/L | 14 |
| Toluene | ND | 1.0 | ug/L | 0.029 |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| Toluene-d8 | 97 | (76 - 115) |
| Dibromofluoromethane | 106 | (81 - 123) |
| 1,2-Dichloroethane-d4 | 100 | (70 - 130) |
| 4-Bromofluorobenzene | 94 | (79 - 115) |

CH2M Hill Plateau Remediation DOE RL

B1X8W7

GC/MS Volatiles

**Lot-Sample #:** F8K060260-001 **Work Order #:** K2DLW1AC **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

| PARAMETER | CAS # | ESTIMATED RESULT | RETENTION TIME | UNITS |
|---|---|---|---|---|
| None | | | | ug/L |

# METHOD BLANK REPORT

## GC/MS Volatiles

**Client Lot #...:** SL763 **Work Order #...:** K2F171AA **Matrix.....:** WATER
**MB Lot-Sample #:** F8K070000-146

**Prep Date.....:** 11/06/08
**Analysis Date..:** 11/06/08 **Prep Batch #...:** 8312146
**Dilution Factor:** 1

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | METHOD |
|---|---|---|---|---|
| 1,1-Dichloroethene | ND | 1.0 | ug/L | SW846 8260B |
| 1,4-Dioxane | ND | 80 | ug/L | SW846 8260B |
| Ethylbenzene | ND | 1.0 | ug/L | SW846 8260B |
| Vinyl chloride | ND | 2.0 | ug/L | SW846 8260B |
| Acetone | ND | 2.0 | ug/L | SW846 8260B |
| **Methylene chloride** | **0.14 J** | **1.0** | **ug/L** | **SW846 8260B** |
| Carbon disulfide | ND | 1.0 | ug/L | SW846 8260B |
| 1,1-Dichloroethane | ND | 1.0 | ug/L | SW846 8260B |
| 2-Butanone | ND | 5.0 | ug/L | SW846 8260B |
| Chloroform | ND | 1.0 | ug/L | SW846 8260B |
| cis-1,2-Dichloroethene | ND | 1.0 | ug/L | SW846 8260B |
| Propionitrile | ND | 5.0 | ug/L | SW846 8260B |
| trans-1,2-Dichloroethene | ND | 1.0 | ug/L | SW846 8260B |
| 1,1,1-Trichloroethane | ND | 1.0 | ug/L | SW846 8260B |
| Carbon tetrachloride | ND | 1.0 | ug/L | SW846 8260B |
| 1,2-Dichloroethane | ND | 1.0 | ug/L | SW846 8260B |
| Benzene | ND | 1.0 | ug/L | SW846 8260B |
| Trichloroethene | ND | 1.0 | ug/L | SW846 8260B |
| 4-Methyl-2-pentanone | ND | 5.0 | ug/L | SW846 8260B |
| 1,1,2-Trichloroethane | ND | 1.0 | ug/L | SW846 8260B |
| Tetrachloroethene | ND | 1.0 | ug/L | SW846 8260B |
| Tetrahydrofuran | ND | 10 | ug/L | SW846 8260B |
| Xylenes (total) | ND | 3.0 | ug/L | SW846 8260B |
| 1,4-Dichlorobenzene | ND | 1.0 | ug/L | SW846 8260B |
| 1-Butanol | ND | 40 | ug/L | SW846 8260B |
| Toluene | ND | 1.0 | ug/L | SW846 8260B |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| Toluene-d8 | 111 | (76 - 115) |
| Dibromofluoromethane | 101 | (81 - 123) |
| 1,2-Dichloroethane-d4 | 106 | (70 - 130) |
| 4-Bromofluorobenzene | 114 | (79 - 115) |

**NOTE(S):**

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

J Estimated result. Result is less than RL.

CH2M Hill Plateau Remediation DOE RL

Method Blank Report

GC/MS Volatiles

**Lot-Sample #:** F8K070000-146 B **Work Order #:** K2F171AA **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

| PARAMETER | CAS # | ESTIMATED RESULT | RETENTION TIME | UNITS |
|---|---|---|---|---|
| None | | | | ug/L |

# METHOD BLANK REPORT

## GC/MS Volatiles

Client Lot #...: SL763 Work Order #...: K251K1AA Matrix.....: WATER
MB Lot-Sample #: F8K180000-284

Prep Date.....: 11/13/08
Analysis Date..: 11/13/08 Prep Batch #...: 8323284
Dilution Factor: 1

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | METHOD |
|---|---|---|---|---|
| 1,1-Dichloroethene | ND | 1.0 | ug/L | SW846 8260B |
| 1,4-Dioxane | ND | 80 | ug/L | SW846 8260B |
| Ethylbenzene | ND | 1.0 | ug/L | SW846 8260B |
| Vinyl chloride | ND | 2.0 | ug/L | SW846 8260B |
| Acetone | ND | 2.0 | ug/L | SW846 8260B |
| **Methylene chloride** | **0.092 J** | **1.0** | **ug/L** | **SW846 8260B** |
| **Carbon disulfide** | **0.032 J** | **1.0** | **ug/L** | **SW846 8260B** |
| 1,1-Dichloroethane | ND | 1.0 | ug/L | SW846 8260B |
| 2-Butanone | ND | 5.0 | ug/L | SW846 8260B |
| Chloroform | ND | 1.0 | ug/L | SW846 8260B |
| cis-1,2-Dichloroethene | ND | 1.0 | ug/L | SW846 8260B |
| Propionitrile | ND | 5.0 | ug/L | SW846 8260B |
| trans-1,2-Dichloroethene | ND | 1.0 | ug/L | SW846 8260B |
| 1,1,1-Trichloroethane | ND | 1.0 | ug/L | SW846 8260B |
| Carbon tetrachloride | ND | 1.0 | ug/L | SW846 8260B |
| 1,2-Dichloroethane | ND | 1.0 | ug/L | SW846 8260B |
| Benzene | ND | 1.0 | ug/L | SW846 8260B |
| Trichloroethene | ND | 1.0 | ug/L | SW846 8260B |
| 4-Methyl-2-pentanone | ND | 5.0 | ug/L | SW846 8260B |
| 1,1,2-Trichloroethane | ND | 1.0 | ug/L | SW846 8260B |
| Tetrachloroethene | ND | 1.0 | ug/L | SW846 8260B |
| Tetrahydrofuran | ND | 10 | ug/L | SW846 8260B |
| Xylenes (total) | ND | 3.0 | ug/L | SW846 8260B |
| 1,4-Dichlorobenzene | ND | 1.0 | ug/L | SW846 8260B |
| 1-Butanol | ND | 40 | ug/L | SW846 8260B |
| **Toluene** | **0.041 J** | **1.0** | **ug/L** | **SW846 8260B** |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| Toluene-d8 | 100 | (76 - 115) |
| Dibromofluoromethane | 99 | (81 - 123) |
| 1,2-Dichloroethane-d4 | 101 | (70 - 130) |
| 4-Bromofluorobenzene | 96 | (79 - 115) |

**NOTE(S):**

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

J Estimated result. Result is less than RL.

CH2M Hill Plateau Remediation DOE RL

Method Blank Report

GC/MS Volatiles

**Lot-Sample #:** F8K180000-284 B **Work Order #:** K251K1AA **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

| PARAMETER | CAS # | ESTIMATED RESULT | RETENTION TIME | UNITS |
|---|---|---|---|---|
| None | | | | ug/L |

# METHOD BLANK REPORT

## GC/MS Volatiles

**Client Lot #...:** SL763 **Work Order #...:** K28P01AA **Matrix.....:** WATER
**MB Lot-Sample #:** F8K190000-243

**Prep Date.....:** 11/17/08
**Analysis Date..:** 11/17/08 **Prep Batch #...:** 8324243
**Dilution Factor:** 1

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | METHOD |
|---|---|---|---|---|
| 1,4-Dioxane | ND | 80 | ug/L | SW846 8260B |
| Ethylbenzene | ND | 1.0 | ug/L | SW846 8260B |
| 1,1-Dichloroethene | ND | 1.0 | ug/L | SW846 8260B |
| Vinyl chloride | ND | 2.0 | ug/L | SW846 8260B |
| Acetone | ND | 2.0 | ug/L | SW846 8260B |
| Methylene chloride | ND | 1.0 | ug/L | SW846 8260B |
| Carbon disulfide | ND | 1.0 | ug/L | SW846 8260B |
| 1,1-Dichloroethane | ND | 1.0 | ug/L | SW846 8260B |
| 2-Butanone | ND | 5.0 | ug/L | SW846 8260B |
| Chloroform | ND | 1.0 | ug/L | SW846 8260B |
| cis-1,2-Dichloroethene | ND | 1.0 | ug/L | SW846 8260B |
| Propionitrile | ND | 5.0 | ug/L | SW846 8260B |
| trans-1,2-Dichloroethene | ND | 1.0 | ug/L | SW846 8260B |
| 1,1,1-Trichloroethane | ND | 1.0 | ug/L | SW846 8260B |
| Carbon tetrachloride | ND | 1.0 | ug/L | SW846 8260B |
| 1,2-Dichloroethane | ND | 1.0 | ug/L | SW846 8260B |
| Benzene | ND | 1.0 | ug/L | SW846 8260B |
| Trichloroethene | ND | 1.0 | ug/L | SW846 8260B |
| 4-Methyl-2-pentanone | ND | 5.0 | ug/L | SW846 8260B |
| 1,1,2-Trichloroethane | ND | 1.0 | ug/L | SW846 8260B |
| Tetrachloroethene | ND | 1.0 | ug/L | SW846 8260B |
| Tetrahydrofuran | ND | 10 | ug/L | SW846 8260B |
| Xylenes (total) | ND | 3.0 | ug/L | SW846 8260B |
| 1,4-Dichlorobenzene | ND | 1.0 | ug/L | SW846 8260B |
| 1-Butanol | ND | 40 | ug/L | SW846 8260B |
| **Toluene** | **0.030 J** | **1.0** | **ug/L** | **SW846 8260B** |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| Toluene-d8 | 96 | (76 - 115) |
| Dibromofluoromethane | 105 | (81 - 123) |
| 1,2-Dichloroethane-d4 | 104 | (70 - 130) |
| 4-Bromofluorobenzene | 95 | (79 - 115) |

**NOTE(S):**

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

J Estimated result. Result is less than RL.

CH2M Hill Plateau Remediation DOE RL

Method Blank Report

GC/MS Volatiles

**Lot-Sample #:** F8K190000-243 B **Work Order #:** K28P01AA **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

| PARAMETER | CAS # | ESTIMATED RESULT | RETENTION TIME | UNITS |
|---|---|---|---|---|
| None | | | | ug/L |

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: SL763 Work Order #...: K2F171AC-LCS Matrix.....: WATER
LCS Lot-Sample#: F8K070000-146 K2F171AD-LCSD
Prep Date.....: 11/06/08 Analysis Date..: 11/06/08
Prep Batch #...: 8312146
Dilution Factor: 1

| PARAMETER | SPIKE AMOUNT | MEASURED AMOUNT | UNITS | PERCENT RECOVERY | RPD | METHOD |
|---|---|---|---|---|---|---|
| Ethylbenzene | 10.0 | 11.2 | ug/L | 112 | | SW846 8260B |
| | 10.0 | 11.1 | ug/L | 111 | 0.71 | SW846 8260B |
| 1,4-Dioxane | 200 | 244 | ug/L | 122 | | SW846 8260B |
| | 200 | 218 | ug/L | 109 | 11 | SW846 8260B |
| 1,1-Dichloroethene | 10.0 | 10.4 | ug/L | 104 | | SW846 8260B |
| | 10.0 | 9.66 | ug/L | 97 | 7.2 | SW846 8260B |
| Vinyl chloride | 10.0 | 8.39 | ug/L | 84 | | SW846 8260B |
| | 10.0 | 8.25 | ug/L | 82 | 1.7 | SW846 8260B |
| Acetone | 10.0 | 12.7 | ug/L | 127 | | SW846 8260B |
| | 10.0 | 12.1 | ug/L | 121 | 5.0 | SW846 8260B |
| Methylene chloride | 10.0 | 10.1 | ug/L | 101 | | SW846 8260B |
| | 10.0 | 10.3 | ug/L | 103 | 2.3 | SW846 8260B |
| Carbon disulfide | 10.0 | 9.88 | ug/L | 99 | | SW846 8260B |
| | 10.0 | 9.65 | ug/L | 97 | 2.3 | SW846 8260B |
| 1,1-Dichloroethane | 10.0 | 9.80 | ug/L | 98 | | SW846 8260B |
| | 10.0 | 9.82 | ug/L | 98 | 0.20 | SW846 8260B |
| 2-Butanone | 10.0 | 9.35 | ug/L | 94 | | SW846 8260B |
| | 10.0 | 10.6 | ug/L | 106 | 12 | SW846 8260B |
| Chloroform | 10.0 | 9.76 | ug/L | 98 | | SW846 8260B |
| | 10.0 | 10.3 | ug/L | 103 | 5.0 | SW846 8260B |
| cis-1,2-Dichloroethene | 10.0 | 10.0 | ug/L | 100 | | SW846 8260B |
| | 10.0 | 10.5 | ug/L | 105 | 4.6 | SW846 8260B |
| Propionitrile | 50.0 | 55.7 | ug/L | 111 | | SW846 8260B |
| | 50.0 | 58.9 | ug/L | 118 | 5.6 | SW846 8260B |
| trans-1,2-Dichloroethene | 10.0 | 9.82 | ug/L | 98 | | SW846 8260B |
| | 10.0 | 9.49 | ug/L | 95 | 3.4 | SW846 8260B |
| 1,1,1-Trichloroethane | 10.0 | 9.86 | ug/L | 99 | | SW846 8260B |
| | 10.0 | 10.1 | ug/L | 101 | 2.4 | SW846 8260B |
| Carbon tetrachloride | 10.0 | 10.3 | ug/L | 103 | | SW846 8260B |
| | 10.0 | 10.5 | ug/L | 105 | 1.4 | SW846 8260B |
| 1,2-Dichloroethane | 10.0 | 9.58 | ug/L | 96 | | SW846 8260B |
| | 10.0 | 10.1 | ug/L | 101 | 5.2 | SW846 8260B |
| Benzene | 10.0 | 9.95 | ug/L | 99 | | SW846 8260B |
| | 10.0 | 9.95 | ug/L | 99 | 0.010 | SW846 8260B |
| Trichloroethene | 10.0 | 9.91 | ug/L | 99 | | SW846 8260B |
| | 10.0 | 9.72 | ug/L | 97 | 1.9 | SW846 8260B |
| 4-Methyl-2-pentanone | 10.0 | 10.6 | ug/L | 106 | | SW846 8260B |
| | 10.0 | 12.2 | ug/L | 122 | 14 | SW846 8260B |
| 1,1,2-Trichloroethane | 10.0 | 9.90 | ug/L | 99 | | SW846 8260B |
| | 10.0 | 10.3 | ug/L | 103 | 4.1 | SW846 8260B |

