# APPENDIX A

# LIMITATIONS

# APPENDIX A
## LIMITATIONS

1. The observations described in this report were made under the conditions stated herein. The conclusions presented in this report were based solely upon the services described herein, and not on scientific tasks or procedures beyond the scope of described services.

2. In preparing this report, SHA has relied on certain information provided by regulatory agency officials and other parties referenced herein, and on information contained in the files of such agencies available to us at the time of the Remedial Investigation (RI). Although there may have been some degree of overlap in the information provided by these various sources, we did not independently verify the accuracy or completeness of all information reviewed or received during the course of the investigation.

3. The conclusions and recommendations presented in this report are based in part on the data obtained from a limited number of soil, groundwater, surface water, sediment, and soil vapor samples. The nature and extent of variations between these explorations and sampling locations may not become evident until further Site work is completed. If variations or other latent conditions then appear evident, it may be necessary to re-evaluate the conclusions and/or recommendations of this report.

4. The generalized soil profile described in the text is intended to convey trends in subsurface conditions. The boundaries between strata are approximate and idealized and have been developed based on interpretation of observations from explorations and samples; actual soil transitions may differ. For specific information, refer to the exploration logs.

5. Water levels have been measured in Site monitoring wells at times and under conditions stated within the text of this report and included on the accompanying tables and boring logs. Note that fluctuations in the level of the groundwater may occur due to variations in rainfall and other factors not evident at the time measurements were made.

6. Data have been reviewed and interpretations made in the report. It should be noted that variations in the types and concentrations of contaminants and variations in their flow paths may occur due to seasonal water table fluctuations, the passage of time, and other factors. Should additional chemical data become available in the future, these data should be reviewed by SHA and the conclusions and recommendations presented herein modified accordingly. Similarly, if additional information pertinent to waste materials at the Site becomes available, those data should be reviewed by

SHA and the conclusions and recommendations presented herein modified accordingly.

7. Chemical analyses have been performed for specific parameters during the course of this study, as detailed in the text. It must be noted that additional constituents not searched for during the current study may be present in soil, sediment, groundwater, surface water, and soil vapor at and in the vicinity of the Site.

8. As required by the United States Environmental Protection Agency, information from Metcalf & Eddy, Inc.'s (M&E's) report entitled "Data Evaluation Report for Additional Asbestos Investigations, Blackburn & Union Privileges Superfund Site, Walpole, Massachusetts" (M&E Asbestos Report) has been incorporated into this report. SHA has not independently verified the accuracy or completeness of the data presented in M&E's Asbestos Report. Therefore, any of SHA's interpretations, conclusions, or recommendations contained in this report that have relied on information from M&E's Asbestos Report will be contingent on its validity. M&E's Asbestos Report remains the sole responsibility of M&E.

9. This report has been prepared in accordance with generally accepted hydrogeologic and environmental practices for the exclusive use of Tyco Healthcare Group, LP and the United States Environmental Protection Agency for specific application to the Remedial Investigation associated with the Blackburn & Union Privileges Superfund Site in Walpole, Massachusetts. No warranty, express or implied, is made.

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# APPENDIX B

# FIELD DOCUMENTATION

# APPENDIX B-1

# SOIL BORING LOGS

SHA
ENGINEERS ■ SCIENTISTS

Project: Blackburn & Union Privileges
Location: Walpole, MA
SHA Project No.: 2032.00

# Log of Boring SB-09A

Ground Elevation: 173.79 feet

Datum: NGVD 1929

Drilling Method: Geoprobe® 54DT

Sampling Method: 2" Macro-Core® or Large Bore® Sampler

Drilling Company: ESN North Atlantic
Foreman: D. Diorne
Date Started: 09/07/06 Date Finished: 09/07/06
Logged By: B. Green Checked By: C. Head

Groundwater Readings

| Date | Time | Depth to Water | Ref. Pt. | Depth of Casing | Stab. Time |
|---|---|---|---|---|---|
| 09/07/06 | | Not Encountered | | | |

| Depth (ft) | Sample Information: Sample No. | Depth (ft) | Spoon Blows per 6 in | Pen/ Rec (in) | PID/FID Values (ppmv) | Stratum: Log | Description | Geologic Description | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| 0 | S-1 | 0 - 2 | | 24/19 | ND/ND | | -----0'----- ASPHALT -----0.3'----- | ASPHALT. | 1. Refer to page 2 for notes. |
| | | | | | | | | S-1: Olive brown (2.5Y 4/4), fine to coarse SAND, some Silt, trace Gravel. Pieces of Concrete and Roots. Moist. FILL. | |
| 2 | S-2A | 2 - 3.5 | | 48/42 | ND/ND | | FILL | S-2A: Very dark brown (10YR 2/2), fine to coarse SAND, some Silt, trace Gravel. Pieces of Concrete and Asphalt. Moist. FILL. | |
| | S-2B | 3.5 - 6 | | --- | ND/ND | | -----3.5'----- | S-2B: Light olive brown (2.5Y 5/3), fine to coarse SAND and GRAVEL, trace Silt. Moist. | |
| 4 | | | | | | | SAND & GRAVEL | | |
| 6 | S-3 | 6 - 7 | | 12/6 | ND/ND | | | S-3: Light olive brown (2.5Y 5/3), fine to coarse SAND and GRAVEL, trace Silt. Moist. | |
| | | | | | | | -----7'----- | Boring terminated at 7 feet, due to refusal on apparent cobble. | |
| 8 | | | | | | | | | |
| 10 | | | | | | | | | |

BORING LOG \\192.168.127.29\CONDATA\CONDATA\2000S\2032\LOGS\2032.00 LOGS.GPJ 121106 SHA.GLB 06 DEC SHA.GDT 2/21/07

SHA
ENGINEERS ▪ SCIENTISTS

Log of Boring SB-09A

Notes:

1. Soil samples were screened for volatile organic compounds (VOCs) using a Photovac Model 2020 Photoionization Detector (PID) with a 10.6 eV lamp, calibrated to a 100 part per million by volume (ppmv) isobutylene standard using a response factor of 1.0. Results are presented in ppm; the typical detection limit is 1 ppm. Samples were screened twice; once as Macro-Core® was initially opened and again via jar head space. The results of the two screenings are represented on the log. Results of initial screening are indicated first followed by the results of head space screening (i.e., ND/ND).

2. The boring was backfilled with bentonite grout. Approximately 3 inches of asphalt cold patch were placed at the ground surface.

3. A 2.25-inch outside diameter, 4-foot long Macro-Core® sampler was used to collect sample using direct-push drilling techniques. Therefore, blow counts were not collected and a density could not be assigned to the sample description.

4. Drilling was performed in Level D+ personal protective equipment (PPE).

5. Groundwater was not encountered.

6. Soil Sample S-2A and 2B (labeled SB-09A/S-2/09-07-06) was submitted to the analytical laboratory for chemical analyses.

SHA
ENGINEERS ▪ SCIENTISTS

Project: Blackburn & Union Privileges
Location: Walpole, MA
SHA Project No.: 2032.00

# Log of Boring SB-9A1

Ground Elevation: 173.79 feet

Datum: NGVD 1929

Drilling Method: Geoprobe® 54DT

Sampling Method: 2" Macro-Core® or Large Bore® Sampler

Drilling Company: ESN North Atlantic
Foreman: D. Diorne
Date Started: 09/07/06 Date Finished: 09/07/06
Logged By: B. Green Checked By: C. Head

Groundwater Readings

| Date | Time | Depth to Water | Ref. Pt. | Depth of Casing | Stab. Time |
|---|---|---|---|---|---|
| 09/07/06 | | Not Encountered | | | |

| Depth (ft) | Sample Information: Sample No. | Depth (ft) | Pen/ Rec (ft) | PID/FID Values (ppmv) | Stratum: Log | Description | Geologic Description | Remarks |
|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | -----0'----- | | 1. Refer to page 2 for notes. |
| | | | | | | ASPHALT | | |
| | | | | | | -----0.3'----- | Refer to SB-09A log for geologic descriptions. | |
| 2 | | | | | | FILL | | |
| | | | | | | -----3.5'----- | | |
| 4 | | | | | | SAND & GRAVEL | | |
| 6 | S-1 | 6 - 7.5 | 1.5/0.8 | ND/ND | | | S-1: Light olive brown (2.5Y 5/3), fine to coarse SAND, little Gravel, trace Silt. Moist. | |
| | | | | | | -----7.5'----- | Boring terminated at 7.5 feet, due to refusal on apparent cobble. | |
| 8 | | | | | | | | |
| 10 | | | | | | | | |

GEOPROBE/ROTOSONIC S:\CONDATA\2000S\2032\LOGS\2032.00 LOGS.GPJ 121106 SHA GLB 06 DEC SHA.GDT 2/5/07

SHA
ENGINEERS▪SCIENTISTS

Log of Boring SB-09A1

Notes:

1. Soil samples were screened for volatile organic compounds (VOCs) using a Photovac Model 2020 Photoionization Detector (PID) with a 10.6 eV lamp, calibrated to a 100 part per million by volume (ppmv) isobutylene standard using a response factor of 1.0. Results are presented in ppm; the typical detection limit is 1 ppm. Samples were screened twice; once as Macro-Core® was initially opened and again via jar head space. The results of the two screenings are represented on the log. Results of initial screening are indicated first followed by the results of head space screening (i.e., ND/ND).

2. The boring was backfilled with bentonite grout. Approximately 3 inches of asphalt cold patch were placed at the ground surface.

3. A 2.25-inch outside diameter, 4-foot long Macro-Core® sampler was used to collect sample using direct-push drilling techniques. Therefore, blow counts were not collected and a density could not be assigned to the sample description.

4. Drilling was performed in Level D+ personal protective equipment (PPE).

5. Groundwater was not encountered.

6. Soil Sample S-1 (labeled SB-09A/S-3/09-07-06) was submitted to the analytical laboratory for chemical analyses.

# APPENDIX B-2

# FIELD SAMPLING SUMMARY FORMS-SURFACE WATER

# WATER LEVEL ROUND - SEPTEMBER 19, 2006

# Groundwater Quality Field Sampling Summary

Sanborn, Head & Associates, Inc.
CONSULTING ENGINEERS & SCIENTISTS

| | | | |
|---|---|---|---|
| Project Number: | 2032 | Date: | September 19, 2006 |
| Project Name: | Blackburn & Union Privileges Superfund Site | | |
| Project Location: | Walpole, MA | | |
| Weather: | Overcast, becoming sunny, 61-80°F | Project Manager: | Charles L. Head, P.E., LSP |

Measurement Device: QED MP30 S/N 1002, Geotech DRS Oil Water Interface Probe S/N 01422601, Steel Tape measure

**Field Measurements**

| Sampling Location | SH-01D | SH-01R | SH-01S | SH-02D | SH-02S |
|---|---|---|---|---|---|
| Collector(s) | MTS | MTS | MTS | MTS | MTS |
| Reference Point | TPVC | TPVC | TPVC | TPVC | TPVC |
| Reference Point Elevation (feet) | 167.82 | 167.57 | 167.60 | 166.79 | 167.22 |
| Depth to Floating Product (feet) | - | - | - | - | - |
| Depth to Water | 16.76 | 16.44 | 15.38 | 15.52 | 16.08 |
| Water Table Elevation (feet) | 151.06 | 151.13 | 152.22 | 151.27 | 151.14 |
| Depth to Bottom (feet) | - | - | - | - | - |
| Initial Well Head PID Reading (ppm) | - | - | - | - | - |
| Temperature (ºC) | - | - | - | - | - |
| Specific Conductance (µS/cm) | - | - | - | - | - |
| Dissolved Oxygen (mg/l) | - | - | - | - | - |
| pH (standard units) | - | - | - | - | - |
| Oxidation/Reduction Potential (mV) | - | - | - | - | - |
| Turbidity (NTU) | - | - | - | - | - |
| Sample Date/Time | 09/19/06 8:11 | 09/19/06 8:13 | 09/19/06 8:08 | 09/19/06 8:24 | 09/19/06 8:22 |
| SDG | | | | | |
| Comment Reference Number | 1 | 1 | 1 | 1 | 1 |

**Comments**

1. Only water level measurements were collected.

Checked by initials: MBT 11/12/06

**GWQFSS No.:** GW0171

Print Date: Wednesday, April 11, 2007 11:10:35 AM

# Groundwater Quality Field Sampling Summary

Sanborn, Head & Associates, Inc.
CONSULTING ENGINEERS & SCIENTISTS

| | | | |
|---|---|---|---|
| Project Number: | 2032 | Date: | September 19, 2006 |
| Project Name: | Blackburn & Union Privileges Superfund Site | | |
| Project Location: | Walpole, MA | | |
| Weather: | Overcast, becoming sunny, 61-80°F | Project Manager: | Charles L. Head, P.E., LSP |

Measurement Device: QED MP30 S/N 1002, Geotech DRS Oil Water Interface Probe S/N 01422601, Steel Tape measure

**Field Measurements**

| Sampling Location | SH-02R | SH-03D | SH-03S | SH-04D | SH-04S |
|---|---|---|---|---|---|
| Collector(s) | MTS | MTS | MTS | MTS | MTS |
| Reference Point | TPVC | TPVC | TPVC | TPVC | TPVC |
| Reference Point Elevation (feet) | 166.42 | 169.27 | 169.77 | 151.28 | 151.30 |
| Depth to Floating Product (feet) | - | - | - | - | - |
| Depth to Water | 15.18 | 18.25 | 19.48 | 3.08 | 5.41 |
| Water Table Elevation (feet) | 151.24 | 151.02 | 150.29 | 148.20 | 145.89 |
| Depth to Bottom (feet) | - | - | - | - | - |
| Initial Well Head PID Reading (ppm) | - | - | - | - | - |
| Temperature (ºC) | - | - | - | - | - |
| Specific Conductance (µS/cm) | - | - | - | - | - |
| Dissolved Oxygen (mg/l) | - | - | - | - | - |
| pH (standard units) | - | - | - | - | - |
| Oxidation/Reduction Potential (mV) | - | - | - | - | - |
| Turbidity (NTU) | - | - | - | - | - |
| Sample Date/Time | 09/19/06 8:26 | 09/19/06 8:58 | 09/19/06 8:56 | 09/19/06 13:11 | 09/19/06 13:07 |
| SDG | | | | | |
| Comment Reference Number | 1 | 1 | 1 | 1 | 1 |

