RECEIVED DECEMBER 3, 2007

0077759

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

# ANALYTICAL REPORT

W08-010

Lot #: F7J170222
SDG #: SL717

Steve Trent

Fluor Hanford Inc
PO Box 1000
MSIN E6-35
Richland, WA 99352

RECEIVED
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TESTAMERICA LABORATORIES, INC.

Michael C. Franks
Project Manager

November 30, 2007

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

**CASE NARRATIVE**

Pacific Northwest National Laboratories
P.O. Box 1970
Richland, Washington 99352
April 26, 2005
Attention: Steve Trent

| | | |
|---|---|---|
| SDG | : | SL717 |
| Number of Samples | : | 20 samples |
| Sample Matrix | : | Water |
| Data Deliverable | : | Summary |
| Date SDG Closed | : | October 31, 2007 |

II. Introduction

Between between October 17, 2007 and October 24, 2007, twenty (20) samples 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: W08-010, I08-004, I08-002, S08-010

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.


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

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THE LEADER IN ENVIRONMENTAL TESTING

***Fluor Hanford Inc.***
November 30, 2007
SDG: SL717

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.

## Volatiles

Batch: 7304444
For a large number of analytes in the LCS/LCSD, it becomes statistically likely that a few will be outside the laboratory QC limits. Upper and lower marginal exceedance (ME) limits have been established to determine when corrective action is necessary. The number of allowable marginal exceedances is based on the number of analytes in the LCS/LCSD.
LCS/LCSD recoveries for Bromomethane are outside laboratory QC limits and qualified accordingly. Recoveries are within marginal exceedance limits, and within the number of analytes allowed.

The LCS/LCSD RPD for 1,4-Dioxane and 1-Butanol are outside of the QC limits. The recoveries for the LCS/LCSD are acceptable.

For a large number of analytes in the MS/MSD, it becomes statistically likely that a few will be outside the laboratory QC limits. Upper and lower marginal exceedance (ME) limits have been established to determine when corrective action is necessary. The number of allowable marginal exceedances is based on the number of analytes in the MS/MSD.
MS/MSD recoveries for Bromomethane and Iodomethaneare outside laboratory QC limits and qualified accordingly. Recoveries are within marginal exceedance limits, and within the number of analytes allowed.

**Affected Samples:**
F7J230123 (2): B1PX27
F7J230123 (4): B1PX45
F7J230270 (1): B1R296

## Semi-Volatiles

Batch: 7299156
The CCV recovery was outside the upper QC limit (greater than 20% RSD) for Dimethylformamide, 2,2-Oxybis (1-Chloropropane), 4-Nitrophenol, a,a-Dimethyl-phenethylamine, Sulfotepp, Dimethoate, 4-Nitroquinoline-1-oxide, and Kepone, indicating a potential high bias for those analytes in the samples associated with this CCV. These analytes were not detected above the reporting limit in the associated samples.

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THE LEADER IN ENVIRONMENTAL TESTING

***Fluor Hanford Inc.***
November 30, 2007
SDG: SL717

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The LCS recoveries for numerous analyte are outside the upper QC limit, indicating a potential positive bias for that analytes. These analytes were not observed above the reporting limit in the associated samples; therefore the sample data was not adversely affected by this excursion.

Surrogate 2,4,6-Tribromophenol recovered low in the LCS. The samples and method blank has acceptable recoveries for this surrogate

The MS/MSD recoveries for Chrysene are outside the established QC limits. The RPD is within method acceptance criteria indicating a possible matrix interference. Method performance is demonstrated by acceptable LCS recovery.

**Affected Samples:**
F7J230123 (2): B1PX27
F7J230123 (4): B1PX45

**PCBs**

Batch: 7300127
The MS/MSD RPD for Aroclor 1016 and Aroclor 1260 are not within method acceptance criteria. MS/MSD recoveries for both analytes are within QC limits demonstrating good extraction performance in the sample matrix.
**Affected Samples:**
F7J230123 (2): B1PX27
F7J230123 (4): B1PX45
F7J240126 (3): B1PXF2

**There were no observations or nonconformances to report for the following analyses:**

Mercury
Sulfate
Oil and Grease
Phenols by GC

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.


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

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THE LEADER IN ENVIRONMENTAL TESTING

***Fluor Hanford Inc.***

November 30, 2007
SDG: SL717

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Reviewed and approved:

Mike 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

**SL717**

| PARAMETER | ANALYTICAL METHOD | PREPARATION METHOD |
|---|---|---|
| Mercury in Liquid Waste (Manual Cold-Vapor) | SW846 7470A | SW846 7470A |
| Oil & Grease (Gravimetric) | MCAWW 413.1 | MCAWW 413.1 |
| Phenols by GC | SW846 8040A | SW846 3520 |
| PCBs by SW-846 8082 | SW846 8082 | SW846 3510C |
| Semivolatile Organic Compounds by GC/MS | SW846 8270C | SW846 3510C |
| Sulfate | MCAWW 300.0A | MCAWW 300.0A |
| 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

**SL717 : F7J170222**

| WO # | SAMPLE# | CLIENT SAMPLE ID | SAMPLED DATE | SAMP TIME |
|---|---|---|---|---|
| J86AK | 001 | B1PWH2 | 10/16/07 | 12:14 |
| J86A0 | 002 | B1PWP2 | 10/16/07 | 13:35 |
| J86A2 | 003 | B1PWP3 | 10/16/07 | 13:35 |
| J86CG | 004 | B1PWY1 | 10/16/07 | 11:27 |
| J86CM | 005 | B1PX54 | 10/16/07 | 10:22 |
| J86CQ | 006 | B1PX55 | 10/16/07 | 10:22 |
| J86D2 | 007 | B1PXY1 | 10/16/07 | 08:30 |
| J89CF | 008 | B1PXY0 | 10/16/07 | 08:30 |

**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

**SL717 : F7J180181**

| WO # | SAMPLE# | CLIENT SAMPLE ID | SAMPLED DATE | SAMP TIME |
|---|---|---|---|---|
| J89D2 | 001 | B1PV94 | 10/17/07 | 10:34 |

**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

**SL717 : F7J200146**

| WO # | SAMPLE# | CLIENT SAMPLE ID | SAMPLED DATE | SAMP TIME |
|---|---|---|---|---|
| J9HAA | 001 | B1PV38 | 10/19/07 | 11:37 |
| J9HAC | 002 | B1PV39 | 10/19/07 | 11:37 |

**NOTE(S):**

- The analytical results of the samples listed above are presented on the following pages.
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- 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

**SL717 : F7J230123**

| WO # | SAMPLE# | CLIENT SAMPLE ID | SAMPLED DATE | SAMP TIME |
|---|---|---|---|---|
| J9LK3 | 001 | B1PX26 | 10/22/07 | 12:50 |
| J9LLA | 002 | B1PX27 | 10/22/07 | 12:50 |
| J9LMV | 003 | B1PX16 | 10/22/07 | 09:00 |
| J9LM3 | 004 | B1PX45 | 10/22/07 | 09:00 |

**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

**SL717 : F7J230270**

| WO # | SAMPLE# | CLIENT SAMPLE ID | SAMPLED DATE | SAMP TIME |
|---|---|---|---|---|
| J9MR6 | 001 | B1R296 | 10/22/07 | 12:50 |

**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

**SL717 : F7J240126**

| WO # | SAMPLE# | CLIENT SAMPLE ID | SAMPLED DATE | SAMP TIME |
|---|---|---|---|---|
| J9NWQ | 001 | B1PWW5 | 10/23/07 | 11:12 |
| J9NWV | 002 | B1PXF1 | 10/23/07 | 11:12 |
| J9NWW | 003 | B1PXF2 | 10/23/07 | 11:12 |
| J9NW4 | 004 | B1PWT1 | 10/23/07 | 12:46 |

**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# SL717

FLUOR HANFORD

SL717

# CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W08-010-94

Page 1 of 1

| | | |
|---|---|---|
| Collector: Josh Herrick, Fluor Hanford | Contact/Requester: Steve Trent | Telephone No.: 509-373-5869 MSIN FAX |
| SAF No.: W08-010 | Sampling Origin: Hanford Site | Purchase Order/Charge Code |
| Project Title: RCRA, OCTOBER 2007 | HNF-N-506-12 | Ice Chest No. 7924 3845 Temp. 3.8°C |
| Shipped To (Lab): TestAmerica St. Louis | Method of Shipment: Govt. Vehicle | Bill of Lading/Air Bill No. |
| 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 ☐

| Sample No. | Lab ID | * | Date | Time | No/Type Container | Sample Analysis | Preservative |
|---|---|---|---|---|---|---|---|
| B1PWH2 | | W | 10-16-07 | 12/4 | 3x1000-mL aG | 8040_PHENOLIC_GC: List-1 (17) | Residual Chlorine 0.0008% Na2S2O3 Cool~4C |
| B1PWH2 | | W | ↓ | ↓ | 1x20-mL P | Activity Scan | None |

| Relinquished By | Print | Sign | Date/Time | Received By | Print | Sign | Date/Time |
|---|---|---|---|---|---|---|---|
| Josh Herrick, Fluor Hanford | | | OCT 16 2007 1400 | FedEx | | | |
| FedEx | | | 10-17-07 0900 | B-2 | | | 10/17/07 0900 |
| | | | | | | | |
| | | | | | | | |

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

SDG# SI7717

FLUOR HANFORD

51717

# CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W08-010-134**



| | | |
|---|---|---|
| Collector: Josh Herrick, Fluor Hanford | Contact/Requester: Steve Trent | Telephone No.: 509-373-5869 MSIN FAX |
| SAF No.: W08-010 | Sampling Origin: Hanford Site | Purchase Order/Charge Code |
| Project Title: RCRA OCTOBER 2007 | HNV-N-506 | Ice Chest No.: 9243845 Temp.: 3834 |
| Shipped To (Lab): TestAmerica St. Louis | Method of Shipment: Govt. Vehicle | Bill of Lading/Air Bill No. |
| 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 ☐

| Sample No. | Lab ID | * | Date | Time | No/Type Container | Sample Analysis | Preservative |
|---|---|---|---|---|---|---|---|
| B1PWP2 | | W | 10/16/07 | 1335 | 3x1000-mL aG | 8040_PHENOLIC_GC: List-1 (17) | Residual Chlorine 0.0008% Na2S2O3 Cool~4C |
| B1PWP2 | | W | ↓ | ↓ | 1x20-mL P | Activity Scan | None |

| Relinquished By | Print | Sign | Date/Time | Received By | Print | Sign | Date/Time |
|---|---|---|---|---|---|---|---|
| Josh Herrick, Fluor Hanford | | J. Herrick | OCT 16 2007 1400 | FedEx | | | |
| Relinquished By: FedEx | | | Date/Time: 10/17/07 0900 | Received By: B. [illegible] | | | Date/Time: 10/17/07 0900 |
| Relinquished By | | | Date/Time | Received By | | | Date/Time |
| Relinquished By | | | Date/Time | Received By | | | Date/Time |

**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

SDG# SL717

FLUOR HANFORD

SL717

# CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W08-010-135

Page 1 of 1

| | | |
|---|---|---|
| Collector: Josh Herrick, Fluor Hanford | Contact/Requester: Steve Trent | Telephone No.: 509-373-5869 MSIN FAX |
| SAF No.: W08-010 | Sampling Origin: Hanford Site | Purchase Order/Charge Code |
| Project Title: RCRA OCTOBER 2007 | HAF-N-506-8 | Ice Chest No.: 7924 3848 3834 Temp. |
| Shipped To (Lab): TestAmerica St. Louis | Method of Shipment: Govt. Vehicle | Bill of Lading/Air Bill No. |
| 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 ☐

| Sample No. | Lab ID | * | Date | Time | No/Type Container | Sample Analysis | Preservative |
|---|---|---|---|---|---|---|---|
| B1PWP3 | | W | 10-16-07 | 1335 | 3x1000-mL aG | 8040_PHENOLIC_GC: List-1 (17) | Residual Chlorine 0.0008% Na2S2O3 Cool~4C |
| B1PWP3 | | W | ↓ | ↓ | 1x20-mL P | Activity Scan | None |

| Relinquished By | Print / Sign | Date/Time | Received By | Print / Sign | Date/Time |
|---|---|---|---|---|---|
| Josh Herrick, Fluor Hanford | J. Herrick | OCT 16 2007 1400 | Fed Ex | | |
| Relinquished By: FEDEX | | 10-17-07 0900 | Received By: B. [illegible] | | 10/17/07 0900 |
| Relinquished By | | Date/Time | Received By | | Date/Time |
| Relinquished By | | Date/Time | Received By | | Date/Time |

**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

SDG# SL717

FLUOR HANFORD

SL717

# CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W08-010-174

Page 1 of 1

| | | |
|---|---|---|
| Collector: Fluor Hanford R. T. SICKLE | Contact/Requester: Steve Trent | Telephone No.: 509-373-5869 MSIN FAX |
| SAF No.: W08-010 | Sampling Origin: Hanford Site | Purchase Order/Charge Code |
| Project Title: RCRA, OCTOBER 2007 | HNF-N-506-5 Pg 49 | Ice Chest No.: GRP-03-012 Temp. |
| Shipped To (Lab): TestAmerica St. Louis | Method of Shipment: Govt. Vehicle | Bill of Lading/Air Bill No.: 79 828788 1056 |
| 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 ☐

| Sample No. | Lab ID | * | Date | Time | No/Type Container | Sample Analysis | Preservative |
|---|---|---|---|---|---|---|---|
| B1PWY1 | | W | 10/16/07 | 1127 | 3x1000-mL aG | 8040_PHENOLIC_GC: List-1 (17) | Residual Chlorine 0.0008% Na2S2O3 Cool~4C |
| B1PWY1 | | W | ↓ | ↓ | 1x20-mL P | Activity Scan | None |

RBW 10/16/07

| Relinquished By | Print | Sign | Date/Time | Received By | Print | Sign | Date/Time |
|---|---|---|---|---|---|---|---|
| | Fluor Hanford R. T. SICKLE | | OCT 16 2007 1300 | FEd Ex | | | |
| RD Ex | | | 10-17-07 0900 | R-Ri | | | 10/10/07 0900 |
| | | | | | | | |
| | | | | | | | |

Matrix *

| | | | |
|---|---|---|---|
| S = Soil | | DS = Drum Solid | |
| SE = Sediment | | DL = Drum Liquid | |
| 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

SDG# 51717

FLUOR HANFORD

51717

# CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W08-010-188**

Page 1 of 1

| | | |
|---|---|---|
| Collector: Fluor Hanford R. T. SICKLE | Contact/Requester: Steve Trent | Telephone No.: 509-373-5869 MSIN FAX |
| SAF No.: W08-010 | Sampling Origin: Hanford Site | Purchase Order/Charge Code |
| Project Title: RCRA, OCTOBER 2007 | HNF-W-506-5 Pg 49 | Ice Chest No.: GRP-03-012 Temp. |
| Shipped To (Lab): TestAmerica St. Louis | Method of Shipment: Govt. Vehicle | Bill of Lading/Air Bill No.: 798287881056 |
| 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 ☐

| Sample No. | Lab ID | * | Date | Time | No/Type Container | Sample Analysis | Preservative |
|---|---|---|---|---|---|---|---|
| B1PX54 (F) | | W | 10/16/07 | 1072 | 1x500-mL G | 7470_HG_CVAA: Mercury (1) | HNO3 to pH <2 Cool~4C |
| B1PX55 | | W | | | 3x1000-mL aG | 8040_PHENOLIC_GC: List-1 (17) | Residual Chlorine 0.0008% Na2S2O3 Cool~4C |
| B1PX55 | | W | | | 1x20-mL P | Activity Scan | None |
| B1PX55 | | W | | | 3x1000-mL aG | 8082_PCB_GC: List-1 (7) | Cool~4C |
| B1PX55 | | W | | | 1x500-mL G | 7470_HG_CVAA: Mercury (1) | HNO3 to pH <2 Cool~4C |

RDW 10/16/07

| Relinquished By (Print / Sign) | Date/Time | Received By (Print / Sign) | Date/Time |
|---|---|---|---|
| Fluor Hanford R. T. SICKLE | 10/16/07 1300 | FEd EX | |
| FEDEX | 10-17-07 0900 | B— | 10/17/07 0900 |
| | | | |
| | | | |

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

SDG# SL717

| FLUOR HANFORD 51717 | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | C.O.C. # W08-010-229 Page 1 of 1 |
|---|---|---|

| | | |
|---|---|---|
| Collector: Fluor Hanford R. T. SICKLE | Contact/Requester: Steve Trent | Telephone No.: 509-373-5869 MSIN FAX |
| SAF No.: W08-010 | Sampling Origin: Hanford Site | Purchase Order/Charge Code |
| Project Title: RCRA, OCTOBER 2007 | HNF-N-506-5 pg. 49 | Ice Chest No.: GRP-03-012 Temp. |
| Shipped To (Lab): TestAmerica St. Louis | Method of Shipment: Govt. Vehicle | Bill of Lading/Air Bill No.: 79828788 1056 |
| 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 ☐

| Sample No. | Lab ID | * | Date | Time | No/Type Container | Sample Analysis | Preservative |
|---|---|---|---|---|---|---|---|
| B1PXY0 (F) | | W | 10/4/07 | 0830 | 1x500-mL G | 7470_HG_CVAA: Mercury (1) | HNO3 to pH <2 Cool~4C |
| B1PXY1 | | W | | | 3x1000-mL aG | 8040_PHENOLIC_GC: List-1 (17) | Residual Chlorine 0.0008% Na2S2O3 Cool~4C |
| B1PXY1 | | W | | | 1x20-mL P | Activity Scan | None |
| B1PXY1 | | W | | | 3x1000-mL aG | 8082_PCB_GC: List-1 (7) | Cool~4C |
| B1PXY1 | | W | | | 1x500-mL G | 7470_HG_CVAA: Mercury (1) | HNO3 to pH <2 Cool~4C |

DRW 10/16/07

| Relinquished By (Print / Sign) | Date/Time | Received By (Print / Sign) | Date/Time |
|---|---|---|---|
| Fluor Hanford R. T. SICKLE | OCT 16 2007 1300 | FEd EX | |
| FED EX | 10-17-07 0900 | [signature] | 10/17/07 0900 |
| | | | |
| | | | |

**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

18 of 144

SDG# SL717

FLUOR HANFORD

SL717

CUR 163

# CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W08-010-229

Page 1 of 1

| | | |
|---|---|---|
| Collector: Fluor Hanford R. T. SICKLE | Contact/Requester: Steve Trent | Telephone No.: 509-373-5869 MSIN FAX |
| SAF No.: W08-010 | Sampling Origin: Hanford Site | Purchase Order/Charge Code: DRW 10/17/07 |
| Project Title: RCRA OCTOBER 2007 | HNF-N-506-5 pg. 49 | Ice Chest No.: GRF 03-012 Temp. NOOMER #1 DRW 10/17/07 |
| Shipped To (Lab): TestAmerica St. Louis | Method of Shipment: Govt. Vehicle | Bill of Lading/Air Bill No.: ~~7982878810 56~~ |
| Protocol: RCRA | Priority: 45 Days | Offsite Property No.: 7914 1377 5864 |

**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 ☐

| Sample No. | Lab ID | * | Date | Time | No/Type Container | Sample Analysis | Preservative |
|---|---|---|---|---|---|---|---|
| B1PXY0 (F) | | W | 10/16/07 | 0830 | 1x500-mL G | 7470_HG_CVAA: Mercury (1) | HNO3 to pH <2 Cool~4C |
| ~~B1PXY1~~ | | W | | | ~~3x1000-mL aG~~ | ~~8040_PHENOLIC_GC: List-1 (17)~~ DRW 10/17/07 | ~~Residual Chlorine 0.0008% Na2S2O3 Cool~4C~~ |
| B1PXY1 | | W | | | 1x20-mL P | Activity Scan | None |
| ~~B1PXY1~~ | | W | | | ~~3x1000-mL aG~~ | ~~8082_PCB_GC: List-1 (7)~~ DRW 10/17/07 | ~~Cool~4C~~ |
| B1PXY1 | | W | | | 1x500-mL G | 7470_HG_CVAA: Mercury (1) | HNO3 to pH <2 Cool~4C |

These three bottles were left out of the 10/16/07 shipment

DRW 10/17/07

DRW 10/16/07

| Relinquished By | Print | Sign | Date/Time | Received By | Print | Sign | Date/Time |
|---|---|---|---|---|---|---|---|
| Fluor Hanford R. T. SICKLE | | | DRW 10/17/07 1200 ~~OCT 16 2007~~ OCT 17 2007 | FED EX | | | |
| FED EX | | | 10-18-07 0800 | | Michael Hiler | | 10-18-07 0950 |
| | | | | | | | |
| | | | | | | | |

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

Quick Help

| | | | |
|---|---|---|---|
| **Tracking number** | 792438453834 | **Reference** | SAWS-371 |
| **Signed for by** | B.DANIELS | **Destination** | Earth City, MO |
| **Ship date** | Oct 16, 2007 | **Delivered to** | Shipping/Receiving |
| **Delivery date** | Oct 17, 2007 9:00 AM | **Service type** | Priority Overnight |
| | | **Weight** | 54.0 lbs. |

**Status** Delivered

**Signature image available** Yes

| Date/Time | | Activity | Location | Details |
|---|---|---|---|---|
| **Oct 17, 2007** | 9:00 AM | **Delivered** | Earth City, MO | |
| | 7:25 AM | On FedEx vehicle for delivery | EARTH CITY, MO | |
| | 7:17 AM | At local FedEx facility | EARTH CITY, MO | |
| | 5:35 AM | At dest sort facility | BERKELEY, MO | |
| | 4:42 AM | Departed FedEx location | MEMPHIS, TN | |
| | 12:58 AM | Arrived at FedEx location | MEMPHIS, TN | |
| **Oct 16, 2007** | 5:18 PM | Left origin | PASCO, WA | |
| | 4:17 PM | Picked up | PASCO, WA | |
| | 4:14 PM | Package data transmitted to FedEx | | |

Signature proof | E-mail results | Track more shipments/orders

Subscribe to tracking updates (optional)

**Your Name:** **Your E-mail Address:**

| **E-mail address** | **Language** | **Exception updates** | **Delivery 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

Submit

Track Shipments/FedEx Kinko's Orders

# Detailed Results

Quick Help

| | | | |
|---|---|---|---|
| **Tracking number** | 798287881056 | **Reference** | GRP-03-012 |
| **Signed for by** | B.DANIELS | **Destination** | Earth City, MO |
| **Ship date** | Oct 16, 2007 | **Delivered to** | Shipping/Receiving |
| **Delivery date** | Oct 17, 2007 9:00 AM | **Service type** | Priority Overnight |
| | | **Weight** | 91.0 lbs. |

**Status** Delivered

**Signature image available** Yes

| Date/Time | | Activity | Location | Details |
|---|---|---|---|---|
| **Oct 17, 2007** | 9:00 AM | **Delivered** | Earth City, MO | |
| | 7:02 AM | On FedEx vehicle for delivery | EARTH CITY, MO | |
| | 6:54 AM | At local FedEx facility | EARTH CITY, MO | |
| | 5:35 AM | At dest sort facility | BERKELEY, MO | |
| | 4:42 AM | Departed FedEx location | MEMPHIS, TN | |
| | 12:58 AM | Arrived at FedEx location | MEMPHIS, TN | |
| **Oct 16, 2007** | 5:18 PM | Left origin | PASCO, WA | |
| | 4:17 PM | Picked up | PASCO, WA | |
| | 3:38 PM | Package data transmitted to FedEx | | |

Signature proof | E-mail results | Track more shipments/orders

Subscribe to tracking updates (optional)

**Your Name:** **Your E-mail Address:**

| E-mail address | Language | Exception updates | Delivery 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

Submit

Track Shipments/FedEx Kinko's Orders

# Detailed Results

Quick Help

| | | | |
|---|---|---|---|
| **Tracking number** | 791413715864 | **Reference** | NOONER-1 |
| **Signed for by** | B.DANIELS | **Destination** | Earth City, MO |
| **Ship date** | Oct 17, 2007 | **Delivered to** | Shipping/Receiving |
| **Delivery date** | Oct 18, 2007 9:47 AM | **Service type** | Priority Overnight |
| | | **Weight** | 17.0 lbs. |

**Status** Delivered

**Signature image available** Yes

| Date/Time | | Activity | Location | Details |
|---|---|---|---|---|
| **Oct 18, 2007** | 9:47 AM | **Delivered** | Earth City, MO | |
| | 8:07 AM | On FedEx vehicle for delivery | EARTH CITY, MO | |
| | 7:59 AM | At local FedEx facility | EARTH CITY, MO | |
| | 6:49 AM | At dest sort facility | BERKELEY, MO | |
| | 5:00 AM | Departed FedEx location | MEMPHIS, TN | |
| | 1:34 AM | Arrived at FedEx location | MEMPHIS, TN | |
| **Oct 17, 2007** | 5:16 PM | Left origin | PASCO, WA | |
| | 4:18 PM | Picked up | PASCO, WA | |
| | 2:53 PM | Package data transmitted to FedEx | | |

Signature proof | E-mail results | Track more shipments/orders

Subscribe to tracking updates (optional)

**Your Name:** **Your E-mail Address:**

| **E-mail address** | **Language** | **Exception updates** | **Delivery 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

Submit

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Lot #(s): F7J170214, 222, 300

- 720 -

## Condition Upon Receipt Form

Client: Hanford
Quote No: 77135, 76983
COC/RFA No: See below
Initiated By: BD
Date: 10/17/07
Time: 0900

### Shipping Information

Shipper Name: FE
Multiple Packages (Y) N

Shipping # (s):*

| | | | |
|---|---|---|---|
| 1. | 7982 8788 1056 | 6. | |
| 2. | 7924 3845 3834 | 7. | |
| 3. | 7924 3820 2963 | 8. | |
| 4. | 7914 13776 5864 | 9. | |
| 5. | 1371 | 10. | |

Sample Temperature (s):**

| | | | |
|---|---|---|---|
| 1. | 2 | 6. | |
| 2. | 2 | 7. | |
| 3. | 2 | 8. | |
| 4. | 6 | 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: 1. W08-010-174, 188, 229, R08-003
2. W08-010-94, 134, 135
3. X07-025-21, 22, 24, 25

Possible hold time issues with samples B1MV02, V04, V08 & VF0. log per MF

Did not receive sample B1PXY0 & 5004 for B1PXY1. Received samples on 10/18/07 BD

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

Project Management Review: Date: 10-18-07

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# SL717

FLUOR HANFORD

SL717

# CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # I08-004-8

Page 1 of 1

| | | |
|---|---|---|
| Collector: Josh Hemick, Fluor Hanford | Contact/Requester: Steve Trent | Telephone No.: 509-373-5869 MSIN FAX |
| SAF No.: I08-004 | Sampling Origin: Hanford Site | Purchase Order/Charge Code |
| Project Title: ISRM OCTOBER 2007 | HNF-N-506-12 | Ice Chest No.: NOOVER1 Temp. |
| Shipped To (Lab): TestAmerica St. Louis | Method of Shipment: Govt. Vehicle | Bill of Lading/Air Bill No.: 7914 1377 5864 |
| 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 Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

| Sample No. | Lab ID | * | Date | Time | No/Type Container | Sample Analysis | Preservative |
|---|---|---|---|---|---|---|---|
| B1PV94 | | W | 10-17-07 | 0944 | 1x500-mL P | 300.0_ANIONS_IC: Sulfate (1) | Cool~4C |
| B1PV94 | | W | ↓ | ↓ | 1x20-mL P | Activity Scan | None |

MLH 10-18-07 In Window

| Relinquished By | Print | Sign | Date/Time | Received By | Print | Sign | Date/Time |
|---|---|---|---|---|---|---|---|
| Josh Hemick, Fluor Hanford | J. Hemick | | OCT 17 2007 1400 | FedEx | | | |
| Relinquished By: RoEx | | | 10-18-07 0950 | Received By | Michael Hilger | | 10-18-07 0950 |
| Relinquished By | | | Date/Time | Received By | | | Date/Time |
| Relinquished By | | | Date/Time | Received By | | | Date/Time |

**Matrix ***

| | | | |
|---|---|---|---|
| SE = 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

Quick Help

| | | | |
|---|---|---|---|
| **Tracking number** | 791413715864 | **Reference** | NOONER-1 |
| **Signed for by** | B.DANIELS | **Destination** | Earth City, MO |
| **Ship date** | Oct 17, 2007 | **Delivered to** | Shipping/Receiving |
| **Delivery date** | Oct 18, 2007 9:47 AM | **Service type** | Priority Overnight |
| | | **Weight** | 17.0 lbs. |
| **Status** | Delivered | | |
| **Signature image available** | Yes | | |

| Date/Time | | Activity | Location | Details |
|---|---|---|---|---|
| **Oct 18, 2007** | 9:47 AM | **Delivered** | Earth City, MO | |
| | 8:07 AM | On FedEx vehicle for delivery | EARTH CITY, MO | |
| | 7:59 AM | At local FedEx facility | EARTH CITY, MO | |
| | 6:49 AM | At dest sort facility | BERKELEY, MO | |
| | 5:00 AM | Departed FedEx location | MEMPHIS, TN | |
| | 1:34 AM | Arrived at FedEx location | MEMPHIS, TN | |
| **Oct 17, 2007** | 5:16 PM | Left origin | PASCO, WA | |
| | 4:18 PM | Picked up | PASCO, WA | |
| | 2:53 PM | Package data transmitted to FedEx | | |

Signature proof | E-mail results | Track more shipments/orders

Subscribe to tracking updates (optional)

**Your Name:** **Your E-mail Address:**

| **E-mail address** | **Language** | **Exception updates** | **Delivery 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

Submit

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Lot #(s): F7J180181

- 763 -

**Condition Upon Receipt Form**

Client: HANFord
Quote No: 77153
COC/RFA No: W08-010-279, I08-004-8
Initiated By: [illegible]
Date: 10-18-07
Time: 0950

**Shipping Information**

Shipper Name: FE
Shipping # (s):*
1. 7914 1371 5864
2.
3.
4.
5.
6.
7.
8.
9.
10.