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# LABORATORY CONTROL SAMPLE DATA REPORT

## GC/MS Volatiles

Client Lot #...: SL763 Work Order #...: K2F171AC-LCS Matrix.....: WATER
LCS Lot-Sample#: F8K070000-146 K2F171AD-LCSD

| PARAMETER | SPIKE AMOUNT | MEASURED AMOUNT | UNITS | PERCENT RECOVERY | RPD | METHOD |
|---|---|---|---|---|---|---|
| **Tetrachloroethene** | **10.0** | **9.86** | **ug/L** | **99** | | **SW846 8260B** |
| | **10.0** | **10.0** | **ug/L** | **100** | **1.6** | **SW846 8260B** |
| **Tetrahydrofuran** | **50.0** | **47.6** | **ug/L** | **95** | | **SW846 8260B** |
| | **50.0** | **59.3 p** | **ug/L** | **119** | **22** | **SW846 8260B** |
| **1,4-Dichlorobenzene** | **10.0** | **9.33** | **ug/L** | **93** | | **SW846 8260B** |
| | **10.0** | **9.55** | **ug/L** | **95** | **2.3** | **SW846 8260B** |
| **1-Butanol** | **100** | **100** | **ug/L** | **100** | | **SW846 8260B** |
| | **100** | **99.7** | **ug/L** | **100** | **0.66** | **SW846 8260B** |
| **Toluene** | **10.0** | **10.1** | **ug/L** | **101** | | **SW846 8260B** |
| | **10.0** | **9.99** | **ug/L** | **100** | **0.67** | **SW846 8260B** |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| Toluene-d8 | 110 | (82 - 115) |
| | 107 | (82 - 115) |
| Dibromofluoromethane | 100 | (79 - 120) |
| | 104 | (79 - 120) |
| 1,2-Dichloroethane-d4 | 90 | (62 - 130) |
| | 102 | (62 - 130) |
| 4-Bromofluorobenzene | 108 | (77 - 115) |
| | 106 | (77 - 115) |

**NOTE(S):**

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

Bold print denotes control parameters

p Relative percent difference (RPD) is outside stated control limits.

# LABORATORY CONTROL SAMPLE DATA REPORT

## GC/MS Volatiles

Client Lot #...: SL763 Work Order #...: K251K1AC Matrix.....: WATER
LCS Lot-Sample#: F8K180000-284
Prep Date.....: 11/13/08 Analysis Date..: 11/13/08
Prep Batch #...: 8323284
Dilution Factor: 1

| PARAMETER | SPIKE AMOUNT | MEASURED AMOUNT | UNITS | PERCENT RECOVERY | METHOD |
|---|---|---|---|---|---|
| 1,4-Dioxane | 200 | 226 | ug/L | 113 | SW846 8260B |
| 1,1-Dichloroethene | 10.0 | 10.9 | ug/L | 109 | SW846 8260B |
| Ethylbenzene | 10.0 | 11.0 | ug/L | 110 | SW846 8260B |
| Vinyl chloride | 10.0 | 9.36 | ug/L | 94 | SW846 8260B |
| Acetone | 10.0 | 9.37 | ug/L | 94 | SW846 8260B |
| Methylene chloride | 10.0 | 11.1 | ug/L | 111 | SW846 8260B |
| Carbon disulfide | 10.0 | 8.45 | ug/L | 84 | SW846 8260B |
| 1,1-Dichloroethane | 10.0 | 9.68 | ug/L | 97 | SW846 8260B |
| 2-Butanone | 10.0 | 7.77 | ug/L | 78 | SW846 8260B |
| Chloroform | 10.0 | 10.2 | ug/L | 102 | SW846 8260B |
| cis-1,2-Dichloroethene | 10.0 | 10.2 | ug/L | 102 | SW846 8260B |
| Propionitrile | 50.0 | 51.5 | ug/L | 103 | SW846 8260B |
| trans-1,2-Dichloroethene | 10.0 | 10.2 | ug/L | 102 | SW846 8260B |
| 1,1,1-Trichloroethane | 10.0 | 9.80 | ug/L | 98 | SW846 8260B |
| Carbon tetrachloride | 10.0 | 10.7 | ug/L | 107 | SW846 8260B |
| 1,2-Dichloroethane | 10.0 | 9.84 | ug/L | 98 | SW846 8260B |
| Benzene | 10.0 | 10.2 | ug/L | 102 | SW846 8260B |
| Trichloroethene | 10.0 | 10.4 | ug/L | 104 | SW846 8260B |
| 4-Methyl-2-pentanone | 10.0 | 7.26 | ug/L | 73 | SW846 8260B |
| 1,1,2-Trichloroethane | 10.0 | 10.3 | ug/L | 103 | SW846 8260B |
| Tetrachloroethene | 10.0 | 10.2 | ug/L | 102 | SW846 8260B |
| Tetrahydrofuran | 50.0 | 47.6 | ug/L | 95 | SW846 8260B |
| 1,4-Dichlorobenzene | 10.0 | 9.58 | ug/L | 96 | SW846 8260B |
| 1-Butanol | 100 | 91.3 | ug/L | 91 | SW846 8260B |
| Toluene | 10.0 | 9.78 | ug/L | 98 | SW846 8260B |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| Toluene-d8 | 96 | (82 - 115) |
| Dibromofluoromethane | 98 | (79 - 120) |
| 1,2-Dichloroethane-d4 | 92 | (62 - 130) |
| 4-Bromofluorobenzene | 93 | (77 - 115) |

(Continued on next page)

# LABORATORY CONTROL SAMPLE DATA REPORT

## GC/MS Volatiles

**Client Lot #...:** SL763 **Work Order #...:** K251K1AC **Matrix.....:** WATER
**LCS Lot-Sample#:** F8K180000-284

**NOTE(S):**

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

Bold print denotes control parameters

# LABORATORY CONTROL SAMPLE DATA REPORT

## GC/MS Volatiles

Client Lot #...: SL763 Work Order #...: K28P01AC-LCS Matrix.....: WATER
LCS Lot-Sample#: F8K190000-243 K28P01AD-LCSD
Prep Date.....: 11/17/08 Analysis Date..: 11/17/08
Prep Batch #...: 8324243
Dilution Factor: 1

| PARAMETER | SPIKE AMOUNT | MEASURED AMOUNT | UNITS | PERCENT RECOVERY | RPD | METHOD |
|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 10.0 | 9.70 | ug/L | 97 | | SW846 8260B |
| | 10.0 | 9.81 | ug/L | 98 | 1.1 | SW846 8260B |
| Ethylbenzene | 10.0 | 10.5 | ug/L | 105 | | SW846 8260B |
| | 10.0 | 10.4 | ug/L | 104 | 0.76 | SW846 8260B |
| 1,4-Dioxane | 200 | 211 | ug/L | 106 | | SW846 8260B |
| | 200 | 244 | ug/L | 122 | 14 | SW846 8260B |
| Vinyl chloride | 10.0 | 8.54 | ug/L | 85 | | SW846 8260B |
| | 10.0 | 8.16 | ug/L | 82 | 4.5 | SW846 8260B |
| Acetone | 10.0 | 10.1 | ug/L | 101 | | SW846 8260B |
| | 10.0 | 10.1 | ug/L | 101 | 0.79 | SW846 8260B |
| Methylene chloride | 10.0 | 9.80 | ug/L | 98 | | SW846 8260B |
| | 10.0 | 9.83 | ug/L | 98 | 0.25 | SW846 8260B |
| Carbon disulfide | 10.0 | 9.04 | ug/L | 90 | | SW846 8260B |
| | 10.0 | 8.87 | ug/L | 89 | 1.9 | SW846 8260B |
| 1,1-Dichloroethane | 10.0 | 9.43 | ug/L | 94 | | SW846 8260B |
| | 10.0 | 9.32 | ug/L | 93 | 1.2 | SW846 8260B |
| 2-Butanone | 10.0 | 10.9 | ug/L | 109 | | SW846 8260B |
| | 10.0 | 10.3 | ug/L | 103 | 6.0 | SW846 8260B |
| Chloroform | 10.0 | 9.68 | ug/L | 97 | | SW846 8260B |
| | 10.0 | 9.70 | ug/L | 97 | 0.19 | SW846 8260B |
| cis-1,2-Dichloroethene | 10.0 | 10.3 | ug/L | 103 | | SW846 8260B |
| | 10.0 | 9.96 | ug/L | 100 | 2.9 | SW846 8260B |
| Propionitrile | 50.0 | 59.6 | ug/L | 119 | | SW846 8260B |
| | 50.0 | 63.4 | ug/L | 127 | 6.2 | SW846 8260B |
| trans-1,2-Dichloroethene | 10.0 | 9.72 | ug/L | 97 | | SW846 8260B |
| | 10.0 | 9.46 | ug/L | 95 | 2.7 | SW846 8260B |
| 1,1,1-Trichloroethane | 10.0 | 10.2 | ug/L | 102 | | SW846 8260B |
| | 10.0 | 9.61 | ug/L | 96 | 6.3 | SW846 8260B |
| Carbon tetrachloride | 10.0 | 10.8 | ug/L | 108 | | SW846 8260B |
| | 10.0 | 10.5 | ug/L | 105 | 3.2 | SW846 8260B |
| 1,2-Dichloroethane | 10.0 | 10.2 | ug/L | 102 | | SW846 8260B |
| | 10.0 | 10.2 | ug/L | 102 | 0.39 | SW846 8260B |
| Benzene | 10.0 | 9.63 | ug/L | 96 | | SW846 8260B |
| | 10.0 | 9.54 | ug/L | 95 | 0.92 | SW846 8260B |
| Trichloroethene | 10.0 | 10.3 | ug/L | 103 | | SW846 8260B |
| | 10.0 | 9.90 | ug/L | 99 | 3.7 | SW846 8260B |
| 4-Methyl-2-pentanone | 10.0 | 11.0 | ug/L | 110 | | SW846 8260B |
| | 10.0 | 10.6 | ug/L | 106 | 3.2 | SW846 8260B |
| 1,1,2-Trichloroethane | 10.0 | 10.5 | ug/L | 105 | | SW846 8260B |
| | 10.0 | 10.9 | ug/L | 109 | 3.8 | SW846 8260B |

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# LABORATORY CONTROL SAMPLE DATA REPORT

## GC/MS Volatiles

**Client Lot #...:** SL763 **Work Order #...:** K28P01AC-LCS **Matrix.....:** WATER
**LCS Lot-Sample#:** F8K190000-243 K28P01AD-LCSD

| PARAMETER | SPIKE AMOUNT | MEASURED AMOUNT | UNITS | PERCENT RECOVERY | RPD | METHOD |
|---|---|---|---|---|---|---|
| **Tetrachloroethene** | **10.0** | **9.72** | **ug/L** | **97** | | **SW846 8260B** |
| | **10.0** | **9.78** | **ug/L** | **98** | **0.51** | **SW846 8260B** |
| **Tetrahydrofuran** | **50.0** | **57.7** | **ug/L** | **115** | | **SW846 8260B** |
| | **50.0** | **55.0** | **ug/L** | **110** | **4.7** | **SW846 8260B** |
| **1,4-Dichlorobenzene** | **10.0** | **9.19** | **ug/L** | **92** | | **SW846 8260B** |
| | **10.0** | **9.37** | **ug/L** | **94** | **1.9** | **SW846 8260B** |
| **1-Butanol** | **100** | **95.0** | **ug/L** | **95** | | **SW846 8260B** |
| | **100** | **91.2** | **ug/L** | **91** | **4.1** | **SW846 8260B** |
| **Toluene** | **10.0** | **9.23** | **ug/L** | **92** | | **SW846 8260B** |
| | **10.0** | **9.12** | **ug/L** | **91** | **1.2** | **SW846 8260B** |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| Toluene-d8 | 101 | (82 - 115) |
| | 98 | (82 - 115) |
| Dibromofluoromethane | 105 | (79 - 120) |
| | 103 | (79 - 120) |
| 1,2-Dichloroethane-d4 | 101 | (62 - 130) |
| | 103 | (62 - 130) |
| 4-Bromofluorobenzene | 94 | (77 - 115) |
| | 97 | (77 - 115) |