**Comments**

1. Only water level measurements were collected.

Checked by initials: MBT 11/12/06

**GWQFSS No.:** GW0172

Print Date: Wednesday, April 11, 2007 11:10:35 AM

# Groundwater Quality Field Sampling Summary

| | | |
|---|---|---|
| Sanborn, Head & Associates, Inc.<br>Consulting Engineers & Scientists | Project Number: 2032 | Date: September 19, 2006 |
| | Project Name: Blackburn & Union Privileges Superfund Site | |
| | Project Location: Walpole, MA | |
| Weather: Overcast, becoming sunny, 61-80°F | Project Manager: Charles L. Head, P.E., LSP | |

Measurement Device: QED MP30 S/N 1002, Geotech DRS Oil Water Interface Probe S/N 01422601, Steel Tape measure

**Field Measurements**

| Sampling Location | SH-05D | SH-05S | SH-06D | SH-06S | SH-07S |
|---|---|---|---|---|---|
| Collector(s) | MTS | MTS | MTS | MTS | MTS |
| Reference Point | TPVC | TPVC | TPVC | TPVC | TPVC |
| Reference Point Elevation (feet) | 151.65 | 152.16 | 155.22 | 155.08 | 161.93 |
| Depth to Floating Product (feet) | - | - | - | - | - |
| Depth to Water | 4.04 | 5.33 | 5.66 | 5.64 | 9.88 |
| Water Table Elevation (feet) | 147.61 | 146.83 | 149.56 | 149.44 | 152.05 |
| Depth to Bottom (feet) | - | - | - | - | - |
| Initial Well Head PID Reading (ppm) | - | - | - | - | - |
| Temperature (ºC) | - | - | - | - | - |
| Specific Conductance (µS/cm) | - | - | - | - | - |
| Dissolved Oxygen (mg/l) | - | - | - | - | - |
| pH (standard units) | - | - | - | - | - |
| Oxidation/Reduction Potential (mV) | - | - | - | - | - |
| Turbidity (NTU) | - | - | - | - | - |
| Sample Date/Time | 09/19/06 12:35 | 09/19/06 12:37 | 09/19/06 9:21 | 09/19/06 9:19 | 09/19/06 9:39 |
| SDG | | | | | |
| Comment Reference Number | 2 | 2 | 1,2 | 2 | 1,2 |

**Comments**

1. Bentonite has swelled above TPVC, J-Plug not secured in PVC column.

2. Only water level measurements were collected.

Checked by initials: MBT 11/12/06

**GWQFSS No.:** GW0173

Print Date: Wednesday, April 11, 2007 11:10:35 AM

# Groundwater Quality Field Sampling Summary

| | | |
|---|---|---|
| Sanborn, Head & Associates, Inc.<br>Consulting Engineers & Scientists | Project Number: 2032 | Date: September 19, 2006 |
| | Project Name: Blackburn & Union Privileges Superfund Site | |
| | Project Location: Walpole, MA | |
| Weather: Overcast, becoming sunny, 61-80°F | Project Manager: Charles L. Head, P.E., LSP | |

Measurement Device: QED MP30 S/N 1002, Geotech DRS Oil Water Interface Probe S/N 01422601, Steel Tape measure

**Field Measurements**

| Sampling Location | SH-07D | SH-08S | SH-09D | SH-09S | SH-10S |
|---|---|---|---|---|---|
| Collector(s) | MTS | MTS | MTS | MTS | MTS |
| Reference Point | TPVC | TPVC | TPVC | TPVC | TPVC |
| Reference Point Elevation (feet) | 162.09 | 162.52 | 167.28 | 167.57 | 174.04 |
| Depth to Floating Product (feet) | - | - | - | - | - |
| Depth to Water | 9.81 | 6.65 | 14.11 | 13.84 | 18.04 |
| Water Table Elevation (feet) | 152.28 | 155.87 | 153.17 | 153.73 | 156.00 |
| Depth to Bottom (feet) | - | - | - | - | - |
| Initial Well Head PID Reading (ppm) | - | - | - | - | - |
| Temperature (ºC) | - | - | - | - | - |
| Specific Conductance (µS/cm) | - | - | - | - | - |
| Dissolved Oxygen (mg/l) | - | - | - | - | - |
| pH (standard units) | - | - | - | - | - |
| Oxidation/Reduction Potential (mV) | - | - | - | - | - |
| Turbidity (NTU) | - | - | - | - | - |
| Sample Date/Time | 09/19/06 9:41 | 09/19/06 9:45 | 09/19/06 8:04 | 09/19/06 8:01 | 09/19/06 8:34 |
| SDG | | | | | |
| Comment Reference Number | 1 | 1 | 1 | 1 | 1 |

**Comments**

1. Only water level measurements were collected.

| | | |
|---|---|---|
| Checked by initials: MBT 11/12/06 | | **GWQFSS No.:** GW0174 |

Print Date: Wednesday, April 11, 2007 11:10:35 AM

# Groundwater Quality Field Sampling Summary

| | | |
|---|---|---|
| Sanborn, Head & Associates, Inc.<br>Consulting Engineers & Scientists | Project Number: 2032 | Date: September 19, 2006 |
| | Project Name: Blackburn & Union Privileges Superfund Site | |
| | Project Location: Walpole, MA | |
| Weather: Overcast, becoming sunny, 61-80°F | Project Manager: Charles L. Head, P.E., LSP | |
| Measurement Device: QED MP30 S/N 1002, Geotech DRS Oil Water Interface Probe S/N 01422601, Steel Tape measure | | |

**Field Measurements**

| Sampling Location | SH-11S | SH-12D | SH-12S | SH-13S | SH-14S |
|---|---|---|---|---|---|
| Collector(s) | MTS | MTS | MTS | MTS | MTS |
| Reference Point | TPVC | TPVC | TPVC | TPVC | TPVC |
| Reference Point Elevation (feet) | 169.91 | 169.14 | 169.32 | 168.19 | 152.28 |
| Depth to Floating Product (feet) | - | - | - | - | - |
| Depth to Water | 15.09 | 17.75 | 18.97 | 17.42 | 4.42 |
| Water Table Elevation (feet) | 154.82 | 151.39 | 150.35 | 150.77 | 147.86 |
| Depth to Bottom (feet) | - | - | - | - | - |
| Initial Well Head PID Reading (ppm) | - | - | - | - | - |
| Temperature (ºC) | - | - | - | - | - |
| Specific Conductance (µS/cm) | - | - | - | - | - |
| Dissolved Oxygen (mg/l) | - | - | - | - | - |
| pH (standard units) | - | - | - | - | - |
| Oxidation/Reduction Potential (mV) | - | - | - | - | - |
| Turbidity (NTU) | - | - | - | - | - |
| Sample Date/Time | 09/19/06 8:38 | 09/19/06 8:49 | 09/19/06 8:47 | 09/19/06 8:43 | 09/19/06 12:49 |
| SDG | | | | | |
| Comment Reference Number | 1 | 1 | 1 | 1 | 1 |

**Comments**

1. Only water level measurements were collected.

| | | |
|---|---|---|
| Checked by initials: MBT 11/12/06 | | **GWQFSS No.:** GW0175 |

Print Date: Wednesday, April 11, 2007 11:10:35 AM

# Groundwater Quality Field Sampling Summary

| | | |
|---|---|---|
| Sanborn, Head & Associates, Inc.<br>Consulting Engineers & Scientists | Project Number: 2032 | Date: September 19, 2006 |
| | Project Name: Blackburn & Union Privileges Superfund Site | |
| | Project Location: Walpole, MA | |
| Weather: Overcast, becoming sunny, 61-80°F | Project Manager: Charles L. Head, P.E., LSP | |
| Measurement Device: QED MP30 S/N 1002, Geotech DRS Oil Water Interface Probe S/N 01422601, Steel Tape measure | | |

**Field Measurements**

| Sampling Location | SH-14D | SH-20S | SH-21S | SH-22S | SH-23S |
|---|---|---|---|---|---|
| Collector(s) | MTS | MTS | MTS | MTS | MTS |
| Reference Point | TPVC | TPVC | TPVC | TPVC | TPVC |
| Reference Point Elevation (feet) | 151.98 | 167.90 | 165.39 | 170.29 | 171.86 |
| Depth to Floating Product (feet) | - | - | - | - | - |
| Depth to Water | 2.19 | 9.23 | - | 10.69 | 7.31 |
| Water Table Elevation (feet) | 149.79 | 158.67 | | 159.60 | 164.55 |
| Depth to Bottom (feet) | - | - | - | - | - |
| Initial Well Head PID Reading (ppm) | - | | - | | - |
| Temperature (ºC) | - | - | - | - | - |
| Specific Conductance (µS/cm) | - | - | - | - | - |
| Dissolved Oxygen (mg/l) | - | - | - | - | - |
| pH (standard units) | - | - | - | - | - |
| Oxidation/Reduction Potential (mV) | - | - | - | - | - |
| Turbidity (NTU) | - | - | - | - | - |
| Sample Date/Time | 09/19/06 12:53 | 09/19/06 15:44 | 09/19/06 16:09 | 09/19/06 15:54 | 09/19/06 15:43 |
| SDG | | | | | |
| Comment Reference Number | 2 | 2,3 | 1,2 | 2,3 | 2 |

**Comments**

1. Well dry to 5.97 feet.

2. Only water level measurements were collected.

3. No mearsurable product thickness was detected from within the well.

| | | |
|---|---|---|
| Checked by initials: MBT 11/12/06 | | **GWQFSS No.:** GW0176 |

Print Date: Wednesday, April 11, 2007 11:10:35 AM

# Groundwater Quality Field Sampling Summary

Sanborn, Head & Associates, Inc.
CONSULTING ENGINEERS & SCIENTISTS

| | | | |
|---|---|---|---|
| Project Number: | 2032 | Date: | September 19, 2006 |
| Project Name: | Blackburn & Union Privileges Superfund Site | | |
| Project Location: | Walpole, MA | | |
| Weather: | Overcast, becoming sunny, 61-80°F | Project Manager: | Charles L. Head, P.E., LSP |

Measurement Device: QED MP30 S/N 1002, Geotech DRS Oil Water Interface Probe S/N 01422601, Steel Tape measure

**Field Measurements**

| Sampling Location | SH-06R-A | SH-06R-B | SH-17D | SH-17R | SH-25S |
|---|---|---|---|---|---|
| Collector(s) | MTS | MTS | MTS | MTS | MTS |
| Reference Point | TPVC | TPVC | TPVC | TPVC | TPVC |
| Reference Point Elevation (feet) | 155.90 | 156.01 | 156.59 | 156.17 | 148.93 |
| Depth to Floating Product (feet) | - | - | - | - | - |
| Depth to Water | 6.16 | 6.34 | 7.63 | 7.06 | 4.68 |
| Water Table Elevation (feet) | 149.74 | 149.67 | 148.96 | 149.11 | 144.25 |
| Depth to Bottom (feet) | - | - | - | - | - |
| Initial Well Head PID Reading (ppm) | - | - | - | - | - |
| Temperature (ºC) | - | - | - | - | - |
| Specific Conductance (µS/cm) | - | - | - | - | - |
| Dissolved Oxygen (mg/l) | - | - | - | - | - |
| pH (standard units) | - | - | - | - | - |
| Oxidation/Reduction Potential (mV) | - | - | - | - | - |
| Turbidity (NTU) | - | - | - | - | - |
| Sample Date/Time | 09/19/06 9:51 | 09/19/06 9:56 | 09/19/06 10:22 | 09/19/06 10:25 | 09/19/06 10:45 |
| SDG | | | | | |
| Comment Reference Number | 1 | 1 | 1 | 1 | 1 |

**Comments**

1. Only water level measurements were collected.

Checked by initials: MBT 11/12/06

**GWQFSS No.:** GW0177

Print Date: Wednesday, April 11, 2007 11:10:35 AM

# Groundwater Quality Field Sampling Summary

| | | |
|---|---|---|
| Sanborn, Head & Associates, Inc.<br>Consulting Engineers & Scientists | Project Number: 2032 | Date: September 19, 2006 |
| | Project Name: Blackburn & Union Privileges Superfund Site | |
| | Project Location: Walpole, MA | |
| Weather: Overcast, becoming sunny, 61-80°F | Project Manager: Charles L. Head, P.E., LSP | |

Measurement Device: QED MP30 S/N 1002, Geotech DRS Oil Water Interface Probe S/N 01422601, Steel Tape measure

**Field Measurements**

| Sampling Location | SH-25D | SH-26S | SH-27D | SH-27R | SH-27S |
|---|---|---|---|---|---|
| Collector(s) | MTS | MTS | MTS | MTS | MTS |
| Reference Point | TPVC | TPVC | TPVC | TPVC | TPVC |
| Reference Point Elevation (feet) | 150.27 | 145.32 | 159.24 | 159.79 | 159.07 |
| Depth to Floating Product (feet) | - | - | - | - | - |
| Depth to Water | 3.85 | 1.61 | 11.33 | 11.52 | 10.98 |
| Water Table Elevation (feet) | 146.42 | 143.71 | 147.91 | 148.27 | 148.09 |
| Depth to Bottom (feet) | - | - | - | - | - |
| Initial Well Head PID Reading (ppm) | - | - | - | - | - |
| Temperature (ºC) | - | - | - | - | - |
| Specific Conductance (µS/cm) | - | - | - | - | - |
| Dissolved Oxygen (mg/l) | - | - | - | - | - |
| pH (standard units) | - | - | - | - | - |
| Oxidation/Reduction Potential (mV) | - | - | - | - | - |
| Turbidity (NTU) | - | - | - | - | - |
| Sample Date/Time | 09/19/06 10:47 | 09/19/06 13:58 | 09/19/06 11:49 | 09/19/06 11:44 | 09/19/06 11:47 |
| SDG | | | | | |
| Comment Reference Number | 1 | 1 | 1 | 1 | 1 |