Multiple Packages Y (N)
Sample Temperature (s):**
1. 6°
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: COC Not Relinquished

I08-004-8

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: 10-18-07

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# SL717

FLUOR HANFORD Cell R 788

# CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C.# 18 I08-002-174

Page 1 of 1

| | | |
|---|---|---|
| Collector ~~J.G. Hogan~~ RTSICKLE ~~Fluor Hanford~~ 10-19-07 | Contact/Requester Steve Trent | Telephone No. 509-373-5869 MSIN FAX |
| SAF No. I08-002 | Sampling Origin Hanford Site | Purchase Order/Charge Code |
| Project Title 100KR4IAM(1/2), OCTOBER 2007 | HNF-N-506-5 | Ice Chest No. ERC-99-003 Temp. |
| Shipped To (Lab) TestAmerica St. Louis | Method of Shipment Govt. Vehicle | Bill of Lading/Air Bill No. 7925 8391 1403 |
| 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 Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

| Sample No. | Lab ID | * | Date | Time | No/Type Container | Sample Analysis | Preservative |
|---|---|---|---|---|---|---|---|
| B1PV38 (F) | | W | 10-19-07 | 1137 | 1x500-mL G | 7470_HG_CVAA: Mercury (1) | HNO3 to pH <2 Cool~4C |
| B1PV39 | | W | ↓ | ↓ | 1x20-mL P | Activity Scan | None |
| B1PV39 | | W | ↓ | ↓ | 1x500-mL G | 7470_HG_CVAA: Mercury (1) | HNO3 to pH <2 Cool~4C |

| Relinquished By (Print / Sign) | Date/Time | Received By (Print / Sign) | Date/Time |
|---|---|---|---|
| ~~J.G. Hogan~~ 10-19-07 Fluor Hanford / RTSICKLE | 1400 OCT 19 2007 | FedEx | |
| FedEx | 10-20-07 09:00 | Angela Buson | 10-20-07 9:00 |
| | | | |
| | | | |

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

Quick Help

| | | | |
|---|---|---|---|
| **Tracking number** | 792583911403 | **Reference** | ERC-99-003 |
| **Signed for by** | B.DANIELS | **Destination** | Earth City, MO |
| **Ship date** | Oct 19, 2007 | **Delivered to** | Shipping/Receiving |
| **Delivery date** | Oct 20, 2007 8:49 AM | **Service type** | Priority Overnight |
| | | **Weight** | 18.0 lbs. |

**Status** Delivered

**Signature image available** Yes

| Date/Time | | Activity | Location | Details |
|---|---|---|---|---|
| **Oct 20, 2007** | 8:49 AM | **Delivered** | Earth City, MO | |
| | 7:28 AM | On FedEx vehicle for delivery | EARTH CITY, MO | |
| | 7:22 AM | At local FedEx facility | EARTH CITY, MO | |
| | 5:05 AM | At dest sort facility | BERKELEY, MO | |
| | 4:03 AM | Departed FedEx location | MEMPHIS, TN | |
| | 12:51 AM | Arrived at FedEx location | MEMPHIS, TN | |
| **Oct 19, 2007** | 5:18 PM | Left origin | PASCO, WA | |
| | 4:07 PM | Picked up | PASCO, WA | |
| | 2:40 PM | Package data transmitted to FedEx | | |

Signature proof | E-mail results | Track more shipments/orders

Subscribe to tracking updates (optional)

**Your Name:** **Your E-mail Address:**

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

**Select format:** ◉ HTML ○ Text ○ Wireless

**Add personal message:**

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Submit

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Lot #(s): FT5200146

- 788 -

## Condition Upon Receipt Form

Client: Fluor Hanford COC/RFA No: I08-002 Date: 10-20-07
Quote No: 17152 Initiated By: KWB Time: 9:00

### Shipping Information

Shipper Name: FE
Multiple Packages Y (N)

Shipping # (s):*
1. 7985 8391 1403 6.
2. 7. 
3. 8. 
4. 9. 
5. 10.

Sample Temperature (s):**
1. 4 6.
2. 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:
I08-002-174

Corrective Action:
☐ Client Contact Name: Informed by:
☐ Sample(s) processed "as is"
☐ Sample(s) on hold until: If released, notify:
Project Management Review: Date: 10-23-07

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# SL717

FLUOR HANFORD

5L717

# CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W08-010-102

Page 1 of 1

| | | |
|---|---|---|
| Quint Herrick<br>Fluor Hanford | Contact/Requester<br>Steve Trent | Telephone No. 509-373-5869 MSIN FAX |
| SAF No.<br>W08-010 | Sampling Origin<br>Hanford Site | Purchase Order/Charge Code |
| Project Title<br>RCRA, OCTOBER 2007 | HNF-N-506-5 | Ice Chest No. SWS-1 Temp. |
| Shipped To (Lab)<br>TestAmerica St. Louis | Method of Shipment<br>Govt. Vehicle | Bill of Lading/Air Bill No. 7987 9182 6688 |
| Protocol<br>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 ☐

| Sample No. | Lab ID | * | Date | Time | No/Type Container | Sample Analysis | Preservative |
|---|---|---|---|---|---|---|---|
| B1PX26 (F) | | W | 10-22-07 | 1250 | 1x500-mL G | 7470_HG_CVAA: Mercury (1) | HNO3 to pH <2 Cool~4C |
| B1PX27 | | W | | | 3x1000-mL aG | 8040_PHENOLIC_GC: List-1 (17) | Residual Chlorine 0.0008% Na2S2O3 Cool~4C |
| B1PX27 | | W | | | 1x20-mL P | Activity Scan | None |
| B1PX27 | | W | | | 4x40-mL aGs* | 8260_VOA_GCMS: List-2 (55) | HCl or H2SO4 to pH <2 Cool~4C |
| B1PX27 | | W | | | 3x1000-mL aG | 8270_SVOA_GCMS_IX: List-2 (124) | Cool~4C |
| B1PX27 | | W | | | 3x1000-mL aG | 8082_PCB_GC: List-1 (7) | Cool~4C |
| B1PX27 | | W | | | 1x500-mL G | 7470_HG_CVAA: Mercury (1) | HNO3 to pH <2 Cool~4C |
| B1PX27 | | W | ✓ | ✓ | 3x1000-mL G | 413.1_OILGREASE: Oil and Grease (1) | HCl to pH <2 Cool~4C |

| Relinquished By | Print | Sign | Date/Time | Received By | Print | Sign | Date/Time |
|---|---|---|---|---|---|---|---|
| Fluor Hanford | | | OCT 22 2007 1400 | FedEX | | | |
| Relinquished By | | | Date/Time | Received By | | | Date/Time |
| FedEx | | | 10.23.07 0930 | M Hilger | | | 10-23-07 0930 |
| Relinquished By | | | Date/Time | Received By | | | Date/Time |
| Relinquished By | | | Date/Time | Received By | | | Date/Time |

**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

44

SDG: SL717

FLUOR HANFORD SL 717

# CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W08-010-227

Page 1 of 1

| | | |
|---|---|---|
| Collector: Josh Herrick, Fluor Hanford | Contact/Requester: Steve Trent | Telephone No.: 509-373-5869 MSIN FAX |
| SAF No.: W08-010 | Sampling Origin: Hanford Site | Purchase Order/Charge Code |
| Project Title: RCRA OCTOBER 2007 | HNF-N-506-5 | Ice Chest No.: 6RD-03-28 Temp. |
| Shipped To (Lab): TestAmerica St. Louis | Method of Shipment: Govt. Vehicle | Bill of Lading/Air Bill No.: 7817 3832 3533 |
| 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 ☐

| Sample No. | Lab ID | * | Date | Time | No/Type Container | Sample Analysis | Preservative |
|---|---|---|---|---|---|---|---|
| B1PX16 (F) | | W | 0900 | 10-22-07 | 1x500-mL G | 7470_HG_CVAA: Mercury (1) | HNO3 to pH <2 Cool~4C |
| B1PX45 | | W | | | 3x1000-mL aG | 8040_PHENOLIC_GC: List-1 (17) | Residual Chlorine 0.0008% Na2S2O3 Cool~4C |
| B1PX45 | | W | | | 1x20-mL P | Activity Scan | None |
| B1PX45 | | W | | | 4x40-mL aGs* | 8260_VOA_GCMS: List-2 (55) | HCl or H2SO4 to pH <2 Cool~4C |
| B1PX45 | | W | | | 3x1000-mL aG | 8270_SVOA_GCMS_IX: List-2 (124) | Cool~4C |
| B1PX45 | | W | | | 3x1000-mL aG | 8082_PCB_GC: List-1 (7) | Cool~4C |
| B1PX45 | | W | | | 1x500-mL G | 7470_HG_CVAA: Mercury (1) | HNO3 to pH <2 Cool~4C |
| B1PX45 | | W | | | 3x1000-mL G | 413.1_OILGREASE: Oil and Grease (1) | HCl to pH <2 Cool~4C |

| Relinquished By | Print | Sign | Date/Time | Received By | Print | Sign | Date/Time |
|---|---|---|---|---|---|---|---|
| Josh Herrick, Fluor Hanford | | | OCT 22 2007 1400 | FedEX | | | |
| Relinquished By: Fed Ex | | | Date/Time: 10-23-07 0930 | Received By: Michael Hilger | | | Date/Time: 10-23-07 0930 |
| Relinquished By | | | Date/Time | Received By | | | Date/Time |
| Relinquished By | | | Date/Time | Received By | | | Date/Time |

Matrix *

| | | | |
|---|---|---|---|
| S = Soil | | DS = Drum Solid | |
| SE = Sediment | | DL = Drum Liquid | |
| 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

Quick Help

| | | | |
|---|---|---|---|
| **Tracking number** | 798791826688 | **Reference** | SWS-1 |
| **Signed for by** | B.DANIELS | **Destination** | Earth City, MO |
| **Ship date** | Oct 22, 2007 | **Delivered to** | Shipping/Receiving |
| **Delivery date** | Oct 23, 2007 9:24 AM | **Service type** | Priority Overnight |
| | | **Weight** | 71.0 lbs. |

**Status** Delivered

**Signature image available** Yes

| Date/Time | | Activity | Location | Details |
|---|---|---|---|---|
| **Oct 23, 2007** | 9:24 AM | **Delivered** | Earth City, MO | |
| | 7:20 AM | On FedEx vehicle for delivery | EARTH CITY, MO | |
| | 7:13 AM | At local FedEx facility | EARTH CITY, MO | |
| | 6:33 AM | At dest sort facility | BERKELEY, MO | |
| | 4:25 AM | Departed FedEx location | MEMPHIS, TN | |
| | 1:04 AM | Arrived at FedEx location | MEMPHIS, TN | |
| **Oct 22, 2007** | 5:16 PM | Left origin | PASCO, WA | |
| | 4:11 PM | Package data transmitted to FedEx | | |
| | 3:28 PM | Picked up | PASCO, WA | |

Signature proof | E-mail results | Track more shipments/orders

Subscribe to tracking updates (optional)

**Your Name:** **Your E-mail Address:**

| **E-mail address** | **Language** | **Exception updates** | **Delivery 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

Submit

Track Shipments/FedEx Kinko's Orders

# Detailed Results

Quick Help

| | | | |
|---|---|---|---|
| **Tracking number** | 799738323533 | **Reference** | GRP-03-028 |
| **Signed for by** | B.DANIELS | **Destination** | Earth City, MO |
| **Ship date** | Oct 22, 2007 | **Delivered to** | Shipping/Receiving |
| **Delivery date** | Oct 23, 2007 9:24 AM | **Service type** | Priority Overnight |
| | | **Weight** | 77.0 lbs. |

**Status** Delivered

**Signature image available** Yes

| Date/Time | | Activity | Location | Details |
|---|---|---|---|---|
| **Oct 23, 2007** | 9:24 AM | **Delivered** | Earth City, MO | |
| | 7:20 AM | On FedEx vehicle for delivery | EARTH CITY, MO | |
| | 7:13 AM | At local FedEx facility | EARTH CITY, MO | |
| | 6:33 AM | At dest sort facility | BERKELEY, MO | |
| | 4:25 AM | Departed FedEx location | MEMPHIS, TN | |
| | 1:04 AM | Arrived at FedEx location | MEMPHIS, TN | |
| **Oct 22, 2007** | 5:16 PM | Left origin | PASCO, WA | |
| | 4:12 PM | Package data transmitted to FedEx | | |
| | 3:28 PM | Picked up | PASCO, WA | |

Signature proof | E-mail results | Track more shipments/orders

Subscribe to tracking updates (optional)

**Your Name:** **Your E-mail Address:**

| **E-mail address** | **Language** | **Exception updates** | **Delivery 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

Submit

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

- 774 -

Lot #(s): FTJ230123
159
270

## Condition Upon Receipt Form

Client: Hanford
Quote No: 17135, 16963
COC/RFA No: See below
Initiated By: [illegible]
Date: 10-23-07 [illegible]
Time: 0950

### Shipping Information

Shipper Name: FE
Multiple Packages (Y) N

Shipping # (s):*

| | | | |
|---|---|---|---|
| 1. | 7917 8592 2104 | 6. | |
| 2. | 7987 9182 6688 | 7. | |
| 3. | 7997 3832 3533 | 8. | |
| 4. | | 9. | |
| 5. | | 10. | |

Sample Temperature (s):**

| | | | |
|---|---|---|---|
| 1. | 2° | 6. | |
| 2. | 2° | 7. | |
| 3. | 2 | 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: S08-010-283 W08-010-107, 227
X07-025-23, 27
~~W08-010, 107~~ [illegible] 10-23-07

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: 10.25.07 774

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# SL717

FLUOR HANFORD

SL717

COR

# CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # S08-010-283



| | | |
|---|---|---|
| Collector: Josh Herrick | Contact/Requester: Steve Trent | Telephone No.: 509-373-5869 MSIN FAX |
| SAF No.: Fluor Hanford S08-010 | Sampling Origin: Hanford Site | Purchase Order/Charge Code |
| Project Title: SURV, OCTOBER 2007 | HNF-N-506-5 | Ice Chest No.: SWS-1 Temp. |
| Shipped To (Lab): TestAmerica St. Louis | Method of Shipment: Govt. Vehicle | Bill of Lading/Air Bill No.: 7987 |
| Protocol: SURV | 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 ☐

All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.

WSCF: Batch all GW samples submitted into one SDG, daily closure.

FY07 and FY08 samples cannot be in the same SDG.

| Sample No. | Lab ID | * | Date | Time | No/Type Container | Sample Analysis | Preservative |
|---|---|---|---|---|---|---|---|
| B1R296 | | W | 10-22-07 | 1250 | 4x40-mL aGs* | 8260_VOA_GCMS: List-2 (26) | HCl or H2SO4 to pH <2 Cool~4C |
| B1R296 | | W | ↓ | ↓ | 1x20-mL P | Activity Scan | None |

| Relinquished By | Print | Sign | Date/Time | Received By | Print | Sign | Date/Time |
|---|---|---|---|---|---|---|---|
| Josh Herrick Fluor Hanford | | | OCT 22 2007 1400 | FedEx | | | |
| Relinquished By | | | Date/Time | Received By | | | Date/Time |
| FedEx | | | 10-23-07 0820 | Michael Hilger | | | 10-23-07 0830 |
| Relinquished By | | | Date/Time | Received By | | | Date/Time |
| Relinquished By | | | Date/Time | Received By | | | Date/Time |

**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

5 of 44

Track Shipments/FedEx Kinko's Orders

# Detailed Results

Quick Help

| | | | |
|---|---|---|---|
| **Tracking number** | 798791826688 | **Reference** | SWS-1 |
| **Signed for by** | B.DANIELS | **Destination** | Earth City, MO |
| **Ship date** | Oct 22, 2007 | **Delivered to** | Shipping/Receiving |
| **Delivery date** | Oct 23, 2007 9:24 AM | **Service type** | Priority Overnight |
| | | **Weight** | 71.0 lbs. |

**Status** Delivered

**Signature image available** Yes

| Date/Time | | Activity | Location | Details |
|---|---|---|---|---|
| **Oct 23, 2007** | 9:24 AM | **Delivered** | Earth City, MO | |
| | 7:20 AM | On FedEx vehicle for delivery | EARTH CITY, MO | |
| | 7:13 AM | At local FedEx facility | EARTH CITY, MO | |
| | 6:33 AM | At dest sort facility | BERKELEY, MO | |
| | 4:25 AM | Departed FedEx location | MEMPHIS, TN | |
| | 1:04 AM | Arrived at FedEx location | MEMPHIS, TN | |
| **Oct 22, 2007** | 5:16 PM | Left origin | PASCO, WA | |
| | 4:11 PM | Package data transmitted to FedEx | | |
| | 3:28 PM | Picked up | PASCO, WA | |

Signature proof | E-mail results | Track more shipments/orders

Subscribe to tracking updates (optional)

**Your Name:** **Your E-mail Address:**

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

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**Add personal message:**

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TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Lot #(s): FTJ230123
159
170

- 774 -

## Condition Upon Receipt Form

Client: Hanford
Quote No: 17135, 16983
COC/RFA No: See below
Initiated By: [illegible]
Date: 10-23-07 [illegible]
Time: 0950

### Shipping Information

Shipper Name: FF
Multiple Packages (Y) N

Shipping # (s):*

| | | | |
|---|---|---|---|
| 1. | 7917 8592 2104 | 6. | |
| 2. | 7987 9182 6688 | 7. | |
| 3. | 7997 3832 3533 | 8. | |
| 4. | | 9. | |
| 5. | | 10. | |

Sample Temperature (s):**

| | | | |
|---|---|---|---|
| 1. | 2° | 6. | |
| 2. | 2° | 7. | |
| 3. | 2 | 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: S08-010-283 W08-010-107, 227
X07-025-23, 27
~~W08-010, 107~~ not 10-23-07

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: 10-25-07

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# ST717

FLUOR HANFORD

51717

803

# CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W08-010-158**

Page 1 of 1

| | | |
|---|---|---|
| Collector: Dave Williamson, Fluor Hanford | Contact/Requester: Steve Trent | Telephone No.: 509-373-5869 10-23-07 MSIN FAX |
| SAF No.: W08-010 | Sampling Origin: Hanford Site | Purchase Order/Charge Code |
| Project Title: RCRA OCTOBER 2007 | HNF-N-506 10 | Ice Chest No.: ERC 02-104 (4) Temp. |
| Shipped To (Lab): TestAmerica St. Louis | Method of Shipment: Govt. Vehicle | Bill of Lading/Air Bill No.: 7908-5783-1683 |
| 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 ☐

| Sample No. | Lab ID | * | Date | Time | No/Type Container | Sample Analysis | Preservative |
|---|---|---|---|---|---|---|---|
| B1PWW5 | | W | 10-23-07 | 1112 | 3x1000-mL aG | 8040_PHENOLIC_GC: List-1 (17) | Residual Chlorine 0.0008% Na2S2O3 Cool~4C |
| B1PWW5 | | W | ↓ | ↓ | 1x20-mL P | Activity Scan | None |
| B1PXF1 (F) | | W | ↓ | ↓ | 1x500-mL G | 7470_HG_CVAA: Mercury (1) | HNO3 to pH <2 Cool~4C |
| B1PXF2 | | W | ↓ | ↓ | 3x1000-mL aG | 8082_PCB_GC: List-1 (7) | Cool~4C |
| B1PXF2 | | W | ↓ | ↓ | 1x500-mL G | 7470_HG_CVAA: Mercury (1) | HNO3 to pH <2 Cool~4C |

| Relinquished By | Print | Sign | Date/Time | Received By | Print | Sign | Date/Time |
|---|---|---|---|---|---|---|---|
| Dave Williamson, Fluor Hanford | | | OCT 23 2007 1700 | FED EX | | | 1700 |
| Relinquished By | | | Date/Time | Received By | | | Date/Time |
| FED EX | | | 10-24-07 0945 | | | | 10/24/07 915 |
| Relinquished By | | | Date/Time | Received By | | | Date/Time |
| Relinquished By | | | Date/Time | Received By | | | Date/Time |

**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

OFF 44

SDG# SL717

**FLUOR HANFORD** SL717

803

# CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W08-010-142**

Page 1 of 1

| | | |
|---|---|---|
| **Collector** Dave Williamson, Fluor Hanford | **Contact/Requester** Steve Trent | **Telephone No.** 509-373-5869 **MSIN** **FAX** |
| **SAF No.** W08-010 | **Sampling Origin** Hanford Site | **Purchase Order/Charge Code** |
| **Project Title** RCRA, OCTOBER 2007 | HNF-N-506 10 | **Ice Chest No.** ERC 02-101 **Temp.** |
| **Shipped To (Lab)** TestAmerica St. Louis | **Method of Shipment** Govt. Vehicle | **Bill of Lading/Air Bill No.** 7908-5783-1683 |
| **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 ☐

| Sample No. | Lab ID | * | Date | Time | No/Type Container | Sample Analysis | Preservative |
|---|---|---|---|---|---|---|---|
| B1PWT1 | | W | 10-23-07 | 1246 | 3x1000-mL aG | 8040_PHENOLIC_GC: List-1 (17) | Residual Chlorine 0.0008% Na2S2O3 Cool~4C |
| B1PWT1 | | W | ↓ | ↓ | 1x20-mL P | Activity Scan | None |

| Relinquished By | Print | Sign | Date/Time | Received By | Print | Sign | Date/Time |
|---|---|---|---|---|---|---|---|
| Dave Williamson, Fluor Hanford | Dave Will. | | OCT 23 2007 1400 | FEd EX | | | OCT 23 2007 1400 |
| Relinquished By | | | Date/Time | Received By | | | Date/Time |
| FED Ex | | | 10-24-07 09:15 | | | | 10/24/07 9:15 |
| Relinquished By | | | Date/Time | Received By | | | Date/Time |
| Relinquished By | | | Date/Time | Received By | | | Date/Time |

**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

3 of 4

Track Shipments/FedEx Kinko's Orders

# Detailed Results

Quick Help

| | | | |
|---|---|---|---|
| **Tracking number** | 790857831683 | **Destination** | Earth City, MO |
| **Signed for by** | A.BRUSON | **Delivered to** | Shipping/Receiving |
| **Ship date** | Oct 23, 2007 | **Service type** | Priority Overnight |
| **Delivery date** | Oct 24, 2007 9:17 AM | **Weight** | 68.0 lbs. |
| **Status** | Delivered | | |
| **Signature image available** | Yes | | |

| Date/Time | | Activity | Location | Details |
|---|---|---|---|---|
| **Oct 24, 2007** | 9:17 AM | **Delivered** | Earth City, MO | |
| | 7:27 AM | On FedEx vehicle for delivery | EARTH CITY, MO | |
| | 7:18 AM | At local FedEx facility | EARTH CITY, MO | |
| | 4:56 AM | Departed FedEx location | MEMPHIS, TN | |
| | 3:57 AM | At dest sort facility | BERKELEY, MO | |
| | 1:58 AM | Arrived at FedEx location | MEMPHIS, TN | |
| **Oct 23, 2007** | 5:19 PM | Left origin | PASCO, WA | |
| | 4:30 PM | Package data transmitted to FedEx | | |
| | 4:16 PM | Picked up | PASCO, WA | |

Signature proof | E-mail results | Track more shipments/orders

Subscribe to tracking updates (optional)

**Your Name:** **Your E-mail Address:**

| E-mail address | Language | Exception updates | Delivery 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

Submit

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Lot #(s): F7J240126

- 803 -

**Condition Upon Receipt Form**

Client: Flour Hanford COC/RFA No: W08-010-158, W08-010-142 Date: 10/24/07
Quote No: 77135 Initiated By: JB Time: 915

**Shipping Information**

Shipper Name: Fed Ex
Multiple Packages Y (N)

Shipping # (s):*
1. 790857831683
2.
3.
4.
5.
6.
7.
8.
9.
10.

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:
W08-010-142, 158

Corrective Action:
☐ Client Contact Name: Informed by:
☐ Sample(s) processed "as is"
☐ Sample(s) on hold until: If released, notify:
Project Management Review: Date: 10-25-07

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.