**NOTE(S):**

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

Bold print denotes control parameters

# MATRIX SPIKE SAMPLE DATA REPORT

## GC/MS Volatiles

Client Lot #...: SL763 Work Order #...: K11N81AD-MS Matrix.....: WATER
MS Lot-Sample #: F8J310136-001 K11N81AE-MSD
Date Sampled...: 10/28/08 Date Received..: 10/31/08
Prep Date.....: 11/06/08 Analysis Date..: 11/06/08
Prep Batch #...: 8312146
Dilution Factor: 1

| PARAMETER | SAMPLE AMOUNT | SPIKE AMT | MEASRD AMOUNT | UNITS | PERCNT RECVRY | RPD | METHOD |
|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | ND | 10.0 | 9.52 | ug/L | 95 | | SW846 8260B |
| | ND | 10.0 | 9.11 | ug/L | 91 | 4.4 | SW846 8260B |
| Ethylbenzene | ND | 10.0 | 10.7 | ug/L | 107 | | SW846 8260B |
| | ND | 10.0 | 10.7 | ug/L | 107 | 0.09 | SW846 8260B |
| 1,4-Dioxane | ND | 200 | 124 | ug/L | 62 | | SW846 8260B |
| | ND | 200 | 198 | ug/L | 99 p | 46 | SW846 8260B |
| Vinyl chloride | ND | 10.0 | 7.76 | ug/L | 78 | | SW846 8260B |
| | ND | 10.0 | 7.55 | ug/L | 76 | 2.7 | SW846 8260B |
| Acetone | ND | 10.0 | 10.1 | ug/L | 101 | | SW846 8260B |
| | ND | 10.0 | 9.65 | ug/L | 96 | 4.4 | SW846 8260B |
| Methylene chloride | 21 | 10.0 | 29.6 | ug/L | 85 | | SW846 8260B |
| | 21 | 10.0 | 27.8 | ug/L | 67 | 6.3 | SW846 8260B |
| Carbon disulfide | ND | 10.0 | 9.18 | ug/L | 92 | | SW846 8260B |
| | ND | 10.0 | 8.96 | ug/L | 90 | 2.5 | SW846 8260B |
| 1,1-Dichloroethane | ND | 10.0 | 9.55 | ug/L | 95 | | SW846 8260B |
| | ND | 10.0 | 9.34 | ug/L | 93 | 2.1 | SW846 8260B |
| 2-Butanone | ND | 10.0 | 9.78 | ug/L | 98 | | SW846 8260B |
| | ND | 10.0 | 9.81 | ug/L | 98 | 0.30 | SW846 8260B |
| Chloroform | ND | 10.0 | 9.85 | ug/L | 98 | | SW846 8260B |
| | ND | 10.0 | 9.82 | ug/L | 98 | 0.29 | SW846 8260B |
| cis-1,2-Dichloroethene | ND | 10.0 | 10.3 | ug/L | 103 | | SW846 8260B |
| | ND | 10.0 | 9.76 | ug/L | 98 | 5.0 | SW846 8260B |
| Propionitrile | ND | 50.0 | 57.5 | ug/L | 115 | | SW846 8260B |
| | ND | 50.0 | 60.6 | ug/L | 121 | 5.2 | SW846 8260B |
| trans-1,2-Dichloroethene | ND | 10.0 | 9.55 | ug/L | 96 | | SW846 8260B |
| | ND | 10.0 | 9.29 | ug/L | 93 | 2.7 | SW846 8260B |
| 1,1,1-Trichloroethane | ND | 10.0 | 10.2 | ug/L | 102 | | SW846 8260B |
| | ND | 10.0 | 9.50 | ug/L | 95 | 6.7 | SW846 8260B |
| Carbon tetrachloride | ND | 10.0 | 10.5 | ug/L | 105 | | SW846 8260B |
| | ND | 10.0 | 9.79 | ug/L | 98 | 6.9 | SW846 8260B |
| 1,2-Dichloroethane | ND | 10.0 | 9.76 | ug/L | 98 | | SW846 8260B |
| | ND | 10.0 | 9.69 | ug/L | 97 | 0.75 | SW846 8260B |
| Benzene | ND | 10.0 | 9.68 | ug/L | 97 | | SW846 8260B |
| | ND | 10.0 | 9.61 | ug/L | 96 | 0.79 | SW846 8260B |
| Trichloroethene | ND | 10.0 | 9.94 | ug/L | 99 | | SW846 8260B |
| | ND | 10.0 | 9.42 | ug/L | 94 | 5.4 | SW846 8260B |
| 4-Methyl-2-pentanone | ND | 10.0 | 10.9 | ug/L | 109 | | SW846 8260B |
| | ND | 10.0 | 11.5 | ug/L | 115 | 5.6 | SW846 8260B |
| 1,1,2-Trichloroethane | ND | 10.0 | 10.6 | ug/L | 106 | | SW846 8260B |
| | ND | 10.0 | 10.5 | ug/L | 105 | 1.2 | SW846 8260B |

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# MATRIX SPIKE SAMPLE DATA REPORT

## GC/MS Volatiles

**Client Lot #...:** SL763 **Work Order #...:** K11N81AD-MS **Matrix.....:** WATER
**MS Lot-Sample #:** F8J310136-001 K11N81AE-MSD

| PARAMETER | SAMPLE AMOUNT | SPIKE AMT | MEASRD AMOUNT | UNITS | PERCNT RECVRY | RPD | METHOD |
|---|---|---|---|---|---|---|---|
| **Tetrachloroethene** | **ND** | **10.0** | **9.64** | **ug/L** | **96** | | **SW846 8260B** |
| | **ND** | **10.0** | **9.61** | **ug/L** | **96** | **0.28** | **SW846 8260B** |
| **Tetrahydrofuran** | **ND** | **50.0** | **51.3** | **ug/L** | **103** | | **SW846 8260B** |
| | **ND** | **50.0** | **49.7** | **ug/L** | **99** | **3.1** | **SW846 8260B** |
| **1,4-Dichlorobenzene** | **ND** | **10.0** | **9.13** | **ug/L** | **91** | | **SW846 8260B** |
| | **ND** | **10.0** | **9.24** | **ug/L** | **92** | **1.2** | **SW846 8260B** |
| **1-Butanol** | **ND** | **100** | **102** | **ug/L** | **102** | | **SW846 8260B** |
| | **ND** | **100** | **97.9** | **ug/L** | **98** | **4.2** | **SW846 8260B** |
| **Toluene** | **ND** | **10.0** | **9.85** | **ug/L** | **99** | | **SW846 8260B** |
| | **ND** | **10.0** | **9.87** | **ug/L** | **99** | **0.16** | **SW846 8260B** |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| Toluene-d8 | 101 | (76 - 115) |
| | 103 | (76 - 115) |
| Dibromofluoromethane | 97 | (81 - 123) |
| | 97 | (81 - 123) |
| 1,2-Dichloroethane-d4 | 94 | (70 - 130) |
| | 99 | (70 - 130) |
| 4-Bromofluorobenzene | 98 | (79 - 115) |
| | 105 | (79 - 115) |

**NOTE(S):**

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

Bold print denotes control parameters

p Relative percent difference (RPD) is outside stated control limits.

## MATRIX SPIKE SAMPLE DATA REPORT

### GC/MS Volatiles

Client Lot #...: SL763 Work Order #...: K11PF1AD-MS Matrix.....: WATER
MS Lot-Sample #: F8J310138-001 K11PF1AE-MSD
Date Sampled...: 10/28/08 Date Received..: 10/31/08
Prep Date.....: 11/06/08 Analysis Date..: 11/06/08
Prep Batch #...: 8312146
Dilution Factor: 1

| PARAMETER | SAMPLE AMOUNT | SPIKE AMT | MEASRD AMOUNT | UNITS | PERCNT RECVRY | RPD | METHOD |
|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | ND | 10.0 | 9.28 | ug/L | 93 | | SW846 8260B |
| | ND | 10.0 | 9.20 | ug/L | 92 | 0.94 | SW846 8260B |
| Ethylbenzene | ND | 10.0 | 10.7 | ug/L | 107 | | SW846 8260B |
| | ND | 10.0 | 10.3 | ug/L | 103 | 4.0 | SW846 8260B |
| 1,4-Dioxane | ND | 200 | 163 | ug/L | 81 | | SW846 8260B |
| | ND | 200 | 183 | ug/L | 92 | 12 | SW846 8260B |
| Vinyl chloride | ND | 10.0 | 7.78 | ug/L | 78 | | SW846 8260B |
| | ND | 10.0 | 7.86 | ug/L | 79 | 1.1 | SW846 8260B |
| Acetone | ND | 10.0 | 12.1 | ug/L | 121 | | SW846 8260B |
| | ND | 10.0 | 11.7 | ug/L | 117 | 3.1 | SW846 8260B |
| Methylene chloride | 0.13 | 10.0 | 9.02 | ug/L | 89 | | SW846 8260B |
| | 0.13 | 10.0 | 8.81 | ug/L | 87 | 2.4 | SW846 8260B |
| Carbon disulfide | ND | 10.0 | 9.04 | ug/L | 90 | | SW846 8260B |
| | ND | 10.0 | 8.95 | ug/L | 89 | 1.0 | SW846 8260B |
| 1,1-Dichloroethane | ND | 10.0 | 9.54 | ug/L | 95 | | SW846 8260B |
| | ND | 10.0 | 9.33 | ug/L | 93 | 2.3 | SW846 8260B |
| 2-Butanone | ND | 10.0 | 10.2 | ug/L | 102 | | SW846 8260B |
| | ND | 10.0 | 10.5 | ug/L | 105 | 2.8 | SW846 8260B |
| Chloroform | 0.32 | 10.0 | 9.87 | ug/L | 95 | | SW846 8260B |
| | 0.32 | 10.0 | 9.90 | ug/L | 96 | 0.31 | SW846 8260B |
| cis-1,2-Dichloroethene | ND | 10.0 | 9.80 | ug/L | 98 | | SW846 8260B |
| | ND | 10.0 | 10.0 | ug/L | 100 | 2.3 | SW846 8260B |
| Propionitrile | ND | 50.0 | 56.1 | ug/L | 112 | | SW846 8260B |
| | ND | 50.0 | 59.1 | ug/L | 118 | 5.2 | SW846 8260B |
| trans-1,2-Dichloroethene | ND | 10.0 | 9.24 | ug/L | 92 | | SW846 8260B |
| | ND | 10.0 | 9.30 | ug/L | 93 | 0.62 | SW846 8260B |
| 1,1,1-Trichloroethane | ND | 10.0 | 9.51 | ug/L | 95 | | SW846 8260B |
| | ND | 10.0 | 9.64 | ug/L | 96 | 1.4 | SW846 8260B |
| Carbon tetrachloride | ND | 10.0 | 9.83 | ug/L | 98 | | SW846 8260B |
| | ND | 10.0 | 10.0 | ug/L | 100 | 1.9 | SW846 8260B |
| 1,2-Dichloroethane | ND | 10.0 | 9.63 | ug/L | 96 | | SW846 8260B |
| | ND | 10.0 | 9.80 | ug/L | 98 | 1.7 | SW846 8260B |
| Benzene | ND | 10.0 | 9.56 | ug/L | 96 | | SW846 8260B |
| | ND | 10.0 | 9.60 | ug/L | 96 | 0.33 | SW846 8260B |
| Trichloroethene | 4.7 | 10.0 | 14.3 | ug/L | 95 | | SW846 8260B |
| | 4.7 | 10.0 | 14.0 | ug/L | 93 | 1.6 | SW846 8260B |
| 4-Methyl-2-pentanone | ND | 10.0 | 11.2 | ug/L | 112 | | SW846 8260B |
| | ND | 10.0 | 11.7 | ug/L | 117 | 3.8 | SW846 8260B |
| 1,1,2-Trichloroethane | ND | 10.0 | 10.6 | ug/L | 106 | | SW846 8260B |
| | ND | 10.0 | 10.1 | ug/L | 101 | 4.7 | SW846 8260B |

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# MATRIX SPIKE SAMPLE DATA REPORT

## GC/MS Volatiles

Client Lot #...: SL763 Work Order #...: K11PF1AD-MS Matrix.....: WATER
MS Lot-Sample #: F8J310138-001 K11PF1AE-MSD

| PARAMETER | SAMPLE AMOUNT | SPIKE AMT | MEASRD AMOUNT | UNITS | PERCNT RECVRY | RPD | METHOD |
|---|---|---|---|---|---|---|---|
| **Tetrachloroethene** | **ND** | **10.0** | **9.28** | **ug/L** | **93** | | **SW846 8260B** |
| | **ND** | **10.0** | **9.18** | **ug/L** | **92** | **1.1** | **SW846 8260B** |
| **Tetrahydrofuran** | **ND** | **50.0** | **46.6** | **ug/L** | **93** | | **SW846 8260B** |
| | **ND** | **50.0** | **52.4** | **ug/L** | **105** | **12** | **SW846 8260B** |
| **1,4-Dichlorobenzene** | **ND** | **10.0** | **8.97** | **ug/L** | **90** | | **SW846 8260B** |
| | **ND** | **10.0** | **8.86** | **ug/L** | **89** | **1.3** | **SW846 8260B** |
| **1-Butanol** | **ND** | **100** | **94.0** | **ug/L** | **94** | | **SW846 8260B** |
| | **ND** | **100** | **97.4** | **ug/L** | **97** | **3.5** | **SW846 8260B** |
| **Toluene** | **ND** | **10.0** | **9.58** | **ug/L** | **96** | | **SW846 8260B** |
| | **ND** | **10.0** | **9.35** | **ug/L** | **94** | **2.4** | **SW846 8260B** |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| Toluene-d8 | 103 | (76 - 115) |
| | 100 | (76 - 115) |
| Dibromofluoromethane | 98 | (81 - 123) |
| | 98 | (81 - 123) |
| 1,2-Dichloroethane-d4 | 98 | (70 - 130) |
| | 100 | (70 - 130) |
| 4-Bromofluorobenzene | 100 | (79 - 115) |
| | 103 | (79 - 115) |

**NOTE(S):**

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

Bold print denotes control parameters

# GC/MS SEMIVOLATILES

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1WXX9

GC/MS Semivolatiles

| | | | | | |
|---|---|---|---|---|---|
| **Lot-Sample #...:** | F8J230174-002 | **Work Order #...:** | K1FEN1A1 | **Matrix.....:** | WATER |
| **Date Sampled...:** | 10/21/08 | **Date Received..:** | 10/23/08 | | |
| **Prep Date.....:** | 10/24/08 | **Analysis Date..:** | 10/29/08 | | |
| **Prep Batch #...:** | 8298072 | | | | |
| **Dilution Factor:** | 1 | **Method.....:** | SW846 8270C | | |

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | MDL |
|---|---|---|---|---|
| 1,4-Dioxane | ND | 10 | ug/L | 2.0 |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| 2-Fluorophenol | 33 | (15 - 78 ) |
| Phenol-d5 | 21 | (15 - 63 ) |
| Nitrobenzene-d5 | 53 | (20 - 103) |
| 2-Fluorobiphenyl | 46 | (20 - 103) |
| 2,4,6-Tribromophenol | 57 | (20 - 110) |
| Terphenyl-d14 | 70 | (15 - 114) |

CH2M Hill Plateau Remediation DOE RL

B1WXX9

GC/MS Semivolatiles

**Lot-Sample #:** F8J230174-002 **Work Order #:** K1FEN1A1 **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

| PARAMETER | CAS # | ESTIMATED RESULT | | RETENTION TIME | UNITS |
|---|---|---|---|---|---|
| Unknown | | 10 | M | 3.6797 | ug/L |
| Unknown aldol condensate | | 59 | M | 4.1659 | ug/L |
| Unknown | | 4.6 | M | 4.8123 | ug/L |

**NOTE(S):**

M: Result was measured against nearest internal standard assuming a response factor of 1.