**Comments**

1. Only water level measurements were collected.

Checked by initials: MBT 11/12/06

**GWQFSS No.:** GW0178

Print Date: Wednesday, April 11, 2007 11:10:35 AM

# Groundwater Quality Field Sampling Summary

Sanborn, Head & Associates, Inc.
CONSULTING ENGINEERS & SCIENTISTS

| | | | |
|---|---|---|---|
| Project Number: | 2032 | Date: | September 19, 2006 |
| Project Name: | Blackburn & Union Privileges Superfund Site | | |
| Project Location: | Walpole, MA | | |
| Weather: | Overcast, becoming sunny, 61-80°F | Project Manager: | Charles L. Head, P.E., LSP |

Measurement Device: QED MP30 S/N 1002, Geotech DRS Oil Water Interface Probe S/N 01422601, Steel Tape measure

**Field Measurements**

| Sampling Location | SH-15S | SH-24R | SH-24S | SH-28D | SH-28R |
|---|---|---|---|---|---|
| Collector(s) | MBT | MTS | MTS | MTS | MTS |
| Reference Point | TPVC | TPVC | TPVC | TPVC | TPVC |
| Reference Point Elevation (feet) | 148.95 | 145.47 | 145.36 | 150.87 | 150.57 |
| Depth to Floating Product (feet) | - | - | - | - | - |
| Depth to Water | 4.89 | 0.98 | 1.91 | 6.43 | 6.48 |
| Water Table Elevation (feet) | 144.06 | 144.49 | 143.45 | 144.44 | 144.09 |
| Depth to Bottom (feet) | - | - | - | - | - |
| Initial Well Head PID Reading (ppm) | - | - | - | - | - |
| Temperature (ºC) | - | - | - | - | - |
| Specific Conductance (µS/cm) | - | - | - | - | - |
| Dissolved Oxygen (mg/l) | - | - | - | - | - |
| pH (standard units) | - | - | - | - | - |
| Oxidation/Reduction Potential (mV) | - | - | - | - | - |
| Turbidity (NTU) | - | - | - | - | - |
| Sample Date/Time | 09/19/06 13:46 | 09/19/06 14:18 | 09/19/06 14:15 | 09/19/06 14:37 | 09/19/06 14:34 |
| SDG | | | | | |
| Comment Reference Number | 1 | 1 | 1 | 1 | 1 |

**Comments**

1. Only water level measurements were collected.

Checked by initials: MBT 11/12/06

**GWQFSS No.:** GW0179

Print Date: Wednesday, April 11, 2007 11:10:35 AM

# Groundwater Quality Field Sampling Summary

Sanborn, Head & Associates, Inc.
CONSULTING ENGINEERS & SCIENTISTS

| | | | |
|---|---|---|---|
| Project Number: | 2032 | Date: | September 19, 2006 |
| Project Name: | Blackburn & Union Privileges Superfund Site | | |
| Project Location: | Walpole, MA | | |
| Weather: | Overcast, becoming sunny, 61-80°F | Project Manager: | Charles L. Head, P.E., LSP |

Measurement Device: QED MP30 S/N 1002, Geotech DRS Oil Water Interface Probe S/N 01422601, Steel Tape measure

**Field Measurements**

| Sampling Location | SH-15D | SH-16S | SH-17S | SH-18D | SH-18S |
|---|---|---|---|---|---|
| Collector(s) | MBT | MTS | MTS | MBT | MBT |
| Reference Point | TPVC | TPVC | TPVC | TPVC | TPVC |
| Reference Point Elevation (feet) | 148.99 | 150.84 | 156.28 | 170.49 | 170.33 |
| Depth to Floating Product (feet) | - | - | - | - | - |
| Depth to Water | 2.71 | 4.43 | 7.33 | 14.60 | 15.86 |
| Water Table Elevation (feet) | 146.28 | 146.41 | 148.95 | 155.89 | 154.47 |
| Depth to Bottom (feet) | - | - | - | - | - |
| Initial Well Head PID Reading (ppm) | - | - | - | - | - |
| Temperature (ºC) | - | - | - | - | - |
| Specific Conductance (µS/cm) | - | - | - | - | - |
| Dissolved Oxygen (mg/l) | - | - | - | - | - |
| pH (standard units) | - | - | - | - | - |
| Oxidation/Reduction Potential (mV) | - | - | - | - | - |
| Turbidity (NTU) | - | - | - | - | - |
| Sample Date/Time | 09/19/06 13:50 | 09/19/06 10:39 | 09/19/06 10:20 | 09/19/06 16:05 | 09/19/06 15:54 |
| SDG | | | | | |
| Comment Reference Number | 1 | 1 | 1 | 1 | 1 |

**Comments**

1. Only water level measurements were collected.

Checked by initials: MBT 11/12/06

**GWQFSS No.:** GW0180

Print Date: Wednesday, April 11, 2007 11:10:35 AM

# Groundwater Quality Field Sampling Summary

Sanborn, Head & Associates, Inc.
CONSULTING ENGINEERS & SCIENTISTS

| | | | |
|---|---|---|---|
| Project Number: | 2032 | Date: | September 19, 2006 |
| Project Name: | Blackburn & Union Privileges Superfund Site | | |
| Project Location: | Walpole, MA | | |
| Weather: | Overcast, becoming sunny, 61-80°F | Project Manager: | Charles L. Head, P.E., LSP |

Measurement Device: QED MP30 S/N 1002, Geotech DRS Oil Water Interface Probe S/N 01422601, Steel Tape measure

**Field Measurements**

| Sampling Location | SH-05R-A | SH-19D | SH-19R | SH-19S | SH-28S |
|---|---|---|---|---|---|
| Collector(s) | MTS | MTS | MTS | MTS | MTS |
| Reference Point | TPVC | TPVC | TPVC | TPVC | TPVC |
| Reference Point Elevation (feet) | 152.89 | 167.99 | 167.88 | 168.32 | 150.94 |
| Depth to Floating Product (feet) | - | - | - | - | - |
| Depth to Water | 2.09 | 10.00 | 8.46 | 9.48 | 8.55 |
| Water Table Elevation (feet) | 150.80 | 157.99 | 159.42 | 158.84 | 142.39 |
| Depth to Bottom (feet) | - | - | 8.5 | - | - |
| Initial Well Head PID Reading (ppm) | - | - | - | - | - |
| Temperature (ºC) | - | - | - | - | - |
| Specific Conductance (µS/cm) | - | - | - | - | - |
| Dissolved Oxygen (mg/l) | - | - | - | - | - |
| pH (standard units) | - | - | - | - | - |
| Oxidation/Reduction Potential (mV) | - | - | - | - | - |
| Turbidity (NTU) | - | - | - | - | - |
| Sample Date/Time | 09/19/06 14:50 | 09/19/06 15:24 | 09/19/06 15:22 | 09/19/06 15:26 | 09/19/06 14:31 |
| SDG | | | | | |
| Comment Reference Number | 1 | 1 | 1 | 1 | 1 |

**Comments**

1. Only water level measurements were collected.

Checked by initials: MBT 11/12/06

**GWQFSS No.:** GW0181

Print Date: Wednesday, April 11, 2007 11:10:35 AM

# Groundwater Quality Field Sampling Summary

Sanborn, Head & Associates, Inc.
CONSULTING ENGINEERS & SCIENTISTS

| | | | |
|---|---|---|---|
| Project Number: | 2032 | Date: | September 19, 2006 |
| Project Name: | Blackburn & Union Privileges Superfund Site | | |
| Project Location: | Walpole, MA | | |
| Weather: | Overcast, becoming sunny, 61-80°F | Project Manager: | Charles L. Head, P.E., LSP |

Measurement Device: QED MP30 S/N 1002, Geotech DRS Oil Water Interface Probe S/N 01422601, Steel Tape measure

**Field Measurements**

| Sampling Location | SH-05R-B | WP-01 | WP-03 | WP-04 | WP-05 |
|---|---|---|---|---|---|
| Collector(s) | MTS | MBT | MTS | MTS | MTS |
| Reference Point | TPVC | TWP | TWP | TWP | TWP |
| Reference Point Elevation (feet) | 152.94 | 161.40 | 150.36 | 146.75 | 145.52 |
| Depth to Floating Product (feet) | - | - | - | - | - |
| Depth to Water | 2.00 | 5.13 | 5.12 | 1.43 | 1.06 |
| Water Table Elevation (feet) | 150.94 | 156.27 | 145.24 | 145.32 | 144.46 |
| Depth to Bottom (feet) | - | - | - | - | - |
| Initial Well Head PID Reading (ppm) | - | - | - | - | - |
| Temperature (ºC) | - | - | - | - | - |
| Specific Conductance (µS/cm) | - | - | - | - | - |
| Dissolved Oxygen (mg/l) | - | - | - | - | - |
| pH (standard units) | - | - | - | - | - |
| Oxidation/Reduction Potential (mV) | - | - | - | - | - |
| Turbidity (NTU) | - | - | - | - | - |
| Sample Date/Time | 09/19/06 14:52 | 09/19/06 15:33 | 09/19/06 13:30 | 09/19/06 13:20 | 09/19/06 13:40 |
| SDG | | | | | |
| Comment Reference Number | 1 | 1 | 1 | 1 | 1 |

**Comments**

1. Only water level measurements were collected.

Checked by initials: MBT 01/25/07

**GWQFSS No.:** GW0182

Print Date: Wednesday, April 11, 2007 11:10:35 AM

# Groundwater Quality Field Sampling Summary

Sanborn, Head & Associates, Inc.
CONSULTING ENGINEERS & SCIENTISTS

| | | | |
|---|---|---|---|
| Project Number: | 2032 | Date: | September 19, 2006 |
| Project Name: | Blackburn & Union Privileges Superfund Site | | |
| Project Location: | Walpole, MA | | |
| Weather: | Overcast, becoming sunny, 61-80°F | Project Manager: | Charles L. Head, P.E., LSP |

Measurement Device: QED MP30 S/N 1002, Geotech DRS Oil Water Interface Probe S/N 01422601, Steel Tape measure

**Field Measurements**

| Sampling Location | SH-08D | WP-02 | WP-06 | WP-07 | |
|---|---|---|---|---|---|
| Collector(s) | MTS | MBT | MTS | MTS | |
| Reference Point | TPVC | TWP | TWP | TWP | |
| Reference Point Elevation (feet) | 162.62 | 160.04 | 145.19 | 145.54 | |
| Depth to Floating Product (feet) | - | - | - | - | |
| Depth to Water | 9.56 | 3.65 | 2.08 | 2.21 | |
| Water Table Elevation (feet) | 153.06 | 156.39 | 143.11 | 143.33 | |
| Depth to Bottom (feet) | - | - | - | - | |
| Initial Well Head PID Reading (ppm) | - | - | - | - | |
| Temperature (ºC) | - | - | - | - | |
| Specific Conductance (µS/cm) | - | - | - | - | |
| Dissolved Oxygen (mg/l) | - | - | - | - | |
| pH (standard units) | - | - | - | - | |
| Oxidation/Reduction Potential (mV) | - | - | - | - | |
| Turbidity (NTU) | - | - | - | - | |
| Sample Date/Time | 09/19/06 10:07 | 09/19/06 15:15 | 09/19/06 14:08 | 09/19/06 14:03 | |
| SDG | | | | | |
| Comment Reference Number | 1 | 1 | 1 | 1 | |

**Comments**

1. Only water level measurements were collected.

Checked by initials: MBT 01/25/07

**GWQFSS No.:** GW0183

Print Date: Wednesday, April 11, 2007 11:10:35 AM

**APPENDIX TABLE B-2a**
**Summary of Groundwater Vertical Gradients**
**Addendum to the RI Report**
**Phases 1B-4/1B-5 Investigations**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**