# VOLATILES

**Fluor Hanford Inc**

**Client Sample ID: B1PX27**

**GC/MS Volatiles**

**Lot-Sample #...:** F7J230123-002 **Work Order #...:** J9LLA1AF **Matrix.....:** WATER
**Date Sampled...:** 10/22/07 **Date Received..:** 10/23/07
**Prep Date.....:** 10/30/07 **Analysis Date..:** 10/30/07
**Prep Batch #...:** 7304444
**Dilution Factor:** 1 **Method.....:** SW846 8260B

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | MDL |
|---|---|---|---|---|
| Acetonitrile | ND | 5.0 | ug/L | 1.5 |
| Acrolein | ND | 10 | ug/L | 0.44 |
| Bromodichloromethane | ND | 1.0 | ug/L | 0.064 |
| Bromoform | ND | 1.0 | ug/L | 0.12 |
| Bromomethane | ND | 2.0 | ug/L | 0.085 |
| Chlorobenzene | ND | 1.0 | ug/L | 0.10 |
| Chloroprene | ND | 1.0 | ug/L | 0.10 |
| Dibromochloromethane | ND | 1.0 | ug/L | 0.11 |
| 1,2-Dibromo-3-chloro-propane | ND | 1.0 | ug/L | 0.55 |
| Chloroethane | ND | 2.0 | ug/L | 0.10 |
| Chloromethane | ND | 2.0 | ug/L | 0.10 |
| Allyl chloride | ND | 2.0 | ug/L | 0.047 |
| 1,2-Dibromoethane | ND | 1.0 | ug/L | 0.13 |
| Dibromomethane | ND | 1.0 | ug/L | 0.12 |
| trans-1,4-Dichloro-2-butene | ND | 2.0 | ug/L | 0.43 |
| Dichlorodifluoromethane | ND | 2.0 | ug/L | 0.045 |
| 1,1-Dichloroethene | ND | 1.0 | ug/L | 0.045 |
| 1,2-Dichloroethene (total) | ND | 2.0 | ug/L | 0.10 |
| 1,2-Dichloropropane | ND | 1.0 | ug/L | 0.077 |
| cis-1,3-Dichloropropene | ND | 1.0 | ug/L | 0.050 |
| trans-1,3-Dichloropropene | ND | 1.0 | ug/L | 0.085 |
| 1,4-Dioxane | ND | 20 | ug/L | 12 |
| Ethylbenzene | ND | 1.0 | ug/L | 0.064 |
| Ethyl methacrylate | ND | 1.0 | ug/L | 0.66 |
| Trichlorofluoromethane | ND | 1.0 | ug/L | 0.10 |
| 2-Hexanone | ND | 5.0 | ug/L | 1.0 |
| Iodomethane | ND | 2.0 | ug/L | 0.13 |
| Isobutanol | ND | 80 | ug/L | 29 |
| Methacrylonitrile | ND | 5.0 | ug/L | 0.30 |
| Methyl methacrylate | ND | 1.0 | ug/L | 0.84 |
| Styrene | ND | 1.0 | ug/L | 0.10 |
| 1,1,1,2-Tetrachloroethane | ND | 1.0 | ug/L | 0.10 |
| 1,1,2,2-Tetrachloroethane | ND | 1.0 | ug/L | 0.14 |
| 1,2,3-Trichloropropane | ND | 1.0 | ug/L | 0.24 |
| Vinyl acetate | ND | 2.0 | ug/L | 0.72 |
| Vinyl chloride | ND | 2.0 | ug/L | 0.044 |

(Continued on next page)

**Fluor Hanford Inc**

**Client Sample ID: B1PX27**

**GC/MS Volatiles**

**Lot-Sample #...:** F7J230123-002 **Work Order #...:** J9LLA1AF **Matrix.....:** WATER

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | MDL |
|---|---|---|---|---|
| Acetone | ND | 2.0 | ug/L | 0.80 |
| Methylene chloride | ND | 1.0 | ug/L | 0.10 |
| Carbon disulfide | ND | 1.0 | ug/L | 0.10 |
| 1,1-Dichloroethane | ND | 1.0 | ug/L | 0.046 |
| 2-Butanone | ND | 5.0 | ug/L | 1.8 |
| Chloroform | ND | 1.0 | ug/L | 0.10 |
| cis-1,2-Dichloroethene | ND | 1.0 | ug/L | 0.048 |
| Propionitrile | ND | 5.0 | ug/L | 1.7 |
| trans-1,2-Dichloroethene | ND | 1.0 | ug/L | 0.10 |
| 1,1,1-Trichloroethane | ND | 1.0 | ug/L | 0.10 |
| Carbon tetrachloride | ND | 1.0 | ug/L | 0.10 |
| 1,2-Dichloroethane | ND | 1.0 | ug/L | 0.11 |
| Benzene | ND | 1.0 | ug/L | 0.10 |
| Trichloroethene | ND | 1.0 | ug/L | 0.10 |
| 4-Methyl-2-pentanone | ND | 5.0 | ug/L | 0.21 |
| 1,1,2-Trichloroethane | ND | 1.0 | ug/L | 0.092 |
| Tetrachloroethene | ND | 1.0 | ug/L | 0.17 |
| Tetrahydrofuran | ND | 10 | ug/L | 1.2 |
| Xylenes (total) | ND | 3.0 | ug/L | 0.30 |
| 1,4-Dichlorobenzene | ND | 1.0 | ug/L | 0.10 |
| 1-Butanol | ND | 40 | ug/L | 14 |
| Toluene | ND | 1.0 | ug/L | 0.10 |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| Toluene-d8 | 99 | (69 - 119) |
| Dibromofluoromethane | 98 | (74 - 134) |
| 1,2-Dichloroethane-d4 | 101 | (72 - 128) |
| 4-Bromofluorobenzene | 93 | (71 - 115) |

**Fluor Hanford Inc**

**B1PX27**

**GC/MS Volatiles**

**Lot-Sample #:** F7J230123-002 **Work Order #:** J9LLA1AF **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

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

**Fluor Hanford Inc**

**Client Sample ID: B1PX45**

**GC/MS Volatiles**

**Lot-Sample #...:** F7J230123-004 **Work Order #...:** J9LM31AF **Matrix.....:** WATER
**Date Sampled...:** 10/22/07 **Date Received..:** 10/23/07
**Prep Date.....:** 10/30/07 **Analysis Date..:** 10/30/07
**Prep Batch #...:** 7304444
**Dilution Factor:** 1 **Method.....:** SW846 8260B

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | MDL |
|---|---|---|---|---|
| Acetonitrile | ND | 5.0 | ug/L | 1.5 |
| Acrolein | ND | 10 | ug/L | 0.44 |
| Bromodichloromethane | ND | 1.0 | ug/L | 0.064 |
| Bromoform | ND | 1.0 | ug/L | 0.12 |
| Bromomethane | ND | 2.0 | ug/L | 0.085 |
| Chlorobenzene | ND | 1.0 | ug/L | 0.10 |
| Chloroprene | ND | 1.0 | ug/L | 0.10 |
| Dibromochloromethane | ND | 1.0 | ug/L | 0.11 |
| 1,2-Dibromo-3-chloro-propane | ND | 1.0 | ug/L | 0.55 |
| Chloroethane | ND | 2.0 | ug/L | 0.10 |
| Chloromethane | ND | 2.0 | ug/L | 0.10 |
| Allyl chloride | ND | 2.0 | ug/L | 0.047 |
| 1,2-Dibromoethane | ND | 1.0 | ug/L | 0.13 |
| Dibromomethane | ND | 1.0 | ug/L | 0.12 |
| trans-1,4-Dichloro-2-butene | ND | 2.0 | ug/L | 0.43 |
| Dichlorodifluoromethane | ND | 2.0 | ug/L | 0.045 |
| 1,1-Dichloroethene | ND | 1.0 | ug/L | 0.045 |
| 1,2-Dichloroethene (total) | ND | 2.0 | ug/L | 0.10 |
| 1,2-Dichloropropane | ND | 1.0 | ug/L | 0.077 |
| cis-1,3-Dichloropropene | ND | 1.0 | ug/L | 0.050 |
| trans-1,3-Dichloropropene | ND | 1.0 | ug/L | 0.085 |
| 1,4-Dioxane | ND | 20 | ug/L | 12 |
| Ethylbenzene | ND | 1.0 | ug/L | 0.064 |
| Ethyl methacrylate | ND | 1.0 | ug/L | 0.66 |
| Trichlorofluoromethane | ND | 1.0 | ug/L | 0.10 |
| 2-Hexanone | ND | 5.0 | ug/L | 1.0 |
| Iodomethane | ND | 2.0 | ug/L | 0.13 |
| Isobutanol | ND | 80 | ug/L | 29 |
| Methacrylonitrile | ND | 5.0 | ug/L | 0.30 |
| Methyl methacrylate | ND | 1.0 | ug/L | 0.84 |
| Styrene | ND | 1.0 | ug/L | 0.10 |
| 1,1,1,2-Tetrachloroethane | ND | 1.0 | ug/L | 0.10 |
| 1,1,2,2-Tetrachloroethane | ND | 1.0 | ug/L | 0.14 |
| 1,2,3-Trichloropropane | ND | 1.0 | ug/L | 0.24 |
| Vinyl acetate | ND | 2.0 | ug/L | 0.72 |
| Vinyl chloride | ND | 2.0 | ug/L | 0.044 |

(Continued on next page)

**Fluor Hanford Inc**

**Client Sample ID: B1PX45**

**GC/MS Volatiles**

**Lot-Sample #...:** F7J230123-004 **Work Order #...:** J9LM31AF **Matrix.....:** WATER

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | MDL |
|---|---|---|---|---|
| Acetone | ND | 2.0 | ug/L | 0.80 |
| **Methylene chloride** | **0.96 J,B** | **1.0** | **ug/L** | **0.10** |
| Carbon disulfide | ND | 1.0 | ug/L | 0.10 |
| 1,1-Dichloroethane | ND | 1.0 | ug/L | 0.046 |
| 2-Butanone | ND | 5.0 | ug/L | 1.8 |
| Chloroform | ND | 1.0 | ug/L | 0.10 |
| cis-1,2-Dichloroethene | ND | 1.0 | ug/L | 0.048 |
| Propionitrile | ND | 5.0 | ug/L | 1.7 |
| trans-1,2-Dichloroethene | ND | 1.0 | ug/L | 0.10 |
| 1,1,1-Trichloroethane | ND | 1.0 | ug/L | 0.10 |
| Carbon tetrachloride | ND | 1.0 | ug/L | 0.10 |
| 1,2-Dichloroethane | ND | 1.0 | ug/L | 0.11 |
| Benzene | ND | 1.0 | ug/L | 0.10 |
| Trichloroethene | ND | 1.0 | ug/L | 0.10 |
| 4-Methyl-2-pentanone | ND | 5.0 | ug/L | 0.21 |
| 1,1,2-Trichloroethane | ND | 1.0 | ug/L | 0.092 |
| Tetrachloroethene | ND | 1.0 | ug/L | 0.17 |
| Tetrahydrofuran | ND | 10 | ug/L | 1.2 |
| Xylenes (total) | ND | 3.0 | ug/L | 0.30 |
| 1,4-Dichlorobenzene | ND | 1.0 | ug/L | 0.10 |
| 1-Butanol | ND | 40 | ug/L | 14 |
| Toluene | ND | 1.0 | ug/L | 0.10 |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| Toluene-d8 | 96 | (69 - 119) |
| Dibromofluoromethane | 99 | (74 - 134) |
| 1,2-Dichloroethane-d4 | 103 | (72 - 128) |
| 4-Bromofluorobenzene | 84 | (71 - 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.

**Fluor Hanford Inc**

**B1PX45**

**GC/MS Volatiles**

**Lot-Sample #:** F7J230123-004 **Work Order #:** J9LM31AF **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

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

**Fluor Hanford Inc**

**Client Sample ID: B1R296**

**GC/MS Volatiles**

**Lot-Sample #...:** F7J230270-001 **Work Order #...:** J9MR61AC **Matrix.....:** WATER
**Date Sampled...:** 10/22/07 **Date Received..:** 10/23/07
**Prep Date.....:** 10/30/07 **Analysis Date..:** 10/30/07
**Prep Batch #...:** 7304444
**Dilution Factor:** 1 **Method.....:** SW846 8260B

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | MDL |
|---|---|---|---|---|
| 1,1-Dichloroethene | ND | 1.0 | ug/L | 0.045 |
| 1,4-Dioxane | ND | 80 | ug/L | 12 |
| Ethylbenzene | ND | 1.0 | ug/L | 0.064 |
| Vinyl chloride | ND | 2.0 | ug/L | 0.044 |
| Acetone | ND | 2.0 | ug/L | 0.80 |
| **Methylene chloride** | **0.20 J,B** | **1.0** | **ug/L** | **0.10** |
| Carbon disulfide | ND | 1.0 | ug/L | 0.10 |
| 1,1-Dichloroethane | ND | 1.0 | ug/L | 0.046 |
| 2-Butanone | ND | 5.0 | ug/L | 1.8 |
| Chloroform | ND | 1.0 | ug/L | 0.10 |
| cis-1,2-Dichloroethene | ND | 1.0 | ug/L | 0.048 |
| Propionitrile | ND | 5.0 | ug/L | 1.7 |
| trans-1,2-Dichloroethene | ND | 1.0 | ug/L | 0.10 |
| 1,1,1-Trichloroethane | ND | 1.0 | ug/L | 0.10 |
| Carbon tetrachloride | ND | 1.0 | ug/L | 0.10 |
| 1,2-Dichloroethane | ND | 1.0 | ug/L | 0.11 |
| Benzene | ND | 1.0 | ug/L | 0.10 |
| Trichloroethene | ND | 1.0 | ug/L | 0.10 |
| 4-Methyl-2-pentanone | ND | 5.0 | ug/L | 0.21 |
| 1,1,2-Trichloroethane | ND | 1.0 | ug/L | 0.092 |
| Tetrachloroethene | ND | 1.0 | ug/L | 0.17 |
| Tetrahydrofuran | ND | 10 | ug/L | 1.2 |
| Xylenes (total) | ND | 3.0 | ug/L | 0.30 |
| 1,4-Dichlorobenzene | ND | 1.0 | ug/L | 0.10 |
| 1-Butanol | ND | 40 | ug/L | 14 |
| Toluene | ND | 1.0 | ug/L | 0.10 |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| Toluene-d8 | 94 | (69 - 119) |
| Dibromofluoromethane | 95 | (74 - 134) |
| 1,2-Dichloroethane-d4 | 102 | (72 - 128) |
| 4-Bromofluorobenzene | 90 | (71 - 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.

**Fluor Hanford Inc**

**B1R296**

**GC/MS Volatiles**

**Lot-Sample #:** F7J230270-001 **Work Order #:** J9MR61AC **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 #...:** SL717 **Work Order #...:** KAATC1AA **Matrix.....:** WATER
**MB Lot-Sample #:** F7J310000-444

**Prep Date.....:** 10/30/07
**Analysis Date..:** 10/30/07 **Prep Batch #...:** 7304444
**Dilution Factor:** 1

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | METHOD |
|---|---|---|---|---|
| 1,2-Dibromo-3-chloro-propane | ND | 1.0 | ug/L | SW846 8260B |
| Chloroethane | ND | 2.0 | ug/L | SW846 8260B |
| Chloromethane | ND | 2.0 | ug/L | SW846 8260B |
| Allyl chloride | ND | 2.0 | ug/L | SW846 8260B |
| 1,2-Dibromoethane | ND | 1.0 | ug/L | SW846 8260B |
| Dibromomethane | ND | 1.0 | ug/L | SW846 8260B |
| trans-1,4-Dichloro-2-butene | ND | 2.0 | ug/L | SW846 8260B |
| Dichlorodifluoromethane | ND | 2.0 | ug/L | SW846 8260B |
| 1,1-Dichloroethene | ND | 1.0 | ug/L | SW846 8260B |
| 1,2-Dichloroethene (total) | ND | 2.0 | ug/L | SW846 8260B |
| 1,2-Dichloropropane | ND | 1.0 | ug/L | SW846 8260B |
| cis-1,3-Dichloropropene | ND | 1.0 | ug/L | SW846 8260B |
| trans-1,3-Dichloropropene | ND | 1.0 | ug/L | SW846 8260B |
| 1,4-Dioxane | ND | 20 | ug/L | SW846 8260B |
| Ethylbenzene | ND | 1.0 | ug/L | SW846 8260B |
| Ethyl methacrylate | ND | 1.0 | ug/L | SW846 8260B |
| Trichlorofluoromethane | ND | 1.0 | ug/L | SW846 8260B |
| 2-Hexanone | ND | 5.0 | ug/L | SW846 8260B |
| Iodomethane | ND | 2.0 | ug/L | SW846 8260B |
| Isobutanol | ND | 80 | ug/L | SW846 8260B |
| Methacrylonitrile | ND | 5.0 | ug/L | SW846 8260B |
| Methyl methacrylate | ND | 1.0 | ug/L | SW846 8260B |
| **Styrene** | **0.13 J** | **1.0** | **ug/L** | **SW846 8260B** |
| 1,1,1,2-Tetrachloroethane | ND | 1.0 | ug/L | SW846 8260B |
| 1,1,2,2-Tetrachloroethane | ND | 1.0 | ug/L | SW846 8260B |
| 1,2,3-Trichloropropane | ND | 1.0 | ug/L | SW846 8260B |
| Vinyl acetate | ND | 2.0 | ug/L | SW846 8260B |
| Acetonitrile | ND | 5.0 | ug/L | SW846 8260B |
| Acrolein | ND | 10 | ug/L | SW846 8260B |
| Bromodichloromethane | ND | 1.0 | ug/L | SW846 8260B |
| Bromoform | ND | 1.0 | ug/L | SW846 8260B |
| Bromomethane | ND | 2.0 | ug/L | SW846 8260B |
| Chlorobenzene | ND | 1.0 | ug/L | SW846 8260B |
| Chloroprene | ND | 1.0 | ug/L | SW846 8260B |
| Dibromochloromethane | ND | 1.0 | ug/L | SW846 8260B |
| Vinyl chloride | ND | 2.0 | ug/L | SW846 8260B |
| **Acetone** | **0.87 J** | **2.0** | **ug/L** | **SW846 8260B** |
| **Methylene chloride** | **0.13 J** | **1.0** | **ug/L** | **SW846 8260B** |

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**METHOD BLANK REPORT**

**GC/MS Volatiles**

**Client Lot #...:** SL717 **Work Order #...:** KAATC1AA **Matrix.....:** WATER

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | METHOD |
|---|---|---|---|---|
| **Carbon disulfide** | **0.10 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 | ND | 1.0 | ug/L | SW846 8260B |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| Toluene-d8 | 98 | (69 - 119) |
| Dibromofluoromethane | 95 | (74 - 134) |
| 1,2-Dichloroethane-d4 | 105 | (72 - 128) |
| 4-Bromofluorobenzene | 94 | (71 - 115) |

**NOTE(S):**

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

J Estimated result. Result is less than RL.

**Fluor Hanford Inc**

**Method Blank Report**

**GC/MS Volatiles**

**Lot-Sample #:** F7J310000-444 B **Work Order #:** KAATC1AA **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 #...:** SL717 **Work Order #...:** KAATC1AC-LCS **Matrix.....:** WATER
**LCS Lot-Sample#:** F7J310000-444 KAATC1AD-LCSD
**Prep Date.....:** 10/30/07 **Analysis Date..:** 10/30/07
**Prep Batch #...:** 7304444
**Dilution Factor:** 1

| PARAMETER | SPIKE AMOUNT | MEASURED AMOUNT | UNITS | PERCENT RECOVERY | RPD | METHOD |
|---|---|---|---|---|---|---|
| cis-1,3-Dichloropropene | 10.0 | 9.73 | ug/L | 97 | | SW846 8260B |
| | 10.0 | 9.62 | ug/L | 96 | 1.2 | SW846 8260B |
| Dibromochloromethane | 10.0 | 10.3 | ug/L | 103 | | SW846 8260B |
| | 10.0 | 9.95 | ug/L | 100 | 3.8 | SW846 8260B |
| Chloromethane | 10.0 | 9.93 | ug/L | 99 | | SW846 8260B |
| | 10.0 | 9.95 | ug/L | 100 | 0.26 | SW846 8260B |
| Bromomethane | 10.0 | 14.5 a | ug/L | 145 | | SW846 8260B |
| | 10.0 | 14.7 a | ug/L | 147 | 1.1 | SW846 8260B |
| Chloroethane | 10.0 | 8.86 | ug/L | 89 | | SW846 8260B |
| | 10.0 | 9.53 | ug/L | 95 | 7.3 | SW846 8260B |
| 1,1-Dichloroethene | 10.0 | 9.36 | ug/L | 94 | | SW846 8260B |
| | 10.0 | 9.77 | ug/L | 98 | 4.3 | SW846 8260B |
| 1,2-Dichloroethene (total) | 20.0 | 19.4 | ug/L | 97 | | SW846 8260B |
| | 20.0 | 18.9 | ug/L | 95 | 2.4 | SW846 8260B |
| 1,2-Dichloropropane | 10.0 | 10.2 | ug/L | 102 | | SW846 8260B |
| | 10.0 | 9.92 | ug/L | 99 | 3.2 | SW846 8260B |
| Bromodichloromethane | 10.0 | 10.4 | ug/L | 104 | | SW846 8260B |
| | 10.0 | 10.2 | ug/L | 102 | 1.4 | SW846 8260B |
| trans-1,3-Dichloropropene | 10.0 | 10.4 | ug/L | 104 | | SW846 8260B |
| | 10.0 | 9.72 | ug/L | 97 | 7.0 | SW846 8260B |
| 2-Hexanone | 10.0 | 10.6 | ug/L | 106 | | SW846 8260B |
| | 10.0 | 9.27 | ug/L | 93 | 13 | SW846 8260B |
| Chlorobenzene | 10.0 | 9.99 | ug/L | 100 | | SW846 8260B |
| | 10.0 | 9.86 | ug/L | 99 | 1.3 | SW846 8260B |
| Bromoform | 10.0 | 11.1 | ug/L | 111 | | SW846 8260B |
| | 10.0 | 10.5 | ug/L | 105 | 5.6 | SW846 8260B |
| Ethylbenzene | 10.0 | 9.60 | ug/L | 96 | | SW846 8260B |
| | 10.0 | 9.86 | ug/L | 99 | 2.7 | SW846 8260B |
| Styrene | 10.0 | 9.40 | ug/L | 94 | | SW846 8260B |
| | 10.0 | 9.13 | ug/L | 91 | 2.8 | SW846 8260B |
| 1,1,2,2-Tetrachloroethane | 10.0 | 10.6 | ug/L | 106 | | SW846 8260B |
| | 10.0 | 9.76 | ug/L | 98 | 8.4 | SW846 8260B |
| Allyl chloride | 10.0 | 8.16 | ug/L | 82 | | SW846 8260B |
| | 10.0 | 8.89 | ug/L | 89 | 8.6 | SW846 8260B |
| 1,2-Dibromo-3-chloropropane (DBCP) | 10.0 | 11.7 | ug/L | 117 | | SW846 8260B |
| | 10.0 | 10.3 | ug/L | 103 | 13 | SW846 8260B |

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## LABORATORY CONTROL SAMPLE DATA REPORT

### GC/MS Volatiles

**Client Lot #...:** SL717 **Work Order #...:** KAATC1AC-LCS **Matrix.....:** WATER
**LCS Lot-Sample#:** F7J310000-444 KAATC1AD-LCSD

| PARAMETER | SPIKE AMOUNT | MEASURED AMOUNT | UNITS | PERCENT RECOVERY | RPD | METHOD |
|---|---|---|---|---|---|---|
| 1,2-Dibromoethane | 10.0 | 9.24 | ug/L | 92 | | SW846 8260B |
| | 10.0 | 9.07 | ug/L | 91 | 1.8 | SW846 8260B |
| trans-1,4-Dichloro-2-butene | 10.0 | 10.7 | ug/L | 107 | | SW846 8260B |
| | 10.0 | 10.6 | ug/L | 106 | 0.37 | SW846 8260B |
| Dichlorodifluoromethane (Freon 12) | 10.0 | 9.50 | ug/L | 95 | | SW846 8260B |
| | 10.0 | 9.52 | ug/L | 95 | 0.16 | SW846 8260B |
| Ethyl methacrylate | 10.0 | 10.3 | ug/L | 103 | | SW846 8260B |
| | 10.0 | 9.51 | ug/L | 95 | 8.2 | SW846 8260B |
| Methyl methacrylate | 10.0 | 9.17 | ug/L | 92 | | SW846 8260B |
| | 10.0 | 8.48 | ug/L | 85 | 7.8 | SW846 8260B |
| 1,1,1,2-Tetrachloroethane | 10.0 | 10.0 | ug/L | 100 | | SW846 8260B |
| | 10.0 | 9.61 | ug/L | 96 | 4.3 | SW846 8260B |
| Trichlorofluoromethane | 10.0 | 10.0 | ug/L | 100 | | SW846 8260B |
| | 10.0 | 9.70 | ug/L | 97 | 3.1 | SW846 8260B |
| Acetonitrile | 50.0 | 51.1 | ug/L | 102 | | SW846 8260B |
| | 50.0 | 49.0 | ug/L | 98 | 4.1 | SW846 8260B |
| Iodomethane | 10.0 | 11.0 | ug/L | 110 | | SW846 8260B |
| | 10.0 | 11.4 | ug/L | 114 | 3.8 | SW846 8260B |
| Vinyl acetate | 10.0 | 13.8 | ug/L | 138 | | SW846 8260B |
| | 10.0 | 12.5 | ug/L | 125 | 9.7 | SW846 8260B |
| Acrolein | 50.0 | 48.1 | ug/L | 96 | | SW846 8260B |
| | 50.0 | 48.8 | ug/L | 98 | 1.5 | SW846 8260B |
| Isobutanol | 200 | 214 | ug/L | 107 | | SW846 8260B |
| | 200 | 193 | ug/L | 97 | 10 | SW846 8260B |
| Methacrylonitrile | 50.0 | 49.6 | ug/L | 99 | | SW846 8260B |
| | 50.0 | 45.0 | ug/L | 90 | 9.9 | SW846 8260B |
| 1,4-Dioxane | 200 | 264 | ug/L | 132 | | SW846 8260B |
| | 200 | 188 p | ug/L | 94 | 34 | SW846 8260B |
| Chloroprene | 10.0 | 9.99 | ug/L | 100 | | SW846 8260B |
| | 10.0 | 10.3 | ug/L | 103 | 3.2 | SW846 8260B |
| Vinyl chloride | 10.0 | 8.52 | ug/L | 85 | | SW846 8260B |
| | 10.0 | 8.51 | ug/L | 85 | 0.11 | SW846 8260B |
| Acetone | 10.0 | 10.4 | ug/L | 104 | | SW846 8260B |
| | 10.0 | 10.6 | ug/L | 106 | 1.5 | SW846 8260B |
| Methylene chloride | 10.0 | 9.33 | ug/L | 93 | | SW846 8260B |
| | 10.0 | 9.52 | ug/L | 95 | 2.0 | SW846 8260B |
| Carbon disulfide | 10.0 | 10.8 | ug/L | 108 | | SW846 8260B |
| | 10.0 | 11.1 | ug/L | 111 | 2.4 | SW846 8260B |

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## LABORATORY CONTROL SAMPLE DATA REPORT

### GC/MS Volatiles

**Client Lot #...:** SL717 **Work Order #...:** KAATC1AC-LCS **Matrix.....:** WATER
**LCS Lot-Sample#:** F7J310000-444 KAATC1AD-LCSD

| PARAMETER | SPIKE AMOUNT | MEASURED AMOUNT | UNITS | PERCENT RECOVERY | RPD | METHOD |
|---|---|---|---|---|---|---|
| 1,1-Dichloroethane | 10.0 | 9.91 | ug/L | 99 | | SW846 8260B |
| | 10.0 | 9.68 | ug/L | 97 | 2.4 | SW846 8260B |
| 2-Butanone | 10.0 | 10.0 | ug/L | 100 | | SW846 8260B |
| | 10.0 | 9.55 | ug/L | 95 | 5.0 | SW846 8260B |
| Chloroform | 10.0 | 10.0 | ug/L | 100 | | SW846 8260B |
| | 10.0 | 9.92 | ug/L | 99 | 1.1 | SW846 8260B |
| cis-1,2-Dichloroethene | 10.0 | 10.0 | ug/L | 100 | | SW846 8260B |
| | 10.0 | 9.57 | ug/L | 96 | 4.6 | SW846 8260B |
| Propionitrile | 50.0 | 50.9 | ug/L | 102 | | SW846 8260B |
| | 50.0 | 44.8 | ug/L | 90 | 13 | SW846 8260B |
| trans-1,2-Dichloroethene | 10.0 | 9.38 | ug/L | 94 | | SW846 8260B |
| | 10.0 | 9.36 | ug/L | 94 | 0.11 | SW846 8260B |
| 1,1,1-Trichloroethane | 10.0 | 10.6 | ug/L | 106 | | SW846 8260B |
| | 10.0 | 10.4 | ug/L | 104 | 1.8 | SW846 8260B |
| Carbon tetrachloride | 10.0 | 9.81 | ug/L | 98 | | SW846 8260B |
| | 10.0 | 9.93 | ug/L | 99 | 1.2 | SW846 8260B |
| 1,2-Dichloroethane | 10.0 | 10.0 | ug/L | 100 | | SW846 8260B |
| | 10.0 | 9.39 | ug/L | 94 | 6.7 | SW846 8260B |
| Benzene | 10.0 | 9.87 | ug/L | 99 | | SW846 8260B |
| | 10.0 | 9.76 | ug/L | 98 | 1.1 | SW846 8260B |
| Trichloroethene | 10.0 | 9.66 | ug/L | 97 | | SW846 8260B |
| | 10.0 | 9.59 | ug/L | 96 | 0.71 | SW846 8260B |
| 4-Methyl-2-pentanone | 10.0 | 9.59 | ug/L | 96 | | SW846 8260B |
| | 10.0 | 9.71 | ug/L | 97 | 1.2 | SW846 8260B |
| 1,1,2-Trichloroethane | 10.0 | 9.60 | ug/L | 96 | | SW846 8260B |
| | 10.0 | 9.02 | ug/L | 90 | 6.2 | SW846 8260B |
| Tetrachloroethene | 10.0 | 10.2 | ug/L | 102 | | SW846 8260B |
| | 10.0 | 10.5 | ug/L | 105 | 3.3 | SW846 8260B |
| Tetrahydrofuran | 50.0 | 49.2 | ug/L | 98 | | SW846 8260B |
| | 50.0 | 44.3 | ug/L | 89 | 11 | SW846 8260B |
| 1,4-Dichlorobenzene | 10.0 | 9.96 | ug/L | 100 | | SW846 8260B |
| | 10.0 | 9.91 | ug/L | 99 | 0.47 | SW846 8260B |
| 1-Butanol | 100 | 114 | ug/L | 114 | | SW846 8260B |
| | 100 | 84.9 p | ug/L | 85 | 29 | SW846 8260B |
| Toluene | 10.0 | 9.91 | ug/L | 99 | | SW846 8260B |
| | 10.0 | 9.93 | ug/L | 99 | 0.21 | SW846 8260B |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| Toluene-d8 | 96 | (85 - 121) |
| | 104 | (85 - 121) |
| Dibromofluoromethane | 93 | (84 - 117) |
| | 100 | (84 - 117) |
| 1,2-Dichloroethane-d4 | 96 | (72 - 124) |
| | 102 | (72 - 124) |

(Continued on next page)

## LABORATORY CONTROL SAMPLE DATA REPORT

### GC/MS Volatiles

**Client Lot #...:** SL717 **Work Order #...:** KAATC1AC-LCS **Matrix.....:** WATER
**LCS Lot-Sample#:** F7J310000-444 KAATC1AD-LCSD

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| 4-Bromofluorobenzene | 99 | (80 - 121) |
| | 98 | (80 - 121) |