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1WXX9

GC/MS Semivolatiles

Lot-Sample #...: F8J230174-002 Work Order #...: K1FEN1A2 Matrix.....: WATER
Date Sampled...: 10/21/08 Date Received..: 10/23/08
Prep Date.....: 10/24/08 Analysis Date..: 10/29/08
Prep Batch #...: 8298072
Dilution Factor: 1 Method.....: SW846 8270C

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | MDL |
|---|---|---|---|---|
| bis(2-Ethylhexyl) phthalate | ND | 10 | ug/L | 1.0 |
| 1,4-Dichlorobenzene | ND | 10 | ug/L | 1.0 |
| 2,4-Dichlorophenol | ND | 10 | ug/L | 1.0 |
| 2-Methylphenol | ND | 10 | ug/L | 2.0 |
| Naphthalene | ND | 10 | ug/L | 1.0 |
| 2-Nitrophenol | ND | 10 | ug/L | 1.0 |
| Pentachlorophenol | ND | 50 | ug/L | 2.0 |
| Phenol | ND | 10 | ug/L | 4.0 |
| 2-Picoline | ND | 20 | ug/L | 1.0 |
| Tributyl phosphate | ND | 10 | ug/L | 1.5 |
| 3-Methylphenol & 4-Methylphenol | ND | 20 | ug/L | 1.0 |
| Benzothiazole | ND | 10 | ug/L | 1.0 |
| Tris(2-chloroethyl)phosphate | ND | 10 | ug/L | 1.0 |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| 2-Fluorophenol | 33 | (15 - 78 ) |
| Phenol-d5 | 21 | (15 - 63 ) |
| Nitrobenzene-d5 | 53 | (20 - 103) |
| 2-Fluorobiphenyl | 46 | (20 - 103) |
| 2,4,6-Tribromophenol | 57 | (20 - 110) |
| Terphenyl-d14 | 70 | (15 - 114) |

**CH2M Hill Plateau Remediation DOE RL**

**B1WXX9**

**GC/MS Semivolatiles**

**Lot-Sample #:** F8J230174-002 **Work Order #:** K1FEN1A2 **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

| PARAMETER | CAS # | ESTIMATED RESULT | | RETENTION TIME | UNITS |
|---|---|---|---|---|---|
| Unknown | | 10 | M | 3.6797 | ug/L |
| Unknown aldol condensate | | 59 | M | 4.1659 | ug/L |
| Unknown | | 4.6 | M | 4.8123 | ug/L |

**NOTE(S):**

M: Result was measured against nearest internal standard assuming a response factor of 1.

# METHOD BLANK REPORT

## GC/MS Semivolatiles

**Client Lot #...:** SL763 **Work Order #...:** K1HKX1AA **Matrix.....:** WATER
**MB Lot-Sample #:** F8J240000-072

**Prep Date.....:** 10/24/08
**Analysis Date..:** 10/29/08 **Prep Batch #...:** 8298072
**Dilution Factor:** 1

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | METHOD |
|---|---|---|---|---|
| 1,4-Dioxane | ND | 10 | ug/L | SW846 8270C |
| bis(2-Ethylhexyl) phthalate | ND | 10 | ug/L | SW846 8270C |
| 1,4-Dichlorobenzene | ND | 10 | ug/L | SW846 8270C |
| 2,4-Dichlorophenol | ND | 10 | ug/L | SW846 8270C |
| 2-Methylphenol | ND | 10 | ug/L | SW846 8270C |
| Naphthalene | ND | 10 | ug/L | SW846 8270C |
| 2-Nitrophenol | ND | 10 | ug/L | SW846 8270C |
| Pentachlorophenol | ND | 50 | ug/L | SW846 8270C |
| Phenol | ND | 10 | ug/L | SW846 8270C |
| 2-Picoline | ND | 20 | ug/L | SW846 8270C |
| Tributyl phosphate | ND | 10 | ug/L | SW846 8270C |
| 3-Methylphenol & 4-Methylphenol | ND | 20 | ug/L | SW846 8270C |
| Benzothiazole | ND | 10 | ug/L | SW846 8270C |
| Tris(2-chloroethyl)phosph | ND | 10 | ug/L | SW846 8270C |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| 2-Fluorophenol | 21 | (15 - 58) |
| Phenol-d5 | 14 | (10 - 39) |
| Nitrobenzene-d5 | 31 | (22 - 94) |
| 2-Fluorobiphenyl | 27 | (20 - 97) |
| 2,4,6-Tribromophenol | 28 | (23 - 102) |
| Terphenyl-d14 | 35 | (30 - 114) |

**NOTE(S):**

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

CH2M Hill Plateau Remediation DOE RL

Method Blank Report

GC/MS Semivolatiles

**Lot-Sample #:** F8J240000-072 B **Work Order #:** K1HKX1AA **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

| PARAMETER | CAS # | ESTIMATED RESULT | | RETENTION TIME | UNITS |
|---|---|---|---|---|---|
| Unknown | | 6.8 | M | 3.6841 | ug/L |
| Unknown aldol condensate | | 47 | M | 4.1702 | ug/L |

**NOTE(S):**

M: Result was measured against nearest internal standard assuming a response factor of 1.

# LABORATORY CONTROL SAMPLE DATA REPORT

## GC/MS Semivolatiles

Client Lot #...: SL763 Work Order #...: K1HKX1AC Matrix.....: WATER
LCS Lot-Sample#: F8J240000-072
Prep Date.....: 10/24/08 Analysis Date..: 10/29/08
Prep Batch #...: 8298072
Dilution Factor: 1

| PARAMETER | SPIKE AMOUNT | MEASURED AMOUNT | UNITS | PERCENT RECOVERY | METHOD |
|---|---|---|---|---|---|
| **Phenol** | **100** | **29.9** | **ug/L** | **30** | **SW846 8270C** |
| **2-Methylphenol** | **100** | **60.4** | **ug/L** | **60** | **SW846 8270C** |
| **2-Nitrophenol** | **100** | **69.5** | **ug/L** | **69** | **SW846 8270C** |
| **2,4-Dichlorophenol** | **100** | **68.2** | **ug/L** | **68** | **SW846 8270C** |
| **Naphthalene** | **100** | **50.4** | **ug/L** | **50** | **SW846 8270C** |
| **Pentachlorophenol** | **100** | **46.1** | **ug/L** | **46** | **SW846 8270C** |
| **bis(2-Ethylhexyl) phthalate** | **100** | **72.9** | **ug/L** | **73** | **SW846 8270C** |
| **3-Methylphenol & 4-Methylphenol** | **100** | **60.6** | **ug/L** | **61** | **SW846 8270C** |
| **1,4-Dichlorobenzene** | **100** | **43.9** | **ug/L** | **44** | **SW846 8270C** |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| 2-Fluorophenol | 47 | (15 - 58) |
| Phenol-d5 | 31 | (10 - 39) |
| Nitrobenzene-d5 | 69 | (22 - 94) |
| 2-Fluorobiphenyl | 57 | (20 - 97) |
| 2,4,6-Tribromophenol | 64 | (23 - 102) |
| Terphenyl-d14 | 74 | (30 - 114) |

**NOTE(S):**

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

Bold print denotes control parameters

# MATRIX SPIKE SAMPLE DATA REPORT

## GC/MS Semivolatiles

Client Lot #...: SL763 Work Order #...: K1FEN1A9-MS Matrix.....: WATER
MS Lot-Sample #: F8J230174-002 K1FEN1CA-MSD
Date Sampled...: 10/21/08 Date Received..: 10/23/08
Prep Date.....: 10/24/08 Analysis Date..: 10/29/08
Prep Batch #...: 8298072
Dilution Factor: 1

| PARAMETER | SAMPLE AMOUNT | SPIKE AMT | MEASRD AMOUNT | UNITS | PERCNT RECVRY | RPD | METHOD |
|---|---|---|---|---|---|---|---|
| **2-Methylphenol** | | **95.7** | **56.0** | **ug/L** | **59** | | **SW846 8270C** |
| | | **94.9** | **55.4** | **ug/L** | **58** | **1.2** | **SW846 8270C** |
| **3-Methylphenol &** 4-Methylphenol | | **95.7** | **56.0** | **ug/L** | **59** | | **SW846 8270C** |
| | | **94.9** | **56.1** | **ug/L** | **59** | **0.03** | **SW846 8270C** |
| **2-Nitrophenol** | | **95.7** | **64.2** | **ug/L** | **67** | | **SW846 8270C** |
| | | **94.9** | **65.3** | **ug/L** | **69** | **1.8** | **SW846 8270C** |
| **2,4-Dichlorophenol** | | **95.7** | **63.9** | **ug/L** | **67** | | **SW846 8270C** |
| | | **94.9** | **65.2** | **ug/L** | **69** | **2.0** | **SW846 8270C** |
| **Naphthalene** | | **95.7** | **44.1** | **ug/L** | **46** | | **SW846 8270C** |
| | | **94.9** | **48.1** | **ug/L** | **51** | **8.7** | **SW846 8270C** |
| **Pentachlorophenol** | | **95.7** | **48.8** | **ug/L** | **51** | | **SW846 8270C** |
| | | **94.9** | **49.3** | **ug/L** | **52** | **1.1** | **SW846 8270C** |
| **bis(2-Ethylhexyl)** phthalate | | **95.7** | **71.5** | **ug/L** | **75** | | **SW846 8270C** |
| | | **94.9** | **73.9** | **ug/L** | **78** | **3.3** | **SW846 8270C** |
| **1,4-Dichlorobenzene** | | **95.7** | **36.8** | **ug/L** | **38** | | **SW846 8270C** |
| | | **94.9** | **42.6** | **ug/L** | **45** | **15** | **SW846 8270C** |
| **Phenol** | | **95.7** | **26.7** | **ug/L** | **28** | | **SW846 8270C** |
| | | **94.9** | **26.4** | **ug/L** | **28** | **1.2** | **SW846 8270C** |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| 2-Fluorophenol | 44 | (15 - 78) |
| | 44 | (15 - 78) |
| Phenol-d5 | 28 | (15 - 63) |
| | 28 | (15 - 63) |
| Nitrobenzene-d5 | 68 | (20 - 103) |
| | 68 | (20 - 103) |
| 2-Fluorobiphenyl | 60 | (20 - 103) |
| | 57 | (20 - 103) |
| 2,4,6-Tribromophenol | 64 | (20 - 110) |
| | 68 | (20 - 110) |
| Terphenyl-d14 | 77 | (15 - 114) |
| | 79 | (15 - 114) |

**NOTE(S):**

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

Bold print denotes control parameters

# PESTICIDES

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1W210

GC Semivolatiles

Lot-Sample #...: F8J230173-001 Work Order #...: K1FDL1AC Matrix.....: WATER
Date Sampled...: 10/21/08 Date Received..: 10/23/08
Prep Date.....: 10/27/08 Analysis Date..: 11/04/08
Prep Batch #...: 8301113
Dilution Factor: 1 Method.....: SW846 8081A

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | MDL |
|---|---|---|---|---|
| Aldrin | ND | 0.050 | ug/L | 0.0047 |
| 4,4'-DDD | ND | 0.050 | ug/L | 0.0031 |
| 4,4'-DDE | ND | 0.050 | ug/L | 0.0059 |
| 4,4'-DDT | ND | 0.050 | ug/L | 0.0098 |
| Endosulfan I | ND | 0.050 | ug/L | 0.0031 |
| Endosulfan II | ND | 0.050 | ug/L | 0.0032 |
| gamma-BHC (Lindane) | ND | 0.050 | ug/L | 0.0029 |
| alpha-BHC | ND | 0.050 | ug/L | 0.0044 |
| beta-BHC | ND | 0.050 | ug/L | 0.0065 |
| Endrin | ND | 0.050 | ug/L | 0.0067 |
| delta-BHC | ND | 0.050 | ug/L | 0.0032 |
| Heptachlor | ND | 0.050 | ug/L | 0.0052 |
| Heptachlor epoxide | ND | 0.050 | ug/L | 0.0041 |
| Methoxychlor | ND | 0.10 | ug/L | 0.0081 |
| Chlordane (technical) | ND | 0.50 | ug/L | 0.032 |
| Dieldrin | ND | 0.050 | ug/L | 0.0036 |
| Endosulfan sulfate | ND | 0.050 | ug/L | 0.0082 |
| Endrin aldehyde | ND | 0.050 | ug/L | 0.0027 |
| Toxaphene | ND | 2.0 | ug/L | 0.19 |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| Tetrachloro-m-xylene | 81 | (70 - 130) |
| Decachlorobiphenyl | 106 | (70 - 130) |