| Well Couplet | August 20, 2001 | | | October 29, 2001 | | | March 5, 2002 | | | May 14, 2002 | | | November 17-18, 2003 | | | May 25, 2004 | | | September 19, 2006 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Equivalent Potentiometric Elevation (ft) | Saturated Thickness (ft) | Vertical Gradient (ft/ft) | Equivalent Potentiometric Elevation (ft) | Saturated Thickness (ft) | Vertical Gradient (ft/ft) | Equivalent Potentiometric Elevation (ft) | Saturated Thickness (ft) | Vertical Gradient (ft/ft) | Equivalent Potentiometric Elevation (ft) | Saturated Thickness (ft) | Vertical Gradient (ft/ft) | Equivalent Potentiometric Elevation (ft) | Saturated Thickness (ft) | Vertical Gradient (ft/ft) | Equivalent Potentiometric Elevation (ft) | Saturated Thickness (ft) | Vertical Gradient (ft/ft) | Equivalent Potentiometric Elevation (ft) | Saturated Thickness (ft) | Vertical Gradient (ft/ft) |
| **Shallow and Deep Monitoring Wells** | | | | | | | | | | | | | | | | | | | | | |
| SH-01S | 151.99 | 26.9 | -6.8E-02 | 150.54 | 25.5 | -2.0E-02 | 152.41 | 27.4 | -9.4E-02 | 153.10 | 28.1 | -6.9E-02 | 152.82 | 27.8 | -1.1E-01 | 153.23 | 28.2 | -8.7E-02 | 152.22 | 27.1 | -4.3E-02 |
| SH-01D | 150.15 | | | 150.04 | | | 149.84 | | | 151.17 | | | 149.84 | | | 150.77 | | | 151.06 | | |
| SH-02S | 150.89 | 26.8 | 2.2E-03 | 149.84 | 25.7 | 1.2E-02 | 151.17 | 27.0 | 3.7E-03 | 151.70 | 27.6 | 7.3E-04 | 151.58 | 27.4 | 4.4E-03 | 152.14 | 28.0 | 1.4E-03 | 151.14 | 27.0 | 4.8E-03 |
| SH-02D | 150.95 | | | 150.15 | | | 151.27 | | | 151.72 | | | 151.70 | | | 152.18 | | | 151.27 | | |
| SH-03S | 149.98 | 68.0 | 1.2E-02 | 149.26 | 67.3 | 1.4E-02 | 150.47 | 68.5 | 9.3E-03 | 150.73 | 68.7 | 1.2E-02 | 150.65 | 68.7 | 9.2E-03 | 151.32 | 69.3 | 1.3E-02 | 150.29 | 68.3 | 1.1E-02 |
| SH-03D | 150.79 | | | 150.18 | | | 151.11 | | | 151.57 | | | 151.28 | | | 152.23 | | | 151.02 | | |
| SH-04S | 145.60 | 62.2 | 3.7E-02 | 145.31 | 61.9 | 2.8E-02 | 146.00 | 62.6 | 3.4E-02 | 146.68 | 63.3 | 3.3E-02 | 145.72 | 62.3 | 4.6E-02 | 145.92 | 62.5 | 4.5E-02 | 145.89 | 62.5 | 3.7E-02 |
| SH-04D | 147.89 | | | 147.05 | | | 148.10 | | | 148.75 | | | 148.58 | | | 148.75 | | | 148.20 | | |
| SH-05S | 146.39 | 44.5 | 2.3E-02 | 145.72 | 43.9 | 2.2E-02 | 146.90 | 45.0 | 1.9E-02 | 147.75 | 45.9 | 1.6E-02 | 146.73 | 44.9 | 2.8E-02 | 146.98 | 45.1 | 3.4E-02 | 146.83 | 44.9 | 1.7E-02 |
| SH-05D | 147.43 | | | 146.67 | | | 147.75 | | | 148.48 | | | 148.00 | | | 148.50 | | | 147.61 | | |
| SH-06S | 149.46 | 35.9 | -1.5E-02 | 147.99 | 34.4 | 2.6E-03 | 149.31 | 35.8 | -3.9E-02 | 150.99 | 37.4 | -3.6E-02 | 150.09 | 36.5 | -4.5E-02 | 150.52 | 37.0 | -3.1E-02 | 149.44 | 35.8 | 3.3E-03 |
| SH-06D | 148.92 | | | 148.08 | | | 147.93 | | | 149.65 | | | 148.44 | | | 149.37 | | | 149.56 | | |
| SH-07S | 151.95 | 35.7 | -1.9E-02 | 150.36 | 34.1 | -5.3E-03 | 152.35 | 36.1 | -3.5E-02 | 153.64 | 37.4 | -4.5E-02 | 152.65 | 36.4 | -4.4E-03 | 156.13 | 39.9 | -9.2E-02 | 152.05 | 35.8 | 6.4E-03 |
| SH-07D | 151.28 | | | 150.18 | | | 151.07 | | | 151.96 | | | 152.49 | | | 152.47 | | | 152.28 | | |
| SH-08S | 155.84 | 20.5 | -1.4E-01 | 153.95 | 18.7 | -1.4E-01 | 155.79 | 20.5 | -1.4E-01 | 156.74 | 21.4 | -1.2E-01 | 156.00 | 20.7 | -1.3E-01 | 156.87 | 21.6 | -1.3E-01 | 155.87 | 20.6 | -1.4E-01 |
| SH-08D | 152.97 | | | 151.31 | | | 152.98 | | | 154.25 | | | 153.33 | | | 154.16 | | | 153.06 | | |
| SH-09S | 153.91 | 14.8 | -5.5E-02 | 152.77 | 13.7 | -6.1E-02 | 154.38 | 15.3 | -6.1E-02 | 154.88 | 15.8 | -5.2E-02 | 154.13 | 15.0 | -4.2E-02 | 154.20 | 15.1 | -2.1E-02 | 153.73 | 14.9 | -3.8E-02 |
| SH-09D | 153.10 | | | 151.94 | | | 153.45 | | | 154.06 | | | 153.50 | | | 153.88 | | | 153.17 | | |
| SH-12S | 150.05 | 54.6 | 2.0E-02 | 149.52 | 54.1 | 1.8E-02 | 150.48 | 55.0 | 1.7E-02 | 150.73 | 55.3 | 2.0E-02 | 150.69 | 55.2 | 1.6E-02 | 151.34 | 55.9 | 1.4E-02 | 150.35 | 54.9 | 1.9E-02 |
| SH-12D | 151.16 | | | 150.48 | | | 151.42 | | | 151.84 | | | 151.57 | | | 152.15 | | | 151.39 | | |
| SH-14S | 147.71 | 41.6 | 4.7E-02 | 147.38 | 41.2 | 3.9E-02 | 147.95 | 41.8 | 4.1E-02 | 148.31 | 42.2 | 4.3E-02 | 147.84 | 41.7 | 5.0E-02 | 148.09 | 41.9 | 5.7E-02 | 147.86 | 41.7 | 4.6E-02 |
| SH-14D | 149.66 | | | 148.98 | | | 149.67 | | | 150.12 | | | 149.92 | | | 150.48 | | | 149.79 | | |
| SH-15S | 143.78 | 46.7 | 4.0E-02 | 143.60 | 46.5 | 3.2E-02 | 144.12 | 47.0 | 4.0E-02 | 146.69 | 49.6 | -3.5E-02 | 145.87 | 48.7 | 2.9E-03 | 144.01 | 46.9 | 4.9E-02 | 144.06 | 47.0 | 4.7E-02 |
| SH-15D | 145.63 | | | 145.11 | | | 146.00 | | | 144.94 | | | 146.01 | | | 146.30 | | | 146.28 | | |
| SH-18S | 154.39 | 28.8 | 4.8E-02 | 152.95 | 27.4 | 5.7E-02 | 153.87 | 28.3 | 5.9E-02 | 155.13 | 29.5 | 5.0E-02 | 154.41 | 28.8 | 5.0E-02 | 156.09 | 30.5 | 3.9E-02 | 154.47 | 28.9 | 4.9E-02 |
| SH-18D | 155.77 | | | 154.50 | | | 155.54 | | | 156.62 | | | 155.86 | | | 157.29 | | | 155.89 | | |
| SH-19S | 158.77 | 22.5 | -4.3E-02 | 157.85 | 21.6 | -4.8E-02 | 158.71 | 22.5 | -4.3E-02 | 159.44 | 23.2 | -5.1E-02 | 159.71 | 23.5 | -7.6E-02 | 159.81 | 23.6 | -3.7E-02 | 158.84 | 22.5 | -3.8E-02 |
| SH-19D | 157.81 | | | 156.82 | | | 157.74 | | | 158.25 | | | 157.93 | | | 158.93 | | | 157.99 | | |
| SH-17S | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | 149.18 | 19.9 | 5.0E-04 | 150.28 | 21.0 | 1.9E-03 | 148.95 | 19.6 | 5.1E-04 |
| SH-17D | NI | | | NI | | | NI | | | NI | | | 149.19 | | | 150.32 | | | 148.96 | | |
| SH-25S | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | 144.53 | 46.5 | 4.3E-02 | 144.78 | 46.7 | 5.9E-02 | 144.25 | 46.2 | 4.7E-02 |
| SH-25D | NI | | | NI | | | NI | | | NI | | | 146.53 | | | 147.54 | | | 146.42 | | |
| SH-27S | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | 148.38 | 28.8 | -1.0E-02 | 149.69 | 30.1 | -8.3E-03 | 148.09 | 28.5 | -6.3E-03 |
| SH-27D | NI | | | NI | | | NI | | | NI | | | 148.09 | | | 149.44 | | | 147.91 | | |
| SH-28S | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | 142.32 | 40.4 | 4.1E-02 | 142.46 | 40.5 | 6.4E-02 | 142.39 | 40.5 | 5.1E-02 |
| SH-28D | NI | | | NI | | | NI | | | NI | | | 143.98 | | | 145.07 | | | 144.44 | | |
| **Bedrock and Deep Overburden Wells** | | | | | | | | | | | | | | | | | | | | | |
| SH-01D | 150.15 | 20.9 | 5.1E-02 | 150.04 | 20.9 | 9.1E-03 | 149.84 | 20.9 | -1.9E-03 | 151.17 | 20.9 | 8.6E-03 | 149.84 | 20.9 | 7.6E-02 | 150.77 | 20.9 | 3.8E-02 | 151.06 | 20.9 | 3.4E-03 |
| SH-01R | 151.22 | | | 150.23 | | | 149.80 | | | 151.35 | | | 151.42 | | | 151.56 | | | 151.13 | | |
| SH-02D | 150.95 | 27.2 | 7.3E-03 | 150.15 | 27.2 | 9.2E-03 | 151.27 | 27.2 | 4.4E-03 | 151.72 | 27.2 | 5.1E-03 | 151.35 | 27.2 | 7.0E-03 | 152.18 | 27.2 | -2.6E-03 | 151.27 | 27.2 | -1.1E-03 |
| SH-02R | 151.15 | | | 150.40 | | | 151.39 | | | 151.86 | | | 151.54 | | | 152.11 | | | 151.24 | | |
| SH-19D | 157.81 | 22.6 | 2.4E-02 | 156.82 | 22.6 | 4.0E-02 | 157.74 | 22.6 | -2.7E-03 | 158.25 | 22.6 | -1.1E-02 | 157.93 | 22.6 | 2.0E-02 | 158.93 | 22.6 | 1.5E-02 | 157.99 | 22.6 | 6.3E-02 |
| SH-19R | 158.35 | | | 157.72 | | | 157.68 | | | 157.99 | | | 158.39 | | | 159.27 | | | 159.42 | | |
| SH-17D | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | 149.19 | 20.3 | -3.4E-03 | 150.32 | 20.3 | -9.3E-03 | 148.96 | 20.3 | 7.4E-03 |
| SH-17R | NI | | | NI | | | NI | | | NI | | | 149.12 | | | 150.13 | | | 149.11 | | |
| SH-27D | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | 148.09 | 22.6 | 2.4E-02 | 149.44 | 22.6 | -3.3E-02 | 147.91 | 22.6 | 1.6E-02 |
| SH-27R | NI | | | NI | | | NI | | | NI | | | 148.63 | | | 148.70 | | | 148.27 | | |
| SH-28D | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | 143.98 | 28.6 | 4.6E-03 | 145.07 | 28.6 | -6.0E-03 | 144.44 | 28.6 | -1.2E-02 |
| SH-28R | NI | | | NI | | | NI | | | NI | | | 144.11 | | | 144.90 | | | 144.09 | | |

Notes:

1. Vertical gradients are based on water level measurements recorded by SHA on the dates indicated. Additional water level information is provided in Table 3a.

2. Vertical gradients (in ft/ft) were calculated using:

$i_v = (A-B) / (\text{Saturated Thickness})$

where:
"A" and "B" are the equivalent potentiometric elevations in the deeper and shallower well, respectively; and
"Saturated Thickness" for shallow to deep calculations is the distance between the midpoint of the screened interval of the deep well and the water level elevation of the shallow well. The saturated thicknesses used in the bedrock and deep overburden well calculation is the distance between the midpoints of the screened intervals of the deep and bedrock wells.

3. A negative number denotes a downward hydraulic gradient.
A positive number denotes a upward hydraulic gradient.

4. "NI" indicates that the well was not installed.

# LOW FLOW SAMPLING
# SEPTEMBER 25 TO OCTOBER 5, 2006

# Groundwater Quality Field Sampling Summary

Sanborn, Head & Associates, Inc.
CONSULTING ENGINEERS & SCIENTISTS

| | | | |
|---|---|---|---|
| Project Number: | 2032 | Date: | September 25, 2006 |
| Project Name: | Blackburn & Union Privileges Superfund Site | | |
| Project Location: | Walpole, MA | | |
| Weather: | Mostly Cloudy, ~ 70°s F | Project Manager: | Charles L. Head, P.E., LSP |
| Measurement Device: | Slope Indicator or QED MP30, Graduated Cup, YSI 556, and Hach 2100 HP | | |

**Field Measurements**

| Sampling Location | SH-17S | SH-19D | SH-22S | SH-23S | SH-27S |
|---|---|---|---|---|---|
| Collector(s) | MTS | LAA | TMW | MTS | TMW |
| Reference Point | TPVC | TPVC | TPVC | TPVC | TPVC |
| Reference Point Elevation (feet) | 156.28 | 167.99 | 170.29 | 171.86 | 159.07 |
| Depth to Floating Product (feet) | - | - | - | - | - |
| Depth to Water | 7.44 | 10.07 | 10.72 | 7.42 | 11.18 |
| Water Table Elevation (feet) | 148.84 | 157.92 | 159.57 | 164.44 | 147.89 |
| Depth to Bottom (feet) | 12.6 | 37.0 | 20.0 | 20.0 | 18.0 |
| Initial Well Head PID Reading (ppm) | ND | ND | ND | ND | ND |
| Temperature (ºC) | 13.54 | 16.57 | 17.14 | 14.72 | 12.30 |
| Specific Conductance (µS/cm) | 156 | 397 | 414 | 443 | 644 |
| Dissolved Oxygen (mg/l) | 2.44 | 5.80 | 5.72 | 5.70 | 2.61 |
| pH (standard units) | 5.01 | 5.65 | 6.01 | 5.31 | 6.04 |
| Oxidation/Reduction Potential (mV) | 187.10 | 58.10 | 194.10 | 212.30 | 184.70 |
| Turbidity (NTU) | 0.75 | 7.33 | 0.86 | 27.00 | 5.70 |
| Sample Date/Time | 09/25/06 15:16 | 09/25/06 13:50 | 09/25/06 13:27 | 09/25/06 11:58 | 09/25/06 14:50 |
| SDG | BU212 | BU212 | BU212 | BU212 | BU212 |
| Comment Reference Number | | | | 1 | |