**NOTE(S):**

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

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

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

## MATRIX SPIKE SAMPLE DATA REPORT

### GC/MS Volatiles

**Client Lot #...:** SL717 **Work Order #...:** J9LLA1AN-MS **Matrix.....:** WATER
**MS Lot-Sample #:** F7J230123-002 J9LLA1AP-MSD
**Date Sampled...:** 10/22/07 **Date Received..:** 10/23/07
**Prep Date.....:** 10/30/07 **Analysis Date..:** 10/30/07
**Prep Batch #...:** 7304444
**Dilution Factor:** 1

| PARAMETER | SAMPLE AMOUNT | SPIKE AMT | MEASRD AMOUNT | UNITS | PERCNT RECVRY | RPD | METHOD |
|---|---|---|---|---|---|---|---|
| cis-1,3-Dichloropropene | ND | 10.0 | 11.2 | ug/L | 112 | | SW846 8260B |
| | ND | 10.0 | 10.5 | ug/L | 105 | 6.0 | SW846 8260B |
| Chloromethane | ND | 10.0 | 11.9 | ug/L | 119 | | SW846 8260B |
| | ND | 10.0 | 12.1 | ug/L | 121 | 1.8 | SW846 8260B |
| Bromomethane | ND | 10.0 | 15.2 | ug/L | 152 a | | SW846 8260B |
| | ND | 10.0 | 16.3 | ug/L | 163 a | 7.0 | SW846 8260B |
| Chloroethane | ND | 10.0 | 9.61 | ug/L | 96 | | SW846 8260B |
| | ND | 10.0 | 9.80 | ug/L | 98 | 1.9 | SW846 8260B |
| 1,1-Dichloroethene | ND | 10.0 | 10.9 | ug/L | 109 | | SW846 8260B |
| | ND | 10.0 | 11.2 | ug/L | 112 | 2.8 | SW846 8260B |
| 1,2-Dichloroethene (total) | ND | 20.0 | 21.6 | ug/L | 108 | | SW846 8260B |
| | ND | 20.0 | 21.6 | ug/L | 108 | 0.04 | SW846 8260B |
| 1,2-Dichloropropane | ND | 10.0 | 11.2 | ug/L | 112 | | SW846 8260B |
| | ND | 10.0 | 11.1 | ug/L | 111 | 1.6 | SW846 8260B |
| Bromodichloromethane | ND | 10.0 | 12.2 | ug/L | 122 | | SW846 8260B |
| | ND | 10.0 | 12.1 | ug/L | 121 | 0.57 | SW846 8260B |
| trans-1,3-Dichloropropene | ND | 10.0 | 11.6 | ug/L | 116 | | SW846 8260B |
| | ND | 10.0 | 11.2 | ug/L | 112 | 2.7 | SW846 8260B |
| 2-Hexanone | ND | 10.0 | 10.6 | ug/L | 106 | | SW846 8260B |
| | ND | 10.0 | 10.5 | ug/L | 105 | 0.37 | SW846 8260B |
| Chlorobenzene | ND | 10.0 | 11.4 | ug/L | 114 | | SW846 8260B |
| | ND | 10.0 | 11.4 | ug/L | 114 | 0.26 | SW846 8260B |
| Bromoform | ND | 10.0 | 11.4 | ug/L | 114 | | SW846 8260B |
| | ND | 10.0 | 11.9 | ug/L | 119 | 4.7 | SW846 8260B |
| Ethylbenzene | ND | 10.0 | 10.8 | ug/L | 108 | | SW846 8260B |
| | ND | 10.0 | 10.9 | ug/L | 109 | 0.82 | SW846 8260B |
| Styrene | ND | 10.0 | 9.91 | ug/L | 99 | | SW846 8260B |
| | ND | 10.0 | 10.2 | ug/L | 102 | 2.8 | SW846 8260B |
| 1,1,2,2-Tetrachloroethane | ND | 10.0 | 10.5 | ug/L | 105 | | SW846 8260B |
| | ND | 10.0 | 10.9 | ug/L | 109 | 3.5 | SW846 8260B |
| Dibromochloromethane | ND | 10.0 | 11.9 | ug/L | 119 | | SW846 8260B |
| | ND | 10.0 | 11.5 | ug/L | 115 | 3.5 | SW846 8260B |
| Allyl chloride | ND | 10.0 | 10.8 | ug/L | 108 | | SW846 8260B |
| | ND | 10.0 | 12.0 | ug/L | 120 | 11 | SW846 8260B |
| 1,2-Dibromo-3-chloropropane (DBCP) | ND | 10.0 | 11.2 | ug/L | 112 | | SW846 8260B |
| | ND | 10.0 | 11.2 | ug/L | 112 | 0.09 | SW846 8260B |

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**MATRIX SPIKE SAMPLE DATA REPORT**

**GC/MS Volatiles**

**Client Lot #...:** SL717 **Work Order #...:** J9LLA1AN-MS **Matrix.....:** WATER
**MS Lot-Sample #:** F7J230123-002 J9LLA1AP-MSD

| PARAMETER | SAMPLE AMOUNT | SPIKE AMT | MEASRD AMOUNT | UNITS | PERCNT RECVRY | RPD | METHOD |
|---|---|---|---|---|---|---|---|
| 1,2-Dibromoethane | ND | 10.0 | 10.7 | ug/L | 107 | | SW846 8260B |
| | ND | 10.0 | 11.1 | ug/L | 111 | 3.8 | SW846 8260B |
| trans-1,4-Dichloro-2-butene | ND | 10.0 | 10.5 | ug/L | 105 | | SW846 8260B |
| | ND | 10.0 | 9.86 | ug/L | 99 | 6.2 | SW846 8260B |
| Dichlorodifluoromethane (Freon 12) | ND | 10.0 | 10.2 | ug/L | 102 | | SW846 8260B |
| | ND | 10.0 | 10.4 | ug/L | 104 | 2.4 | SW846 8260B |
| Ethyl methacrylate | ND | 10.0 | 11.0 | ug/L | 110 | | SW846 8260B |
| | ND | 10.0 | 11.3 | ug/L | 113 | 2.2 | SW846 8260B |
| Methyl methacrylate | ND | 10.0 | 10.0 | ug/L | 100 | | SW846 8260B |
| | ND | 10.0 | 10.1 | ug/L | 101 | 0.59 | SW846 8260B |
| 1,1,1,2-Tetrachloroethane | ND | 10.0 | 11.0 | ug/L | 110 | | SW846 8260B |
| | ND | 10.0 | 11.5 | ug/L | 115 | 4.5 | SW846 8260B |
| Trichlorofluoromethane | ND | 10.0 | 12.0 | ug/L | 120 | | SW846 8260B |
| | ND | 10.0 | 12.2 | ug/L | 122 | 1.5 | SW846 8260B |
| Acetonitrile | ND | 50.0 | 55.9 | ug/L | 112 | | SW846 8260B |
| | ND | 50.0 | 48.7 | ug/L | 97 | 14 | SW846 8260B |
| Iodomethane | ND | 10.0 | 14.9 | ug/L | 149 | | SW846 8260B |
| | ND | 10.0 | 16.0 | ug/L | 160 a | 7.1 | SW846 8260B |
| Vinyl acetate | ND | 10.0 | 13.1 | ug/L | 131 | | SW846 8260B |
| | ND | 10.0 | 12.3 | ug/L | 123 | 6.2 | SW846 8260B |
| Acrolein | ND | 50.0 | 47.5 | ug/L | 95 | | SW846 8260B |
| | ND | 50.0 | 49.5 | ug/L | 99 | 4.0 | SW846 8260B |
| Isobutanol | ND | 200 | 212 | ug/L | 106 | | SW846 8260B |
| | ND | 200 | 182 | ug/L | 91 | 15 | SW846 8260B |
| Methacrylonitrile | ND | 50.0 | 54.7 | ug/L | 109 | | SW846 8260B |
| | ND | 50.0 | 52.6 | ug/L | 105 | 3.8 | SW846 8260B |
| 1,4-Dioxane | ND | 200 | 192 | ug/L | 96 | | SW846 8260B |
| | ND | 200 | 218 | ug/L | 109 | 13 | SW846 8260B |
| Chloroprene | ND | 10.0 | 12.3 | ug/L | 123 | | SW846 8260B |
| | ND | 10.0 | 12.3 | ug/L | 123 | 0.32 | SW846 8260B |
| Vinyl chloride | ND | 10.0 | 9.58 | ug/L | 96 | | SW846 8260B |
| | ND | 10.0 | 10.1 | ug/L | 101 | 5.4 | SW846 8260B |
| Acetone | ND | 10.0 | 8.78 | ug/L | 88 | | SW846 8260B |
| | ND | 10.0 | 7.61 | ug/L | 76 | 14 | SW846 8260B |
| Methylene chloride | ND | 10.0 | 9.77 | ug/L | 98 | | SW846 8260B |
| | ND | 10.0 | 9.31 | ug/L | 93 | 4.8 | SW846 8260B |
| Carbon disulfide | ND | 10.0 | 11.8 | ug/L | 118 | | SW846 8260B |
| | ND | 10.0 | 12.4 | ug/L | 124 | 5.5 | SW846 8260B |

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**MATRIX SPIKE SAMPLE DATA REPORT**

**GC/MS Volatiles**

**Client Lot #...:** SL717 **Work Order #...:** J9LLA1AN-MS **Matrix.....:** WATER
**MS Lot-Sample #:** F7J230123-002 J9LLA1AP-MSD

| PARAMETER | SAMPLE AMOUNT | SPIKE AMT | MEASRD AMOUNT | UNITS | PERCNT RECVRY | RPD | METHOD |
|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethane | ND | 10.0 | 11.3 | ug/L | 113 | | SW846 8260B |
| | ND | 10.0 | 11.3 | ug/L | 113 | 0.17 | SW846 8260B |
| 2-Butanone | ND | 10.0 | 9.75 | ug/L | 97 | | SW846 8260B |
| | ND | 10.0 | 11.0 | ug/L | 110 | 12 | SW846 8260B |
| Chloroform | ND | 10.0 | 11.6 | ug/L | 116 | | SW846 8260B |
| | ND | 10.0 | 11.3 | ug/L | 113 | 2.0 | SW846 8260B |
| cis-1,2-Dichloroethene | ND | 10.0 | 11.1 | ug/L | 111 | | SW846 8260B |
| | ND | 10.0 | 11.1 | ug/L | 111 | 0.18 | SW846 8260B |
| Propionitrile | ND | 50.0 | 53.4 | ug/L | 107 | | SW846 8260B |
| | ND | 50.0 | 48.8 | ug/L | 98 | 9.2 | SW846 8260B |
| trans-1,2-Dichloroethene | ND | 10.0 | 10.6 | ug/L | 106 | | SW846 8260B |
| | ND | 10.0 | 10.6 | ug/L | 106 | 0.28 | SW846 8260B |
| 1,1,1-Trichloroethane | ND | 10.0 | 12.9 | ug/L | 129 | | SW846 8260B |
| | ND | 10.0 | 12.7 | ug/L | 127 | 1.6 | SW846 8260B |
| Carbon tetrachloride | ND | 10.0 | 12.4 | ug/L | 124 | | SW846 8260B |
| | ND | 10.0 | 12.5 | ug/L | 125 | 0.64 | SW846 8260B |
| 1,2-Dichloroethane | ND | 10.0 | 12.2 | ug/L | 122 | | SW846 8260B |
| | ND | 10.0 | 11.9 | ug/L | 119 | 2.8 | SW846 8260B |
| Benzene | ND | 10.0 | 11.1 | ug/L | 111 | | SW846 8260B |
| | ND | 10.0 | 10.6 | ug/L | 106 | 4.5 | SW846 8260B |
| Trichloroethene | ND | 10.0 | 11.9 | ug/L | 119 | | SW846 8260B |
| | ND | 10.0 | 11.0 | ug/L | 110 | 7.6 | SW846 8260B |
| 4-Methyl-2-pentanone | ND | 10.0 | 11.1 | ug/L | 111 | | SW846 8260B |
| | ND | 10.0 | 10.7 | ug/L | 107 | 3.1 | SW846 8260B |
| 1,1,2-Trichloroethane | ND | 10.0 | 10.6 | ug/L | 106 | | SW846 8260B |
| | ND | 10.0 | 10.6 | ug/L | 106 | 0.09 | SW846 8260B |
| Tetrachloroethene | ND | 10.0 | 11.7 | ug/L | 117 | | SW846 8260B |
| | ND | 10.0 | 11.7 | ug/L | 117 | 0.34 | SW846 8260B |
| Tetrahydrofuran | ND | 50.0 | 51.4 | ug/L | 103 | | SW846 8260B |
| | ND | 50.0 | 51.5 | ug/L | 103 | 0.33 | SW846 8260B |
| 1,4-Dichlorobenzene | ND | 10.0 | 10.8 | ug/L | 108 | | SW846 8260B |
| | ND | 10.0 | 10.5 | ug/L | 105 | 3.2 | SW846 8260B |
| 1-Butanol | ND | 100 | 81.2 | ug/L | 81 | | SW846 8260B |
| | ND | 100 | 89.8 | ug/L | 90 | 10 | SW846 8260B |
| Toluene | ND | 10.0 | 11.1 | ug/L | 111 | | SW846 8260B |
| | ND | 10.0 | 11.3 | ug/L | 113 | 1.6 | SW846 8260B |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| Toluene-d8 | 100 | (69 - 119) |
| | 104 | (69 - 119) |

(Continued on next page)

**MATRIX SPIKE SAMPLE DATA REPORT**

**GC/MS Volatiles**

**Client Lot #...:** SL717 **Work Order #...:** J9LLA1AN-MS **Matrix.....:** WATER
**MS Lot-Sample #:** F7J230123-002 J9LLA1AP-MSD

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| Dibromofluoromethane | 101 | (74 - 134) |
| | 99 | (74 - 134) |
| 1,2-Dichloroethane-d4 | 113 | (72 - 128) |
| | 108 | (72 - 128) |
| 4-Bromofluorobenzene | 93 | (71 - 115) |
| | 95 | (71 - 115) |

**NOTE(S):**

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

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

# GC/MS SEMIVOLATILES

**Fluor Hanford Inc**

**Client Sample ID: B1PX27**

**GC/MS Semivolatiles**

**Lot-Sample #...:** F7J230123-002 **Work Order #...:** J9LLA1AK **Matrix.....:** WATER
**Date Sampled...:** 10/22/07 **Date Received..:** 10/23/07
**Prep Date.....:** 10/26/07 **Analysis Date..:** 11/10/07
**Prep Batch #...:** 7299156
**Dilution Factor:** 1 **Method.....:** SW846 8270C

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | MDL |
|---|---|---|---|---|
| Hexachloropropene | ND | 100 | ug/L | 2.5 |
| N-Nitro-o-toluidine | ND | 20 | ug/L | |
| Pyridine | ND | 20 | ug/L | 5.0 |
| N-Nitrosodimethylamine | ND | 10 | ug/L | 2.0 |
| 2-Picoline | ND | 20 | ug/L | 5.5 |
| N-Nitrosomethylethylamine | ND | 10 | ug/L | 1.0 |
| Methyl methanesulfonate | ND | 10 | ug/L | 5.0 |
| Methyl parathion | ND | 50 | ug/L | 1.0 |
| N-Nitrosodiethylamine | ND | 10 | ug/L | 1.0 |
| Ethyl methanesulfonate | ND | 10 | ug/L | 1.0 |
| Phenol | ND | 10 | ug/L | 4.0 |
| Pentachloroethane | ND | 50 | ug/L | 1.0 |
| Aniline | ND | 10 | ug/L | 1.0 |
| bis(2-Chloroethyl)-ether | ND | 10 | ug/L | 1.0 |
| 2-Chlorophenol | ND | 10 | ug/L | 1.0 |
| 1,3-Dichlorobenzene | ND | 10 | ug/L | 1.0 |
| 1,4-Dichlorobenzene | ND | 10 | ug/L | 1.0 |
| Benzyl alcohol | ND | 10 | ug/L | 1.0 |
| Hexachlorophene | ND | 100 | ug/L | 10 |
| 1,2-Dichlorobenzene | ND | 10 | ug/L | 1.0 |
| 2-Methylphenol | ND | 10 | ug/L | 2.0 |
| 2,2'-oxybis(1-Chloropropane) | ND | 10 | ug/L | 1.0 |
| Acetophenone | ND | 10 | ug/L | 1.0 |
| 4-Methylphenol | ND | 10 | ug/L | |
| N-Nitrosopyrrolidine | ND | 10 | ug/L | 1.0 |
| N-Nitrosomorpholine | ND | 10 | ug/L | 0.96 |
| o-Toluidine | ND | 20 | ug/L | 1.0 |
| N-Nitrosodi-n-propyl-amine | ND | 10 | ug/L | 1.0 |
| Hexachloroethane | ND | 10 | ug/L | 1.0 |
| 2-Methylnaphthalene | ND | 10 | ug/L | 1.0 |
| Nitrobenzene | ND | 10 | ug/L | 1.0 |
| N-Nitrosopiperidine | ND | 10 | ug/L | 1.0 |
| Isophorone | ND | 10 | ug/L | 1.0 |
| 2-Nitrophenol | ND | 10 | ug/L | 1.0 |
| 2,4-Dimethylphenol | ND | 10 | ug/L | 1.0 |
| O,O,O-Triethylphosphoro-thioate | ND | 50 | ug/L | 1.0 |

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**Fluor Hanford Inc**

**Client Sample ID: B1PX27**

**GC/MS Semivolatiles**

**Lot-Sample #...:** F7J230123-002 **Work Order #...:** J9LLA1AK **Matrix.....:** WATER

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | MDL |
|---|---|---|---|---|
| bis(2-Chloroethoxy) methane | ND | 10 | ug/L | 1.0 |
| alpha,alpha-Dimethylphenethylamine | ND | 50 | ug/L | 20 |
| 2,4-Dichlorophenol | ND | 10 | ug/L | 1.0 |
| 1,2,4-Trichlorobenzene | ND | 10 | ug/L | 1.0 |
| Naphthalene | ND | 10 | ug/L | 1.0 |
| 2,6-Dichlorophenol | ND | 10 | ug/L | 1.0 |
| 4-Chloroaniline | ND | 10 | ug/L | 1.0 |
| Hexachlorobutadiene | ND | 10 | ug/L | 1.0 |
| p-Phenylene diamine | ND | 100 | ug/L | 1.0 |
| 4-Chloro-3-methylphenol | ND | 10 | ug/L | 1.0 |
| Safrole | ND | 20 | ug/L | 1.0 |
| 1,2,4,5-Tetrachlorobenzene | ND | 10 | ug/L | 1.0 |
| Hexachlorocyclopentadiene | ND | 50 | ug/L | 2.5 |
| 2,4,6-Trichlorophenol | ND | 10 | ug/L | 2.0 |
| 2,4,5-Trichlorophenol | ND | 10 | ug/L | 2.0 |
| 2-Chloronaphthalene | ND | 10 | ug/L | 1.0 |
| Isosafrole | ND | 20 | ug/L | 5.7 |
| 2-Nitroaniline | ND | 50 | ug/L | 2.0 |
| 1,4-Naphthoquinone | ND | 50 | ug/L | 0.95 |
| Dimethyl phthalate | ND | 10 | ug/L | 1.0 |
| N-Nitrosodi-n-butylamine | ND | 10 | ug/L | 1.0 |
| 1,3-Dinitrobenzene | ND | 10 | ug/L | 1.0 |
| Acenaphthylene | ND | 10 | ug/L | 1.0 |
| 2,6-Dinitrotoluene | ND | 10 | ug/L | 1.1 |
| 3-Nitroaniline | ND | 50 | ug/L | 1.1 |
| Acenaphthene | ND | 10 | ug/L | 1.0 |
| 2,4-Dinitrophenol | ND | 50 | ug/L | 10 |
| 4-Nitrophenol | ND | 50 | ug/L | 5.0 |
| Dibenzofuran | ND | 10 | ug/L | 1.0 |
| Pentachlorobenzene | ND | 10 | ug/L | 2.7 |
| 2,4-Dinitrotoluene | ND | 10 | ug/L | 1.1 |
| 1-Naphthylamine | ND | 10 | ug/L | 1.0 |
| 2,3,4,6-Tetrachlorophenol | ND | 50 | ug/L | 1.0 |
| 2-Naphthylamine | ND | 10 | ug/L | 1.0 |
| O,O-Diethyl-O-(2-pyrazinyl) phosphorothioate | ND | 50 | ug/L | 0.99 |

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**Fluor Hanford Inc**

**Client Sample ID: B1PX27**

**GC/MS Semivolatiles**

**Lot-Sample #...:** F7J230123-002 **Work Order #...:** J9LLA1AK **Matrix.....:** WATER

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | MDL |
|---|---|---|---|---|
| Diethyl phthalate | ND | 10 | ug/L | 1.0 |
| Fluorene | ND | 10 | ug/L | 1.0 |
| 4-Chlorophenyl phenyl ether | ND | 10 | ug/L | 1.0 |
| 4-Nitroaniline | ND | 50 | ug/L | 1.3 |
| 4,6-Dinitro-2-methylphenol | ND | 50 | ug/L | 5.0 |
| N-Nitrosodiphenylamine | ND | 10 | ug/L | 1.0 |
| Azobenzene | ND | 10 | ug/L | 1.0 |
| Tetraethyldithiopyrophosphate | ND | 50 | ug/L | 1.0 |
| 1,3,5-Trinitrobenzene | ND | 50 | ug/L | 5.0 |
| Diallate | ND | 20 | ug/L | 2.0 |
| Phorate | ND | 50 | ug/L | 2.9 |
| 4-Bromophenyl phenyl ether | ND | 10 | ug/L | 1.0 |
| Phenacetin | ND | 20 | ug/L | 0.94 |
| Dimethoate | ND | 20 | ug/L | 1.1 |
| Hexachlorobenzene | ND | 10 | ug/L | 1.0 |
| Pentachlorophenol | ND | 50 | ug/L | 2.0 |
| Pentachloronitrobenzene | ND | 50 | ug/L | 1.1 |
| 4-Aminobiphenyl | ND | 50 | ug/L | 1.0 |
| Pronamide | ND | 20 | ug/L | 1.0 |
| Disulfoton | ND | 50 | ug/L | 1.0 |
| Phenanthrene | ND | 10 | ug/L | 1.0 |
| Anthracene | ND | 10 | ug/L | 1.1 |
| Dinoseb | ND | 20 | ug/L | 2.0 |
| 4-Nitroquinoline-1-oxide | ND | 100 | ug/L | 5.0 |
| Parathion | ND | 50 | ug/L | 1.0 |
| Methapyrilene | ND | 50 | ug/L | 14 |
| Fluoranthene | ND | 10 | ug/L | 1.0 |
| Isodrin | ND | 10 | ug/L | 1.0 |
| Pyrene | ND | 10 | ug/L | 1.0 |
| Aramite 1 | ND | 20 | ug/L | |
| Aramite 2 | ND | 20 | ug/L | |
| p-Dimethylaminoazobenzene | ND | 20 | ug/L | 1.0 |
| p-Chlorobenzilate | ND | 10 | ug/L | 1.0 |
| Famphur | ND | 100 | ug/L | 50 |
| Kepone | ND | 100 | ug/L | 20 |
| 3,3'-Dimethylbenzidine | ND | 50 | ug/L | 10 |
| Butyl benzyl phthalate | ND | 10 | ug/L | 1.0 |
| 2-Acetylaminofluorene | ND | 100 | ug/L | 1.0 |

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**Fluor Hanford Inc**

**Client Sample ID: B1PX27**

**GC/MS Semivolatiles**

**Lot-Sample #...:** F7J230123-002 **Work Order #...:** J9LLA1AK **Matrix.....:** WATER

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | MDL |
|---|---|---|---|---|
| Benzo(a)anthracene | ND | 10 | ug/L | 1.0 |
| 3,3'-Dichlorobenzidine | ND | 50 | ug/L | 1.0 |
| Chrysene | ND | 10 | ug/L | 1.0 |
| bis(2-Ethylhexyl) phthalate | ND | 10 | ug/L | 1.0 |
| Di-n-butyl phthalate | ND | 10 | ug/L | 1.0 |
| Di-n-octyl phthalate | ND | 10 | ug/L | 5.0 |
| 7,12-Dimethylbenz(a)-anthracene | ND | 20 | ug/L | 1.0 |
| Benzo(b)fluoranthene | ND | 10 | ug/L | 1.0 |
| Benzo(k)fluoranthene | ND | 10 | ug/L | 1.0 |
| Benzo(a)pyrene | ND | 10 | ug/L | 1.0 |
| 3-Methylcholanthrene | ND | 20 | ug/L | 1.0 |
| Indeno(1,2,3-cd)pyrene | ND | 10 | ug/L | 1.0 |
| Benzo(ghi)perylene | ND | 10 | ug/L | 1.0 |
| Dibenz(a,h)anthracene | ND | 10 | ug/L | 1.0 |
| Tributyl phosphate | ND | 10 | ug/L | 1.1 |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| 2-Fluorophenol | 39 | (26 - 74 ) |
| Phenol-d5 | 26 | (18 - 86 ) |
| Nitrobenzene-d5 | 63 | (39 - 94 ) |
| 2-Fluorobiphenyl | 52 | (42 - 95 ) |
| 2,4,6-Tribromophenol | 58 | (49 - 96 ) |
| Terphenyl-d14 | 73 | (31 - 104) |

**Fluor Hanford Inc**

**B1PX27**

**GC/MS Semivolatiles**

**Lot-Sample #:** F7J230123-002 **Work Order #:** J9LLA1AK **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

| PARAMETER | CAS # | ESTIMATED RESULT | | RETENTION TIME | UNITS |
|---|---|---|---|---|---|
| Unknown | | 4.4 | M | 4.0939 | ug/L |

**NOTE(S):**

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

**Fluor Hanford Inc**

**Client Sample ID: B1PX45**

**GC/MS Semivolatiles**

**Lot-Sample #...:** F7J230123-004 **Work Order #...:** J9LM31AH **Matrix.....:** WATER
**Date Sampled...:** 10/22/07 **Date Received..:** 10/23/07
**Prep Date.....:** 10/26/07 **Analysis Date..:** 11/10/07
**Prep Batch #...:** 7299156
**Dilution Factor:** 1 **Method.....:** SW846 8270C

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | MDL |
|---|---|---|---|---|
| Hexachloropropene | ND | 100 | ug/L | 2.5 |
| N-Nitro-o-toluidine | ND | 20 | ug/L | |
| Pyridine | ND | 20 | ug/L | 5.0 |
| N-Nitrosodimethylamine | ND | 10 | ug/L | 2.0 |
| 2-Picoline | ND | 20 | ug/L | 5.5 |
| N-Nitrosomethylethylamine | ND | 10 | ug/L | 1.0 |
| Methyl methanesulfonate | ND | 10 | ug/L | 5.0 |
| Methyl parathion | ND | 50 | ug/L | 1.0 |
| N-Nitrosodiethylamine | ND | 10 | ug/L | 1.0 |
| Ethyl methanesulfonate | ND | 10 | ug/L | 1.0 |
| Phenol | ND | 10 | ug/L | 4.0 |
| Pentachloroethane | ND | 50 | ug/L | 1.0 |
| Aniline | ND | 10 | ug/L | 1.0 |
| bis(2-Chloroethyl)-ether | ND | 10 | ug/L | 1.0 |
| 2-Chlorophenol | ND | 10 | ug/L | 1.0 |
| 1,3-Dichlorobenzene | ND | 10 | ug/L | 1.0 |
| 1,4-Dichlorobenzene | ND | 10 | ug/L | 1.0 |
| Benzyl alcohol | ND | 10 | ug/L | 1.0 |
| Hexachlorophene | ND | 100 | ug/L | 10 |
| 1,2-Dichlorobenzene | ND | 10 | ug/L | 1.0 |
| 2-Methylphenol | ND | 10 | ug/L | 2.0 |
| 2,2'-oxybis(1-Chloropropane) | ND | 10 | ug/L | 1.0 |
| Acetophenone | ND | 10 | ug/L | 1.0 |
| 4-Methylphenol | ND | 10 | ug/L | |
| N-Nitrosopyrrolidine | ND | 10 | ug/L | 1.0 |
| N-Nitrosomorpholine | ND | 10 | ug/L | 0.96 |
| o-Toluidine | ND | 20 | ug/L | 1.0 |
| N-Nitrosodi-n-propyl-amine | ND | 10 | ug/L | 1.0 |
| Hexachloroethane | ND | 10 | ug/L | 1.0 |
| 2-Methylnaphthalene | ND | 10 | ug/L | 1.0 |
| Nitrobenzene | ND | 10 | ug/L | 1.0 |
| N-Nitrosopiperidine | ND | 10 | ug/L | 1.0 |
| Isophorone | ND | 10 | ug/L | 1.0 |
| 2-Nitrophenol | ND | 10 | ug/L | 1.0 |
| 2,4-Dimethylphenol | ND | 10 | ug/L | 1.0 |
| O,O,O-Triethylphosphoro-thioate | ND | 50 | ug/L | 1.0 |