# METHOD BLANK REPORT

## GC Semivolatiles

Client Lot #...: SL763
MB Lot-Sample #: F8J270000-113
Work Order #...: K1NCG1AA
Matrix.....: WATER
Prep Date.....: 10/27/08
Analysis Date..: 11/04/08
Prep Batch #...: 8301113
Dilution Factor: 1

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | METHOD |
|---|---|---|---|---|
| Aldrin | ND | 0.050 | ug/L | SW846 8081A |
| 4,4'-DDD | ND | 0.050 | ug/L | SW846 8081A |
| 4,4'-DDE | ND | 0.050 | ug/L | SW846 8081A |
| 4,4'-DDT | ND | 0.050 | ug/L | SW846 8081A |
| Endosulfan I | ND | 0.050 | ug/L | SW846 8081A |
| Endosulfan II | ND | 0.050 | ug/L | SW846 8081A |
| gamma-BHC (Lindane) | ND | 0.050 | ug/L | SW846 8081A |
| alpha-BHC | ND | 0.050 | ug/L | SW846 8081A |
| beta-BHC | ND | 0.050 | ug/L | SW846 8081A |
| Endrin | ND | 0.050 | ug/L | SW846 8081A |
| delta-BHC | ND | 0.050 | ug/L | SW846 8081A |
| Heptachlor | ND | 0.050 | ug/L | SW846 8081A |
| Heptachlor epoxide | ND | 0.050 | ug/L | SW846 8081A |
| Methoxychlor | ND | 0.10 | ug/L | SW846 8081A |
| Chlordane (technical) | ND | 0.50 | ug/L | SW846 8081A |
| Dieldrin | ND | 0.050 | ug/L | SW846 8081A |
| Endosulfan sulfate | ND | 0.050 | ug/L | SW846 8081A |
| Endrin aldehyde | ND | 0.050 | ug/L | SW846 8081A |
| Toxaphene | ND | 2.0 | ug/L | SW846 8081A |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| Tetrachloro-m-xylene | 99 | (70 - 130) |
| Decachlorobiphenyl | 102 | (70 - 130) |

**NOTE(S):**

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

# LABORATORY CONTROL SAMPLE DATA REPORT

## GC Semivolatiles

Client Lot #...: SL763 Work Order #...: K1NCG1AC Matrix.....: WATER
LCS Lot-Sample#: F8J270000-113
Prep Date.....: 10/27/08 Analysis Date..: 11/04/08
Prep Batch #...: 8301113
Dilution Factor: 1

| PARAMETER | SPIKE AMOUNT | MEASURED AMOUNT | UNITS | PERCENT RECOVERY | METHOD |
|---|---|---|---|---|---|
| **Aldrin** | **0.500** | **0.506** | **ug/L** | **101** | **SW846 8081A** |
| **4,4'-DDT** | **0.500** | **0.441** | **ug/L** | **88** | **SW846 8081A** |
| **4,4'-DDD** | **0.500** | **0.497** | **ug/L** | **99** | **SW846 8081A** |
| **4,4'-DDE** | **0.500** | **0.502** | **ug/L** | **100** | **SW846 8081A** |
| **Endosulfan I** | **0.500** | **0.480** | **ug/L** | **96** | **SW846 8081A** |
| **Endosulfan II** | **0.500** | **0.466** | **ug/L** | **93** | **SW846 8081A** |
| **gamma-BHC (Lindane)** | **0.500** | **0.502** | **ug/L** | **100** | **SW846 8081A** |
| **alpha-BHC** | **0.500** | **0.517** | **ug/L** | **103** | **SW846 8081A** |
| **Endrin** | **0.500** | **0.505** | **ug/L** | **101** | **SW846 8081A** |
| **beta-BHC** | **0.500** | **0.492** | **ug/L** | **98** | **SW846 8081A** |
| **Heptachlor** | **0.500** | **0.485** | **ug/L** | **97** | **SW846 8081A** |
| **delta-BHC** | **0.500** | **0.521** | **ug/L** | **104** | **SW846 8081A** |
| **Heptachlor epoxide** | **0.500** | **0.496** | **ug/L** | **99** | **SW846 8081A** |
| **Methoxychlor** | **0.500** | **0.497** | **ug/L** | **99** | **SW846 8081A** |
| **Dieldrin** | **0.500** | **0.488** | **ug/L** | **98** | **SW846 8081A** |
| **Endosulfan sulfate** | **0.500** | **0.476** | **ug/L** | **95** | **SW846 8081A** |
| **Endrin aldehyde** | **0.500** | **0.420** | **ug/L** | **84** | **SW846 8081A** |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| Tetrachloro-m-xylene | 101 | (70 - 130) |
| Decachlorobiphenyl | 98 | (70 - 130) |

**NOTE(S):**

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

Bold print denotes control parameters

# MATRIX SPIKE SAMPLE DATA REPORT

## GC Semivolatiles

Client Lot #...: SL763 Work Order #...: K1FDL1AD-MS Matrix.....: WATER
MS Lot-Sample #: F8J230173-001 K1FDL1AE-MSD
Date Sampled...: 10/21/08 Date Received..: 10/23/08
Prep Date.....: 10/27/08 Analysis Date..: 11/04/08
Prep Batch #...: 8301113
Dilution Factor: 1

| PARAMETER | SAMPLE AMOUNT | SPIKE AMT | MEASRD AMOUNT | UNITS | PERCNT RECVRY | RPD | METHOD |
|---|---|---|---|---|---|---|---|
| Aldrin | ND | 0.483 | 0.478 | ug/L | 99 | | SW846 8081A |
| | ND | 0.476 | 0.544 | ug/L | 114 | 13 | SW846 8081A |
| 4,4'-DDT | ND | 0.483 | 0.419 | ug/L | 87 | | SW846 8081A |
| | ND | 0.476 | 0.495 | ug/L | 104 | 17 | SW846 8081A |
| 4,4'-DDD | ND | 0.483 | 0.501 | ug/L | 104 | | SW846 8081A |
| | ND | 0.476 | 0.563 | ug/L | 118 | 12 | SW846 8081A |
| 4,4'-DDE | ND | 0.483 | 0.485 | ug/L | 100 | | SW846 8081A |
| | ND | 0.476 | 0.544 | ug/L | 114 | 11 | SW846 8081A |
| Endosulfan I | ND | 0.483 | 0.475 | ug/L | 98 | | SW846 8081A |
| | ND | 0.476 | 0.532 | ug/L | 112 | 11 | SW846 8081A |
| Endosulfan II | ND | 0.483 | 0.483 | ug/L | 100 | | SW846 8081A |
| | ND | 0.476 | 0.525 | ug/L | 110 | 8.3 | SW846 8081A |
| gamma-BHC (Lindane) | ND | 0.483 | 0.499 | ug/L | 103 | | SW846 8081A |
| | ND | 0.476 | 0.551 | ug/L | 116 | 9.9 | SW846 8081A |
| alpha-BHC | ND | 0.483 | 0.515 | ug/L | 107 | | SW846 8081A |
| | ND | 0.476 | 0.568 | ug/L | 119 | 9.8 | SW846 8081A |
| Endrin | ND | 0.483 | 0.544 | ug/L | 113 | | SW846 8081A |
| | ND | 0.476 | 0.574 | ug/L | 121 | 5.4 | SW846 8081A |
| beta-BHC | ND | 0.483 | 0.487 | ug/L | 101 | | SW846 8081A |
| | ND | 0.476 | 0.545 | ug/L | 114 | 11 | SW846 8081A |
| Heptachlor | ND | 0.483 | 0.476 | ug/L | 99 | | SW846 8081A |
| | ND | 0.476 | 0.548 | ug/L | 115 | 14 | SW846 8081A |
| delta-BHC | ND | 0.483 | 0.518 | ug/L | 107 | | SW846 8081A |
| | ND | 0.476 | 0.581 | ug/L | 122 | 11 | SW846 8081A |
| Heptachlor epoxide | ND | 0.483 | 0.495 | ug/L | 102 | | SW846 8081A |
| | ND | 0.476 | 0.547 | ug/L | 115 | 10 | SW846 8081A |
| Methoxychlor | ND | 0.483 | 0.466 | ug/L | 96 | | SW846 8081A |
| | ND | 0.476 | 0.507 | ug/L | 107 | 8.4 | SW846 8081A |
| Dieldrin | ND | 0.483 | 0.495 | ug/L | 102 | | SW846 8081A |
| | ND | 0.476 | 0.545 | ug/L | 114 | 9.6 | SW846 8081A |
| Endosulfan sulfate | ND | 0.483 | 0.488 | ug/L | 101 | | SW846 8081A |
| | ND | 0.476 | 0.537 | ug/L | 113 | 9.6 | SW846 8081A |
| Endrin aldehyde | ND | 0.483 | 0.402 | ug/L | 83 | | SW846 8081A |
| | ND | 0.476 | 0.435 | ug/L | 91 | 7.9 | SW846 8081A |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| Tetrachloro-m-xylene | 95 | (70 - 130) |
| | 107 | (70 - 130) |

(Continued on next page)

# MATRIX SPIKE SAMPLE DATA REPORT

## GC Semivolatiles

**Client Lot #...:** SL763 **Work Order #...:** K1FDL1AD-MS **Matrix.....:** WATER
**MS Lot-Sample #:** F8J230173-001 K1FDL1AE-MSD

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| Decachlorobiphenyl | 100 | (70 - 130) |
| | 111 | (70 - 130) |

**NOTE(S):**

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

Bold print denotes control parameters

# METALS

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1WXX8

DISSOLVED Metals

Lot-Sample #...: F8J230174-001 Matrix.....: WATER
Date Sampled...: 10/21/08 Date Received..: 10/23/08

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | METHOD | PREPARATION-ANALYSIS DATE | WORK ORDER # |
|---|---|---|---|---|---|---|
| **Prep Batch #...: 8315307** | | | | | | |
| Lithium | ND | 50.0 | ug/L | SW846 6010B | 11/13-11/14/08 | K1FEF1AA |
| | | Dilution Factor: 1 | | MDL.....: 9.6 | | |
| Aluminum | ND | 200 | ug/L | SW846 6010B | 11/13-11/14/08 | K1FEF1AC |
| | | Dilution Factor: 1 | | MDL.....: 79.9 | | |
| Antimony | ND | 60.0 | ug/L | SW846 6010B | 11/13-11/14/08 | K1FEF1AD |
| | | Dilution Factor: 1 | | MDL.....: 4.0 | | |
| **Barium** | **29.1 B** | **200** | **ug/L** | **SW846 6010B** | **11/13-11/14/08** | **K1FEF1AE** |
| | | Dilution Factor: 1 | | MDL.....: 0.85 | | |
| Beryllium | ND | 5.0 | ug/L | SW846 6010B | 11/13-11/14/08 | K1FEF1AF |
| | | Dilution Factor: 1 | | MDL.....: 0.50 | | |
| Cadmium | ND | 5.0 | ug/L | SW846 6010B | 11/13-11/14/08 | K1FEF1AG |
| | | Dilution Factor: 1 | | MDL.....: 0.45 | | |
| **Calcium** | **27600 C,D** | **25000** | **ug/L** | **SW846 6010B** | **11/13-11/14/08** | **K1FEF1AH** |
| | | Dilution Factor: 5 | | MDL.....: 93.0 | | |
| **Chromium** | **74.5** | **10.0** | **ug/L** | **SW846 6010B** | **11/13-11/14/08** | **K1FEF1AJ** |
| | | Dilution Factor: 1 | | MDL.....: 3.1 | | |
| Cobalt | ND | 50.0 | ug/L | SW846 6010B | 11/13-11/14/08 | K1FEF1AK |
| | | Dilution Factor: 1 | | MDL.....: 4.0 | | |
| Copper | ND | 25.0 | ug/L | SW846 6010B | 11/13-11/14/08 | K1FEF1AL |
| | | Dilution Factor: 1 | | MDL.....: 4.6 | | |
| Iron | ND | 100 | ug/L | SW846 6010B | 11/13-11/14/08 | K1FEF1AM |
| | | Dilution Factor: 1 | | MDL.....: 16.0 | | |
| **Magnesium** | **9470** | **5000** | **ug/L** | **SW846 6010B** | **11/13-11/14/08** | **K1FEF1AN** |
| | | Dilution Factor: 1 | | MDL.....: 110 | | |
| Manganese | ND | 15.0 | ug/L | SW846 6010B | 11/13-11/14/08 | K1FEF1AP |
| | | Dilution Factor: 1 | | MDL.....: 0.96 | | |
| Nickel | ND | 40.0 | ug/L | SW846 6010B | 11/13-11/14/08 | K1FEF1AQ |
| | | Dilution Factor: 1 | | MDL.....: 13.3 | | |

(Continued on next page)

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1WXX8

DISSOLVED Metals

Lot-Sample #...: F8J230174-001 Matrix.....: WATER

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | METHOD | PREPARATION-ANALYSIS DATE | WORK ORDER # |
|---|---|---|---|---|---|---|
| Potassium | 2950 B | 5000 | ug/L | SW846 6010B | 11/13-11/14/08 | K1FEF1AR |
| | | Dilution Factor: 1 | | MDL.....: 1650 | | |
| Silver | ND | 10.0 | ug/L | SW846 6010B | 11/13-11/14/08 | K1FEF1AT |
| | | Dilution Factor: 1 | | MDL.....: 6.0 | | |
| Sodium | 27800 | 5000 | ug/L | SW846 6010B | 11/13-11/14/08 | K1FEF1AU |
| | | Dilution Factor: 1 | | MDL.....: 134 | | |
| Strontium | 115 B,C,D | 250 | ug/L | SW846 6010B | 11/13-11/14/08 | K1FEF1AV |
| | | Dilution Factor: 5 | | MDL.....: 2.7 | | |
| Vanadium | 35.0 B | 50.0 | ug/L | SW846 6010B | 11/13-11/14/08 | K1FEF1AW |
| | | Dilution Factor: 1 | | MDL.....: 4.1 | | |
| Zinc | 5.4 B | 20.0 | ug/L | SW846 6010B | 11/13-11/14/08 | K1FEF1AX |
| | | Dilution Factor: 1 | | MDL.....: 5.2 | | |

NOTE(S):

B Estimated result. Result is less than RL.