**Comments**

1. The sample was collected at a pumping rate of 80 ml/min (slightly less than 100 ml/min equilibrium criteria).

Checked by initials: MBT 11/16/06

**GWQFSS No.:** GW0186

Print Date: Wednesday, April 11, 2007 11:10:35 AM

# Groundwater Quality Field Sampling Summary

Sanborn, Head & Associates, Inc.
CONSULTING ENGINEERS & SCIENTISTS

| | | | |
|---|---|---|---|
| Project Number: | 2032 | Date: | September 26, 2006 |
| Project Name: | Blackburn & Union Privileges Superfund Site | | |
| Project Location: | Walpole, MA | | |
| Weather: | Overcast, 60°s F | Project Manager: | Charles L. Head, P.E., LSP |
| Measurement Device: | Slope Indicator or QED MP30, Graduated Cup, YSI 556, and Hach 2100 HP | | |

**Field Measurements**

| Sampling Location | SH-18D | SH-18S | SH-21S | SH-25S | WP-01 |
|---|---|---|---|---|---|
| Collector(s) | LAA ,TMW | LAA | MTS | TMW | MTS |
| Reference Point | TPVC | TPVC | TPVC | TPVC | TWP |
| Reference Point Elevation (feet) | 170.49 | 170.33 | 165.39 | 148.93 | 161.40 |
| Depth to Floating Product (feet) | - | - | - | - | - |
| Depth to Water | 14.76 | 15.99 | 6.14 | 4.69 | 5.23 |
| Water Table Elevation (feet) | 155.73 | 154.34 | 159.25 | 144.24 | 156.17 |
| Depth to Bottom (feet) | 50.4 | 22.5 | 18.7 | 17.0 | 8.1 |
| Initial Well Head PID Reading (ppm) | ND | ND | ND | ND | ND |
| Temperature (ºC) | 13.70 | 16.41 | 14.81 | 13.64 | 14.63 |
| Specific Conductance (µS/cm) | 372 | 353 | 404 | 483 | 310 |
| Dissolved Oxygen (mg/l) | 6.22 | 0.48 | 5.66 | 0.66 | 0.70 |
| pH (standard units) | 5.89 | 5.78 | 4.68 | 6.70 | 5.77 |
| Oxidation/Reduction Potential (mV) | 160.30 | 166.10 | 211.30 | 169.90 | 31.10 |
| Turbidity (NTU) | 9.41 | 1.15 | 8.65 | 3.93 | 17.90 |
| Sample Date/Time | 09/26/06 14:55 | 09/26/06 12:35 | 09/26/06 14:55 | 09/26/06 9:50 | 09/26/06 9:16 |
| SDG | BU212 | BU212 | BU212 | BU212 | BU212 |
| Comment Reference Number | | | | | |

**Comments**

Checked by initials: LAA 11/13/2006

**GWQFSS No.:** GW0187

Print Date: Wednesday, April 11, 2007 11:10:35 AM

# Groundwater Quality Field Sampling Summary

Sanborn, Head & Associates, Inc.
CONSULTING ENGINEERS & SCIENTISTS

| | | | |
|---|---|---|---|
| Project Number: | 2032 | Date: | September 27, 2006 |
| Project Name: | Blackburn & Union Privileges Superfund Site | | |
| Project Location: | Walpole, MA | | |
| Weather: | Sunny, 50°-70°s F | Project Manager: | Charles L. Head, P.E., LSP |
| Measurement Device: | Slope Indicator or QED MP30, Graduated Cup, YSI 556, and Hach 2100 HP | | |

**Field Measurements**

| Sampling Location | SH-15D | SH-25D | SH-28D | SH-28S | WP-04 |
|---|---|---|---|---|---|
| Collector(s) | TMW | TMW | LAA, MBT | LAA | MTS |
| Reference Point | TPVC | TPVC | TPVC | TPVC | TWP |
| Reference Point Elevation (feet) | 148.99 | 150.27 | 150.87 | 150.94 | 146.75 |
| Depth to Floating Product (feet) | - | - | - | - | - |
| Depth to Water | 3.13 | 4.18 | 8.67 | 8.67 | 1.66 |
| Water Table Elevation (feet) | 145.86 | 146.09 | 142.20 | 142.27 | 145.09 |
| Depth to Bottom (feet) | 57.2 | 54.0 | 54.0 | 16.5 | 6.0 |
| Initial Well Head PID Reading (ppm) | ND | ND | ND | 1.2 | ND |
| Temperature (ºC) | 11.93 | 13.08 | 13.76 | 14.93 | 12.06 |
| Specific Conductance (µS/cm) | 216 | 243 | 218 | 459 | 244 |
| Dissolved Oxygen (mg/l) | 1.43 | 1.27 | 1.71 | 1.95 | 6.22 |
| pH (standard units) | 6.25 | 7.04 | 6.79 | 5.74 | 5.35 |
| Oxidation/Reduction Potential (mV) | 154.30 | 190.60 | 123.00 | 183.70 | 226.50 |
| Turbidity (NTU) | 119.00 | 62.30 | 35.30 | 0.58 | 154.00 |
| Sample Date/Time | 09/27/06 9:30 | 09/27/06 14:25 | 09/27/06 15:27 | 09/27/06 10:50 | 09/27/06 8:36 |
| SDG | BU212 | BU212 | BU213 | BU212 | BU212 |
| Comment Reference Number | | | | 1 | |

**Comments**

1. Duplicate sample collected at this location and labeled OW-212/09-27-06

Checked by initials: LAA 11/13/06

**GWQFSS No.:** GW0188

Print Date: Wednesday, April 11, 2007 11:10:35 AM

# Groundwater Quality Field Sampling Summary

| | | | |
|---|---|---|---|
| Sanborn, Head & Associates, Inc.<br>Consulting Engineers & Scientists | Project Number: 2032 | Date: September 27, 2006 | |
| | Project Name: Blackburn & Union Privileges Superfund Site | | |
| | Project Location: Walpole, MA | | |
| Weather: Sunny, 50°-70°s F | Project Manager: Charles L. Head, P.E., LSP | | |
| Measurement Device: Slope Indicator or QED MP30, Graduated Cup, YSI 556, and Hach 2100 HP | | | |

**Field Measurements**

| | | | | | |
|---|---|---|---|---|---|
| Sampling Location | WP-05 | | | | |
| Collector(s) | MTS | | | | |
| Reference Point | TWP | | | | |
| Reference Point Elevation (feet) | 145.52 | | | | |
| Depth to Floating Product (feet) | - | | | | |
| Depth to Water | 1.28 | | | | |
| Water Table Elevation (feet) | 144.24 | | | | |
| Depth to Bottom (feet) | 6.0 | | | | |
| Initial Well Head PID Reading (ppm) | ND | | | | |
| Temperature (ºC) | 15.16 | | | | |
| Specific Conductance (µS/cm) | 198 | | | | |
| Dissolved Oxygen (mg/l) | 6.25 | | | | |
| pH (standard units) | 4.16 | | | | |
| Oxidation/Reduction Potential (mV) | 282.80 | | | | |
| Turbidity (NTU) | 0.40 | | | | |
| Sample Date/Time | 09/27/06 12:19 | | | | |
| SDG | BU212 | | | | |
| Comment Reference Number | | | | | |

**Comments**

| | | |
|---|---|---|
| Checked by initials: LAA 11/13/06 | | **GWQFSS No.:** GW0189 |

Print Date: Wednesday, April 11, 2007 11:10:35 AM

# Groundwater Quality Field Sampling Summary

| | | |
|---|---|---|
| Sanborn, Head & Associates, Inc.<br>Consulting Engineers & Scientists | Project Number: 2032 | Date: September 28, 2006 |
| | Project Name: Blackburn & Union Privileges Superfund Site | |
| | Project Location: Walpole, MA | |
| Weather: Clear, 60- 70°s F | Project Manager: Charles L. Head, P.E., LSP | |
| Measurement Device: Slope Indicator or QED MP30, Graduated Cup, YSI 556, and Hach 2100 HP | | |

**Field Measurements**

| Sampling Location | SH-13S | SH-19R | SH-24R | SH-24S | WP-03 |
|---|---|---|---|---|---|
| Collector(s) | MTS | TMW | LAA | LAA | MTS |
| Reference Point | TPVC | TPVC | TPVC | TPVC | TOC |
| Reference Point Elevation (feet) | 168.19 | 167.88 | 145.47 | 145.36 | 150.36 |
| Depth to Floating Product (feet) | - | - | - | - | - |
| Depth to Water | 17.50 | 8.72 | 1.51 | 2.13 | 5.42 |
| Water Table Elevation (feet) | 150.69 | 159.16 | 143.96 | 143.23 | 144.94 |
| Depth to Bottom (feet) | 27.8 | 59.4 | 38.5 | 14.0 | 6.1 |
| Initial Well Head PID Reading (ppm) | 9 | ND | ND | 3.6 | ND |
| Temperature (ºC) | 15.80 | 16.36 | 14.09 | 14.41 | 14.11 |
| Specific Conductance (µS/cm) | 662 | 104 | 102 | 250 | 147 |
| Dissolved Oxygen (mg/l) | 0.36 | 0.99 | 2.45 | 5.25 | 3.15 |
| pH (standard units) | 5.76 | 7.40 | 7.48 | 5.86 | 4.45 |
| Oxidation/Reduction Potential (mV) | -38.00 | 199.00 | 117.80 | 179.80 | 255.50 |
| Turbidity (NTU) | 25.00 | 7.25 | 2.89 | 3.34 | 159.00 |
| Sample Date/Time | 09/28/06 14:00 | 09/28/06 15:50 | 09/28/06 15:35 | 09/28/06 10:28 | 09/28/06 9:25 |
| SDG | BU213 | BU213 | BU213 | BU212 | BU212 |
| Comment Reference Number | 2 | 1 | | 1 | |

**Comments**

1. Drawdown was continuous with pumping at 100 ml/min. A four-hour pumping limit was imposed and the sample was collected.

2. MS/MSD sample collected at this location.

| | | |
|---|---|---|
| Checked by initials: LAA 11/13/06 | | **GWQFSS No.:** GW0190 |

Print Date: Wednesday, April 11, 2007 11:10:35 AM

# Groundwater Quality Field Sampling Summary

| | | | |
|---|---|---|---|
| Sanborn, Head & Associates, Inc.<br>Consulting Engineers & Scientists | Project Number: 2032 | Date: September 28, 2006 | |
| | Project Name: Blackburn & Union Privileges Superfund Site | | |
| | Project Location: Walpole, MA | | |
| Weather: Clear, 60- 70°s F | Project Manager: Charles L. Head, P.E., LSP | | |
| Measurement Device: Slope Indicator or QED MP30, Graduated Cup, YSI 556, and Hach 2100 HP | | | |

**Field Measurements**

| | | | | | |
|---|---|---|---|---|---|
| Sampling Location | Equipment Blank | | | | |
| Collector(s) | MBT | | | | |
| Reference Point | - | | | | |
| Reference Point Elevation (feet) | - | | | | |
| Depth to Floating Product (feet) | - | | | | |
| Depth to Water | - | | | | |
| Water Table Elevation (feet) | | | | | |
| Depth to Bottom (feet) | - | | | | |
| Initial Well Head PID Reading (ppm) | - | | | | |
| Temperature (ºC) | - | | | | |
| Specific Conductance (µS/cm) | - | | | | |
| Dissolved Oxygen (mg/l) | - | | | | |
| pH (standard units) | - | | | | |
| Oxidation/Reduction Potential (mV) | - | | | | |
| Turbidity (NTU) | - | | | | |
| Sample Date/Time | 09/28/06 16:00 | | | | |
| SDG | BU212 | | | | |
| Comment Reference Number | 1 | | | | |

**Comments**

1. Equipment Blank labeled OW-212A /09-28-06 was prepared and submitted this day.

| | | |
|---|---|---|
| Checked by initials: LAA 11/13/06 | | **GWQFSS No.:** GW0191 |

Print Date: Wednesday, April 11, 2007 11:10:35 AM

# Groundwater Quality Field Sampling Summary

Sanborn, Head & Associates, Inc.
CONSULTING ENGINEERS & SCIENTISTS

| | | | |
|---|---|---|---|
| Project Number: | 2032 | Date: | September 29, 2006 |
| Project Name: | Blackburn & Union Privileges Superfund Site | | |
| Project Location: | Walpole, MA | | |
| Weather: | Overcast,, 60°-70°s F | Project Manager: | Charles L. Head, P.E., LSP |
| Measurement Device: | Slope Indicator or QED MP30, Graduated Cup, YSI 556, and Hach 2100 HP | | |

**Field Measurements**

| Sampling Location | SH-02R | SH-03S | SH-19S | SH-27R | SH-28R |
|---|---|---|---|---|---|
| Collector(s) | TMW | BAG | MTS | LAA | MTS |
| Reference Point | TPVC | TPVC | TPVC | TPVC | TPVC |
| Reference Point Elevation (feet) | 166.42 | 169.77 | 168.32 | 159.79 | 150.57 |
| Depth to Floating Product (feet) | - | - | - | - | - |
| Depth to Water | 15.27 | 19.58 | 9.57 | 11.92 | 6.68 |
| Water Table Elevation (feet) | 151.15 | 150.19 | 158.75 | 147.87 | 143.89 |
| Depth to Bottom (feet) | 74.6 | 27.7 | 20.4 | 68.0 | 82.0 |
| Initial Well Head PID Reading (ppm) | ND | ND | 3 | ND | 1 |
| Temperature (ºC) | 13.36 | 15.84 | 16.62 | 13.78 | 14.80 |
| Specific Conductance (µS/cm) | 956 | 988 | 480 | 559 | 146 |
| Dissolved Oxygen (mg/l) | 0.62 | 0.22 | 1.30 | 0.44 | 2.38 |
| pH (standard units) | 7.49 | 6.83 | 5.02 | 6.16 | 6.27 |
| Oxidation/Reduction Potential (mV) | -1.00 | -106.50 | 82.40 | 97.20 | 16.50 |
| Turbidity (NTU) | 1.08 | 0.77 | 5.20 | 6.99 | 15.00 |
| Sample Date/Time | 09/29/06 12:20 | 09/29/06 14:25 | 09/29/06 8:52 | 09/29/06 12:37 | 09/29/06 11:51 |
| SDG | BU213 | BU213 | BU212 | BU213 | BU213 |
| Comment Reference Number | | | | | |