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**Fluor Hanford Inc**

**Client Sample ID: B1PX45**

**GC/MS Semivolatiles**

**Lot-Sample #...:** F7J230123-004 **Work Order #...:** J9LM31AH **Matrix.....:** WATER

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | MDL |
|---|---|---|---|---|
| bis(2-Chloroethoxy) methane | ND | 10 | ug/L | 1.0 |
| alpha,alpha-Dimethylphenethylamine | ND | 50 | ug/L | 20 |
| 2,4-Dichlorophenol | ND | 10 | ug/L | 1.0 |
| 1,2,4-Trichlorobenzene | ND | 10 | ug/L | 1.0 |
| Naphthalene | ND | 10 | ug/L | 1.0 |
| 2,6-Dichlorophenol | ND | 10 | ug/L | 1.0 |
| 4-Chloroaniline | ND | 10 | ug/L | 1.0 |
| Hexachlorobutadiene | ND | 10 | ug/L | 1.0 |
| p-Phenylene diamine | ND | 100 | ug/L | 1.0 |
| 4-Chloro-3-methylphenol | ND | 10 | ug/L | 1.0 |
| Safrole | ND | 20 | ug/L | 1.0 |
| 1,2,4,5-Tetrachlorobenzene | ND | 10 | ug/L | 1.0 |
| Hexachlorocyclopentadiene | ND | 50 | ug/L | 2.5 |
| 2,4,6-Trichlorophenol | ND | 10 | ug/L | 2.0 |
| 2,4,5-Trichlorophenol | ND | 10 | ug/L | 2.0 |
| 2-Chloronaphthalene | ND | 10 | ug/L | 1.0 |
| Isosafrole | ND | 20 | ug/L | 5.7 |
| 2-Nitroaniline | ND | 50 | ug/L | 2.0 |
| 1,4-Naphthoquinone | ND | 50 | ug/L | 0.95 |
| Dimethyl phthalate | ND | 10 | ug/L | 1.0 |
| N-Nitrosodi-n-butylamine | ND | 10 | ug/L | 1.0 |
| 1,3-Dinitrobenzene | ND | 10 | ug/L | 1.0 |
| Acenaphthylene | ND | 10 | ug/L | 1.0 |
| 2,6-Dinitrotoluene | ND | 10 | ug/L | 1.1 |
| 3-Nitroaniline | ND | 50 | ug/L | 1.1 |
| Acenaphthene | ND | 10 | ug/L | 1.0 |
| 2,4-Dinitrophenol | ND | 50 | ug/L | 10 |
| 4-Nitrophenol | ND | 50 | ug/L | 5.0 |
| Dibenzofuran | ND | 10 | ug/L | 1.0 |
| Pentachlorobenzene | ND | 10 | ug/L | 2.7 |
| 2,4-Dinitrotoluene | ND | 10 | ug/L | 1.1 |
| 1-Naphthylamine | ND | 10 | ug/L | 1.0 |
| 2,3,4,6-Tetrachlorophenol | ND | 50 | ug/L | 1.0 |
| 2-Naphthylamine | ND | 10 | ug/L | 1.0 |
| O,O-Diethyl-O-(2-pyrazinyl) phosphorothioate | ND | 50 | ug/L | 0.99 |

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**Fluor Hanford Inc**

**Client Sample ID: B1PX45**

**GC/MS Semivolatiles**

**Lot-Sample #...:** F7J230123-004 **Work Order #...:** J9LM31AH **Matrix.....:** WATER

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | MDL |
|---|---|---|---|---|
| Diethyl phthalate | ND | 10 | ug/L | 1.0 |
| Fluorene | ND | 10 | ug/L | 1.0 |
| 4-Chlorophenyl phenyl ether | ND | 10 | ug/L | 1.0 |
| 4-Nitroaniline | ND | 50 | ug/L | 1.3 |
| 4,6-Dinitro-2-methylphenol | ND | 50 | ug/L | 5.0 |
| N-Nitrosodiphenylamine | ND | 10 | ug/L | 1.0 |
| Azobenzene | ND | 10 | ug/L | 1.0 |
| Tetraethyldithiopyrophosphate | ND | 50 | ug/L | 1.0 |
| 1,3,5-Trinitrobenzene | ND | 50 | ug/L | 5.0 |
| Diallate | ND | 20 | ug/L | 2.0 |
| Phorate | ND | 50 | ug/L | 2.9 |
| 4-Bromophenyl phenyl ether | ND | 10 | ug/L | 1.0 |
| Phenacetin | ND | 20 | ug/L | 0.94 |
| Dimethoate | ND | 20 | ug/L | 1.1 |
| Hexachlorobenzene | ND | 10 | ug/L | 1.0 |
| Pentachlorophenol | ND | 50 | ug/L | 2.0 |
| Pentachloronitrobenzene | ND | 50 | ug/L | 1.1 |
| 4-Aminobiphenyl | ND | 50 | ug/L | 1.0 |
| Pronamide | ND | 20 | ug/L | 1.0 |
| Disulfoton | ND | 50 | ug/L | 1.0 |
| Phenanthrene | ND | 10 | ug/L | 1.0 |
| Anthracene | ND | 10 | ug/L | 1.1 |
| Dinoseb | ND | 20 | ug/L | 2.0 |
| 4-Nitroquinoline-1-oxide | ND | 100 | ug/L | 5.0 |
| Parathion | ND | 50 | ug/L | 1.0 |
| Methapyrilene | ND | 50 | ug/L | 14 |
| Fluoranthene | ND | 10 | ug/L | 1.0 |
| Isodrin | ND | 10 | ug/L | 1.0 |
| Pyrene | ND | 10 | ug/L | 1.0 |
| Aramite 1 | ND | 20 | ug/L | |
| Aramite 2 | ND | 20 | ug/L | |
| p-Dimethylaminoazobenzene | ND | 20 | ug/L | 1.0 |
| p-Chlorobenzilate | ND | 10 | ug/L | 1.0 |
| Famphur | ND | 100 | ug/L | 50 |
| Kepone | ND | 100 | ug/L | 20 |
| 3,3'-Dimethylbenzidine | ND | 50 | ug/L | 10 |
| Butyl benzyl phthalate | ND | 10 | ug/L | 1.0 |
| 2-Acetylaminofluorene | ND | 100 | ug/L | 1.0 |

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**Fluor Hanford Inc**

**Client Sample ID: B1PX45**

**GC/MS Semivolatiles**

**Lot-Sample #...:** F7J230123-004 **Work Order #...:** J9LM31AH **Matrix.....:** WATER

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | MDL |
|---|---|---|---|---|
| Benzo(a)anthracene | ND | 10 | ug/L | 1.0 |
| 3,3'-Dichlorobenzidine | ND | 50 | ug/L | 1.0 |
| Chrysene | ND | 10 | ug/L | 1.0 |
| bis(2-Ethylhexyl) phthalate | ND | 10 | ug/L | 1.0 |
| Di-n-butyl phthalate | ND | 10 | ug/L | 1.0 |
| Di-n-octyl phthalate | ND | 10 | ug/L | 5.0 |
| 7,12-Dimethylbenz(a)-anthracene | ND | 20 | ug/L | 1.0 |
| Benzo(b)fluoranthene | ND | 10 | ug/L | 1.0 |
| Benzo(k)fluoranthene | ND | 10 | ug/L | 1.0 |
| Benzo(a)pyrene | ND | 10 | ug/L | 1.0 |
| 3-Methylcholanthrene | ND | 20 | ug/L | 1.0 |
| Indeno(1,2,3-cd)pyrene | ND | 10 | ug/L | 1.0 |
| Benzo(ghi)perylene | ND | 10 | ug/L | 1.0 |
| Dibenz(a,h)anthracene | ND | 10 | ug/L | 1.0 |
| Tributyl phosphate | ND | 10 | ug/L | 1.1 |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| 2-Fluorophenol | 41 | (26 - 74 ) |
| Phenol-d5 | 27 | (18 - 86 ) |
| Nitrobenzene-d5 | 66 | (39 - 94 ) |
| 2-Fluorobiphenyl | 55 | (42 - 95 ) |
| 2,4,6-Tribromophenol | 54 | (49 - 96 ) |
| Terphenyl-d14 | 76 | (31 - 104) |

**Fluor Hanford Inc**

**B1PX45**

**GC/MS Semivolatiles**

**Lot-Sample #:** F7J230123-004 **Work Order #:** J9LM31AH **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 Semivolatiles**

**Client Lot #...:** SL717 **Work Order #...:** J90AM1AA **Matrix.....:** WATER
**MB Lot-Sample #:** F7J260000-156

**Prep Date.....:** 10/26/07
**Analysis Date..:** 11/10/07 **Prep Batch #...:** 7299156
**Dilution Factor:** 1

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | METHOD |
|---|---|---|---|---|
| N-Nitro-o-toluidine | ND | 20 | ug/L | SW846 8270C |
| Hexachloropropene | ND | 100 | ug/L | SW846 8270C |
| Pyridine | ND | 20 | ug/L | SW846 8270C |
| N-Nitrosodimethylamine | ND | 10 | ug/L | SW846 8270C |
| 2-Picoline | ND | 20 | ug/L | SW846 8270C |
| N-Nitrosomethylethylamine | ND | 10 | ug/L | SW846 8270C |
| N-Nitrosodiethylamine | ND | 10 | ug/L | SW846 8270C |
| Methyl methanesulfonate | ND | 10 | ug/L | SW846 8270C |
| Methyl parathion | ND | 50 | ug/L | SW846 8270C |
| Ethyl methanesulfonate | ND | 10 | ug/L | SW846 8270C |
| Phenol | ND | 10 | ug/L | SW846 8270C |
| Pentachloroethane | ND | 50 | ug/L | SW846 8270C |
| Aniline | ND | 10 | ug/L | SW846 8270C |
| bis(2-Chloroethyl)-ether | ND | 10 | ug/L | SW846 8270C |
| 2-Chlorophenol | ND | 10 | ug/L | SW846 8270C |
| 1,3-Dichlorobenzene | ND | 10 | ug/L | SW846 8270C |
| 1,4-Dichlorobenzene | ND | 10 | ug/L | SW846 8270C |
| Benzyl alcohol | ND | 10 | ug/L | SW846 8270C |
| Hexachlorophene | ND | 100 | ug/L | SW846 8270C |
| 1,2-Dichlorobenzene | ND | 10 | ug/L | SW846 8270C |
| 2-Methylphenol | ND | 10 | ug/L | SW846 8270C |
| 2,2'-oxybis(1-Chloropropa | ND | 10 | ug/L | SW846 8270C |
| Acetophenone | ND | 10 | ug/L | SW846 8270C |
| 4-Methylphenol | ND | 20 | ug/L | SW846 8270C |
| N-Nitrosopyrrolidine | ND | 10 | ug/L | SW846 8270C |
| N-Nitrosomorpholine | ND | 10 | ug/L | SW846 8270C |
| N-Nitrosodi-n-propyl-amine | ND | 10 | ug/L | SW846 8270C |
| o-Toluidine | ND | 20 | ug/L | SW846 8270C |
| Hexachloroethane | ND | 10 | ug/L | SW846 8270C |
| Nitrobenzene | ND | 10 | ug/L | SW846 8270C |
| 2-Methylnaphthalene | ND | 10 | ug/L | SW846 8270C |
| N-Nitrosopiperidine | ND | 10 | ug/L | SW846 8270C |
| Isophorone | ND | 10 | ug/L | SW846 8270C |
| 2-Nitrophenol | ND | 10 | ug/L | SW846 8270C |
| 2,4-Dimethylphenol | ND | 10 | ug/L | SW846 8270C |
| O,O,O-Triethylphosphoro-thioate | ND | 50 | ug/L | SW846 8270C |
| bis(2-Chloroethoxy) methane | ND | 10 | ug/L | SW846 8270C |

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**METHOD BLANK REPORT**

**GC/MS Semivolatiles**

**Client Lot #...:** SL717 **Work Order #...:** J90AM1AA **Matrix.....:** WATER

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | METHOD |
|---|---|---|---|---|
| alpha,alpha-Dimethylphene | ND | 50 | ug/L | SW846 8270C |
| 2,4-Dichlorophenol | ND | 10 | ug/L | SW846 8270C |
| 1,2,4-Trichloro-benzene | ND | 10 | ug/L | SW846 8270C |
| Naphthalene | ND | 10 | ug/L | SW846 8270C |
| 2,6-Dichlorophenol | ND | 10 | ug/L | SW846 8270C |
| 4-Chloroaniline | ND | 10 | ug/L | SW846 8270C |
| Hexachlorobutadiene | ND | 10 | ug/L | SW846 8270C |
| p-Phenylene diamine | ND | 100 | ug/L | SW846 8270C |
| 4-Chloro-3-methylphenol | ND | 10 | ug/L | SW846 8270C |
| Safrole | ND | 20 | ug/L | SW846 8270C |
| 1,2,4,5-Tetrachloro-benzene | ND | 10 | ug/L | SW846 8270C |
| Hexachlorocyclopenta-diene | ND | 50 | ug/L | SW846 8270C |
| 2,4,6-Trichloro-phenol | ND | 10 | ug/L | SW846 8270C |
| 2,4,5-Trichloro-phenol | ND | 10 | ug/L | SW846 8270C |
| 2-Chloronaphthalene | ND | 10 | ug/L | SW846 8270C |
| Isosafrole | ND | 20 | ug/L | SW846 8270C |
| 2-Nitroaniline | ND | 50 | ug/L | SW846 8270C |
| 1,4-Naphthoquinone | ND | 50 | ug/L | SW846 8270C |
| N-Nitrosodi-n-butylamine | ND | 10 | ug/L | SW846 8270C |
| Dimethyl phthalate | ND | 10 | ug/L | SW846 8270C |
| 1,3-Dinitrobenzene | ND | 10 | ug/L | SW846 8270C |
| Acenaphthylene | ND | 10 | ug/L | SW846 8270C |
| 2,6-Dinitrotoluene | ND | 10 | ug/L | SW846 8270C |
| 3-Nitroaniline | ND | 50 | ug/L | SW846 8270C |
| Acenaphthene | ND | 10 | ug/L | SW846 8270C |
| 2,4-Dinitrophenol | ND | 50 | ug/L | SW846 8270C |
| 4-Nitrophenol | ND | 50 | ug/L | SW846 8270C |
| Dibenzofuran | ND | 10 | ug/L | SW846 8270C |
| Pentachlorobenzene | ND | 10 | ug/L | SW846 8270C |
| 2,4-Dinitrotoluene | ND | 10 | ug/L | SW846 8270C |
| 1-Naphthylamine | ND | 10 | ug/L | SW846 8270C |
| 2,3,4,6-Tetrachlorophenol | ND | 50 | ug/L | SW846 8270C |
| 2-Naphthylamine | ND | 10 | ug/L | SW846 8270C |
| O,O-Diethyl-O-(2-pyraziny | ND | 50 | ug/L | SW846 8270C |
| Diethyl phthalate | ND | 10 | ug/L | SW846 8270C |
| Fluorene | ND | 10 | ug/L | SW846 8270C |
| 4-Chlorophenyl phenyl ether | ND | 10 | ug/L | SW846 8270C |
| 4-Nitroaniline | ND | 50 | ug/L | SW846 8270C |
| 4,6-Dinitro-2-methylphenol | ND | 50 | ug/L | SW846 8270C |

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**METHOD BLANK REPORT**

**GC/MS Semivolatiles**

**Client Lot #...:** SL717 **Work Order #...:** J90AM1AA **Matrix.....:** WATER

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | METHOD |
|---|---|---|---|---|
| N-Nitrosodiphenylamine | ND | 10 | ug/L | SW846 8270C |
| Azobenzene | ND | 10 | ug/L | SW846 8270C |
| Tetraethyldithiopyro-phosphate | ND | 50 | ug/L | SW846 8270C |
| 1,3,5-Trinitrobenzene | ND | 50 | ug/L | SW846 8270C |
| Diallate | ND | 20 | ug/L | SW846 8270C |
| Phorate | ND | 50 | ug/L | SW846 8270C |
| 4-Bromophenyl phenyl ether | ND | 10 | ug/L | SW846 8270C |
| Phenacetin | ND | 20 | ug/L | SW846 8270C |
| Dimethoate | ND | 20 | ug/L | SW846 8270C |
| Hexachlorobenzene | ND | 10 | ug/L | SW846 8270C |
| Pentachlorophenol | ND | 50 | ug/L | SW846 8270C |
| Pentachloronitrobenzene | ND | 50 | ug/L | SW846 8270C |
| 4-Aminobiphenyl | ND | 50 | ug/L | SW846 8270C |
| Pronamide | ND | 20 | ug/L | SW846 8270C |
| Disulfoton | ND | 50 | ug/L | SW846 8270C |
| Phenanthrene | ND | 10 | ug/L | SW846 8270C |
| Anthracene | ND | 10 | ug/L | SW846 8270C |
| Dinoseb | ND | 20 | ug/L | SW846 8270C |
| 4-Nitroquinoline-1-oxide | ND | 100 | ug/L | SW846 8270C |
| Parathion | ND | 50 | ug/L | SW846 8270C |
| Methapyrilene | ND | 50 | ug/L | SW846 8270C |
| Fluoranthene | ND | 10 | ug/L | SW846 8270C |
| Isodrin | ND | 10 | ug/L | SW846 8270C |
| Pyrene | ND | 10 | ug/L | SW846 8270C |
| Aramite 1 | ND | 20 | ug/L | SW846 8270C |
| Aramite 2 | ND | 20 | ug/L | SW846 8270C |
| p-Dimethylaminoazobenzene | ND | 20 | ug/L | SW846 8270C |
| p-Chlorobenzilate | ND | 10 | ug/L | SW846 8270C |
| Famphur | ND | 100 | ug/L | SW846 8270C |
| Kepone | ND | 100 | ug/L | SW846 8270C |
| 3,3'-Dimethylbenzidine | ND | 50 | ug/L | SW846 8270C |
| Butyl benzyl phthalate | ND | 10 | ug/L | SW846 8270C |
| 2-Acetylaminofluorene | ND | 100 | ug/L | SW846 8270C |
| Benzo(a)anthracene | ND | 10 | ug/L | SW846 8270C |
| 3,3'-Dichlorobenzidine | ND | 50 | ug/L | SW846 8270C |
| Chrysene | ND | 10 | ug/L | SW846 8270C |
| bis(2-Ethylhexyl) phthalate | ND | 10 | ug/L | SW846 8270C |
| Di-n-butyl phthalate | ND | 10 | ug/L | SW846 8270C |
| Di-n-octyl phthalate | ND | 10 | ug/L | SW846 8270C |
| 7,12-Dimethylbenz(a)-anthracene | ND | 20 | ug/L | SW846 8270C |

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**METHOD BLANK REPORT**

**GC/MS Semivolatiles**

**Client Lot #...:** SL717 **Work Order #...:** J90AM1AA **Matrix.....:** WATER

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | METHOD |
|---|---|---|---|---|
| Benzo(b)fluoranthene | ND | 10 | ug/L | SW846 8270C |
| Benzo(k)fluoranthene | ND | 10 | ug/L | SW846 8270C |
| Benzo(a)pyrene | ND | 10 | ug/L | SW846 8270C |
| 3-Methylcholanthrene | ND | 20 | ug/L | SW846 8270C |
| Indeno(1,2,3-cd)pyrene | ND | 10 | ug/L | SW846 8270C |
| Benzo(ghi)perylene | ND | 10 | ug/L | SW846 8270C |
| Dibenz(a,h)anthracene | ND | 10 | ug/L | SW846 8270C |
| Tributyl phosphate | ND | 10 | ug/L | SW846 8270C |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| 2-Fluorophenol | 45 | (26 - 74) |
| Phenol-d5 | 31 | (18 - 86) |
| Nitrobenzene-d5 | 71 | (39 - 94) |
| 2-Fluorobiphenyl | 67 | (42 - 95) |
| 2,4,6-Tribromophenol | 62 | (49 - 96) |
| Terphenyl-d14 | 102 | (31 - 104) |

**NOTE(S):**

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

**Fluor Hanford Inc**

**Method Blank Report**

**GC/MS Semivolatiles**

**Lot-Sample #:** F7J260000-156 B **Work Order #:** J90AM1AA **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

| PARAMETER | CAS # | ESTIMATED RESULT | | RETENTION TIME | UNITS |
|---|---|---|---|---|---|
| Unknown | | 13 | M | 4.407 | ug/L |
| Unknown | | 6.7 | M | 4.6741 | 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 #...:** SL717 **Work Order #...:** J90AM1AC **Matrix.....:** WATER
**LCS Lot-Sample#:** F7J260000-156
**Prep Date.....:** 10/26/07 **Analysis Date..:** 11/10/07
**Prep Batch #...:** 7299156
**Dilution Factor:** 1

| PARAMETER | SPIKE AMOUNT | MEASURED AMOUNT | UNITS | PERCENT RECOVERY | METHOD |
|---|---|---|---|---|---|
| Phenol | 100 | 23.5 | ug/L | 24 | SW846 8270C |
| bis(2-Chloroethyl)-ether | 100 | 68.9 | ug/L | 69 | SW846 8270C |
| 2-Chlorophenol | 100 | 46.9 | ug/L | 47 | SW846 8270C |
| 1,3-Dichlorobenzene | 100 | 54.7 | ug/L | 55 | SW846 8270C |
| 1,4-Dichlorobenzene | 100 | 54.7 | ug/L | 55 | SW846 8270C |
| 1,2-Dichlorobenzene | 100 | 55.7 | ug/L | 56 | SW846 8270C |
| 2-Methylphenol | 100 | 54.4 | ug/L | 54 | SW846 8270C |
| 2,2'-oxybis(1-Chloropropa | 100 | 75.2 | ug/L | 75 | SW846 8270C |
| N-Nitrosodi-n-propyl-amine | 100 | 81.7 | ug/L | 82 | SW846 8270C |
| Hexachloroethane | 100 | 57.8 | ug/L | 58 | SW846 8270C |
| Nitrobenzene | 100 | 69.6 | ug/L | 70 | SW846 8270C |
| 2-Methylnaphthalene | 100 | 65.1 | ug/L | 65 | SW846 8270C |
| Isophorone | 100 | 81.8 | ug/L | 82 | SW846 8270C |
| 2-Nitrophenol | 100 | 47.1 | ug/L | 47 | SW846 8270C |
| 2,4-Dimethylphenol | 100 | 60.3 | ug/L | 60 | SW846 8270C |
| bis(2-Chloroethoxy) methane | 100 | 66.9 | ug/L | 67 | SW846 8270C |
| 2,4-Dichlorophenol | 100 | 46.1 | ug/L | 46 | SW846 8270C |
| 1,2,4-Trichloro-benzene | 100 | 60.3 | ug/L | 60 | SW846 8270C |
| Naphthalene | 100 | 61.1 | ug/L | 61 | SW846 8270C |
| 4-Chloroaniline | 100 | 43.7 | ug/L | 44 | SW846 8270C |
| Hexachlorobutadiene | 100 | 58.8 | ug/L | 59 | SW846 8270C |
| 4-Chloro-3-methylphenol | 100 | 62.4 | ug/L | 62 | SW846 8270C |
| Hexachlorocyclopenta-diene | 100 | 59.4 | ug/L | 59 | SW846 8270C |
| 2,4,6-Trichloro-phenol | 100 | 44.9 | ug/L | 45 | SW846 8270C |
| 2,4,5-Trichloro-phenol | 100 | 44.8 | ug/L | 45 | SW846 8270C |
| 2-Chloronaphthalene | 100 | 72.1 | ug/L | 72 | SW846 8270C |
| 2-Nitroaniline | 100 | 77.1 | ug/L | 77 | SW846 8270C |

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## LABORATORY CONTROL SAMPLE DATA REPORT

### GC/MS Semivolatiles

**Client Lot #...:** SL717 **Work Order #...:** J90AM1AC **Matrix.....:** WATER
**LCS Lot-Sample#:** F7J260000-156

| PARAMETER | SPIKE AMOUNT | MEASURED AMOUNT | UNITS | PERCENT RECOVERY | METHOD |
|---|---|---|---|---|---|
| Dimethyl phthalate | 100 | 70.5 | ug/L | 70 | SW846 8270C |
| Acenaphthylene | 100 | 71.5 | ug/L | 72 | SW846 8270C |
| 2,6-Dinitrotoluene | 100 | 69.2 | ug/L | 69 | SW846 8270C |
| 3-Nitroaniline | 100 | 63.7 | ug/L | 64 | SW846 8270C |
| Acenaphthene | 100 | 73.6 | ug/L | 74 | SW846 8270C |
| 2,4-Dinitrophenol | 100 | 30.6 a | ug/L | 31 | SW846 8270C |
| 4-Nitrophenol | 100 | 28.6 | ug/L | 29 | SW846 8270C |
| Dibenzofuran | 100 | 74.6 | ug/L | 75 | SW846 8270C |
| 2,4-Dinitrotoluene | 100 | 72.1 | ug/L | 72 | SW846 8270C |
| Diethyl phthalate | 100 | 73.7 | ug/L | 74 | SW846 8270C |
| Fluorene | 100 | 83.4 | ug/L | 83 | SW846 8270C |
| 4-Chlorophenyl phenyl ether | 100 | 86.8 | ug/L | 87 | SW846 8270C |
| 4-Nitroaniline | 100 | 64.3 | ug/L | 64 | SW846 8270C |
| 4,6-Dinitro-2-methylphenol | 100 | 49.4 | ug/L | 49 | SW846 8270C |
| N-Nitrosodiphenylamine | 100 | 76.3 | ug/L | 76 | SW846 8270C |
| 4-Bromophenyl phenyl ether | 100 | 88.9 | ug/L | 89 | SW846 8270C |
| Hexachlorobenzene | 100 | 105 a | ug/L | 105 | SW846 8270C |
| Pentachlorophenol | 100 | 47.6 | ug/L | 48 | SW846 8270C |
| Phenanthrene | 100 | 96.2 a | ug/L | 96 | SW846 8270C |
| Anthracene | 100 | 106 a | ug/L | 106 | SW846 8270C |
| Fluoranthene | 100 | 107 a | ug/L | 107 | SW846 8270C |
| Pyrene | 100 | 104 a | ug/L | 104 | SW846 8270C |
| Butyl benzyl phthalate | 100 | 102 a | ug/L | 102 | SW846 8270C |
| Benzo(a)anthracene | 100 | 107 a | ug/L | 107 | SW846 8270C |
| 3,3'-Dichlorobenzidine | 100 | 56.3 | ug/L | 56 | SW846 8270C |
| Chrysene | 100 | 154 a | ug/L | 154 | SW846 8270C |
| bis(2-Ethylhexyl) phthalate | 100 | 116 a | ug/L | 116 | SW846 8270C |
| Di-n-butyl phthalate | 100 | 93.8 | ug/L | 94 | SW846 8270C |
| Di-n-octyl phthalate | 100 | 116 a | ug/L | 116 | SW846 8270C |
| Benzo(b)fluoranthene | 100 | 114 a | ug/L | 114 | SW846 8270C |
| Benzo(k)fluoranthene | 100 | 119 a | ug/L | 119 | SW846 8270C |
| Benzo(a)pyrene | 100 | 108 a | ug/L | 108 | SW846 8270C |
| Indeno(1,2,3-cd)pyrene | 100 | 95.4 | ug/L | 95 | SW846 8270C |

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## LABORATORY CONTROL SAMPLE DATA REPORT

### GC/MS Semivolatiles

**Client Lot #...:** SL717 **Work Order #...:** J90AM1AC **Matrix.....:** WATER
**LCS Lot-Sample#:** F7J260000-156

| PARAMETER | SPIKE AMOUNT | MEASURED AMOUNT | UNITS | PERCENT RECOVERY | METHOD |
|---|---|---|---|---|---|
| **Benzo(ghi)perylene** | **100** | **98.2** | **ug/L** | **98** | **SW846 8270C** |
| **Dibenz(a,h)anthracene** | **100** | **101** | **ug/L** | **101** | **SW846 8270C** |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| 2-Fluorophenol | 31 | (26 - 67) |
| Phenol-d5 | 24 | (19 - 45) |
| Nitrobenzene-d5 | 67 | (45 - 96) |
| 2-Fluorobiphenyl | 66 | (50 - 100) |
| 2,4,6-Tribromophenol | 47 * | (55 - 103) |
| Terphenyl-d14 | 85 | (40 - 106) |

**NOTE(S):**

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

Bold print denotes control parameters

* Surrogate recovery is outside stated control limits.

a Spiked analyte recovery is outside stated control limits.