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

D Result was obtained from the analysis of a dilution.

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1WXX9

TOTAL Metals

Lot-Sample #...: F8J230174-002 Matrix.....: WATER
Date Sampled...: 10/21/08 Date Received..: 10/23/08

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | METHOD | PREPARATION-ANALYSIS DATE | WORK ORDER # |
|---|---|---|---|---|---|---|
| Prep Batch #...: 8315307 | | | | | | |
| Lithium | ND | 50.0 | ug/L | SW846 6010B | 11/13-11/14/08 | K1FEN1AC |
| | | Dilution Factor: 1 | | MDL.....: 9.6 | | |
| Aluminum | ND | 200 | ug/L | SW846 6010B | 11/13-11/14/08 | K1FEN1AD |
| | | Dilution Factor: 1 | | MDL.....: 79.9 | | |
| Antimony | ND | 60.0 | ug/L | SW846 6010B | 11/13-11/14/08 | K1FEN1AE |
| | | Dilution Factor: 1 | | MDL.....: 4.0 | | |
| **Barium** | **28.2 B** | **200** | **ug/L** | **SW846 6010B** | **11/13-11/14/08** | **K1FEN1AF** |
| | | Dilution Factor: 1 | | MDL.....: 0.85 | | |
| Beryllium | ND | 5.0 | ug/L | SW846 6010B | 11/13-11/14/08 | K1FEN1AG |
| | | Dilution Factor: 1 | | MDL.....: 0.50 | | |
| Cadmium | ND | 5.0 | ug/L | SW846 6010B | 11/13-11/14/08 | K1FEN1AH |
| | | Dilution Factor: 1 | | MDL.....: 0.45 | | |
| **Calcium** | **27000 C,D** | **25000** | **ug/L** | **SW846 6010B** | **11/13-11/14/08** | **K1FEN1AJ** |
| | | Dilution Factor: 5 | | MDL.....: 93.0 | | |
| **Chromium** | **72.3** | **10.0** | **ug/L** | **SW846 6010B** | **11/13-11/14/08** | **K1FEN1AK** |
| | | Dilution Factor: 1 | | MDL.....: 3.1 | | |
| Cobalt | ND | 50.0 | ug/L | SW846 6010B | 11/13-11/14/08 | K1FEN1AL |
| | | Dilution Factor: 1 | | MDL.....: 4.0 | | |
| Copper | ND | 25.0 | ug/L | SW846 6010B | 11/13-11/14/08 | K1FEN1AM |
| | | Dilution Factor: 1 | | MDL.....: 4.6 | | |
| **Iron** | **33.8 B** | **100** | **ug/L** | **SW846 6010B** | **11/13-11/14/08** | **K1FEN1AN** |
| | | Dilution Factor: 1 | | MDL.....: 16.0 | | |
| **Magnesium** | **9140** | **5000** | **ug/L** | **SW846 6010B** | **11/13-11/14/08** | **K1FEN1AP** |
| | | Dilution Factor: 1 | | MDL.....: 110 | | |
| **Manganese** | **1.2 B** | **15.0** | **ug/L** | **SW846 6010B** | **11/13-11/14/08** | **K1FEN1AQ** |
| | | Dilution Factor: 1 | | MDL.....: 0.96 | | |
| Nickel | ND | 40.0 | ug/L | SW846 6010B | 11/13-11/14/08 | K1FEN1AR |
| | | Dilution Factor: 1 | | MDL.....: 13.3 | | |

(Continued on next page)

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1WXX9

TOTAL Metals

Lot-Sample #...: F8J230174-002 Matrix.....: WATER

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | METHOD | PREPARATION-ANALYSIS DATE | WORK ORDER # |
|---|---|---|---|---|---|---|
| Potassium | 4060 B | 5000 | ug/L | SW846 6010B | 11/13-11/14/08 | K1FEN1AT |
| | | Dilution Factor: 1 | | MDL.....: 1650 | | |
| Silver | ND | 10.0 | ug/L | SW846 6010B | 11/13-11/14/08 | K1FEN1AU |
| | | Dilution Factor: 1 | | MDL.....: 6.0 | | |
| Sodium | 27100 | 5000 | ug/L | SW846 6010B | 11/13-11/14/08 | K1FEN1AV |
| | | Dilution Factor: 1 | | MDL.....: 134 | | |
| Strontium | 111 B,C,D | 250 | ug/L | SW846 6010B | 11/13-11/14/08 | K1FEN1AW |
| | | Dilution Factor: 5 | | MDL.....: 2.7 | | |
| Vanadium | 33.7 B | 50.0 | ug/L | SW846 6010B | 11/13-11/14/08 | K1FEN1AX |
| | | Dilution Factor: 1 | | MDL.....: 4.1 | | |
| Zinc | 9.5 B | 20.0 | ug/L | SW846 6010B | 11/13-11/14/08 | K1FEN1A0 |
| | | Dilution Factor: 1 | | MDL.....: 5.2 | | |

NOTE(S):

B Estimated result. Result is less than RL.

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

D Result was obtained from the analysis of a dilution.

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: SL763 Matrix.....: WATER

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | METHOD | PREPARATION-ANALYSIS DATE | WORK ORDER # |
|---|---|---|---|---|---|---|
| **MB Lot-Sample #:** F8K100000-307 **Prep Batch #...:** 8315307 | | | | | | |
| Lithium | ND | 50.0 | ug/L | SW846 6010B | 11/13-11/14/08 | K2LAD1AA |
| | | Dilution Factor: 1 | | | | |
| Aluminum | ND | 200 | ug/L | SW846 6010B | 11/13-11/14/08 | K2LAD1AC |
| | | Dilution Factor: 1 | | | | |
| Antimony | ND | 60.0 | ug/L | SW846 6010B | 11/13-11/14/08 | K2LAD1AD |
| | | Dilution Factor: 1 | | | | |
| Barium | ND | 200 | ug/L | SW846 6010B | 11/13-11/14/08 | K2LAD1AE |
| | | Dilution Factor: 1 | | | | |
| Beryllium | ND | 5.0 | ug/L | SW846 6010B | 11/13-11/14/08 | K2LAD1AF |
| | | Dilution Factor: 1 | | | | |
| **Cadmium** | **0.65 B** | **5.0** | **ug/L** | **SW846 6010B** | **11/13-11/14/08** | **K2LAD1AG** |
| | | Dilution Factor: 1 | | | | |
| **Calcium** | **23.7 B** | **5000** | **ug/L** | **SW846 6010B** | **11/13-11/14/08** | **K2LAD1AH** |
| | | Dilution Factor: 1 | | | | |
| Chromium | ND | 10.0 | ug/L | SW846 6010B | 11/13-11/14/08 | K2LAD1AJ |
| | | Dilution Factor: 1 | | | | |
| Cobalt | ND | 50.0 | ug/L | SW846 6010B | 11/13-11/14/08 | K2LAD1AK |
| | | Dilution Factor: 1 | | | | |
| Copper | ND | 25.0 | ug/L | SW846 6010B | 11/13-11/14/08 | K2LAD1AL |
| | | Dilution Factor: 1 | | | | |
| Iron | ND | 100 | ug/L | SW846 6010B | 11/13-11/14/08 | K2LAD1AM |
| | | Dilution Factor: 1 | | | | |
| Magnesium | ND | 5000 | ug/L | SW846 6010B | 11/13-11/14/08 | K2LAD1AN |
| | | Dilution Factor: 1 | | | | |
| Manganese | ND | 15.0 | ug/L | SW846 6010B | 11/13-11/14/08 | K2LAD1AP |
| | | Dilution Factor: 1 | | | | |
| Nickel | ND | 40.0 | ug/L | SW846 6010B | 11/13-11/14/08 | K2LAD1AQ |
| | | Dilution Factor: 1 | | | | |
| Potassium | ND | 5000 | ug/L | SW846 6010B | 11/13-11/14/08 | K2LAD1AR |
| | | Dilution Factor: 1 | | | | |

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## METHOD BLANK REPORT

### TOTAL Metals

**Client Lot #...:** SL763 **Matrix.....:** WATER

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | METHOD | PREPARATION-ANALYSIS DATE | WORK ORDER # |
|---|---|---|---|---|---|---|
| Silver | ND | 10.0 | ug/L | SW846 6010B | 11/13-11/14/08 | K2LAD1AT |
| | | Dilution Factor: 1 | | | | |
| Sodium | ND | 5000 | ug/L | SW846 6010B | 11/13-11/14/08 | K2LAD1AU |
| | | Dilution Factor: 1 | | | | |
| **Strontium** | **0.69 B** | **50.0** | **ug/L** | **SW846 6010B** | **11/13-11/14/08** | **K2LAD1AV** |
| | | Dilution Factor: 1 | | | | |
| Vanadium | ND | 50.0 | ug/L | SW846 6010B | 11/13-11/14/08 | K2LAD1AW |
| | | Dilution Factor: 1 | | | | |
| Zinc | ND | 20.0 | ug/L | SW846 6010B | 11/13-11/14/08 | K2LAD1AX |
| | | Dilution Factor: 1 | | | | |

**NOTE(S):**

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

B Estimated result. Result is less than RL.

METHOD BLANK REPORT

DISSOLVED Metals

Client Lot #...: SL763 Matrix.....: WATER

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | METHOD | PREPARATION-ANALYSIS DATE | WORK ORDER # |
|---|---|---|---|---|---|---|
| **MB Lot-Sample #: F8K100000-307 Prep Batch #...: 8315307** | | | | | | |
| Lithium | ND | 50.0 | ug/L | SW846 6010B | 11/13-11/14/08 | K2LAD1CM |
| | | Dilution Factor: 1 | | | | |
| Aluminum | ND | 200 | ug/L | SW846 6010B | 11/13-11/14/08 | K2LAD1CN |
| | | Dilution Factor: 1 | | | | |
| Antimony | ND | 60.0 | ug/L | SW846 6010B | 11/13-11/14/08 | K2LAD1CP |
| | | Dilution Factor: 1 | | | | |
| Barium | ND | 200 | ug/L | SW846 6010B | 11/13-11/14/08 | K2LAD1CQ |
| | | Dilution Factor: 1 | | | | |
| Beryllium | ND | 5.0 | ug/L | SW846 6010B | 11/13-11/14/08 | K2LAD1CR |
| | | Dilution Factor: 1 | | | | |
| **Cadmium** | **0.65 B** | **5.0** | **ug/L** | **SW846 6010B** | **11/13-11/14/08** | **K2LAD1CT** |
| | | Dilution Factor: 1 | | | | |
| **Calcium** | **23.7 B** | **5000** | **ug/L** | **SW846 6010B** | **11/13-11/14/08** | **K2LAD1CU** |
| | | Dilution Factor: 1 | | | | |
| Chromium | ND | 10.0 | ug/L | SW846 6010B | 11/13-11/14/08 | K2LAD1CV |
| | | Dilution Factor: 1 | | | | |
| Cobalt | ND | 50.0 | ug/L | SW846 6010B | 11/13-11/14/08 | K2LAD1CW |
| | | Dilution Factor: 1 | | | | |
| Copper | ND | 25.0 | ug/L | SW846 6010B | 11/13-11/14/08 | K2LAD1CX |
| | | Dilution Factor: 1 | | | | |
| Iron | ND | 100 | ug/L | SW846 6010B | 11/13-11/14/08 | K2LAD1C0 |
| | | Dilution Factor: 1 | | | | |
| Magnesium | ND | 5000 | ug/L | SW846 6010B | 11/13-11/14/08 | K2LAD1C1 |
| | | Dilution Factor: 1 | | | | |
| Manganese | ND | 15.0 | ug/L | SW846 6010B | 11/13-11/14/08 | K2LAD1C2 |
| | | Dilution Factor: 1 | | | | |
| Nickel | ND | 40.0 | ug/L | SW846 6010B | 11/13-11/14/08 | K2LAD1C3 |
| | | Dilution Factor: 1 | | | | |
| Potassium | ND | 5000 | ug/L | SW846 6010B | 11/13-11/14/08 | K2LAD1C4 |
| | | Dilution Factor: 1 | | | | |

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## METHOD BLANK REPORT

### DISSOLVED Metals

Client Lot #...: SL763 Matrix.....: WATER

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | METHOD | PREPARATION-ANALYSIS DATE | WORK ORDER # |
|---|---|---|---|---|---|---|
| Silver | ND | 10.0 | ug/L | SW846 6010B | 11/13-11/14/08 | K2LAD1C5 |
| | | Dilution Factor: 1 | | | | |
| Sodium | ND | 5000 | ug/L | SW846 6010B | 11/13-11/14/08 | K2LAD1C6 |
| | | Dilution Factor: 1 | | | | |
| Strontium | 0.69 B | 50.0 | ug/L | SW846 6010B | 11/13-11/14/08 | K2LAD1C7 |
| | | Dilution Factor: 1 | | | | |
| Vanadium | ND | 50.0 | ug/L | SW846 6010B | 11/13-11/14/08 | K2LAD1C8 |
| | | Dilution Factor: 1 | | | | |
| Zinc | ND | 20.0 | ug/L | SW846 6010B | 11/13-11/14/08 | K2LAD1C9 |
| | | Dilution Factor: 1 | | | | |

NOTE(S):

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

B Estimated result. Result is less than RL.