**Comments**

Checked by initials: LAA 11/13/2006

**GWQFSS No.:** GW0185

Print Date: Wednesday, April 11, 2007 11:10:35 AM

# Groundwater Quality Field Sampling Summary

Sanborn, Head & Associates, Inc.
CONSULTING ENGINEERS & SCIENTISTS

| | | | |
|---|---|---|---|
| Project Number: | 2032 | Date: | October 2, 2006 |
| Project Name: | Blackburn & Union Privileges Superfund Site | | |
| Project Location: | Walpole, MA | | |
| Weather: | Cloudy, 60°-70°s F | Project Manager: | Charles L. Head, P.E., LSP |
| Measurement Device: | Slope Indicator or QED MP30, Graduated Cup, YSI 556, and Hach 2100 HP | | |

**Field Measurements**

| Sampling Location | SH-05D | SH-06R-A | SH-06R-B | SH-12S | SH-14S |
|---|---|---|---|---|---|
| Collector(s) | LAA | MTS | MTS | TMW | TMW |
| Reference Point | TPVC | TPVC | TPVC | TPVC | TPVC |
| Reference Point Elevation (feet) | 151.65 | 155.90 | 156.01 | 169.32 | 152.28 |
| Depth to Floating Product (feet) | - | - | - | - | - |
| Depth to Water | 4.02 | 6.57 | 6.29 | - | 4.46 |
| Water Table Elevation (feet) | 147.63 | 149.33 | 149.72 | | 147.82 |
| Depth to Bottom (feet) | 55.0 | 73.0 | 119.0 | 29.3 | 20.5 |
| Initial Well Head PID Reading (ppm) | | 1 | 1 | ND | ND |
| Temperature (ºC) | 12.98 | 14.09 | 13.19 | 16.11 | 14.21 |
| Specific Conductance (µS/cm) | 408 | 1,125 | 888 | 663 | 571 |
| Dissolved Oxygen (mg/l) | 0.41 | 0.65 | 1.40 | 0.19 | 0.34 |
| pH (standard units) | 6.80 | 6.22 | 6.21 | 5.66 | 6.44 |
| Oxidation/Reduction Potential (mV) | 140.40 | 161.60 | 201.60 | -37.60 | 23.40 |
| Turbidity (NTU) | 12.70 | 6.42 | 7.01 | 1.07 | 55.80 |
| Sample Date/Time | 10/02/06 14:54 | 10/02/06 12:45 | 10/02/06 9:27 | 10/02/06 17:03 | 10/02/06 13:25 |
| SDG | BU213 | BU213 | BU213 | BU213 | BU213 |
| Comment Reference Number | | | | 1 | 2 |

**Comments**

1. Only field parameter data was collected from this location. No samples were collected.

2. A duplicate sample labeled OW-213 / 10-02-06 was collected at this location.

Checked by initials: LAA 11/13/06

**GWQFSS No.:** GW0194

Print Date: Wednesday, April 11, 2007 11:10:35 AM

# Groundwater Quality Field Sampling Summary

| | | | |
|---|---|---|---|
| Sanborn, Head & Associates, Inc.<br>Consulting Engineers & Scientists | Project Number: 2032 | Date: October 2, 2006 | |
| | Project Name: Blackburn & Union Privileges Superfund Site | | |
| | Project Location: Walpole, MA | | |
| Weather: Cloudy, 60°-70°s F | Project Manager: Charles L. Head, P.E., LSP | | |
| Measurement Device: Slope Indicator or QED MP30, Graduated Cup, YSI 556, and Hach 2100 HP | | | |

**Field Measurements**

| | | | | | |
|---|---|---|---|---|---|
| Sampling Location | SH-14D | SH-27D | | | |
| Collector(s) | TMW | LAA | | | |
| Reference Point | TPVC | TPVC | | | |
| Reference Point Elevation (feet) | 151.98 | 159.24 | | | |
| Depth to Floating Product (feet) | - | - | | | |
| Depth to Water | 2.31 | 11.62 | | | |
| Water Table Elevation (feet) | 149.67 | 147.62 | | | |
| Depth to Bottom (feet) | 49.0 | 48.0 | | | |
| Initial Well Head PID Reading (ppm) | ND | ND | | | |
| Temperature (ºC) | 13.33 | 12.49 | | | |
| Specific Conductance (µS/cm) | 196 | 548 | | | |
| Dissolved Oxygen (mg/l) | 1.49 | 1.19 | | | |
| pH (standard units) | 6.23 | 6.49 | | | |
| Oxidation/Reduction Potential (mV) | 113.00 | 146.40 | | | |
| Turbidity (NTU) | 4.78 | 74.40 | | | |
| Sample Date/Time | 10/02/06 10:50 | 10/02/06 10:58 | | | |
| SDG | BU213 | BU213 | | | |
| Comment Reference Number | | | | | |

**Comments**

| | | |
|---|---|---|
| Checked by initials: LAA 11/13/06 | | **GWQFSS No.:** GW0195 |

Print Date: Wednesday, April 11, 2007 11:10:35 AM

# Groundwater Quality Field Sampling Summary

Sanborn, Head & Associates, Inc.
CONSULTING ENGINEERS & SCIENTISTS

| | | | |
|---|---|---|---|
| Project Number: | 2032 | Date: | October 3, 2006 |
| Project Name: | Blackburn & Union Privileges Superfund Site | | |
| Project Location: | Walpole, MA | | |
| Weather: | Sunny, 60-70°s F | Project Manager: | Charles L. Head, P.E., LSP |
| Measurement Device: | Slope Indicator or QED MP30, Graduated Cup, YSI 556, and Hach 2100 HP | | |

**Field Measurements**

| Sampling Location | SH-01D | SH-03D | SH-05R-A | SH-05R-B | SH-15S |
|---|---|---|---|---|---|
| Collector(s) | LAA | TMW | MTS | MTS | TMW |
| Reference Point | TPVC | TPVC | TPVC | TPVC | TPVC |
| Reference Point Elevation (feet) | 167.82 | 169.27 | 152.89 | 152.94 | 148.95 |
| Depth to Floating Product (feet) | - | - | - | - | - |
| Depth to Water | 17.22 | 18.40 | 2.35 | 2.22 | 5.04 |
| Water Table Elevation (feet) | 150.60 | 150.87 | 150.54 | 150.72 | 143.91 |
| Depth to Bottom (feet) | 47.5 | 93.1 | 115.1 | 166.0 | 19.7 |
| Initial Well Head PID Reading (ppm) | ND | ND | 1 | ND | ND |
| Temperature (ºC) | 16.92 | 14.88 | 15.92 | 12.78 | 13.96 |
| Specific Conductance (µS/cm) | 96,048 | 227 | 116 | 121 | 919 |
| Dissolved Oxygen (mg/l) | -0.01 | 1.12 | 1.30 | 1.87 | 1.79 |
| pH (standard units) | 13.83 | 6.99 | 7.23 | 7.33 | 10.39 |
| Oxidation/Reduction Potential (mV) | -510.50 | 69.60 | -67.20 | -4.30 | -214.10 |
| Turbidity (NTU) | 5.31 | 451.00 | 12.80 | 4.46 | 3.24 |
| Sample Date/Time | 10/03/06 13:30 | 10/03/06 11:45 | 10/03/06 13:03 | 10/03/06 8:21 | 10/03/06 15:00 |
| SDG | BU214 | BU213 | BU213 | BU213 | BU213 |
| Comment Reference Number | | | | | |

**Comments**

| | | |
|---|---|---|
| Checked by initials: LAA 11/13/06 | | **GWQFSS No.:** GW0192 |

Print Date: Wednesday, April 11, 2007 11:10:35 AM

# Groundwater Quality Field Sampling Summary

| | | | |
|---|---|---|---|
| Sanborn, Head & Associates, Inc.<br>Consulting Engineers & Scientists | Project Number: 2032 | Date: October 3, 2006 | |
| | Project Name: Blackburn & Union Privileges Superfund Site | | |
| | Project Location: Walpole, MA | | |
| Weather: Sunny, 60-70°s F | Project Manager: Charles L. Head, P.E., LSP | | |
| Measurement Device: Slope Indicator or QED MP30, Graduated Cup, YSI 556, and Hach 2100 HP | | | |

**Field Measurements**

| | | | | | |
|---|---|---|---|---|---|
| Sampling Location | Equipment Blank | | | | |
| Collector(s) | MBT | | | | |
| Reference Point | - | | | | |
| Reference Point Elevation (feet) | - | | | | |
| Depth to Floating Product (feet) | - | | | | |
| Depth to Water | - | | | | |
| Water Table Elevation (feet) | | | | | |
| Depth to Bottom (feet) | - | | | | |
| Initial Well Head PID Reading (ppm) | - | | | | |
| Temperature (ºC) | - | | | | |
| Specific Conductance (µS/cm) | - | | | | |
| Dissolved Oxygen (mg/l) | - | | | | |
| pH (standard units) | - | | | | |
| Oxidation/Reduction Potential (mV) | - | | | | |
| Turbidity (NTU) | - | | | | |
| Sample Date/Time | 10/03/06 10:32 | | | | |
| SDG | BU213 | | | | |
| Comment Reference Number | 1 | | | | |

**Comments**

1. Equipment blank labeled OW-213A / 10-03-06 prepared and submitted this day.

| | | |
|---|---|---|
| Checked by initials: MBT 11/12/06 | | **GWQFSS No.:** GW0193 |

Print Date: Wednesday, April 11, 2007 11:10:35 AM

# Groundwater Quality Field Sampling Summary

| | | |
|---|---|---|
| Sanborn, Head & Associates, Inc.<br>Consulting Engineers & Scientists | Project Number: 2032 | Date: October 4, 2006 |
| | Project Name: Blackburn & Union Privileges Superfund Site | |
| | Project Location: Walpole, MA | |
| Weather: Cloudy, 60°-70°s F | Project Manager: Charles L. Head, P.E., LSP | |
| Measurement Device: Slope Indicator or QED MP30, Graduated Cup, YSI 556, and Hach 2100 HP | | |

**Field Measurements**

| Sampling Location | SH-01R | SH-04S | SH-05S | SH-17R | SH-26S |
|---|---|---|---|---|---|
| Collector(s) | MTS | TMW | DRF | TMW | MTS |
| Reference Point | TPVC | TPVC | TPVC | TPVC | TPVC |
| Reference Point Elevation (feet) | 167.57 | 151.30 | 152.16 | 156.17 | 145.32 |
| Depth to Floating Product (feet) | - | - | - | - | - |
| Depth to Water | 16.80 | 5.55 | 5.44 | 7.70 | 1.65 |
| Water Table Elevation (feet) | 150.77 | 145.75 | 146.72 | 148.47 | 143.67 |
| Depth to Bottom (feet) | 68.4 | 20.0 | 19.7 | 52.4 | 18.0 |
| Initial Well Head PID Reading (ppm) | ND | ND | ND | ND | ND |
| Temperature (ºC) | 15.83 | 13.57 | 15.49 | 14.57 | 13.65 |
| Specific Conductance (µS/cm) | 65,530 | 1,525 | 1,296 | 2,092 | 1,075 |
| Dissolved Oxygen (mg/l) | 0.05 | 0.30 | 3.32 | 2.13 | 0.24 |
| pH (standard units) | 13.14 | 10.44 | 10.68 | 10.63 | 10.66 |
| Oxidation/Reduction Potential (mV) | -408.20 | -135.80 | -85.90 | -43.70 | -26.80 |
| Turbidity (NTU) | 9.42 | 3.59 | 5.21 | 3.30 | 99.10 |
| Sample Date/Time | 10/04/06 8:43 | 10/04/06 9:25 | 10/04/06 10:30 | 10/04/06 14:30 | 10/04/06 14:45 |
| SDG | BU214 | BU214 | BU214 | BU214 | BU214 |
| Comment Reference Number | | | 1,2 | | |

**Comments**

1. The turbidity value at the time of sample collection was approximately 12% of the previous two readings (slightly higher than the 10% equilibrium criteria).

2. Duplicate sample collected at this location and labeled OW-214/10-04-06.

| | | |
|---|---|---|
| Checked by initials: LAA 11/13/06 | | **GWQFSS No.:** GW0196 |

Print Date: Wednesday, April 11, 2007 11:10:35 AM

# Groundwater Quality Field Sampling Summary

Sanborn, Head & Associates, Inc.
CONSULTING ENGINEERS & SCIENTISTS

| | | | |
|---|---|---|---|
| Project Number: | 2032 | Date: | October 5, 2006 |
| Project Name: | Blackburn & Union Privileges Superfund Site | | |
| Project Location: | Walpole, MA | | |
| Weather: | Overcast, High 50°s F, breezy | Project Manager: | Charles L. Head, P.E., LSP |

Measurement Device: Slope Indicator or QED MP30, Graduated Cup, YSI 556, and Hach 2100 HP

**Field Measurements**

| Sampling Location | Equipment Blank | SH-01S | SH-17D | WP-06 | |
|---|---|---|---|---|---|
| Collector(s) | MBT | TMW | DRF | MTS | |
| Reference Point | - | TPVC | TPVC | TWP | |
| Reference Point Elevation (feet) | - | 167.60 | 156.59 | 145.19 | |
| Depth to Floating Product (feet) | - | - | - | - | |
| Depth to Water | - | 15.65 | 8.01 | 2.30 | |
| Water Table Elevation (feet) | | 151.95 | 148.58 | 142.89 | |
| Depth to Bottom (feet) | - | 25.0 | 32.2 | 6.0 | |
| Initial Well Head PID Reading (ppm) | - | ND | ND | ND | |
| Temperature (ºC) | - | 12.43 | 11.60 | 13.34 | |
| Specific Conductance (µS/cm) | - | 1,309 | 1,861 | 633 | |
| Dissolved Oxygen (mg/l) | - | 0.35 | 0.42 | 0.33 | |
| pH (standard units) | - | 11.09 | 10.78 | 9.77 | |
| Oxidation/Reduction Potential (mV) | - | -131.70 | 81.30 | 81.70 | |
| Turbidity (NTU) | - | 13.10 | 2.35 | 7.64 | |
| Sample Date/Time | 10/05/06 12:20 | 10/05/06 9:20 | 10/05/06 10:40 | 10/05/06 8:27 | |
| SDG | BU214 | BU214 | BU214 | BU214 | |
| Comment Reference Number | 2 | | | 1 | |

**Comments**

1. The sample was collected with drawdown of 0.31 feet (slightly higher than the 0.3 feet equilibrium criteria), and no recharge was recorded in the water level before the sample w collected (see September 7, 2001 letter from SHA to M. Taylor [USEPA Region I]).