**MATRIX SPIKE SAMPLE DATA REPORT**

**GC/MS Semivolatiles**

**Client Lot #...:** SL717 **Work Order #...:** J9LM31AJ-MS **Matrix.....:** WATER
**MS Lot-Sample #:** F7J230123-004 J9LM31AK-MSD
**Date Sampled...:** 10/22/07 **Date Received..:** 10/23/07
**Prep Date.....:** 10/26/07 **Analysis Date..:** 11/10/07
**Prep Batch #...:** 7299156
**Dilution Factor:** 1

| PARAMETER | SAMPLE AMOUNT | SPIKE AMT | MEASRD AMOUNT | UNITS | PERCNT RECVRY | RPD | METHOD |
|---|---|---|---|---|---|---|---|
| Phenol | ND | 95.3 | 25.9 | ug/L | 27 | | SW846 8270C |
| | ND | 95.7 | 27.9 | ug/L | 29 | 7.2 | SW846 8270C |
| bis(2-Chloroethyl)-ether | ND | 95.3 | 64.7 | ug/L | 68 | | SW846 8270C |
| | ND | 95.7 | 69.8 | ug/L | 73 | 7.6 | SW846 8270C |
| 2-Chlorophenol | ND | 95.3 | 60.2 | ug/L | 63 | | SW846 8270C |
| | ND | 95.7 | 64.2 | ug/L | 67 | 6.3 | SW846 8270C |
| 1,3-Dichlorobenzene | ND | 95.3 | 47.4 | ug/L | 50 | | SW846 8270C |
| | ND | 95.7 | 52.4 | ug/L | 55 | 9.9 | SW846 8270C |
| 1,4-Dichlorobenzene | ND | 95.3 | 47.4 | ug/L | 50 | | SW846 8270C |
| | ND | 95.7 | 51.9 | ug/L | 54 | 9.1 | SW846 8270C |
| 1,2-Dichlorobenzene | ND | 95.3 | 48.8 | ug/L | 51 | | SW846 8270C |
| | ND | 95.7 | 53.7 | ug/L | 56 | 9.6 | SW846 8270C |
| 2-Methylphenol | ND | 95.3 | 56.3 | ug/L | 59 | | SW846 8270C |
| | ND | 95.7 | 60.2 | ug/L | 63 | 6.7 | SW846 8270C |
| 2,2'-oxybis(1-Chloropropa | ND | 95.3 | 69.6 | ug/L | 73 | | SW846 8270C |
| | ND | 95.7 | 75.5 | ug/L | 79 | 8.0 | SW846 8270C |
| N-Nitrosodi-n-propyl-amine | ND | 95.3 | 75.7 | ug/L | 79 | | SW846 8270C |
| | ND | 95.7 | 81.6 | ug/L | 85 | 7.6 | SW846 8270C |
| Hexachloroethane | ND | 95.3 | 49.8 | ug/L | 52 | | SW846 8270C |
| | ND | 95.7 | 53.7 | ug/L | 56 | 7.5 | SW846 8270C |
| Nitrobenzene | ND | 95.3 | 66.5 | ug/L | 70 | | SW846 8270C |
| | ND | 95.7 | 70.5 | ug/L | 74 | 5.8 | SW846 8270C |
| 2-Methylnaphthalene | ND | 95.3 | 54.9 | ug/L | 58 | | SW846 8270C |
| | ND | 95.7 | 59.4 | ug/L | 62 | 7.9 | SW846 8270C |
| Isophorone | ND | 95.3 | 77.2 | ug/L | 81 | | SW846 8270C |
| | ND | 95.7 | 82.4 | ug/L | 86 | 6.5 | SW846 8270C |
| 2-Nitrophenol | ND | 95.3 | 61.2 | ug/L | 64 | | SW846 8270C |
| | ND | 95.7 | 65.4 | ug/L | 68 | 6.7 | SW846 8270C |
| 2,4-Dimethylphenol | ND | 95.3 | 58.0 | ug/L | 61 | | SW846 8270C |
| | ND | 95.7 | 63.0 | ug/L | 66 | 8.3 | SW846 8270C |
| bis(2-Chloroethoxy) methane | ND | 95.3 | 63.4 | ug/L | 67 | | SW846 8270C |
| | ND | 95.7 | 67.4 | ug/L | 70 | 6.2 | SW846 8270C |
| 2,4-Dichlorophenol | ND | 95.3 | 58.2 | ug/L | 61 | | SW846 8270C |
| | ND | 95.7 | 63.5 | ug/L | 66 | 8.6 | SW846 8270C |

(Continued on next page)

**MATRIX SPIKE SAMPLE DATA REPORT**

**GC/MS Semivolatiles**

**Client Lot #...:** SL717 **Work Order #...:** J9LM31AJ-MS **Matrix.....:** WATER
**MS Lot-Sample #:** F7J230123-004 J9LM31AK-MSD

| PARAMETER | SAMPLE AMOUNT | SPIKE AMT | MEASRD AMOUNT | UNITS | PERCNT RECVRY | RPD | METHOD |
|---|---|---|---|---|---|---|---|
| 1,2,4-Trichloro-benzene | ND | 95.3 | 49.7 | ug/L | 52 | | SW846 8270C |
| | ND | 95.7 | 54.9 | ug/L | 57 | 10 | SW846 8270C |
| Naphthalene | ND | 95.3 | 54.6 | ug/L | 57 | | SW846 8270C |
| | ND | 95.7 | 60.0 | ug/L | 63 | 9.4 | SW846 8270C |
| 4-Chloroaniline | ND | 95.3 | 50.3 | ug/L | 53 | | SW846 8270C |
| | ND | 95.7 | 52.5 | ug/L | 55 | 4.3 | SW846 8270C |
| Hexachlorobutadiene | ND | 95.3 | 45.7 | ug/L | 48 | | SW846 8270C |
| | ND | 95.7 | 49.5 | ug/L | 52 | 8.0 | SW846 8270C |
| 4-Chloro-3-methylphenol | ND | 95.3 | 68.3 | ug/L | 72 | | SW846 8270C |
| | ND | 95.7 | 71.5 | ug/L | 75 | 4.6 | SW846 8270C |
| Hexachlorocyclopenta-diene | ND | 95.3 | 39.1 | ug/L | 41 | | SW846 8270C |
| | ND | 95.7 | 42.8 | ug/L | 45 | 9.0 | SW846 8270C |
| 2,4,6-Trichloro-phenol | ND | 95.3 | 59.8 | ug/L | 63 | | SW846 8270C |
| | ND | 95.7 | 64.0 | ug/L | 67 | 6.8 | SW846 8270C |
| 2,4,5-Trichloro-phenol | ND | 95.3 | 58.6 | ug/L | 62 | | SW846 8270C |
| | ND | 95.7 | 62.2 | ug/L | 65 | 5.9 | SW846 8270C |
| 2-Chloronaphthalene | ND | 95.3 | 58.9 | ug/L | 62 | | SW846 8270C |
| | ND | 95.7 | 63.8 | ug/L | 67 | 7.8 | SW846 8270C |
| 2-Nitroaniline | ND | 95.3 | 72.9 | ug/L | 76 | | SW846 8270C |
| | ND | 95.7 | 75.3 | ug/L | 79 | 3.3 | SW846 8270C |
| Dimethyl phthalate | ND | 95.3 | 66.6 | ug/L | 70 | | SW846 8270C |
| | ND | 95.7 | 69.4 | ug/L | 73 | 4.1 | SW846 8270C |
| Acenaphthylene | ND | 95.3 | 62.8 | ug/L | 66 | | SW846 8270C |
| | ND | 95.7 | 66.1 | ug/L | 69 | 5.1 | SW846 8270C |
| 2,6-Dinitrotoluene | ND | 95.3 | 64.6 | ug/L | 68 | | SW846 8270C |
| | ND | 95.7 | 69.1 | ug/L | 72 | 6.7 | SW846 8270C |
| 3-Nitroaniline | ND | 95.3 | 62.3 | ug/L | 65 | | SW846 8270C |
| | ND | 95.7 | 62.4 | ug/L | 65 | 0.09 | SW846 8270C |
| Acenaphthene | ND | 95.3 | 62.2 | ug/L | 65 | | SW846 8270C |
| | ND | 95.7 | 65.8 | ug/L | 69 | 5.6 | SW846 8270C |
| 2,4-Dinitrophenol | ND | 95.3 | 49.9 | ug/L | 52 | | SW846 8270C |
| | ND | 95.7 | 53.6 | ug/L | 56 | 7.2 | SW846 8270C |
| 4-Nitrophenol | ND | 95.3 | 36.0 | ug/L | 38 | | SW846 8270C |
| | ND | 95.7 | 36.8 | ug/L | 38 | 2.4 | SW846 8270C |

(Continued on next page)

**MATRIX SPIKE SAMPLE DATA REPORT**

**GC/MS Semivolatiles**

**Client Lot #...:** SL717 **Work Order #...:** J9LM31AJ-MS **Matrix.....:** WATER
**MS Lot-Sample #:** F7J230123-004 J9LM31AK-MSD

| PARAMETER | SAMPLE AMOUNT | SPIKE AMT | MEASRD AMOUNT | UNITS | PERCNT RECVRY | RPD | METHOD |
|---|---|---|---|---|---|---|---|
| Dibenzofuran | ND | 95.3 | 59.9 | ug/L | 63 | | SW846 8270C |
| | ND | 95.7 | 62.4 | ug/L | 65 | 4.0 | SW846 8270C |
| 2,4-Dinitrotoluene | ND | 95.3 | 67.2 | ug/L | 71 | | SW846 8270C |
| | ND | 95.7 | 70.3 | ug/L | 73 | 4.5 | SW846 8270C |
| Diethyl phthalate | ND | 95.3 | 70.1 | ug/L | 74 | | SW846 8270C |
| | ND | 95.7 | 73.2 | ug/L | 77 | 4.3 | SW846 8270C |
| Fluorene | ND | 95.3 | 64.4 | ug/L | 68 | | SW846 8270C |
| | ND | 95.7 | 66.8 | ug/L | 70 | 3.7 | SW846 8270C |
| 4-Chlorophenyl phenyl ether | ND | 95.3 | 62.4 | ug/L | 65 | | SW846 8270C |
| | ND | 95.7 | 64.4 | ug/L | 67 | 3.2 | SW846 8270C |
| 4-Nitroaniline | ND | 95.3 | 63.0 | ug/L | 66 | | SW846 8270C |
| | ND | 95.7 | 65.8 | ug/L | 69 | 4.3 | SW846 8270C |
| 4,6-Dinitro-2-methylphenol | ND | 95.3 | 63.8 | ug/L | 67 | | SW846 8270C |
| | ND | 95.7 | 66.6 | ug/L | 70 | 4.3 | SW846 8270C |
| N-Nitrosodiphenylamine | ND | 95.3 | 65.1 | ug/L | 68 | | SW846 8270C |
| | ND | 95.7 | 68.5 | ug/L | 72 | 5.0 | SW846 8270C |
| 4-Bromophenyl phenyl ether | ND | 95.3 | 59.8 | ug/L | 63 | | SW846 8270C |
| | ND | 95.7 | 62.4 | ug/L | 65 | 4.2 | SW846 8270C |
| Hexachlorobenzene | ND | 95.3 | 62.1 | ug/L | 65 | | SW846 8270C |
| | ND | 95.7 | 64.3 | ug/L | 67 | 3.5 | SW846 8270C |
| Pentachlorophenol | ND | 95.3 | 55.9 | ug/L | 59 | | SW846 8270C |
| | ND | 95.7 | 58.8 | ug/L | 61 | 5.0 | SW846 8270C |
| Phenanthrene | ND | 95.3 | 65.5 | ug/L | 69 | | SW846 8270C |
| | ND | 95.7 | 67.1 | ug/L | 70 | 2.4 | SW846 8270C |
| Anthracene | ND | 95.3 | 65.9 | ug/L | 69 | | SW846 8270C |
| | ND | 95.7 | 67.4 | ug/L | 70 | 2.3 | SW846 8270C |
| Fluoranthene | ND | 95.3 | 67.0 | ug/L | 70 | | SW846 8270C |
| | ND | 95.7 | 68.4 | ug/L | 71 | 2.1 | SW846 8270C |
| Pyrene | ND | 95.3 | 65.8 | ug/L | 69 | | SW846 8270C |
| | ND | 95.7 | 68.4 | ug/L | 71 | 3.8 | SW846 8270C |
| Butyl benzyl phthalate | ND | 95.3 | 68.6 | ug/L | 72 | | SW846 8270C |
| | ND | 95.7 | 71.4 | ug/L | 75 | 4.0 | SW846 8270C |
| Benzo(a)anthracene | ND | 95.3 | 63.4 | ug/L | 67 | | SW846 8270C |
| | ND | 95.7 | 66.2 | ug/L | 69 | 4.4 | SW846 8270C |
| 3,3'-Dichlorobenzidine | ND | 95.3 | 43.8 | ug/L | 46 | | SW846 8270C |
| | ND | 95.7 | 45.7 | ug/L | 48 | 4.3 | SW846 8270C |

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## MATRIX SPIKE SAMPLE DATA REPORT

### GC/MS Semivolatiles

**Client Lot #...:** SL717 **Work Order #...:** J9LM31AJ-MS **Matrix.....:** WATER
**MS Lot-Sample #:** F7J230123-004 J9LM31AK-MSD

| PARAMETER | SAMPLE AMOUNT | SPIKE AMT | MEASRD AMOUNT | UNITS | PERCNT RECVRY | RPD | METHOD |
|---|---|---|---|---|---|---|---|
| **Chrysene** | **ND** | **95.3** | **89.6** | **ug/L** | **94 a** | | **SW846 8270C** |
| | **ND** | **95.7** | **93.3** | **ug/L** | **97 a** | **4.0** | **SW846 8270C** |
| **bis(2-Ethylhexyl)** phthalate | **ND** | **95.3** | **69.5** | **ug/L** | **73** | | **SW846 8270C** |
| | **ND** | **95.7** | **72.6** | **ug/L** | **76** | **4.2** | **SW846 8270C** |
| **Di-n-butyl phthalate** | **ND** | **95.3** | **69.2** | **ug/L** | **73** | | **SW846 8270C** |
| | **ND** | **95.7** | **71.6** | **ug/L** | **75** | **3.4** | **SW846 8270C** |
| **Di-n-octyl phthalate** | **ND** | **95.3** | **71.4** | **ug/L** | **75** | | **SW846 8270C** |
| | **ND** | **95.7** | **74.4** | **ug/L** | **78** | **4.0** | **SW846 8270C** |
| **Benzo(b)fluoranthene** | **ND** | **95.3** | **67.0** | **ug/L** | **70** | | **SW846 8270C** |
| | **ND** | **95.7** | **72.2** | **ug/L** | **75** | **7.5** | **SW846 8270C** |
| **Benzo(k)fluoranthene** | **ND** | **95.3** | **73.4** | **ug/L** | **77** | | **SW846 8270C** |
| | **ND** | **95.7** | **72.4** | **ug/L** | **76** | **1.4** | **SW846 8270C** |
| **Benzo(a)pyrene** | **ND** | **95.3** | **63.0** | **ug/L** | **66** | | **SW846 8270C** |
| | **ND** | **95.7** | **65.2** | **ug/L** | **68** | **3.4** | **SW846 8270C** |
| **Indeno(1,2,3-cd)pyrene** | **ND** | **95.3** | **56.8** | **ug/L** | **60** | | **SW846 8270C** |
| | **ND** | **95.7** | **61.8** | **ug/L** | **65** | **8.5** | **SW846 8270C** |
| **Benzo(ghi)perylene** | **ND** | **95.3** | **58.7** | **ug/L** | **62** | | **SW846 8270C** |
| | **ND** | **95.7** | **61.0** | **ug/L** | **64** | **3.8** | **SW846 8270C** |
| **Dibenz(a,h)anthracene** | **ND** | **95.3** | **60.7** | **ug/L** | **64** | | **SW846 8270C** |
| | **ND** | **95.7** | **62.9** | **ug/L** | **66** | **3.6** | **SW846 8270C** |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| 2-Fluorophenol | 42 | (26 - 74) |
| | 44 | (26 - 74) |
| Phenol-d5 | 28 | (18 - 86) |
| | 30 | (18 - 86) |
| Nitrobenzene-d5 | 69 | (39 - 94) |
| | 72 | (39 - 94) |
| 2-Fluorobiphenyl | 59 | (42 - 95) |
| | 65 | (42 - 95) |
| 2,4,6-Tribromophenol | 62 | (49 - 96) |
| | 66 | (49 - 96) |
| Terphenyl-d14 | 71 | (31 - 104) |
| | 73 | (31 - 104) |

**NOTE(S):**

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

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

# PHENOLS BY GC

**Fluor Hanford Inc**

**Client Sample ID: B1PWH2**

**GC Semivolatiles**

**Lot-Sample #...:** F7J170222-001 **Work Order #...:** J86AK1AC **Matrix.....:** WATER
**Date Sampled...:** 10/16/07 **Date Received..:** 10/17/07
**Prep Date.....:** 10/23/07 **Analysis Date..:** 10/25/07
**Prep Batch #...:** 7296076
**Dilution Factor:** 1 **Method.....:** SW846 8040A

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | MDL |
|---|---|---|---|---|
| 2-Chlorophenol | ND | 5.0 | ug/L | 2.2 |
| 4-Chloro-3-methylphenol | ND | 5.0 | ug/L | 2.4 |
| 3-Methylphenol & 4-Methylphenol | ND | 5.0 | ug/L | 2.2 |
| 2-Methylphenol | ND | 5.0 | ug/L | 2.2 |
| 2,4-Dichlorophenol | ND | 5.0 | ug/L | 2.1 |
| 2,6-Dichlorophenol | ND | 5.0 | ug/L | 2.1 |
| 2,4-Dimethylphenol | ND | 5.0 | ug/L | 2.1 |
| 2,4-Dinitrophenol | ND | 5.0 | ug/L | 2.4 |
| 4,6-Dinitro-2-methylphenol | ND | 5.0 | ug/L | 2.2 |
| Dinoseb | ND | 5.0 | ug/L | 2.4 |
| 2-Nitrophenol | ND | 5.0 | ug/L | 2.3 |
| 4-Nitrophenol | ND | 5.0 | ug/L | 2.2 |
| Pentachlorophenol | ND | 5.0 | ug/L | 2.4 |
| Phenol | ND | 5.0 | ug/L | 2.3 |
| 2,3,4,6-Tetrachlorophenol | ND | 5.0 | ug/L | 2.0 |
| 2,4,5-Trichloro-phenol | ND | 5.0 | ug/L | 2.2 |
| 2,4,6-Trichloro-phenol | ND | 5.0 | ug/L | 2.2 |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| 2,4,6-Tribromophenol | 85 | (44 - 110) |
| 2-Fluorophenol | 73 | (37 - 96 ) |

**Fluor Hanford Inc**

**Client Sample ID: B1PWP2**

**GC Semivolatiles**

**Lot-Sample #...:** F7J170222-002 **Work Order #...:** J86A01AC **Matrix.....:** WATER
**Date Sampled...:** 10/16/07 **Date Received..:** 10/17/07
**Prep Date.....:** 10/23/07 **Analysis Date..:** 10/25/07
**Prep Batch #...:** 7296076
**Dilution Factor:** 1 **Method.....:** SW846 8040A

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | MDL |
|---|---|---|---|---|
| 2-Chlorophenol | ND | 5.0 | ug/L | 2.2 |
| 4-Chloro-3-methylphenol | ND | 5.0 | ug/L | 2.4 |
| 3-Methylphenol & 4-Methylphenol | ND | 5.0 | ug/L | 2.2 |
| 2-Methylphenol | ND | 5.0 | ug/L | 2.2 |
| 2,4-Dichlorophenol | ND | 5.0 | ug/L | 2.1 |
| 2,6-Dichlorophenol | ND | 5.0 | ug/L | 2.1 |
| 2,4-Dimethylphenol | ND | 5.0 | ug/L | 2.1 |
| 2,4-Dinitrophenol | ND | 5.0 | ug/L | 2.4 |
| 4,6-Dinitro-2-methylphenol | ND | 5.0 | ug/L | 2.2 |
| Dinoseb | ND | 5.0 | ug/L | 2.4 |
| 2-Nitrophenol | ND | 5.0 | ug/L | 2.3 |
| 4-Nitrophenol | ND | 5.0 | ug/L | 2.2 |
| Pentachlorophenol | ND | 5.0 | ug/L | 2.4 |
| Phenol | ND | 5.0 | ug/L | 2.3 |
| 2,3,4,6-Tetrachlorophenol | ND | 5.0 | ug/L | 2.0 |
| 2,4,5-Trichlorophenol | ND | 5.0 | ug/L | 2.2 |
| 2,4,6-Trichlorophenol | ND | 5.0 | ug/L | 2.2 |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| 2,4,6-Tribromophenol | 89 | (44 - 110) |
| 2-Fluorophenol | 76 | (37 - 96 ) |

**Fluor Hanford Inc**

**Client Sample ID: B1PWP3**

**GC Semivolatiles**

**Lot-Sample #...:** F7J170222-003 **Work Order #...:** J86A21AC **Matrix.....:** WATER
**Date Sampled...:** 10/16/07 **Date Received..:** 10/17/07
**Prep Date.....:** 10/23/07 **Analysis Date..:** 10/25/07
**Prep Batch #...:** 7296076
**Dilution Factor:** 1 **Method.....:** SW846 8040A

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | MDL |
|---|---|---|---|---|
| 2-Chlorophenol | ND | 5.0 | ug/L | 2.2 |
| 4-Chloro-3-methylphenol | ND | 5.0 | ug/L | 2.4 |
| 3-Methylphenol & 4-Methylphenol | ND | 5.0 | ug/L | 2.2 |
| 2-Methylphenol | ND | 5.0 | ug/L | 2.2 |
| 2,4-Dichlorophenol | ND | 5.0 | ug/L | 2.1 |
| 2,6-Dichlorophenol | ND | 5.0 | ug/L | 2.1 |
| 2,4-Dimethylphenol | ND | 5.0 | ug/L | 2.1 |
| 2,4-Dinitrophenol | ND | 5.0 | ug/L | 2.4 |
| 4,6-Dinitro-2-methylphenol | ND | 5.0 | ug/L | 2.2 |
| Dinoseb | ND | 5.0 | ug/L | 2.4 |
| 2-Nitrophenol | ND | 5.0 | ug/L | 2.3 |
| 4-Nitrophenol | ND | 5.0 | ug/L | 2.2 |
| Pentachlorophenol | ND | 5.0 | ug/L | 2.4 |
| Phenol | ND | 5.0 | ug/L | 2.3 |
| 2,3,4,6-Tetrachlorophenol | ND | 5.0 | ug/L | 2.0 |
| 2,4,5-Trichlorophenol | ND | 5.0 | ug/L | 2.2 |
| 2,4,6-Trichlorophenol | ND | 5.0 | ug/L | 2.2 |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| 2,4,6-Tribromophenol | 91 | (44 - 110) |
| 2-Fluorophenol | 73 | (37 - 96 ) |

**Fluor Hanford Inc**

**Client Sample ID: B1PWY1**

**GC Semivolatiles**

**Lot-Sample #...:** F7J170222-004 **Work Order #...:** J86CG1AC **Matrix.....:** WATER
**Date Sampled...:** 10/16/07 **Date Received..:** 10/17/07
**Prep Date.....:** 10/23/07 **Analysis Date..:** 10/25/07
**Prep Batch #...:** 7296076
**Dilution Factor:** 1 **Method.....:** SW846 8040A

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | MDL |
|---|---|---|---|---|
| 2-Chlorophenol | ND | 5.0 | ug/L | 2.2 |
| 4-Chloro-3-methylphenol | ND | 5.0 | ug/L | 2.4 |
| 3-Methylphenol & 4-Methylphenol | ND | 5.0 | ug/L | 2.2 |
| 2-Methylphenol | ND | 5.0 | ug/L | 2.2 |
| 2,4-Dichlorophenol | ND | 5.0 | ug/L | 2.1 |
| 2,6-Dichlorophenol | ND | 5.0 | ug/L | 2.1 |
| 2,4-Dimethylphenol | ND | 5.0 | ug/L | 2.1 |
| 2,4-Dinitrophenol | ND | 5.0 | ug/L | 2.4 |
| 4,6-Dinitro-2-methylphenol | ND | 5.0 | ug/L | 2.2 |
| Dinoseb | ND | 5.0 | ug/L | 2.4 |
| 2-Nitrophenol | ND | 5.0 | ug/L | 2.3 |
| 4-Nitrophenol | ND | 5.0 | ug/L | 2.2 |
| Pentachlorophenol | ND | 5.0 | ug/L | 2.4 |
| Phenol | ND | 5.0 | ug/L | 2.3 |
| 2,3,4,6-Tetrachlorophenol | ND | 5.0 | ug/L | 2.0 |
| 2,4,5-Trichlorophenol | ND | 5.0 | ug/L | 2.2 |
| 2,4,6-Trichlorophenol | ND | 5.0 | ug/L | 2.2 |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| 2,4,6-Tribromophenol | 96 | (44 - 110) |
| 2-Fluorophenol | 80 | (37 - 96 ) |

**Fluor Hanford Inc**

**Client Sample ID: B1PX55**

**GC Semivolatiles**

**Lot-Sample #...:** F7J170222-006 **Work Order #...:** J86CQ1AC **Matrix.....:** WATER
**Date Sampled...:** 10/16/07 **Date Received..:** 10/17/07
**Prep Date.....:** 10/23/07 **Analysis Date..:** 10/25/07
**Prep Batch #...:** 7296076
**Dilution Factor:** 1 **Method.....:** SW846 8040A

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | MDL |
|---|---|---|---|---|
| 2-Chlorophenol | ND | 5.0 | ug/L | 2.2 |
| 4-Chloro-3-methylphenol | ND | 5.0 | ug/L | 2.4 |
| 3-Methylphenol & 4-Methylphenol | ND | 5.0 | ug/L | 2.2 |
| 2-Methylphenol | ND | 5.0 | ug/L | 2.2 |
| 2,4-Dichlorophenol | ND | 5.0 | ug/L | 2.1 |
| 2,6-Dichlorophenol | ND | 5.0 | ug/L | 2.1 |
| 2,4-Dimethylphenol | ND | 5.0 | ug/L | 2.1 |
| 2,4-Dinitrophenol | ND | 5.0 | ug/L | 2.4 |
| 4,6-Dinitro-2-methylphenol | ND | 5.0 | ug/L | 2.2 |
| Dinoseb | ND | 5.0 | ug/L | 2.4 |
| 2-Nitrophenol | ND | 5.0 | ug/L | 2.3 |
| 4-Nitrophenol | ND | 5.0 | ug/L | 2.2 |
| Pentachlorophenol | ND | 5.0 | ug/L | 2.4 |
| Phenol | ND | 5.0 | ug/L | 2.3 |
| 2,3,4,6-Tetrachlorophenol | ND | 5.0 | ug/L | 2.0 |
| 2,4,5-Trichloro-phenol | ND | 5.0 | ug/L | 2.2 |
| 2,4,6-Trichloro-phenol | ND | 5.0 | ug/L | 2.2 |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| 2,4,6-Tribromophenol | 82 | (44 - 110) |
| 2-Fluorophenol | 70 | (37 - 96 ) |

**Fluor Hanford Inc**

**Client Sample ID: B1PXY1**

**GC Semivolatiles**

**Lot-Sample #...:** F7J170222-007 **Work Order #...:** J86D21AC **Matrix.....:** WATER
**Date Sampled...:** 10/16/07 **Date Received..:** 10/17/07
**Prep Date.....:** 10/23/07 **Analysis Date..:** 10/25/07
**Prep Batch #...:** 7296076
**Dilution Factor:** 1 **Method.....:** SW846 8040A

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | MDL |
|---|---|---|---|---|
| 2-Chlorophenol | ND | 5.0 | ug/L | 2.2 |
| 4-Chloro-3-methylphenol | ND | 5.0 | ug/L | 2.4 |
| 3-Methylphenol & 4-Methylphenol | ND | 5.0 | ug/L | 2.2 |
| 2-Methylphenol | ND | 5.0 | ug/L | 2.2 |
| 2,4-Dichlorophenol | ND | 5.0 | ug/L | 2.1 |
| 2,6-Dichlorophenol | ND | 5.0 | ug/L | 2.1 |
| 2,4-Dimethylphenol | ND | 5.0 | ug/L | 2.1 |
| 2,4-Dinitrophenol | ND | 5.0 | ug/L | 2.4 |
| 4,6-Dinitro-2-methylphenol | ND | 5.0 | ug/L | 2.2 |
| Dinoseb | ND | 5.0 | ug/L | 2.4 |
| 2-Nitrophenol | ND | 5.0 | ug/L | 2.3 |
| 4-Nitrophenol | ND | 5.0 | ug/L | 2.2 |
| Pentachlorophenol | ND | 5.0 | ug/L | 2.4 |
| Phenol | ND | 5.0 | ug/L | 2.3 |
| 2,3,4,6-Tetrachlorophenol | ND | 5.0 | ug/L | 2.0 |
| 2,4,5-Trichlorophenol | ND | 5.0 | ug/L | 2.2 |
| 2,4,6-Trichlorophenol | ND | 5.0 | ug/L | 2.2 |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| 2,4,6-Tribromophenol | 92 | (44 - 110) |
| 2-Fluorophenol | 74 | (37 - 96 ) |

**Fluor Hanford Inc**

**Client Sample ID: B1PX27**

**GC Semivolatiles**

**Lot-Sample #...:** F7J230123-002 **Work Order #...:** J9LLA1AC **Matrix.....:** WATER
**Date Sampled...:** 10/22/07 **Date Received..:** 10/23/07
**Prep Date.....:** 10/29/07 **Analysis Date..:** 11/01/07
**Prep Batch #...:** 7302240
**Dilution Factor:** 1 **Method.....:** SW846 8040A