## LABORATORY CONTROL SAMPLE DATA REPORT

### TOTAL Metals

**Client Lot #...:** SL763 **Matrix.....:** WATER

| PARAMETER | SPIKE AMOUNT | MEASURED AMOUNT | UNITS | PERCNT RECVRY | METHOD | PREPARATION-ANALYSIS DATE | WORK ORDER # |
|---|---|---|---|---|---|---|---|
| **LCS Lot-Sample#:** F8K100000-307 **Prep Batch #...:** 8315307 | | | | | | | |
| Lithium | 1000 | 1050 | ug/L | 105 | SW846 6010B | 11/13-11/14/08 | K2LAD1A0 |
| | | | Dilution Factor: 1 | | | | |
| Aluminum | 500 | 510 | ug/L | 102 | SW846 6010B | 11/13-11/14/08 | K2LAD1A1 |
| | | | Dilution Factor: 1 | | | | |
| Antimony | 500 | 503 | ug/L | 101 | SW846 6010B | 11/13-11/14/08 | K2LAD1A2 |
| | | | Dilution Factor: 1 | | | | |
| Barium | 500 | 528 | ug/L | 106 | SW846 6010B | 11/13-11/14/08 | K2LAD1A3 |
| | | | Dilution Factor: 1 | | | | |
| Beryllium | 500 | 568 | ug/L | 114 | SW846 6010B | 11/13-11/14/08 | K2LAD1A4 |
| | | | Dilution Factor: 1 | | | | |
| Cadmium | 500 | 546 | ug/L | 109 | SW846 6010B | 11/13-11/14/08 | K2LAD1A5 |
| | | | Dilution Factor: 1 | | | | |
| Calcium | 10000 | 10300 | ug/L | 103 | SW846 6010B | 11/13-11/14/08 | K2LAD1A6 |
| | | | Dilution Factor: 1 | | | | |
| Chromium | 500 | 518 | ug/L | 104 | SW846 6010B | 11/13-11/14/08 | K2LAD1A7 |
| | | | Dilution Factor: 1 | | | | |
| Cobalt | 500 | 519 | ug/L | 104 | SW846 6010B | 11/13-11/14/08 | K2LAD1A8 |
| | | | Dilution Factor: 1 | | | | |
| Copper | 500 | 501 | ug/L | 100 | SW846 6010B | 11/13-11/14/08 | K2LAD1A9 |
| | | | Dilution Factor: 1 | | | | |
| Iron | 500 | 583 | ug/L | 117 | SW846 6010B | 11/13-11/14/08 | K2LAD1CA |
| | | | Dilution Factor: 1 | | | | |
| Magnesium | 10000 | 10500 | ug/L | 105 | SW846 6010B | 11/13-11/14/08 | K2LAD1CC |
| | | | Dilution Factor: 1 | | | | |
| Manganese | 500 | 528 | ug/L | 106 | SW846 6010B | 11/13-11/14/08 | K2LAD1CD |
| | | | Dilution Factor: 1 | | | | |
| Nickel | 500 | 528 | ug/L | 106 | SW846 6010B | 11/13-11/14/08 | K2LAD1CE |
| | | | Dilution Factor: 1 | | | | |

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## LABORATORY CONTROL SAMPLE DATA REPORT

### TOTAL Metals

Client Lot #...: SL763 Matrix.....: WATER

| PARAMETER | SPIKE AMOUNT | MEASURED AMOUNT | UNITS | PERCNT RECVRY | METHOD | PREPARATION-ANALYSIS DATE | WORK ORDER # |
|---|---|---|---|---|---|---|---|
| Potassium | 10000 | 8920 | ug/L | 89 | SW846 6010B | 11/13-11/14/08 | K2LAD1CF |
| | | | Dilution Factor: 1 | | | | |
| Silver | 125 | 127 | ug/L | 102 | SW846 6010B | 11/13-11/14/08 | K2LAD1CG |
| | | | Dilution Factor: 1 | | | | |
| Sodium | 10000 | 10600 | ug/L | 106 | SW846 6010B | 11/13-11/14/08 | K2LAD1CH |
| | | | Dilution Factor: 1 | | | | |
| Strontium | 500 | 556 | ug/L | 111 | SW846 6010B | 11/13-11/14/08 | K2LAD1CJ |
| | | | Dilution Factor: 1 | | | | |
| Vanadium | 500 | 523 | ug/L | 105 | SW846 6010B | 11/13-11/14/08 | K2LAD1CK |
| | | | Dilution Factor: 1 | | | | |
| Zinc | 500 | 589 | ug/L | 118 | SW846 6010B | 11/13-11/14/08 | K2LAD1CL |
| | | | Dilution Factor: 1 | | | | |

**NOTE(S):**

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

## LABORATORY CONTROL SAMPLE DATA REPORT

### DISSOLVED Metals

Client Lot #...: SL763 Matrix.....: WATER

| PARAMETER | SPIKE AMOUNT | MEASURED AMOUNT | UNITS | PERCNT RECVRY | METHOD | PREPARATION-ANALYSIS DATE | WORK ORDER # |
|---|---|---|---|---|---|---|---|
| **LCS Lot-Sample#: F8K100000-307 Prep Batch #...: 8315307** | | | | | | | |
| Lithium | 1000 | 1050 | ug/L | 105 | SW846 6010B | 11/13-11/14/08 | K2LAD1DA |
| | | | Dilution Factor: 1 | | | | |
| Aluminum | 500 | 510 | ug/L | 102 | SW846 6010B | 11/13-11/14/08 | K2LAD1DC |
| | | | Dilution Factor: 1 | | | | |
| Antimony | 500 | 503 | ug/L | 101 | SW846 6010B | 11/13-11/14/08 | K2LAD1DD |
| | | | Dilution Factor: 1 | | | | |
| Barium | 500 | 528 | ug/L | 106 | SW846 6010B | 11/13-11/14/08 | K2LAD1DE |
| | | | Dilution Factor: 1 | | | | |
| Beryllium | 500 | 568 | ug/L | 114 | SW846 6010B | 11/13-11/14/08 | K2LAD1DF |
| | | | Dilution Factor: 1 | | | | |
| Cadmium | 500 | 546 | ug/L | 109 | SW846 6010B | 11/13-11/14/08 | K2LAD1DG |
| | | | Dilution Factor: 1 | | | | |
| Calcium | 10000 | 10300 | ug/L | 103 | SW846 6010B | 11/13-11/14/08 | K2LAD1DH |
| | | | Dilution Factor: 1 | | | | |
| Chromium | 500 | 518 | ug/L | 104 | SW846 6010B | 11/13-11/14/08 | K2LAD1DJ |
| | | | Dilution Factor: 1 | | | | |
| Cobalt | 500 | 519 | ug/L | 104 | SW846 6010B | 11/13-11/14/08 | K2LAD1DK |
| | | | Dilution Factor: 1 | | | | |
| Copper | 500 | 501 | ug/L | 100 | SW846 6010B | 11/13-11/14/08 | K2LAD1DL |
| | | | Dilution Factor: 1 | | | | |
| Iron | 500 | 583 | ug/L | 117 | SW846 6010B | 11/13-11/14/08 | K2LAD1DM |
| | | | Dilution Factor: 1 | | | | |
| Magnesium | 10000 | 10500 | ug/L | 105 | SW846 6010B | 11/13-11/14/08 | K2LAD1DN |
| | | | Dilution Factor: 1 | | | | |
| Manganese | 500 | 528 | ug/L | 106 | SW846 6010B | 11/13-11/14/08 | K2LAD1DP |
| | | | Dilution Factor: 1 | | | | |
| Nickel | 500 | 528 | ug/L | 106 | SW846 6010B | 11/13-11/14/08 | K2LAD1DQ |
| | | | Dilution Factor: 1 | | | | |

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## LABORATORY CONTROL SAMPLE DATA REPORT

### DISSOLVED Metals

**Client Lot #...:** SL763 **Matrix.....:** WATER

| PARAMETER | SPIKE AMOUNT | MEASURED AMOUNT | UNITS | PERCNT RECVRY | METHOD | PREPARATION-ANALYSIS DATE | WORK ORDER # |
|---|---|---|---|---|---|---|---|
| Potassium | 10000 | 8920 | ug/L | 89 | SW846 6010B | 11/13-11/14/08 | K2LAD1DR |
| | | | Dilution Factor: 1 | | | | |
| Silver | 125 | 127 | ug/L | 102 | SW846 6010B | 11/13-11/14/08 | K2LAD1DT |
| | | | Dilution Factor: 1 | | | | |
| Sodium | 10000 | 10600 | ug/L | 106 | SW846 6010B | 11/13-11/14/08 | K2LAD1DU |
| | | | Dilution Factor: 1 | | | | |
| Strontium | 500 | 556 | ug/L | 111 | SW846 6010B | 11/13-11/14/08 | K2LAD1DV |
| | | | Dilution Factor: 1 | | | | |
| Vanadium | 500 | 523 | ug/L | 105 | SW846 6010B | 11/13-11/14/08 | K2LAD1DW |
| | | | Dilution Factor: 1 | | | | |
| Zinc | 500 | 589 | ug/L | 118 | SW846 6010B | 11/13-11/14/08 | K2LAD1DX |
| | | | Dilution Factor: 1 | | | | |

**NOTE(S):**

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

## MATRIX SPIKE SAMPLE DATA REPORT

### TOTAL Metals

**Client Lot #...:** SL763 **Matrix.....:** WATER
**Date Sampled...:** 10/21/08 **Date Received..:** 10/23/08

**MS Lot-Sample #:** F8J230174-002 **Prep Batch #...:** 8315307

| PARAMETER | SAMPLE AMOUNT | SPIKE AMT | MEASRD AMOUNT | UNITS | PERCNT RECVRY | RPD | METHOD | PREPARATION-ANALYSIS DATE | WORK ORDER # |
|---|---|---|---|---|---|---|---|---|---|
| Lithium | | | | | | | | | |
| | ND | 1000 | 1050 | ug/L | 105 | | SW846 6010B | 11/13-11/14/08 | K1FEN1CM |
| | ND | 1000 | 1040 | ug/L | 104 | 0.88 | SW846 6010B | 11/13-11/14/08 | K1FEN1CN |
| | | | Dilution Factor: 1 | | | | | | |
| Aluminum | | | | | | | | | |
| | ND | 1000 | 1040 | ug/L | 104 | | SW846 6010B | 11/13-11/14/08 | K1FEN1CP |
| | ND | 1000 | 1010 | ug/L | 101 | 2.7 | SW846 6010B | 11/13-11/14/08 | K1FEN1CQ |
| | | | Dilution Factor: 1 | | | | | | |
| Antimony | | | | | | | | | |
| | ND | 250 | 257 | ug/L | 103 | | SW846 6010B | 11/13-11/14/08 | K1FEN1CR |
| | ND | 250 | 252 | ug/L | 101 | 1.7 | SW846 6010B | 11/13-11/14/08 | K1FEN1CT |
| | | | Dilution Factor: 1 | | | | | | |
| Barium | | | | | | | | | |
| | 28.2 | 1000 | 1090 | ug/L | 107 | | SW846 6010B | 11/13-11/14/08 | K1FEN1CU |
| | 28.2 | 1000 | 1060 | ug/L | 104 | 2.8 | SW846 6010B | 11/13-11/14/08 | K1FEN1CV |
| | | | Dilution Factor: 1 | | | | | | |
| Beryllium | | | | | | | | | |
| | ND | 25.0 | 28.2 | ug/L | 113 | | SW846 6010B | 11/13-11/14/08 | K1FEN1CW |
| | ND | 25.0 | 27.5 | ug/L | 110 | 2.4 | SW846 6010B | 11/13-11/14/08 | K1FEN1CX |
| | | | Dilution Factor: 1 | | | | | | |
| Cadmium | | | | | | | | | |
| | ND | 25.0 | 26.3 | ug/L | 105 | | SW846 6010B | 11/13-11/14/08 | K1FEN1C0 |
| | ND | 25.0 | 25.6 | ug/L | 102 | 2.6 | SW846 6010B | 11/13-11/14/08 | K1FEN1C1 |
| | | | Dilution Factor: 1 | | | | | | |
| Calcium | | | | | | | | | |
| | 27000 | 25000 | 53300 D | ug/L | 105 | | SW846 6010B | 11/13-11/14/08 | K1FEN1C2 |
| | 27000 | 25000 | 50300 D | ug/L | 93 | 5.7 | SW846 6010B | 11/13-11/14/08 | K1FEN1C3 |
| | | | Dilution Factor: 5 | | | | | | |
| Chromium | | | | | | | | | |
| | 72.3 | 100 | 175 | ug/L | 103 | | SW846 6010B | 11/13-11/14/08 | K1FEN1C4 |
| | 72.3 | 100 | 169 | ug/L | 97 | 3.5 | SW846 6010B | 11/13-11/14/08 | K1FEN1C5 |
| | | | Dilution Factor: 1 | | | | | | |

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## MATRIX SPIKE SAMPLE DATA REPORT