2. Equipment Blank labeled OW-214A/10-05-06 was prepared and submitted this day.

Checked by initials: LAA 11/13/06

**GWQFSS No.:** GW0197

Print Date: Wednesday, April 11, 2007 11:10:35 AM

# APPENDIX B-3

# FIELD SAMPLING SUMMARY FORMS - SURFACE WATER

# SURFACE WATER LEVEL ROUND - SEPTEMBER 19, 2006

# Surface Water Elevation Field Sampling Summary

| | | | |
|---|---|---|---|
| Sanborn, Head & Associates, Inc.<br>Consulting Engineers & Scientists | Project Number: | 2032 | Date: September 19, 2006 |
| | Project Name: | Blackburn & Union Privileges Superfund Site | |
| | Project Location: | Walpole, Massachusetts | |
| Weather: Overcast, becoming sunny, 61-80°F | Project Manager: | Charles L. Head, P.E., LSP | |
| Measurement Device: QED MP30 S/N 1002, Oil/Water Interface Probe, Geotech ORS S/N 01422601, Tape Measure | | | |

**Field Measurements**

| Sampling Location | SG-101B | SG-102 | SG-103 | SG-109A | |
|---|---|---|---|---|---|
| Collector(s) | MBT | MBT | MBT | MBT | |
| Reference Point | Grade Stake | Chisel Square | Top Steel Frame | Chisel Mark | |
| Reference Point Elevation (feet) | 167.85 | 173.08 | 161.26 | 147.12 | |
| Depth to Floating Product (feet) | - | - | - | - | |
| Depth to Water (feet) | 2.50 | 14.05 | 6.29 | 4.95 | |
| Surface Water Elevation (feet) | 165.35 | 159.03 | 154.97 | 142.17 | |
| Depth to Bottom (feet) | - | - | - | - | |
| Depth of Flow (feet) (DTB-DTW) | - | - | - | - | |
| Stream Bed Elevation (feet) | - | - | - | - | |
| Sample Date | 09/19/06 | 09/19/06 | 09/19/06 | 09/19/06 | |
| Comment Reference Number | 1,2 | 2 | 2 | 2 | |

**Comments**

1. New staff gauge established because SH-101A-E and SH-101A-M appeared to be destroyed. SG-101B was established in the vicinity of former SG-101A-E on 9/19/06 by M. Thomas.

2. Only water level measurements were collected.

| | | |
|---|---|---|
| Checked By: LAA 12/29/06; MBT 01/ | | **SWQFSS No.** SW045 |

Print Date: Thursday, April 12, 2007 11:07:37 AM

# Surface Water Elevation Field Sampling Summary

| | | | |
|---|---|---|---|
| Sanborn, Head & Associates, Inc.<br>CONSULTING ENGINEERS & SCIENTISTS | Project Number: | 2032 | Date: September 19, 2006 |
| | Project Name: | Blackburn & Union Privileges Superfund Site | |
| | Project Location: | Walpole, Massachusetts | |
| Weather: Overcast, becoming sunny 61-80°F | Project Manager: | Charles L. Head, P.E., LSP | |
| Measurement Device: QED MP30 S/N 1002, Oil/Water Interface Probe, Geotech ORS S/N 01422601, Tape Measure | | | |

**Field Measurements**

| Sampling Location | SG-104 | SG-108 | SG-110A | SG-112 | SG-113-E |
|---|---|---|---|---|---|
| Collector(s) | MBT | MBT | MBT | MBT | MBT |
| Reference Point | Top Culvert | PK Nail | Chisel Mark | Chisel Mark | Grade Stake |
| Reference Point Elevation (feet) | 156.71 | 143.90 | 150.16 | 143.98 | 148.00 |
| Depth to Floating Product (feet) | - | - | - | - | - |
| Depth to Water (feet) | 9.17 | - | 8.45 | 4.40 | 2.42 |
| Surface Water Elevation (feet) | 147.54 | - | 141.71 | 139.58 | 145.58 |
| Depth to Bottom (feet) | - | - | - | - | - |
| Depth of Flow (feet) (DTB-DTW) | - | - | - | - | - |
| Stream Bed Elevation (feet) | - | - | - | - | - |
| Sample Date | 09/19/06 | 09/19/06 | 09/19/06 | 09/19/06 | 09/19/06 |
| Comment Reference Number | 1 | 1,2 | 1 | 1 | 1 |

**Comments**

1. Only water level measurements were collected.

2. Depth to water was collected from an incorrect reference point, and therefore is not provided.

| | | |
|---|---|---|
| Checked By: LAA 12/29/06; MBT 01/ | | **SWQFSS No.** SW046 |

Print Date: Thursday, April 12, 2007 11:07:38 AM

# Surface Water Elevation Field Sampling Summary

Sanborn, Head & Associates, Inc.
CONSULTING ENGINEERS & SCIENTISTS

| | | | |
|---|---|---|---|
| Project Number: | 2032 | Date: | September 19, 2006 |
| Project Name: | Blackburn & Union Privileges Superfund Site | | |
| Project Location: | Walpole, Massachusetts | | |
| Weather: | Overcast, becoming sunny 61-80°F | Project Manager: | Charles L. Head, P.E., LSP |

Measurement Device: QED MP30 S/N 1002, Oil/Water Interface Probe, Geotech ORS S/N 01422601, Tape Measure

**Field Measurements**

| Sampling Location | SG-105B | SG-106A | SG-107C | SG-107D | SG-111A |
|---|---|---|---|---|---|
| Collector(s) | MBT | MBT | MTS | MBT | MTS |
| Reference Point | Grade Stake | Grade Stake | Grade Stake | Grade Stake | Grade Stake |
| Reference Point Elevation (feet) | 146.18 | 146.03 | 144.46 | 143.98 | 140.18 |
| Depth to Floating Product (feet) | - | - | - | - | - |
| Depth to Water (feet) | 1.91 | 2.86 | 1.50 | - | 1.88 |
| Surface Water Elevation (feet) | 144.27 | 143.17 | 142.96 | - | 138.30 |
| Depth to Bottom (feet) | - | - | - | - | - |
| Depth of Flow (feet) (DTB-DTW) | - | - | - | - | - |
| Stream Bed Elevation (feet) | - | - | - | - | - |
| Sample Date | 09/19/06 | 09/19/06 | 09/19/06 | 09/19/06 | 09/19/06 |
| Comment Reference Number | 1,2 | 2 | 2 | 2,3 | 2 |

**Comments**

1. New staff gauge established because SG-105A appeared to be destroyed. SG-105B installed on 9/19/06 by M. Thomas.

2. Only water level measurements were collected.

3. Dry to 0.85 feet.

Checked By: LAA 12/29/06; MBT 01/

**SWQFSS No.** SW047

Print Date: Thursday, April 12, 2007 11:07:38 AM

# SURFACE WATER SAMPLING ROUND - SEPTEMBER 29, 2006

# Surface Water Quality Field Sampling Summary

| | | | |
|---|---|---|---|
| Sanborn, Head & Associates, Inc.<br>Consulting Engineers & Scientists | Project Number: | 2032 | Date: September 29, 2006 |
| | Project Name: | Blackburn & Union Privileges Superfund Site | |
| | Project Location: | Walpole, Massachusetts | |
| Weather: Overcast, 60°Fs | Project Manager: | Charles L. Head, P.E., LSP | |
| Measurement Device: YSI 556 and tape measure | | | |

**Field Measurements**

| Sampling Location | SW-102 | SW-105 | SW-107 | SW-108 | |
|---|---|---|---|---|---|
| Collector(s) | BAG | BAG | BAG | BAG | |
| Reference Point | Chisel mark in bridge | Top SG-105B Grade Stake | Top SG-107D Grade Stake | Nail in tree | |
| Depth to Floating Product (feet) | - | - | - | - | |
| Depth to Water (feet) | 2.72 | 2.18 | 1.80 | 4.21 | |
| Depth to Bottom (feet) | 3.28 | 3.20 | 1.90 | 4.98 | |
| Depth of Flow (feet) (DTB-DTW) | 0.56 | 1.02 | 0.10 | 0.77 | |
| pH (standard units) | 7.07 | 7.03 | 8.57 | 6.66 | |
| Specific Conductance (µS/cm) | 282 | 286 | 950 | 286 | |
| Temperature (ºC) | 16.83 | 16.77 | 15.34 | 16.68 | |
| Dissolved Oxygen (mg/l) | 9.38 | 9.97 | 2.80 | 10.83 | |
| Oxidation/Reduction Potential (mV) | 62 | 81 | 130 | 136 | |
| Sample Date/Time | 09/29/06 12:00 | 09/29/06 11:15 | 09/29/06 10:35 | 09/29/06 9:35 | |
| SDG | BU303 | BU303 | BU303 | BU303 | |
| Comment Reference Number | | 1,4 | 2 | 3,5 | |

**Comments**

1. Depths to water and bottom were measured at location SG-105B.

2. Depths to water and bottom were measured at location SG-107D.

3. Depths to water and bottom were measured from an incorrect reference point located approximately 10' from SG-105B.

4. Collected field duplicate at this location, labeled field duplicate OW-303/09-29-06.

5. MS/MSD sample collected at this location.

| | | |
|---|---|---|
| **Checked By:** MBT 01/26/07 | | **SWQFSS No.** SW044 |

Print Date: Wednesday, April 11, 2007 11:12:14 AM

# APPENDIX B-4

# FIELD SAMPLING SUMMARY FORMS – SEDIMENT

# Floodplain Sediment Field Sampling Summary

| | | | |
|---|---|---|---|
| Sanborn, Head & Associates, Inc.<br>CONSULTING ENGINEERS & SCIENTISTS | Project Number: | 2032 | Date: October 13, 2006 |
| | Project Name: | Blackburn & Union Privileges Superfund Site | |
| | Project Location: | Walpole, Massachusetts | |
| PID Meter: SHA No.12 | Project Manager: | Charles L. Head, P.E., LSP | |
| Other: Stainless steel scoop, bowl, and hand auger | | | |

**Field Measurements**

| Sampling Location | FP-09A | FP-09A | FP-09B | FP-09B |
|---|---|---|---|---|
| Reference Point | Ground Surface | Ground Surface | Ground Surface | Ground Surface |
| Reference Pont Elevation (feet) | - | - | - | - |
| Depth of Sample (feet) | ~ 1 to 3 | ~ 0 to 1 | ~ 1 to 3 | ~ 0 to 1 |
| SDG | BU412 | BU412 | BU412 | BU412 |
| Collector(s) | BAG/DRF | BAG/DRF | BAG/DRF | BAG/DRF |
| PID (ppm) | ND | ND | ND | 2.2 |
| pH (standard units) | - | - | - | - |
| Sediment Description | Brown (10YR 4/3) SILT, trace fine Sand. Wet. | Very dark gray (10YR 3/1) SILT, little fine Sand. Moist. | Brown (10YR 4/3) SILT, little fine Sand. Wet. | Very dark grayish-brown (10YR 3/2) SILT, little fine Sand, Glass. Moist. FILL. |
| Sample Date/Time | 10/13/06 8:45 | 10/13/06 8:40 | 10/13/06 9:20 | 10/13/06 9:15 |
| Weather | Sunny, 45° | Sunny, 45° | Sunny, 45° | Sunny, 45° |
| Comment Reference Number | 1 | | | |

**Comments**

1. Wet 2.5 to 3 feet.

| | | | |
|---|---|---|---|
| Checked by initials: | MSB | | **SedQFSS No.** FP0009 |

Print Date: Wednesday, April 11, 2007 11:11:27 AM

# Floodplain Sediment Field Sampling Summary

| | | | |
|---|---|---|---|
| Sanborn, Head & Associates, Inc.<br>CONSULTING ENGINEERS & SCIENTISTS | Project Number: | 2032 | Date: October 13, 2006 |
| | Project Name: | Blackburn & Union Privileges Superfund Site | |
| | Project Location: | Walpole, Massachusetts | |
| PID Meter: SHA No.18 | Project Manager: | Charles L. Head, P.E., LSP | |
| Other: Stainless steel scoop, bowl, and hand auger | | | |

**Field Measurements**

| Sampling Location | FP-09C | FP-09C | FP-09D | FP-09D |
|---|---|---|---|---|
| Reference Point | Ground Surface | Ground Surface | Ground Surface | Ground Surface |
| Reference Pont Elevation (feet) | - | - | - | - |
| Depth of Sample (feet) | ~ 1 to 3 | ~ 0 to 1 | ~ 1 to 3 | ~ 0 to 1 |
| SDG | BU412 | BU412 | BU412 | BU412 |
| Collector(s) | BAG/DRF | BAG/DRF | BAG/DRF | BAG/DRF |
| PID (ppm) | 1.3 | ND | ND | 2.8 |
| pH (standard units) | - | - | - | - |
| Sediment Description | Brown (10YR 4/3) fine to coarse SAND, trace Silt. Moist to Wet. | Brown (10YR 4/3) fine to medium SAND, little Silt. Moist. | Brown (10YR 4/3) SILT, trace fine Sand. Moist to Wet. | Black (10YR 3/1) SILT, trace fine to medium SAND, trace Gravel. Moist to Wet. |
| Sample Date/Time | 10/13/06 9:30 | 10/13/06 9:25 | 10/13/06 9:50 | 10/13/06 9:45 |
| Weather | Sunny, 45° | Sunny, 45° | Sunny, 45° | Sunny, 45° |
| Comment Reference Number | | | | |