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | MDL |
|---|---|---|---|---|
| 2-Chlorophenol | ND | 5.0 | ug/L | 2.2 |
| 4-Chloro-3-methylphenol | ND | 5.0 | ug/L | 2.4 |
| 3-Methylphenol & 4-Methylphenol | ND | 5.0 | ug/L | 2.2 |
| 2-Methylphenol | ND | 5.0 | ug/L | 2.2 |
| 2,4-Dichlorophenol | ND | 5.0 | ug/L | 2.1 |
| 2,6-Dichlorophenol | ND | 5.0 | ug/L | 2.1 |
| 2,4-Dimethylphenol | ND | 5.0 | ug/L | 2.1 |
| 2,4-Dinitrophenol | ND | 5.0 | ug/L | 2.4 |
| 4,6-Dinitro-2-methylphenol | ND | 5.0 | ug/L | 2.2 |
| Dinoseb | ND | 5.0 | ug/L | 2.4 |
| 2-Nitrophenol | ND | 5.0 | ug/L | 2.3 |
| 4-Nitrophenol | ND | 5.0 | ug/L | 2.2 |
| Pentachlorophenol | ND | 5.0 | ug/L | 2.4 |
| Phenol | ND | 5.0 | ug/L | 2.3 |
| 2,3,4,6-Tetrachlorophenol | ND | 5.0 | ug/L | 2.0 |
| 2,4,5-Trichlorophenol | ND | 5.0 | ug/L | 2.2 |
| 2,4,6-Trichlorophenol | ND | 5.0 | ug/L | 2.2 |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| 2,4,6-Tribromophenol | 81 | (44 - 110) |
| 2-Fluorophenol | 72 | (37 - 96 ) |

**Fluor Hanford Inc**

**Client Sample ID: B1PX45**

**GC Semivolatiles**

**Lot-Sample #...:** F7J230123-004 **Work Order #...:** J9LM31AC **Matrix.....:** WATER
**Date Sampled...:** 10/22/07 **Date Received..:** 10/23/07
**Prep Date.....:** 10/29/07 **Analysis Date..:** 11/01/07
**Prep Batch #...:** 7302240
**Dilution Factor:** 1 **Method.....:** SW846 8040A

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | MDL |
|---|---|---|---|---|
| 2-Chlorophenol | ND | 5.0 | ug/L | 2.2 |
| 4-Chloro-3-methylphenol | ND | 5.0 | ug/L | 2.4 |
| 3-Methylphenol & 4-Methylphenol | ND | 5.0 | ug/L | 2.2 |
| 2-Methylphenol | ND | 5.0 | ug/L | 2.2 |
| 2,4-Dichlorophenol | ND | 5.0 | ug/L | 2.1 |
| 2,6-Dichlorophenol | ND | 5.0 | ug/L | 2.1 |
| 2,4-Dimethylphenol | ND | 5.0 | ug/L | 2.1 |
| 2,4-Dinitrophenol | ND | 5.0 | ug/L | 2.4 |
| 4,6-Dinitro-2-methylphenol | ND | 5.0 | ug/L | 2.2 |
| Dinoseb | ND | 5.0 | ug/L | 2.4 |
| 2-Nitrophenol | ND | 5.0 | ug/L | 2.3 |
| 4-Nitrophenol | ND | 5.0 | ug/L | 2.2 |
| Pentachlorophenol | ND | 5.0 | ug/L | 2.4 |
| Phenol | ND | 5.0 | ug/L | 2.3 |
| 2,3,4,6-Tetrachlorophenol | ND | 5.0 | ug/L | 2.0 |
| 2,4,5-Trichloro-phenol | ND | 5.0 | ug/L | 2.2 |
| 2,4,6-Trichloro-phenol | ND | 5.0 | ug/L | 2.2 |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| 2,4,6-Tribromophenol | 80 | (44 - 110) |
| 2-Fluorophenol | 75 | (37 - 96 ) |

**Fluor Hanford Inc**

**Client Sample ID: B1PWW5**

**GC Semivolatiles**

**Lot-Sample #...:** F7J240126-001 **Work Order #...:** J9NWQ1AC **Matrix.....:** WATER
**Date Sampled...:** 10/23/07 **Date Received..:** 10/24/07
**Prep Date.....:** 10/29/07 **Analysis Date..:** 11/01/07
**Prep Batch #...:** 7302240
**Dilution Factor:** 1 **Method.....:** SW846 8040A

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | MDL |
|---|---|---|---|---|
| 2-Chlorophenol | ND | 5.0 | ug/L | 2.2 |
| 4-Chloro-3-methylphenol | ND | 5.0 | ug/L | 2.4 |
| 3-Methylphenol & 4-Methylphenol | ND | 5.0 | ug/L | 2.2 |
| 2-Methylphenol | ND | 5.0 | ug/L | 2.2 |
| 2,4-Dichlorophenol | ND | 5.0 | ug/L | 2.1 |
| 2,6-Dichlorophenol | ND | 5.0 | ug/L | 2.1 |
| 2,4-Dimethylphenol | ND | 5.0 | ug/L | 2.1 |
| 2,4-Dinitrophenol | ND | 5.0 | ug/L | 2.4 |
| 4,6-Dinitro-2-methylphenol | ND | 5.0 | ug/L | 2.2 |
| Dinoseb | ND | 5.0 | ug/L | 2.4 |
| 2-Nitrophenol | ND | 5.0 | ug/L | 2.3 |
| 4-Nitrophenol | ND | 5.0 | ug/L | 2.2 |
| Pentachlorophenol | ND | 5.0 | ug/L | 2.4 |
| Phenol | ND | 5.0 | ug/L | 2.3 |
| 2,3,4,6-Tetrachlorophenol | ND | 5.0 | ug/L | 2.0 |
| 2,4,5-Trichlorophenol | ND | 5.0 | ug/L | 2.2 |
| 2,4,6-Trichlorophenol | ND | 5.0 | ug/L | 2.2 |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| 2,4,6-Tribromophenol | 85 | (44 - 110) |
| 2-Fluorophenol | 77 | (37 - 96 ) |

**Fluor Hanford Inc**

**Client Sample ID: B1PWT1**

**GC Semivolatiles**

**Lot-Sample #...:** F7J240126-004 **Work Order #...:** J9NW41AC **Matrix.....:** WATER
**Date Sampled...:** 10/23/07 **Date Received..:** 10/24/07
**Prep Date.....:** 10/29/07 **Analysis Date..:** 11/01/07
**Prep Batch #...:** 7302240
**Dilution Factor:** 1 **Method.....:** SW846 8040A

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | MDL |
|---|---|---|---|---|
| 2-Chlorophenol | ND | 5.0 | ug/L | 2.2 |
| 4-Chloro-3-methylphenol | ND | 5.0 | ug/L | 2.4 |
| 3-Methylphenol & 4-Methylphenol | ND | 5.0 | ug/L | 2.2 |
| 2-Methylphenol | ND | 5.0 | ug/L | 2.2 |
| 2,4-Dichlorophenol | ND | 5.0 | ug/L | 2.1 |
| 2,6-Dichlorophenol | ND | 5.0 | ug/L | 2.1 |
| 2,4-Dimethylphenol | ND | 5.0 | ug/L | 2.1 |
| 2,4-Dinitrophenol | ND | 5.0 | ug/L | 2.4 |
| 4,6-Dinitro-2-methylphenol | ND | 5.0 | ug/L | 2.2 |
| Dinoseb | ND | 5.0 | ug/L | 2.4 |
| 2-Nitrophenol | ND | 5.0 | ug/L | 2.3 |
| 4-Nitrophenol | ND | 5.0 | ug/L | 2.2 |
| Pentachlorophenol | ND | 5.0 | ug/L | 2.4 |
| Phenol | ND | 5.0 | ug/L | 2.3 |
| 2,3,4,6-Tetrachlorophenol | ND | 5.0 | ug/L | 2.0 |
| 2,4,5-Trichlorophenol | ND | 5.0 | ug/L | 2.2 |
| 2,4,6-Trichlorophenol | ND | 5.0 | ug/L | 2.2 |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| 2,4,6-Tribromophenol | 84 | (44 - 110) |
| 2-Fluorophenol | 77 | (37 - 96 ) |

**METHOD BLANK REPORT**

**GC Semivolatiles**

**Client Lot #...:** SL717 **Work Order #...:** J9MAL1AA **Matrix.....:** WATER
**MB Lot-Sample #:** F7J230000-076

**Prep Date.....:** 10/23/07
**Analysis Date..:** 10/24/07 **Prep Batch #...:** 7296076
**Dilution Factor:** 1

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | METHOD |
|---|---|---|---|---|
| 2-Chlorophenol | ND | 5.0 | ug/L | SW846 8040A |
| 4-Chloro-3-methylphenol | ND | 5.0 | ug/L | SW846 8040A |
| 3-Methylphenol & 4-Methylphenol | ND | 5.0 | ug/L | SW846 8040A |
| 2-Methylphenol | ND | 5.0 | ug/L | SW846 8040A |
| 2,4-Dichlorophenol | ND | 5.0 | ug/L | SW846 8040A |
| 2,6-Dichlorophenol | ND | 5.0 | ug/L | SW846 8040A |
| 2,4-Dimethylphenol | ND | 5.0 | ug/L | SW846 8040A |
| 2,4-Dinitrophenol | ND | 5.0 | ug/L | SW846 8040A |
| 4,6-Dinitro-2-methylphenol | ND | 5.0 | ug/L | SW846 8040A |
| Dinoseb | ND | 5.0 | ug/L | SW846 8040A |
| 2-Nitrophenol | ND | 5.0 | ug/L | SW846 8040A |
| 4-Nitrophenol | ND | 5.0 | ug/L | SW846 8040A |
| Pentachlorophenol | ND | 5.0 | ug/L | SW846 8040A |
| Phenol | ND | 5.0 | ug/L | SW846 8040A |
| 2,3,4,6-Tetrachlorophenol | ND | 5.0 | ug/L | SW846 8040A |
| 2,4,5-Trichlorophenol | ND | 5.0 | ug/L | SW846 8040A |
| 2,4,6-Trichlorophenol | ND | 5.0 | ug/L | SW846 8040A |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| 2,4,6-Tribromophenol | 84 | (44 - 110) |
| 2-Fluorophenol | 70 | (37 - 96) |

**NOTE(S):**

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

# METHOD BLANK REPORT

## GC Semivolatiles

**Client Lot #...:** SL717 **Work Order #...:** J945A1AA **Matrix.....:** WATER
**MB Lot-Sample #:** F7J290000-240

**Prep Date.....:** 10/29/07
**Analysis Date..:** 11/01/07 **Prep Batch #...:** 7302240
**Dilution Factor:** 1

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | METHOD |
|---|---|---|---|---|
| 2-Chlorophenol | ND | 5.0 | ug/L | SW846 8040A |
| 4-Chloro-3-methylphenol | ND | 5.0 | ug/L | SW846 8040A |
| 3-Methylphenol & 4-Methylphenol | ND | 5.0 | ug/L | SW846 8040A |
| 2-Methylphenol | ND | 5.0 | ug/L | SW846 8040A |
| 2,4-Dichlorophenol | ND | 5.0 | ug/L | SW846 8040A |
| 2,6-Dichlorophenol | ND | 5.0 | ug/L | SW846 8040A |
| 2,4-Dimethylphenol | ND | 5.0 | ug/L | SW846 8040A |
| 2,4-Dinitrophenol | ND | 5.0 | ug/L | SW846 8040A |
| 4,6-Dinitro-2-methylphenol | ND | 5.0 | ug/L | SW846 8040A |
| Dinoseb | ND | 5.0 | ug/L | SW846 8040A |
| 2-Nitrophenol | ND | 5.0 | ug/L | SW846 8040A |
| 4-Nitrophenol | ND | 5.0 | ug/L | SW846 8040A |
| Pentachlorophenol | ND | 5.0 | ug/L | SW846 8040A |
| Phenol | ND | 5.0 | ug/L | SW846 8040A |
| 2,3,4,6-Tetrachlorophenol | ND | 5.0 | ug/L | SW846 8040A |
| 2,4,5-Trichlorophenol | ND | 5.0 | ug/L | SW846 8040A |
| 2,4,6-Trichlorophenol | ND | 5.0 | ug/L | SW846 8040A |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| 2,4,6-Tribromophenol | 79 | (44 - 110) |
| 2-Fluorophenol | 74 | (37 - 96) |

**NOTE(S):**

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

## LABORATORY CONTROL SAMPLE DATA REPORT

### GC Semivolatiles

**Client Lot #...:** SL717 **Work Order #...:** J9MAL1AC **Matrix.....:** WATER
**LCS Lot-Sample#:** F7J230000-076
**Prep Date.....:** 10/23/07 **Analysis Date..:** 10/25/07
**Prep Batch #...:** 7296076
**Dilution Factor:** 1

| PARAMETER | SPIKE AMOUNT | MEASURED AMOUNT | UNITS | PERCENT RECOVERY | METHOD |
|---|---|---|---|---|---|
| **2-Chlorophenol** | **100** | **76.9** | **ug/L** | **77** | **SW846 8040A** |
| **4-Chloro-3-methylphenol** | **100** | **79.5** | **ug/L** | **79** | **SW846 8040A** |
| **3-Methylphenol & 4-Methylphenol** | **100** | **80.4** | **ug/L** | **80** | **SW846 8040A** |
| **2-Methylphenol** | **100** | **79.2** | **ug/L** | **79** | **SW846 8040A** |
| **2,4-Dichlorophenol** | **100** | **77.0** | **ug/L** | **77** | **SW846 8040A** |
| **2,6-Dichlorophenol** | **100** | **80.1** | **ug/L** | **80** | **SW846 8040A** |
| **2,4-Dimethylphenol** | **100** | **79.5** | **ug/L** | **79** | **SW846 8040A** |
| **2,4-Dinitrophenol** | **100** | **80.0** | **ug/L** | **80** | **SW846 8040A** |
| **4,6-Dinitro-2-methylphenol** | **100** | **87.3** | **ug/L** | **87** | **SW846 8040A** |
| **Dinoseb** | **100** | **89.8** | **ug/L** | **90** | **SW846 8040A** |
| **2-Nitrophenol** | **100** | **79.4** | **ug/L** | **79** | **SW846 8040A** |
| **4-Nitrophenol** | **100** | **85.1** | **ug/L** | **85** | **SW846 8040A** |
| **Pentachlorophenol** | **100** | **78.5** | **ug/L** | **79** | **SW846 8040A** |
| **Phenol** | **100** | **76.9** | **ug/L** | **77** | **SW846 8040A** |
| **2,3,4,6-Tetrachlorophenol** | **100** | **83.5** | **ug/L** | **83** | **SW846 8040A** |
| **2,4,5-Trichloro-phenol** | **100** | **78.2** | **ug/L** | **78** | **SW846 8040A** |
| **2,4,6-Trichloro-phenol** | **100** | **80.5** | **ug/L** | **81** | **SW846 8040A** |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| 2,4,6-Tribromophenol | 91 | (50 - 107) |
| 2-Fluorophenol | 71 | (50 - 91) |

**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 Semivolatiles

**Client Lot #...:** SL717 **Work Order #...:** J945A1AC **Matrix.....:** WATER
**LCS Lot-Sample#:** F7J290000-240
**Prep Date.....:** 10/29/07 **Analysis Date..:** 11/01/07
**Prep Batch #...:** 7302240
**Dilution Factor:** 1

| PARAMETER | SPIKE AMOUNT | MEASURED AMOUNT | UNITS | PERCENT RECOVERY | METHOD |
|---|---|---|---|---|---|
| **2-Chlorophenol** | **100** | **77.2** | **ug/L** | **77** | **SW846 8040A** |
| **4-Chloro-3-methylphenol** | **100** | **76.2** | **ug/L** | **76** | **SW846 8040A** |
| **3-Methylphenol & 4-Methylphenol** | **100** | **78.6** | **ug/L** | **79** | **SW846 8040A** |
| **2-Methylphenol** | **100** | **79.4** | **ug/L** | **79** | **SW846 8040A** |
| **2,4-Dichlorophenol** | **100** | **74.9** | **ug/L** | **75** | **SW846 8040A** |
| **2,6-Dichlorophenol** | **100** | **79.0** | **ug/L** | **79** | **SW846 8040A** |
| **2,4-Dimethylphenol** | **100** | **77.0** | **ug/L** | **77** | **SW846 8040A** |
| **2,4-Dinitrophenol** | **100** | **74.7** | **ug/L** | **75** | **SW846 8040A** |
| **4,6-Dinitro-2-methylphenol** | **100** | **83.7** | **ug/L** | **84** | **SW846 8040A** |
| **Dinoseb** | **100** | **85.1** | **ug/L** | **85** | **SW846 8040A** |
| **2-Nitrophenol** | **100** | **77.4** | **ug/L** | **77** | **SW846 8040A** |
| **4-Nitrophenol** | **100** | **83.6** | **ug/L** | **84** | **SW846 8040A** |
| **Pentachlorophenol** | **100** | **69.6** | **ug/L** | **70** | **SW846 8040A** |
| **Phenol** | **100** | **78.1** | **ug/L** | **78** | **SW846 8040A** |
| **2,3,4,6-Tetrachlorophenol** | **100** | **78.7** | **ug/L** | **79** | **SW846 8040A** |
| **2,4,5-Trichloro-phenol** | **100** | **74.4** | **ug/L** | **74** | **SW846 8040A** |
| **2,4,6-Trichloro-phenol** | **100** | **77.5** | **ug/L** | **77** | **SW846 8040A** |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| 2,4,6-Tribromophenol | 89 | (50 - 107) |
| 2-Fluorophenol | 76 | (50 - 91) |

**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 #...:** SL717 **Work Order #...:** J86AK1AD-MS **Matrix.....:** WATER
**MS Lot-Sample #:** F7J170222-001 J86AK1AE-MSD
**Date Sampled...:** 10/16/07 **Date Received..:** 10/17/07
**Prep Date.....:** 10/23/07 **Analysis Date..:** 10/25/07
**Prep Batch #...:** 7296076
**Dilution Factor:** 1

| PARAMETER | SAMPLE AMOUNT | SPIKE AMT | MEASRD AMOUNT | UNITS | PERCNT RECVRY | RPD | METHOD |
|---|---|---|---|---|---|---|---|
| 2-Chlorophenol | ND | 95.0 | 79.7 | ug/L | 84 | | SW846 8040A |
| | ND | 95.0 | 83.2 | ug/L | 88 | 4.3 | SW846 8040A |
| 4-Chloro-3-methylphenol | ND | 95.0 | 84.8 | ug/L | 89 | | SW846 8040A |
| | ND | 95.0 | 85.3 | ug/L | 90 | 0.59 | SW846 8040A |
| 3-Methylphenol & 4-Methylphenol | ND | 95.0 | 84.5 | ug/L | 89 | | SW846 8040A |
| | ND | 95.0 | 87.3 | ug/L | 92 | 3.3 | SW846 8040A |
| 2-Methylphenol | ND | 95.0 | 82.5 | ug/L | 87 | | SW846 8040A |
| | ND | 95.0 | 85.7 | ug/L | 90 | 3.8 | SW846 8040A |
| 2,4-Dichlorophenol | ND | 95.0 | 80.5 | ug/L | 85 | | SW846 8040A |
| | ND | 95.0 | 83.5 | ug/L | 88 | 3.6 | SW846 8040A |
| 2,6-Dichlorophenol | ND | 95.0 | 83.6 | ug/L | 88 | | SW846 8040A |
| | ND | 95.0 | 86.8 | ug/L | 91 | 3.8 | SW846 8040A |
| 2,4-Dimethylphenol | ND | 95.0 | 82.6 | ug/L | 87 | | SW846 8040A |
| | ND | 95.0 | 85.6 | ug/L | 90 | 3.5 | SW846 8040A |
| 2,4-Dinitrophenol | ND | 95.0 | 84.1 | ug/L | 88 | | SW846 8040A |
| | ND | 95.0 | 85.4 | ug/L | 90 | 1.6 | SW846 8040A |
| 4,6-Dinitro-2-methylphenol | ND | 95.0 | 92.0 | ug/L | 97 | | SW846 8040A |
| | ND | 95.0 | 93.2 | ug/L | 98 | 1.2 | SW846 8040A |
| Dinoseb | ND | 95.0 | 93.5 | ug/L | 98 | | SW846 8040A |
| | ND | 95.0 | 95.4 | ug/L | 100 | 2.0 | SW846 8040A |
| 2-Nitrophenol | ND | 95.0 | 80.6 | ug/L | 85 | | SW846 8040A |
| | ND | 95.0 | 86.7 | ug/L | 91 | 7.3 | SW846 8040A |
| 4-Nitrophenol | ND | 95.0 | 88.1 | ug/L | 93 | | SW846 8040A |
| | ND | 95.0 | 90.3 | ug/L | 95 | 2.5 | SW846 8040A |
| Pentachlorophenol | ND | 95.0 | 81.2 | ug/L | 85 | | SW846 8040A |
| | ND | 95.0 | 82.0 | ug/L | 86 | 0.93 | SW846 8040A |
| Phenol | ND | 95.0 | 79.8 | ug/L | 84 | | SW846 8040A |
| | ND | 95.0 | 82.7 | ug/L | 87 | 3.5 | SW846 8040A |
| 2,3,4,6-Tetrachlorophenol | ND | 95.0 | 91.2 | ug/L | 96 | | SW846 8040A |
| | ND | 95.0 | 86.0 | ug/L | 91 | 5.9 | SW846 8040A |
| 2,4,5-Trichlorophenol | ND | 95.0 | 82.9 | ug/L | 87 | | SW846 8040A |
| | ND | 95.0 | 84.1 | ug/L | 89 | 1.5 | SW846 8040A |

(Continued on next page)

## MATRIX SPIKE SAMPLE DATA REPORT

### GC Semivolatiles

**Client Lot #...:** SL717 **Work Order #...:** J86AK1AD-MS **Matrix.....:** WATER
**MS Lot-Sample #:** F7J170222-001 J86AK1AE-MSD

| PARAMETER | SAMPLE AMOUNT | SPIKE AMT | MEASRD AMOUNT | UNITS | PERCNT RECVRY | RPD | METHOD |
|---|---|---|---|---|---|---|---|
| **2,4,6-Trichloro-phenol** | **ND** | **95.0** | **86.4** | **ug/L** | **91** | | **SW846 8040A** |
| | **ND** | **95.0** | **87.3** | **ug/L** | **92** | **1.0** | **SW846 8040A** |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| 2,4,6-Tribromophenol | 98 | (44 - 110) |
| | 101 | (44 - 110) |
| 2-Fluorophenol | 77 | (37 - 96) |
| | 80 | (37 - 96) |

**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 #...:** SL717 **Work Order #...:** J9LLA1AT-MS **Matrix.....:** WATER
**MS Lot-Sample #:** F7J230123-002 J9LLA1AU-MSD
**Date Sampled...:** 10/22/07 **Date Received..:** 10/23/07
**Prep Date.....:** 10/29/07 **Analysis Date..:** 11/01/07
**Prep Batch #...:** 7302240
**Dilution Factor:** 1

| PARAMETER | SAMPLE AMOUNT | SPIKE AMT | MEASRD AMOUNT | UNITS | PERCNT RECVRY | RPD | METHOD |
|---|---|---|---|---|---|---|---|
| 2-Chlorophenol | ND | 95.0 | 74.7 | ug/L | 79 | | SW846 8040A |
| | ND | 94.7 | 76.9 | ug/L | 81 | 2.9 | SW846 8040A |
| 4-Chloro-3-methylphenol | ND | 95.0 | 72.4 | ug/L | 76 | | SW846 8040A |
| | ND | 94.7 | 77.8 | ug/L | 82 | 7.2 | SW846 8040A |
| 3-Methylphenol & 4-Methylphenol | ND | 95.0 | 75.2 | ug/L | 79 | | SW846 8040A |
| | ND | 94.7 | 78.8 | ug/L | 83 | 4.7 | SW846 8040A |
| 2-Methylphenol | ND | 95.0 | 76.0 | ug/L | 80 | | SW846 8040A |
| | ND | 94.7 | 78.9 | ug/L | 83 | 3.7 | SW846 8040A |
| 2,4-Dichlorophenol | ND | 95.0 | 71.8 | ug/L | 76 | | SW846 8040A |
| | ND | 94.7 | 75.6 | ug/L | 80 | 5.2 | SW846 8040A |
| 2,6-Dichlorophenol | ND | 95.0 | 75.1 | ug/L | 79 | | SW846 8040A |
| | ND | 94.7 | 79.0 | ug/L | 83 | 5.0 | SW846 8040A |
| 2,4-Dimethylphenol | ND | 95.0 | 73.4 | ug/L | 77 | | SW846 8040A |
| | ND | 94.7 | 76.5 | ug/L | 81 | 4.2 | SW846 8040A |
| 2,4-Dinitrophenol | ND | 95.0 | 72.7 | ug/L | 77 | | SW846 8040A |
| | ND | 94.7 | 81.0 | ug/L | 86 | 11 | SW846 8040A |
| 4,6-Dinitro-2-methylphenol | ND | 95.0 | 81.9 | ug/L | 86 | | SW846 8040A |
| | ND | 94.7 | 94.2 | ug/L | 99 | 14 | SW846 8040A |
| Dinoseb | ND | 95.0 | 80.8 | ug/L | 85 | | SW846 8040A |
| | ND | 94.7 | 92.0 | ug/L | 97 | 13 | SW846 8040A |
| 2-Nitrophenol | ND | 95.0 | 73.8 | ug/L | 78 | | SW846 8040A |
| | ND | 94.7 | 82.6 | ug/L | 87 | 11 | SW846 8040A |
| 4-Nitrophenol | ND | 95.0 | 79.3 | ug/L | 83 | | SW846 8040A |
| | ND | 94.7 | 85.8 | ug/L | 91 | 7.9 | SW846 8040A |
| Pentachlorophenol | ND | 95.0 | 64.8 | ug/L | 68 | | SW846 8040A |
| | ND | 94.7 | 72.7 | ug/L | 77 | 12 | SW846 8040A |
| Phenol | ND | 95.0 | 75.0 | ug/L | 79 | | SW846 8040A |
| | ND | 94.7 | 77.5 | ug/L | 82 | 3.3 | SW846 8040A |
| 2,3,4,6-Tetrachlorophenol | ND | 95.0 | 74.5 | ug/L | 78 | | SW846 8040A |
| | ND | 94.7 | 85.8 | ug/L | 91 | 14 | SW846 8040A |
| 2,4,5-Trichloro-phenol | ND | 95.0 | 70.8 | ug/L | 74 | | SW846 8040A |
| | ND | 94.7 | 76.5 | ug/L | 81 | 7.7 | SW846 8040A |

(Continued on next page)

# MATRIX SPIKE SAMPLE DATA REPORT

## GC Semivolatiles

**Client Lot #...:** SL717 **Work Order #...:** J9LLA1AT-MS **Matrix.....:** WATER
**MS Lot-Sample #:** F7J230123-002 J9LLA1AU-MSD

| PARAMETER | SAMPLE AMOUNT | SPIKE AMT | MEASRD AMOUNT | UNITS | PERCNT RECVRY | RPD | METHOD |
|---|---|---|---|---|---|---|---|
| **2,4,6-Trichloro-phenol** | **ND** | **95.0** | **73.4** | **ug/L** | **77** | | **SW846 8040A** |
| | **ND** | **94.7** | **77.8** | **ug/L** | **82** | **5.9** | **SW846 8040A** |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| 2,4,6-Tribromophenol | 91 | (44 - 110) |
| | 101 | (44 - 110) |
| 2-Fluorophenol | 76 | (37 - 96) |
| | 78 | (37 - 96) |

**NOTE(S):**

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

Bold print denotes control parameters

# PCBs

**Fluor Hanford Inc**

**Client Sample ID: B1PX55**

**GC Semivolatiles**

**Lot-Sample #...:** F7J170222-006 **Work Order #...:** J86CQ1AD **Matrix.....:** WATER
**Date Sampled...:** 10/16/07 **Date Received..:** 10/17/07
**Prep Date.....:** 10/19/07 **Analysis Date..:** 10/25/07
**Prep Batch #...:** 7292310
**Dilution Factor:** 1 **Method.....:** SW846 8082

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | MDL |
|---|---|---|---|---|
| Aroclor 1016 | ND | 1.0 | ug/L | 0.44 |
| Aroclor 1221 | ND | 1.0 | ug/L | 0.44 |
| Aroclor 1232 | ND | 1.0 | ug/L | 0.44 |
| Aroclor 1242 | ND | 1.0 | ug/L | 0.44 |
| Aroclor 1248 | ND | 1.0 | ug/L | 0.44 |
| Aroclor 1254 | ND | 1.0 | ug/L | 0.30 |
| Aroclor 1260 | ND | 1.0 | ug/L | 0.30 |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| Decachlorobiphenyl | 87 | (55 - 130) |

**Fluor Hanford Inc**

**Client Sample ID: B1PXY1**

**GC Semivolatiles**

**Lot-Sample #...:** F7J170222-007 **Work Order #...:** J86D21AD **Matrix.....:** WATER
**Date Sampled...:** 10/16/07 **Date Received..:** 10/17/07
**Prep Date.....:** 10/19/07 **Analysis Date..:** 10/25/07
**Prep Batch #...:** 7292310
**Dilution Factor:** 1 **Method.....:** SW846 8082