### TOTAL Metals

**Client Lot #...:** SL763 **Matrix.....:** WATER
**Date Sampled...:** 10/21/08 **Date Received..:** 10/23/08

| PARAMETER | SAMPLE AMOUNT | SPIKE AMT | MEASRD AMOUNT | UNITS | PERCNT RECVRY | RPD | METHOD | PREPARATION-ANALYSIS DATE | WORK ORDER # |
|---|---|---|---|---|---|---|---|---|---|
| Cobalt | | | | | | | | | |
| | ND | 250 | 250 | ug/L | 100 | | SW846 6010B | 11/13-11/14/08 | K1FEN1C6 |
| | ND | 250 | 243 | ug/L | 97 | 2.5 | SW846 6010B | 11/13-11/14/08 | K1FEN1C7 |
| | | | Dilution Factor: 1 | | | | | | |
| Copper | | | | | | | | | |
| | ND | 125 | 126 | ug/L | 101 | | SW846 6010B | 11/13-11/14/08 | K1FEN1C8 |
| | ND | 125 | 122 | ug/L | 98 | 2.8 | SW846 6010B | 11/13-11/14/08 | K1FEN1C9 |
| | | | Dilution Factor: 1 | | | | | | |
| Iron | | | | | | | | | |
| | 33.8 | 500 | 572 | ug/L | 108 | | SW846 6010B | 11/13-11/14/08 | K1FEN1DA |
| | 33.8 | 500 | 559 | ug/L | 105 | 2.5 | SW846 6010B | 11/13-11/14/08 | K1FEN1DC |
| | | | Dilution Factor: 1 | | | | | | |
| Magnesium | | | | | | | | | |
| | 9140 | 25000 | 35200 | ug/L | 104 | | SW846 6010B | 11/13-11/14/08 | K1FEN1DD |
| | 9140 | 25000 | 34200 | ug/L | 100 | 2.9 | SW846 6010B | 11/13-11/14/08 | K1FEN1DE |
| | | | Dilution Factor: 1 | | | | | | |
| Manganese | | | | | | | | | |
| | 1.2 | 250 | 260 | ug/L | 104 | | SW846 6010B | 11/13-11/14/08 | K1FEN1DF |
| | 1.2 | 250 | 254 | ug/L | 101 | 2.6 | SW846 6010B | 11/13-11/14/08 | K1FEN1DG |
| | | | Dilution Factor: 1 | | | | | | |
| Nickel | | | | | | | | | |
| | ND | 250 | 253 | ug/L | 101 | | SW846 6010B | 11/13-11/14/08 | K1FEN1DH |
| | ND | 250 | 247 | ug/L | 99 | 2.5 | SW846 6010B | 11/13-11/14/08 | K1FEN1DJ |
| | | | Dilution Factor: 1 | | | | | | |
| Potassium | | | | | | | | | |
| | 4060 | 12500 | 14600 | ug/L | 85 | | SW846 6010B | 11/13-11/14/08 | K1FEN1DK |
| | 4060 | 12500 | 15800 | ug/L | 94 | 7.9 | SW846 6010B | 11/13-11/14/08 | K1FEN1DL |
| | | | Dilution Factor: 1 | | | | | | |
| Silver | | | | | | | | | |
| | ND | 25.0 | 25.9 | ug/L | 104 | | SW846 6010B | 11/13-11/14/08 | K1FEN1DM |
| | ND | 25.0 | 25.8 | ug/L | 103 | 0.38 | SW846 6010B | 11/13-11/14/08 | K1FEN1DN |
| | | | Dilution Factor: 1 | | | | | | |
| Sodium | | | | | | | | | |
| | 27100 | 12500 | 39800 | ug/L | 102 | | SW846 6010B | 11/13-11/14/08 | K1FEN1DP |
| | 27100 | 12500 | 39000 | ug/L | 95 | 2.0 | SW846 6010B | 11/13-11/14/08 | K1FEN1DQ |
| | | | Dilution Factor: 1 | | | | | | |

(Continued on next page)

# MATRIX SPIKE SAMPLE DATA REPORT

## TOTAL Metals

**Client Lot #...:** SL763 **Matrix.....:** WATER
**Date Sampled...:** 10/21/08 **Date Received..:** 10/23/08

| PARAMETER | SAMPLE AMOUNT | SPIKE AMT | MEASRD AMOUNT | UNITS | PERCNT RECVRY | RPD | METHOD | PREPARATION-ANALYSIS DATE | WORK ORDER # |
|---|---|---|---|---|---|---|---|---|---|
| Strontium | | | | | | | | | |
| | 111 | 500 | 660 D | ug/L | 110 | | SW846 6010B | 11/13-11/14/08 | K1FEN1DR |
| | 111 | 500 | 623 D | ug/L | 102 | 5.7 | SW846 6010B | 11/13-11/14/08 | K1FEN1DT |
| | | | Dilution Factor: 5 | | | | | | |
| Vanadium | | | | | | | | | |
| | 33.7 | 250 | 293 | ug/L | 104 | | SW846 6010B | 11/13-11/14/08 | K1FEN1DU |
| | 33.7 | 250 | 285 | ug/L | 100 | 2.7 | SW846 6010B | 11/13-11/14/08 | K1FEN1DV |
| | | | Dilution Factor: 1 | | | | | | |
| Zinc | | | | | | | | | |
| | 9.5 | 250 | 295 | ug/L | 114 | | SW846 6010B | 11/13-11/14/08 | K1FEN1A7 |
| | 9.5 | 250 | 280 | ug/L | 108 | 5.1 | SW846 6010B | 11/13-11/14/08 | K1FEN1A8 |
| | | | Dilution Factor: 1 | | | | | | |

**NOTE(S):**

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

D Result was obtained from the analysis of a dilution.

# WET CHEMISTRY

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1WXX9

General Chemistry

Lot-Sample #...: F8J230174-002 Work Order #...: K1FEN Matrix.....: WATER
Date Sampled...: 10/21/08 Date Received..: 10/23/08

| PARAMETER | RESULT | RL | UNITS | METHOD | PREPARATION-ANALYSIS DATE | PREP BATCH # |
|---|---|---|---|---|---|---|
| Phenol | ND | 50.0 | ug/L | MCAWW 420.2 | 10/27-10/28/08 | 8302221 |
| | | Dilution Factor: 1 | | MDL.....: 14.0 | | |
| Total Organic Carbon | ND | 1.0 | mg/L | SW846 9060 | 11/04/08 | 8310501 |
| | | Dilution Factor: 1 | | MDL.....: 0.20 | | |
| Total Sulfide | ND | 1.0 | mg/L | SW846 9030 | 10/28/08 | 8302263 |
| | | Dilution Factor: 1 | | MDL.....: 0.18 | | |
| **TOX** | **36.0** | **5.0** | **ug/L** | **SW846 9020B** | **11/11-11/12/08** | **8316321** |
| | | Dilution Factor: 1 | | MDL.....: 3.5 | | |

# METHOD BLANK REPORT

## General Chemistry

**Client Lot #...:** SL763 **Matrix.....:** WATER

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | METHOD | PREPARATION-ANALYSIS DATE | PREP BATCH # |
|---|---|---|---|---|---|---|
| Phenol | | Work Order #: K1Q491AA | | MB Lot-Sample #: | F8J280000-221 | |
| | ND | 50.0 | ug/L | MCAWW 420.2 | 10/27-10/28/08 | 8302221 |
| | | Dilution Factor: 1 | | | | |
| Total Organic Carbon | | Work Order #: K19861AA | | MB Lot-Sample #: | F8K050000-501 | |
| | ND | 1.0 | mg/L | SW846 9060 | 11/04/08 | 8310501 |
| | | Dilution Factor: 1 | | | | |
| Total Sulfide | | Work Order #: K1QFX1AA | | MB Lot-Sample #: | F8J280000-263 | |
| | ND | 1.0 | mg/L | SW846 9030 | 10/28/08 | 8302263 |
| | | Dilution Factor: 1 | | | | |
| TOX | | Work Order #: K2TW51AA | | MB Lot-Sample #: | F8K110000-321 | |
| | ND | 5.0 | ug/L | SW846 9020B | 11/12/08 | 8316321 |
| | | Dilution Factor: 1 | | | | |

**NOTE(S):**

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

## LABORATORY CONTROL SAMPLE DATA REPORT

### General Chemistry

Lot-Sample #...: SL763 Matrix.....: WATER

| PARAMETER | SPIKE AMOUNT | MEASURED AMOUNT | UNITS | PERCNT RECVRY | RPD | METHOD | PREPARATION-ANALYSIS DATE | PREP BATCH # |
|---|---|---|---|---|---|---|---|---|
| Total Organic Carbon | | WO#:K19861AC-LCS/K19861AD-LCSD | | | | LCS Lot-Sample#: F8K050000-501 | | |
| | 8.00 | 8.13 | mg/L | 102 | | SW846 9060 | 11/04/08 | 8310501 |
| | 8.00 | 8.10 | mg/L | 101 | 0.44 | SW846 9060 | 11/04/08 | 8310501 |

Dilution Factor: 1

**NOTE(S):**

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

# LABORATORY CONTROL SAMPLE DATA REPORT

## General Chemistry

**Client Lot #...:** SL763 **Matrix.....:** WATER

| PARAMETER | SPIKE AMOUNT | MEASURED AMOUNT | UNITS | PERCNT RECVRY | METHOD | PREPARATION-ANALYSIS DATE | PREP BATCH # |
|---|---|---|---|---|---|---|---|
| Phenol | | | Work Order #: | K1Q491AC | LCS Lot-Sample#: | F8J280000-221 | |
| | 200 | 191 | ug/L | 96 | MCAWW 420.2 | 10/27-10/28/08 | 8302221 |
| | | | Dilution Factor: 1 | | | | |
| Total Sulfide | | | Work Order #: | K1QFX1AC | LCS Lot-Sample#: | F8J280000-263 | |
| | 4.00 | 4.04 | mg/L | 101 | SW846 9030 | 10/28/08 | 8302263 |
| | | | Dilution Factor: 1 | | | | |
| TOX | | | Work Order #: | K2TW51AC | LCS Lot-Sample#: | F8K110000-321 | |
| | 100 | 98.5 | ug/L | 98 | SW846 9020B | 11/12/08 | 8316321 |
| | | | Dilution Factor: 1 | | | | |

**NOTE(S):**

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

# MATRIX SPIKE SAMPLE DATA REPORT

## General Chemistry

**Client Lot #...:** SL763 **Matrix.....:** WATER
**Date Sampled...:** 10/29/08 **Date Received..:** 10/31/08

| PARAMETER | SAMPLE AMOUNT | SPIKE AMT | MEASRD AMOUNT | UNITS | PERCNT RECVRY | RPD | METHOD | PREPARATION-ANALYSIS DATE | PREP BATCH # |
|---|---|---|---|---|---|---|---|---|---|
| Phenol | | | WO#: K1FEN1CC-MS/K1FEN1CD-MSD | | | | MS Lot-Sample #: F8J230174-002 | | |
| | ND | 200 | 199 | ug/L | 99 | | MCAWW 420.2 | 10/27-10/28/08 | 8302221 |
| | ND | 200 | 199 | ug/L | 99 | 0.0 | MCAWW 420.2 | 10/27-10/28/08 | 8302221 |
| | | | Dilution Factor: 1 | | | | | | |

**NOTE(S):**

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

## MATRIX SPIKE SAMPLE DATA REPORT

### General Chemistry

Client Lot #...: SL763 Matrix.....: WATER
Date Sampled...: 10/21/08 Date Received..: 10/23/08

| PARAMETER | SAMPLE AMOUNT | SPIKE AMT | MEASURED AMOUNT | UNITS | PERCENT RECOVERY | METHOD | PREPARATION-ANALYSIS DATE | PREP BATCH # |
|---|---|---|---|---|---|---|---|---|
| Total Organic Carbon | | | Work Order #...: | | K1FEN1CF | MS Lot-Sample #: | | F8J230174-002 |
| | ND | 5.00 | 6.00 | mg/L | 120 | SW846 9060 | 11/05/08 | 8310501 |
| | | | Dilution Factor: 1 | | | | | |
| Total Organic Carbon | | | Work Order #...: | | K11PV1AH | MS Lot-Sample #: | | F8J310139-001 |
| | 2.1 | 5.00 | 7.47 | mg/L | 107 | SW846 9060 | 11/04/08 | 8310501 |
| | | | Dilution Factor: 1 | | | | | |
| Total Sulfide | | | Work Order #...: | | K1FEN1CE | MS Lot-Sample #: | | F8J230174-002 |
| | ND | 4.00 | 4.00 | mg/L | 100 | SW846 9030 | 10/28/08 | 8302263 |
| | | | Dilution Factor: 1 | | | | | |
| TOX | | | Work Order #...: | | K1FEN1CG | MS Lot-Sample #: | | F8J230174-002 |
| | 36.0 | 100 | 134 | ug/L | 98 | SW846 9020B | 11/11-11/12/08 | 8316321 |
| | | | Dilution Factor: 1 | | | | | |

**NOTE(S):**

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

# SAMPLE DUPLICATE EVALUATION REPORT

## General Chemistry

**Client Lot #...:** F8J230173 **Work Order #...:** K1FEN-SMP K1FEN-DUP **Matrix.....:** WATER

**Date Sampled...:** 10/21/08 **Date Received..:** 10/23/08

| PARAM | RESULT | DUPLICATE RESULT | UNITS | RPD | RPD LIMIT | METHOD | PREPARATION-ANALYSIS DATE | PREP BATCH # |
|---|---|---|---|---|---|---|---|---|
| Phenol | | | | | | SD Lot-Sample #: | F8J230174-002 | |
| | ND | ND | ug/L | 0 | (0-20) | MCAWW 420.2 | 10/27-10/28/08 | 8302221 |
| | | | Dilution Factor: 1 | | | | | |
| Total Sulfide | | | | | | SD Lot-Sample #: | F8J230174-002 | |
| | ND | ND | mg/L | 0 | (0-20) | SW846 9030 | 10/28/08 | 8302263 |
| | | | Dilution Factor: 1 | | | | | |
| TOX | | | | | | SD Lot-Sample #: | F8J230174-002 | |
| | 36.0 | 38.2 | ug/L | 5.9 | (0-20) | SW846 9020B | 11/11-11/12/08 | 8316321 |
| | | | Dilution Factor: 1 | | | | | |

## SAMPLE DUPLICATE EVALUATION REPORT

### General Chemistry

**Client Lot #...:** F8J230173 **Work Order #...:** K11PV-SMP K11PV-DUP **Matrix.....:** WATER

**Date Sampled...:** 10/29/08 **Date Received..:** 10/31/08

| PARAM | RESULT | DUPLICATE RESULT | UNITS | RPD | RPD LIMIT | METHOD | PREPARATION-ANALYSIS DATE | PREP BATCH # |
|---|---|---|---|---|---|---|---|---|
| Total Organic Carbon | | | | | | SD Lot-Sample #: | F8J310139-001 | |
| | 2.1 | 2.0 | mg/L | 5.8 | (0-20) | SW846 9060 | 11/04/08 | 8310501 |

Dilution Factor: 1