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | MDL |
|---|---|---|---|---|
| Aroclor 1016 | ND | 1.0 | ug/L | 0.44 |
| Aroclor 1221 | ND | 1.0 | ug/L | 0.44 |
| Aroclor 1232 | ND | 1.0 | ug/L | 0.44 |
| Aroclor 1242 | ND | 1.0 | ug/L | 0.44 |
| Aroclor 1248 | ND | 1.0 | ug/L | 0.44 |
| Aroclor 1254 | ND | 1.0 | ug/L | 0.30 |
| Aroclor 1260 | ND | 1.0 | ug/L | 0.30 |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| Decachlorobiphenyl | 92 | (55 - 130) |

**Fluor Hanford Inc**

**Client Sample ID: B1PX27**

**GC Semivolatiles**

**Lot-Sample #...:** F7J230123-002 **Work Order #...:** J9LLA1AD **Matrix.....:** WATER
**Date Sampled...:** 10/22/07 **Date Received..:** 10/23/07
**Prep Date.....:** 10/27/07 **Analysis Date..:** 11/13/07
**Prep Batch #...:** 7300127
**Dilution Factor:** 1 **Method.....:** SW846 8082

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | MDL |
|---|---|---|---|---|
| Aroclor 1016 | ND | 1.0 | ug/L | 0.44 |
| Aroclor 1221 | ND | 1.0 | ug/L | 0.44 |
| Aroclor 1232 | ND | 1.0 | ug/L | 0.44 |
| Aroclor 1242 | ND | 1.0 | ug/L | 0.44 |
| Aroclor 1248 | ND | 1.0 | ug/L | 0.44 |
| Aroclor 1254 | ND | 1.0 | ug/L | 0.30 |
| Aroclor 1260 | ND | 1.0 | ug/L | 0.30 |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| Decachlorobiphenyl | 105 | (55 - 130) |

**Fluor Hanford Inc**

**Client Sample ID: B1PX45**

**GC Semivolatiles**

**Lot-Sample #...:** F7J230123-004 **Work Order #...:** J9LM31AD **Matrix.....:** WATER
**Date Sampled...:** 10/22/07 **Date Received..:** 10/23/07
**Prep Date.....:** 10/27/07 **Analysis Date..:** 11/13/07
**Prep Batch #...:** 7300127
**Dilution Factor:** 1 **Method.....:** SW846 8082

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | MDL |
|---|---|---|---|---|
| Aroclor 1016 | ND | 1.0 | ug/L | 0.44 |
| Aroclor 1221 | ND | 1.0 | ug/L | 0.44 |
| Aroclor 1232 | ND | 1.0 | ug/L | 0.44 |
| Aroclor 1242 | ND | 1.0 | ug/L | 0.44 |
| Aroclor 1248 | ND | 1.0 | ug/L | 0.44 |
| Aroclor 1254 | ND | 1.0 | ug/L | 0.30 |
| Aroclor 1260 | ND | 1.0 | ug/L | 0.30 |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| Decachlorobiphenyl | 104 | (55 - 130) |

**Fluor Hanford Inc**

**Client Sample ID: B1PXF2**

**GC Semivolatiles**

**Lot-Sample #...:** F7J240126-003 **Work Order #...:** J9NWW1AA **Matrix.....:** WATER
**Date Sampled...:** 10/23/07 **Date Received..:** 10/24/07
**Prep Date.....:** 10/27/07 **Analysis Date..:** 11/13/07
**Prep Batch #...:** 7300127
**Dilution Factor:** 1 **Method.....:** SW846 8082

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | MDL |
|---|---|---|---|---|
| Aroclor 1016 | ND | 1.0 | ug/L | 0.44 |
| Aroclor 1221 | ND | 1.0 | ug/L | 0.44 |
| Aroclor 1232 | ND | 1.0 | ug/L | 0.44 |
| Aroclor 1242 | ND | 1.0 | ug/L | 0.44 |
| Aroclor 1248 | ND | 1.0 | ug/L | 0.44 |
| Aroclor 1254 | ND | 1.0 | ug/L | 0.30 |
| Aroclor 1260 | ND | 1.0 | ug/L | 0.30 |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| Decachlorobiphenyl | 104 | (55 - 130) |

# METHOD BLANK REPORT

## GC Semivolatiles

**Client Lot #...:** SL717 **Work Order #...:** J9ER81AA **Matrix.....:** WATER
**MB Lot-Sample #:** F7J190000-310

**Prep Date.....:** 10/19/07
**Analysis Date..:** 10/25/07 **Prep Batch #...:** 7292310
**Dilution Factor:** 1

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | METHOD |
|---|---|---|---|---|
| Aroclor 1016 | ND | 1.0 | ug/L | SW846 8082 |
| Aroclor 1221 | ND | 1.0 | ug/L | SW846 8082 |
| Aroclor 1232 | ND | 1.0 | ug/L | SW846 8082 |
| Aroclor 1242 | ND | 1.0 | ug/L | SW846 8082 |
| Aroclor 1248 | ND | 1.0 | ug/L | SW846 8082 |
| Aroclor 1254 | ND | 1.0 | ug/L | SW846 8082 |
| Aroclor 1260 | ND | 1.0 | ug/L | SW846 8082 |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| Decachlorobiphenyl | 74 | (55 - 130) |

**NOTE(S):**

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

**METHOD BLANK REPORT**

**GC Semivolatiles**

**Client Lot #...:** SL717 **Work Order #...:** J92D21AA **Matrix.....:** WATER
**MB Lot-Sample #:** F7J270000-127

**Prep Date.....:** 10/27/07
**Analysis Date..:** 11/13/07 **Prep Batch #...:** 7300127
**Dilution Factor:** 1

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | METHOD |
|---|---|---|---|---|
| Aroclor 1016 | ND | 1.0 | ug/L | SW846 8082 |
| Aroclor 1221 | ND | 1.0 | ug/L | SW846 8082 |
| Aroclor 1232 | ND | 1.0 | ug/L | SW846 8082 |
| Aroclor 1242 | ND | 1.0 | ug/L | SW846 8082 |
| Aroclor 1248 | ND | 1.0 | ug/L | SW846 8082 |
| Aroclor 1254 | ND | 1.0 | ug/L | SW846 8082 |
| Aroclor 1260 | ND | 1.0 | ug/L | SW846 8082 |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| Decachlorobiphenyl | 90 | (55 - 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 #...:** SL717 **Work Order #...:** J9ER81AC **Matrix.....:** WATER
**LCS Lot-Sample#:** F7J190000-310
**Prep Date.....:** 10/19/07 **Analysis Date..:** 10/25/07
**Prep Batch #...:** 7292310
**Dilution Factor:** 1

| PARAMETER | SPIKE AMOUNT | MEASURED AMOUNT | UNITS | PERCENT RECOVERY | METHOD |
|---|---|---|---|---|---|
| **Aroclor 1016** | **5.00** | **4.60** | **ug/L** | **92** | **SW846 8082** |
| **Aroclor 1260** | **5.00** | **4.44** | **ug/L** | **89** | **SW846 8082** |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| Decachlorobiphenyl | 85 | (60 - 120) |

**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 Semivolatiles

**Client Lot #...:** SL717 **Work Order #...:** J92D21AC **Matrix.....:** WATER
**LCS Lot-Sample#:** F7J270000-127
**Prep Date.....:** 10/27/07 **Analysis Date..:** 11/13/07
**Prep Batch #...:** 7300127
**Dilution Factor:** 1

| PARAMETER | SPIKE AMOUNT | MEASURED AMOUNT | UNITS | PERCENT RECOVERY | METHOD |
|---|---|---|---|---|---|
| **Aroclor 1016** | **5.00** | **5.72** | **ug/L** | **114** | **SW846 8082** |
| **Aroclor 1260** | **5.00** | **4.70** | **ug/L** | **94** | **SW846 8082** |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| Decachlorobiphenyl | 94 | (60 - 120) |

**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 #...:** SL717 **Work Order #...:** J86CQ1AF-MS **Matrix.....:** WATER
**MS Lot-Sample #:** F7J170222-006 J86CQ1AG-MSD
**Date Sampled...:** 10/16/07 **Date Received..:** 10/17/07
**Prep Date.....:** 10/19/07 **Analysis Date..:** 10/25/07
**Prep Batch #...:** 7292310
**Dilution Factor:** 1

| PARAMETER | SAMPLE AMOUNT | SPIKE AMT | MEASRD AMOUNT | UNITS | PERCNT RECVRY | RPD | METHOD |
|---|---|---|---|---|---|---|---|
| **Aroclor 1016** | **ND** | **4.86** | **4.80** | **ug/L** | **99** | | **SW846 8082** |
| | **ND** | **4.85** | **4.86** | **ug/L** | **100** | **1.3** | **SW846 8082** |
| **Aroclor 1260** | **ND** | **4.86** | **4.58** | **ug/L** | **94** | | **SW846 8082** |
| | **ND** | **4.85** | **4.77** | **ug/L** | **98** | **4.0** | **SW846 8082** |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| Decachlorobiphenyl | 97 | (55 - 130) |
| | 88 | (55 - 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 #...:** SL717 **Work Order #...:** J9LLA1AQ-MS **Matrix.....:** WATER
**MS Lot-Sample #:** F7J230123-002 J9LLA1AR-MSD
**Date Sampled...:** 10/22/07 **Date Received..:** 10/23/07
**Prep Date.....:** 10/27/07 **Analysis Date..:** 11/13/07
**Prep Batch #...:** 7300127
**Dilution Factor:** 1

| PARAMETER | SAMPLE AMOUNT | SPIKE AMT | MEASRD AMOUNT | UNITS | PERCNT RECVRY | RPD | METHOD |
|---|---|---|---|---|---|---|---|
| **Aroclor 1016** | **ND** | **4.74** | **4.75** | **ug/L** | **100** | | **SW846 8082** |
| | **ND** | **4.76** | **3.32** | **ug/L** | **70 p** | **36** | **SW846 8082** |
| **Aroclor 1260** | **ND** | **4.74** | **5.02** | **ug/L** | **106** | | **SW846 8082** |
| | **ND** | **4.76** | **3.43** | **ug/L** | **72 p** | **38** | **SW846 8082** |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| Decachlorobiphenyl | 108 | (55 - 130) |
| | 74 | (55 - 130) |

**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.

# METALS

**Fluor Hanford Inc**

**Client Sample ID: B1PX54**

**DISSOLVED Metals**

**Lot-Sample #...:** F7J170222-005 **Matrix.....:** WATER
**Date Sampled...:** 10/16/07 **Date Received..:** 10/17/07

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | METHOD | PREPARATION-ANALYSIS DATE | WORK ORDER # |
|---|---|---|---|---|---|---|
| **Prep Batch #...:** 7298054 | | | | | | |
| Mercury | ND | 0.20 | ug/L | SW846 7470A | 10/26/07 | J86CM1AA |
| | | Dilution Factor: 1 | | MDL.....: 0.093 | | |

**Fluor Hanford Inc**

**Client Sample ID: B1PX55**

**TOTAL Metals**

**Lot-Sample #...:** F7J170222-006 **Matrix.....:** WATER
**Date Sampled...:** 10/16/07 **Date Received..:** 10/17/07

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | METHOD | PREPARATION-ANALYSIS DATE | WORK ORDER # |
|---|---|---|---|---|---|---|
| **Prep Batch #...:** 7298052 | | | | | | |
| Mercury | ND | 0.20 | ug/L | SW846 7470A | 10/26/07 | J86CQ1AE |
| | | Dilution Factor: 1 | | MDL.....: 0.093 | | |

**Fluor Hanford Inc**

**Client Sample ID: B1PXY1**

**TOTAL Metals**

**Lot-Sample #...:** F7J170222-007 **Matrix.....:** WATER
**Date Sampled...:** 10/16/07 **Date Received..:** 10/17/07

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | METHOD | PREPARATION-ANALYSIS DATE | WORK ORDER # |
|---|---|---|---|---|---|---|
| **Prep Batch #...:** 7298052 | | | | | | |
| Mercury | ND | 0.20 | ug/L | SW846 7470A | 10/26/07 | J86D21AE |
| | | Dilution Factor: 1 | | MDL.....: 0.093 | | |

**Fluor Hanford Inc**

**Client Sample ID: B1PXY0**

**DISSOLVED Metals**

**Lot-Sample #...:** F7J170222-008 **Matrix.....:** WATER
**Date Sampled...:** 10/16/07 **Date Received..:** 10/17/07

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | METHOD | PREPARATION-ANALYSIS DATE | WORK ORDER # |
|---|---|---|---|---|---|---|
| **Prep Batch #...:** 7298054 | | | | | | |
| Mercury | ND | 0.20 | ug/L | SW846 7470A | 10/26/07 | J89CF1AA |
| | | Dilution Factor: 1 | | MDL.....: 0.093 | | |

**Fluor Hanford Inc**

**Client Sample ID: B1PV38**

**DISSOLVED Metals**

**Lot-Sample #...:** F7J200146-001 **Matrix.....:** WATER
**Date Sampled...:** 10/19/07 **Date Received..:** 10/20/07

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | METHOD | PREPARATION-ANALYSIS DATE | WORK ORDER # |
|---|---|---|---|---|---|---|
| **Prep Batch #...:** 7298054 | | | | | | |
| Mercury | ND | 0.20 | ug/L | SW846 7470A | 10/26/07 | J9HAA1AA |
| | | Dilution Factor: 1 | | MDL.....: 0.093 | | |

**Fluor Hanford Inc**

**Client Sample ID: B1PV39**

**DISSOLVED Metals**

**Lot-Sample #...:** F7J200146-002 **Matrix.....:** WATER
**Date Sampled...:** 10/19/07 **Date Received..:** 10/20/07

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | METHOD | PREPARATION-ANALYSIS DATE | WORK ORDER # |
|---|---|---|---|---|---|---|
| **Prep Batch #...:** 7298054 | | | | | | |
| Mercury | ND | 0.20 | ug/L | SW846 7470A | 10/26/07 | J9HAC1AC |
| | | Dilution Factor: 1 | | MDL.....: 0.093 | | |

**Fluor Hanford Inc**

**Client Sample ID: B1PX26**

**DISSOLVED Metals**

**Lot-Sample #...:** F7J230123-001 **Matrix.....:** WATER
**Date Sampled...:** 10/22/07 **Date Received..:** 10/23/07

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | METHOD | PREPARATION-ANALYSIS DATE | WORK ORDER # |
|---|---|---|---|---|---|---|
| **Prep Batch #...:** 7298054 | | | | | | |
| Mercury | ND | 0.20 | ug/L | SW846 7470A | 10/26/07 | J9LK31AA |
| | | Dilution Factor: 1 | | MDL.....: 0.093 | | |

**Fluor Hanford Inc**

**Client Sample ID: B1PX27**

**TOTAL Metals**

**Lot-Sample #...:** F7J230123-002 **Matrix.....:** WATER
**Date Sampled...:** 10/22/07 **Date Received..:** 10/23/07

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | METHOD | PREPARATION-ANALYSIS DATE | WORK ORDER # |
|---|---|---|---|---|---|---|
| **Prep Batch #...:** 7298052 | | | | | | |
| Mercury | ND | 0.20 | ug/L | SW846 7470A | 10/26/07 | J9LLA1AE |
| | | Dilution Factor: 1 | | MDL.....: 0.093 | | |

**Fluor Hanford Inc**

**Client Sample ID: B1PX16**

**DISSOLVED Metals**

**Lot-Sample #...:** F7J230123-003 **Matrix.....:** WATER
**Date Sampled...:** 10/22/07 **Date Received..:** 10/23/07

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | METHOD | PREPARATION-ANALYSIS DATE | WORK ORDER # |
|---|---|---|---|---|---|---|
| **Prep Batch #...:** 7298054 | | | | | | |
| Mercury | ND | 0.20 | ug/L | SW846 7470A | 10/26/07 | J9LMV1AA |
| | | Dilution Factor: 1 | | MDL.....: 0.093 | | |

**Fluor Hanford Inc**

**Client Sample ID: B1PX45**

**TOTAL Metals**

**Lot-Sample #...:** F7J230123-004 **Matrix.....:** WATER
**Date Sampled...:** 10/22/07 **Date Received..:** 10/23/07

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | METHOD | PREPARATION-ANALYSIS DATE | WORK ORDER # |
|---|---|---|---|---|---|---|
| **Prep Batch #...:** 7298052 | | | | | | |
| Mercury | ND | 0.20 | ug/L | SW846 7470A | 10/26/07 | J9LM31AE |
| | | Dilution Factor: 1 | | MDL.....: 0.093 | | |

**Fluor Hanford Inc**

**Client Sample ID: B1PXF1**

**DISSOLVED Metals**

**Lot-Sample #...:** F7J240126-002 **Matrix.....:** WATER
**Date Sampled...:** 10/23/07 **Date Received..:** 10/24/07

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | METHOD | PREPARATION-ANALYSIS DATE | WORK ORDER # |
|---|---|---|---|---|---|---|
| **Prep Batch #...:** 7298054 | | | | | | |
| Mercury | ND | 0.20 | ug/L | SW846 7470A | 10/26/07 | J9NWV1AA |
| | | Dilution Factor: 1 | | MDL.....: 0.093 | | |

**Fluor Hanford Inc**

**Client Sample ID: B1PXF2**

**TOTAL Metals**

**Lot-Sample #...:** F7J240126-003 **Matrix.....:** WATER
**Date Sampled...:** 10/23/07 **Date Received..:** 10/24/07

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | METHOD | PREPARATION-ANALYSIS DATE | WORK ORDER # |
|---|---|---|---|---|---|---|
| **Prep Batch #...:** 7298052 | | | | | | |
| Mercury | ND | 0.20 | ug/L | SW846 7470A | 10/26/07 | J9NWW1AC |
| | | Dilution Factor: 1 | | MDL.....: 0.093 | | |

# METHOD BLANK REPORT

## TOTAL Metals

**Client Lot #...:** SL717 **Matrix.....:** WATER

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | METHOD | PREPARATION-ANALYSIS DATE | WORK ORDER # |
|---|---|---|---|---|---|---|
| **MB Lot-Sample #:** F7J250000-052 **Prep Batch #...:** 7298052 | | | | | | |
| Mercury | ND | 0.20 | ug/L | SW846 7470A | 10/26/07 | J9RK31AA |
| | | Dilution Factor: 1 | | | | |

**NOTE(S):**

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

**METHOD BLANK REPORT**

**DISSOLVED Metals**

**Client Lot #...:** SL717 **Matrix.....:** WATER

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | METHOD | PREPARATION-ANALYSIS DATE | WORK ORDER # |
|---|---|---|---|---|---|---|
| **MB Lot-Sample #:** F7J250000-054 **Prep Batch #...:** 7298054 | | | | | | |
| Mercury | ND | 0.20 | ug/L | SW846 7470A | 10/26/07 | J9RK51AA |
| | | Dilution Factor: 1 | | | | |

**NOTE(S):**

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

## LABORATORY CONTROL SAMPLE DATA REPORT

### TOTAL Metals

**Client Lot #...:** SL717 **Matrix.....:** WATER

| PARAMETER | SPIKE AMOUNT | MEASURED AMOUNT | UNITS | PERCNT RECVRY | METHOD | PREPARATION-ANALYSIS DATE | WORK ORDER # |
|---|---|---|---|---|---|---|---|
| **LCS Lot-Sample#:** F7J250000-052 **Prep Batch #...:** 7298052 | | | | | | | |
| Mercury | 1.00 | 0.988 | ug/L | 99 | SW846 7470A | 10/26/07 | J9RK31AC |
| | | | 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 #...:** SL717 **Matrix.....:** WATER

| PARAMETER | SPIKE AMOUNT | MEASURED AMOUNT | UNITS | PERCNT RECVRY | METHOD | PREPARATION-ANALYSIS DATE | WORK ORDER # |
|---|---|---|---|---|---|---|---|
| **LCS Lot-Sample#:** F7J250000-054 **Prep Batch #...:** 7298054 | | | | | | | |
| Mercury | 1.00 | 0.952 | ug/L | 95 | SW846 7470A | 10/26/07 | J9RK51AC |
| | | | 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 #...:** SL717 **Matrix.....:** WATER
**Date Sampled...:** 10/16/07 **Date Received..:** 10/17/07

| PARAMETER | SAMPLE AMOUNT | SPIKE AMT | MEASRD AMOUNT | UNITS | PERCNT RECVRY | RPD | METHOD | PREPARATION-ANALYSIS DATE | WORK ORDER # |
|---|---|---|---|---|---|---|---|---|---|
| **MS Lot-Sample #:** F7J170222-006 **Prep Batch #...:** 7298052 | | | | | | | | | |
| Mercury | | | | | | | | | |
| | ND | 1.00 | 1.08 | ug/L | 108 | | SW846 7470A | 10/26/07 | J86CQ1AH |
| | ND | 1.00 | 1.09 | ug/L | 109 | 0.92 | SW846 7470A | 10/26/07 | J86CQ1AJ |

Dilution Factor: 1

**NOTE(S):**

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

**MATRIX SPIKE SAMPLE DATA REPORT**

**DISSOLVED Metals**

**Client Lot #...:** SL717 **Matrix.....:** WATER
**Date Sampled...:** 10/16/07 **Date Received..:** 10/17/07

| PARAMETER | SAMPLE AMOUNT | SPIKE AMT | MEASRD AMOUNT | UNITS | PERCNT RECVRY | RPD | METHOD | PREPARATION-ANALYSIS DATE | WORK ORDER # |
|---|---|---|---|---|---|---|---|---|---|
| **MS Lot-Sample #:** F7J170222-005 **Prep Batch #...:** 7298054 | | | | | | | | | |
| Mercury | | | | | | | | | |
| | ND | 1.00 | 1.04 | ug/L | 104 | | SW846 7470A | 10/26/07 | J86CM1AC |
| | ND | 1.00 | 0.995 | ug/L | 100 | 4.4 | SW846 7470A | 10/26/07 | J86CM1AD |

Dilution Factor: 1

**NOTE(S):**

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

# WET CHEMISTRY

**Fluor Hanford Inc**

**Client Sample ID: B1PV94**

**General Chemistry**

**Lot-Sample #...:** F7J180181-001 **Work Order #...:** J89D2 **Matrix.....:** WATER
**Date Sampled...:** 10/17/07 **Date Received..:** 10/18/07

| PARAMETER | RESULT | RL | UNITS | METHOD | PREPARATION-ANALYSIS DATE | PREP BATCH # |
|---|---|---|---|---|---|---|
| **Sulfate** | **93.7 D** | **5.0** | **mg/L** | **MCAWW 300.0A** | **10/18/07** | **7292096** |

Dilution Factor: 10 MDL.....: 0.50

**NOTE(S):**

RL Reporting Limit

D Result was obtained from the analysis of a dilution.

**Fluor Hanford Inc**

**Client Sample ID: B1PX27**

**General Chemistry**

**Lot-Sample #...:** F7J230123-002 **Work Order #...:** J9LLA **Matrix.....:** WATER
**Date Sampled...:** 10/22/07 **Date Received..:** 10/23/07

| PARAMETER | RESULT | RL | UNITS | METHOD | PREPARATION-ANALYSIS DATE | PREP BATCH # |
|---|---|---|---|---|---|---|
| Oil and Grease (Gravimetric) | 0.80 B,C | 5.0 | mg/L | MCAWW 413.1 | 11/08-11/09/07 | 7311212 |

Dilution Factor: 1 MDL.....: 0.50

**NOTE(S):**

RL Reporting Limit

B Estimated result. Result is less than RL.

C Analyte detected in method blank above the MDL/IDL.

**Fluor Hanford Inc**

**Client Sample ID: B1PX45**

**General Chemistry**

**Lot-Sample #...:** F7J230123-004 **Work Order #...:** J9LM3 **Matrix.....:** WATER
**Date Sampled...:** 10/22/07 **Date Received..:** 10/23/07

| PARAMETER | RESULT | RL | UNITS | METHOD | PREPARATION-ANALYSIS DATE | PREP BATCH # |
|---|---|---|---|---|---|---|
| Oil and Grease (Gravimetric) | 12.2 C | 5.0 | mg/L | MCAWW 413.1 | 11/08-11/09/07 | 7311212 |

Dilution Factor: 1 MDL.....: 0.50

**NOTE(S):**

RL Reporting Limit

C Analyte detected in method blank above the MDL/IDL.

# METHOD BLANK REPORT

## General Chemistry

**Client Lot #...:** SL717 **Matrix.....:** WATER

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | METHOD | PREPARATION-ANALYSIS DATE | PREP BATCH # |
|---|---|---|---|---|---|---|
| **Oil and Grease (Gravimetric)** | | Work Order #: KA2K91AA | | MB Lot-Sample #: | F7K070000-212 | |
| | **0.80 B** | **5.0** | **mg/L** | **MCAWW 413.1** | **11/08-11/09/07** | **7311212** |
| | | Dilution Factor: 1 | | | | |
| Sulfate | | Work Order #: J9JCA1AA | | MB Lot-Sample #: | F7J190000-096 | |
| | ND | 0.50 | mg/L | MCAWW 300.0A | 10/18/07 | 7292096 |
| | | Dilution Factor: 1 | | | | |

**NOTE(S):**

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

B Estimated result. Result is less than RL.

## LABORATORY CONTROL SAMPLE DATA REPORT

### General Chemistry

**Lot-Sample #...:** SL717 **Matrix.....:** WATER

| PARAMETER | SPIKE AMOUNT | MEASURED AMOUNT | UNITS | PERCNT RECVRY | RPD | METHOD | PREPARATION-ANALYSIS DATE | PREP BATCH # |
|---|---|---|---|---|---|---|---|---|
| Oil and Grease (Gravimetric) | | WO#:KA2K91AC-LCS/KA2K91AD-LCSD | | | | LCS Lot-Sample#: F7K070000-212 | | |
| | 100 | 120 | mg/L | 120 | | MCAWW 413.1 | 11/08-11/09/07 | 7311212 |
| | 100 | 121 | mg/L | 121 | 0.82 | MCAWW 413.1 | 11/08-11/09/07 | 7311212 |

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 #...:** SL717 **Matrix.....:** WATER

| PARAMETER | SPIKE AMOUNT | MEASURED AMOUNT | UNITS | PERCNT RECVRY | METHOD | PREPARATION-ANALYSIS DATE | PREP BATCH # |
|---|---|---|---|---|---|---|---|
| Sulfate | | | Work Order #: | J9JCA1AC | LCS Lot-Sample#: | F7J190000-096 | |
| | 8.00 | 7.48 | mg/L | 93 | MCAWW 300.0A | 10/18/07 | 7292096 |
| | | | 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 #...:** SL717 **Matrix.....:** WATER
**Date Sampled...:** 10/17/07 **Date Received..:** 10/18/07

| PARAMETER | SAMPLE AMOUNT | SPIKE AMT | MEASURED AMOUNT | UNITS | PERCENT RECOVERY | METHOD | PREPARATION-ANALYSIS DATE | PREP BATCH # |
|---|---|---|---|---|---|---|---|---|
| Oil and Grease (Gravimetric) | | | Work Order #...: | | J9LLA1AL | MS Lot-Sample #: | | F7J230123-002 |
| | 0.80 | 100 | 118 | mg/L | 117 | MCAWW 413.1 | 11/08-11/12/07 | 7311212 |
| | | | Dilution Factor: 1 | | | | | |
| Sulfate | | | Work Order #...: | | J89D21AD | MS Lot-Sample #: | | F7J180181-001 |
| | 93.7 | 40.0 | 135 D | mg/L | 103 | MCAWW 300.0A | 10/18/07 | 7292096 |
| | | | Dilution Factor: 10 | | | | | |

**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.

## SAMPLE DUPLICATE EVALUATION REPORT

### General Chemistry

**Client Lot #...:** F7J170222 **Work Order #...:** J89D2-SMP J89D2-DUP **Matrix.....:** WATER

**Date Sampled...:** 10/17/07 **Date Received..:** 10/18/07

| PARAM | RESULT | DUPLICATE RESULT | UNITS | RPD | RPD LIMIT | METHOD | PREPARATION-ANALYSIS DATE | PREP BATCH # |
|---|---|---|---|---|---|---|---|---|
| Sulfate | | | | | | SD Lot-Sample #: | F7J180181-001 | |
| | 93.7 D | 97.0 D | mg/L | 3.5 | (0-20) | MCAWW 300.0A | 10/18/07 | 7292096 |
| | | | Dilution Factor: 10 | | | | | |

**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.

## SAMPLE DUPLICATE EVALUATION REPORT

### General Chemistry

**Client Lot #...:** F7J170222 **Work Order #...:** J9LLA-SMP J9LLA-DUP **Matrix.....:** WATER

**Date Sampled...:** 10/22/07 **Date Received..:** 10/23/07

| PARAM | RESULT | DUPLICATE RESULT | UNITS | RPD | RPD LIMIT | METHOD | PREPARATION-ANALYSIS DATE | PREP BATCH # |
|---|---|---|---|---|---|---|---|---|
| Oil and Grease (Gravimetric) | | | | | | SD Lot-Sample #: | F7J230123-002 | |
| | 0.80 B,C | 0.90 B,C | mg/L | 12 | (0-20) | MCAWW 413.1 | 11/08-11/09/07 | 7311212 |

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.

C Analyte detected in method blank above the MDL/IDL.