**Comments**

| | | |
|---|---|---|
| Checked by initials: MSB | | **SedQFSS No.** FP0010 |

Print Date: Wednesday, April 11, 2007 11:11:27 AM

# Floodplain Sediment Field Sampling Summary

| | | | |
|---|---|---|---|
| Sanborn, Head & Associates, Inc.<br>CONSULTING ENGINEERS & SCIENTISTS | Project Number: | 2032 | Date: October 13, 2006 |
| | Project Name: | Blackburn & Union Privileges Superfund Site | |
| | Project Location: | Walpole, Massachusetts | |
| PID Meter: SHA No.18 | Project Manager: | Charles L. Head, P.E., LSP | |
| Other: Stainless steel scoop, bowl, and hand auger | | | |

**Field Measurements**

| Sampling Location | FP-09E | FP-09E | FP-09F | FP-09F |
|---|---|---|---|---|
| Reference Point | Ground Surface | Ground Surface | Ground Surface | Ground Surface |
| Reference Pont Elevation (feet) | - | - | - | - |
| Depth of Sample (feet) | ~ 1 to 3 | ~ 0 to 1 | ~ 1 to 3 | ~ 0 to 1 |
| SDG | BU412 | BU412 | BU412 | BU412 |
| Collector(s) | BAG/DRF | BAG/DRF | BAG/DRF | BAG/DRF |
| PID (ppm) | ND | 0.8 | 1.4 | 1.2 |
| pH (standard units) | - | - | - | - |
| Sediment Description | Very dark grayish-brown (10YR 3/2) fine to coarse SAND, little Silt, trace Gravel, Glass. Moist. FILL. | Brown (10YR 4/3) fine to coarse SAND, little Silt, trace Gravel. Moist. FILL. | Very dark gray (10YR 3/1) fine to coarse SAND, little Gravel, trace to little Silt, Glass, Asphalt. Moist. FILL. | Very dark gray (10YR 3/1) fine to coarse SAND, little Gravel, trace Silt, Asphalt. Moist. FILL. |
| Sample Date/Time | 10/13/06 10:05 | 10/13/06 10:00 | 10/13/06 10:20 | 10/13/06 10:15 |
| Weather | Sunny, 50° | Sunny, 50° | Sunny, 50° | Sunny, 50° |
| Comment Reference Number | | | | 1 |

**Comments**

1. Blind Duplicate sample OW-412/0-1' collected at sample FP-09F/0-1'.

| | | |
|---|---|---|
| Checked by initials: MSB | | **SedQFSS No.** FP0011 |

Print Date: Wednesday, April 11, 2007 11:11:27 AM

# APPENDIX B-5

# FIELD SAMPLING SUMMARY FORMS-SOIL VAPOR

# SOIL VAPOR FIELD SAMPLING - SEPTEMBER 6, 2006

# Soil Vapor Field Sampling Summary

| | | |
|---|---|---|
| Sanborn, Head & Associates<br>*Consulting Engineers & Scientists* | Project No.: 2032 | Date: 9/6/06 |
| | Project Name: Blackburn & Union Privileges Superfund Site | |
| | Location: Walpole, Massachusetts | |
| | Project Manager: Charles L. Head, P.E., LSP | |
| PID Meter Used: | Collector(s): EMB, BAG | |

**SOIL VAPOR SAMPLE RECORD**

| Location No. | OW-1001 | SV-03 | SV-05 | SV-04 | SV-01 | SV-02 |
|---|---|---|---|---|---|---|
| Sample ID | SV-01 / 09-07-06 | SV-03 / 09-07-06 | SV-05 / 09-07-06 | SV-04 / 09-07-06 | SV-01 / 09-07-06 | SV-02 / 09-07-06 |
| Implant Install Date | 9/6/2006 | 9/6/2006 | 9/6/2006 | 9/6/2006 | 9/6/2006 | 9/6/2006 |
| Sample Date | 9/7/2006 | 9/7/2006 | 9/7/2006 | 9/7/2006 | 9/7/2006 | 9/7/2006 |
| Indoor or Outdoor? | Outdoor | Outdoor | Outdoor | Outdoor | Outdoor | Outdoor |
| Slab/Pavement Material and Thickness (in.) | 2" Asphalt | N/A (ground) | N/A (ground) | N/A (ground) | 2" asphalt | N/A (ground) |
| Sample Collection Depth (ft bgs/below top of slab) | 4 | 3.5 | 4 | 4 | 4 | 4 |
| Approx. Purge Volume ($cm^3$) | 70 | 70 | 70 | 70 | 70 | 40 |
| Approx. Purge Rate ($cm^3$/min) | 200 | 200 | 200 | 200 | 200 | 200 |
| Canister Serial No./ Tedlar® Bag | 0333 | 0222 | 0254 | 0364 | 0320 | 0133 |
| Flow Controller No. | 139809-7304096 | 139808-7305292 | 7277179 | 133140-7286458 | 139344-7303445 | 141976-7308407 |
| Start Time | 7:45 | 8:50 | 9:40 | 9:18 | 7:45 | 8:30 |
| Start Pressure (inches Hg) | 28.0 | 28.0 | 30.0 | 30.0 | 28.0 | 28.0 |
| Stop Time | 9:45 | 9:45 | 10:40 | 10:19 | 11:30 | 9:30 |
| Stop Pressure (inches Hg) | 4.0 | 5.0 | 4.0 | 5.0 | 4.0 | 3.0 |
| Ambient Air Temp (°F) | 65 | 65 | 65 | 65 | 65 | 65 |
| Weather Conditions | Sunny | Sunny | Sunny | Sunny | Sunny | Sunny |
| Tracer Gas Applied | yes | yes | yes | yes | yes | yes |
| Tracer Gas Result | 0% | 0% | 0% | 0% | 0% | 0% |
| PID reading (ppmv) | 24 | 25 | 40 | 26 | 24 | 24 |
| Comment No. | 1,2 | | | | 2 | |

**COMMENTS**

1. Blind duplicate sample OW-1001 was collected from location SV-01.

2. The duplicate canister read 4" Hg after 2 hours, while the sample canister read 16" Hg at this time. The duplicate canister was shut off and the sample canister was allowed to continue collecting. The sample canister was open for collection for 3 hours 45 minutes.

## Soil Vapor Field Sampling Summary

| Sanborn, Head & Associates<br>*Consulting Engineers & Scientists* | Project No.: 2032 | Date: 9/6/06 |
|---|---|---|
| | Project Name: Blackburn & Union Privileges Superfund Site | |
| | Location: Walpole, Massachusetts | |
| | Project Manager: Charles L. Head, P.E., LSP | |
| PID Meter Used: | Collector(s): EMB, BAG | |

**SOIL VAPOR SAMPLE RECORD**

| Location No. | SV-06 | SV-10 | SV-09 | SV-08 | SV-07 | |
|---|---|---|---|---|---|---|
| Sample ID | SV-06 / 09-07-06 | SV-10 / 09-07-06 | SV-09 / 09-07-06 | SV-08 / 09-07-06 | SV-07 / 09-07-06 | |
| Implant Install Date | 09/06/06 | 09/06/06 | 09/06/06 | 09/06/06 | 09/06/06 | |
| Sample Date | 09/07/06 | 09/06/06 | 09/06/06 | 09/06/06 | 09/06/06 | |
| Indoor or Outdoor? | Outdoor | Indoor | Indoor | Indoor | Indoor | |
| Slab/Pavement Material and Thickness (in.) | 2" asphalt | 6" concrete | 6" concrete | 6" concrete | 16" concrete | |
| Sample Collection Depth (ft bgs/below top of slab) | 4 | 0.67 | 0.67 | 0.67 | 1.5 | |
| Approx. Purge Volume ($cm^3$) | 70 | 30 | 30 | 30 | 35 | |
| Approx. Purge Rate ($cm^3$/min) | 200 | 200 | 200 | 200 | 200 | |
| Canister Serial No./ Tedlar® Bag | 0231 | 0366 | 0369 | 0211 | 172 | |
| Flow Controller No. | 141976-7308405 | 139344-7303439 | 139809-9304102 | A018 | 7252170 | |
| Start Time | 8:00 | 14:20 | 13:50 | 15:20 | 14:52 | |
| Start Pressure (inches Hg) | 30 | 29 | 29 | 30 | 29 | |
| Stop Time | 9:00 | 15:20 | 14:35 | 16:22 | 15:50 | |
| Stop Pressure (inches Hg) | 7 | 5 | 6 | 8 | 4 | |
| Ambient Air Temp (°F) | 65 | 65 | 65 | 65 | 65 | |
| Weather Conditions | Sunny | Overcast | Overcast | Overcast | Overcast | |
| Tracer Gas Applied | yes | yes | yes | yes | yes | |
| Tracer Gas Result | 0% | 0% | 0% | 0% | 0% | |
| PID reading (ppmv) | 21 | 25 | 33 | 43 | 37 | |
| Comment No. | | | 1 | | | |

**COMMENTS**

1. Initial tracer gas sample screen was 2.6% helium. Removed stopper and reapplied bees wax seal and helium screen was 0%.

# AMBIENT AIR SAMPLING - SEPTEMBER 6, 2006

# Ambient Air Field Sampling Summary

| | | |
|---|---|---|
| Sanborn, Head & Associates<br>*Consulting Engineers & Scientists* | Project No.: 2032 | Date: 9/6/06 |
| | Project Name: Blackburn & Union Privileges Superfund Site | |
| | Location: Walpole, Massachusetts | |
| | Project Manager: Charles L. Head, P.E., LSP | |
| PID Meter Used: SHA #7 | Collector(s): EMB, BAG | |

**AMBIENT AIR SAMPLE RECORD**

| | | | | | | |
|---|---|---|---|---|---|---|
| Sample ID | AA-01 | | | | | |
| Sample Date | 9/7/2006 | | | | | |
| Direction from Building (ft) | South | | | | | |
| Distance from Building (ft) | 30 | | | | | |
| Distance to Roadway (ft) | 20 | | | | | |
| Intake Height Above Ground Level (ft) | 5 | | | | | |
| Canister Serial No./ Tedlar® Bag | 112 | | | | | |
| Flow Controller No. | 7302027 | | | | | |
| Start Time | 10:53 | | | | | |
| Start Pressure (inches Hg) | 29.5 | | | | | |
| Stop Time | 11:50 | | | | | |
| Stop Pressure (inches Hg) | 5.0 | | | | | |
| Ambient Air Temp (°F) | 75.0 | | | | | |
| Weather Conditions | P. Cloudy | | | | | |
| Noticeable Odor? | No | | | | | |
| PID reading (ppmv) | 0 | | | | | |
| Comment No. | | | | | | |

**COMMENTS**

# APPENDIX C

# DATA USABILITY ASSESSMENT
# PREPARED BY NEW ENVIRONMENTAL HORIZONS, INC.

*New Environmental Horizons, Inc.*

March 31, 2007

Brad Green
Sanborn, Head & Associates, Inc.
20 Foundry Street
Concord, NH 03301

Subject: Phases 1B-4 and 1B-5 RI Data Usability Assessment Report,
Blackburn & Union Privileges Superfund Site, Walpole, Massachusetts

Dear Brad:

Please find enclosed the Data Usability Assessment Report for the Phase 1B-4 and Phase 1B-5 Remedial Investigation (RI) activities for the Blackburn & Union Privileges Superfund Site, Walpole, Massachusetts prepared by the project Quality Assurance Officer (QAO), New Environmental Horizons, Inc. (NEH). This third-party assessment of the usability of the data generated for ecological risk assessment, human health risk assessment, and other project needs is presented in the following documents:

1. Data Usability Worksheets – these worksheets are compliant with USEPA risk assessment guidance requirements and were produced to aid the risk assessors in the interpretation of data usability in support of the Baseline Human Health Risk Assessment (BHHRA) and the Baseline Ecological Risk Assessment (BERA). Three worksheets were generated:
    a. Data Usability Worksheet – Human Health Risk: Phase 1B-4 Soil Vapor & Soil
    b. Data Usability Worksheet – Human Health Risk: Phase 1B-5 Media
    c. Data Usability Worksheet – Ecological Risk: Sediment & Surface Water
2. Tables of Data Usability Summary Statistics for Phase 1B-4 and Phase 1B-5 for all media to support the Data Usability Worksheet information and detail the evaluations of measures of data quality including: accuracy, precision, representativeness, completeness, and sensitivity
3. Individual Data Usability Reports (compliant with USEPA Region I data validation guidance) performed for each laboratory data package for each media and each parameter in support of Phase 1B-4 and Phase 1B-5 sample analyses.
4. Field Audit Checklists performed by Sanborn, Head, and Associates, Inc. (SHA) in support of field collection oversight activities.

These documents are being provided electronically today and will also be provided in a full hard copy report to be remitted to you later this week. NEH has enjoyed our collaboration with SHA on this important project. Please feel free to call me with any questions.

Sincerely,

*Susan*

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| Data Usability Worksheet – Human Health Risk: Phase 1B-4 Soil Vapor & Soil | |
|---|---|
| **Activity** | **Comment** |
| **Field Sampling** | |
| Discuss sampling problems and field conditions that affect data usability. | There were no sampling problems reported from the field collection programs, Phase 1B-4 Remedial Investigation (RI) for soil vapor and soil that affected usability of the data for human health risk assessment. One minor field sampling deviation is discussed in Field QC evaluation, below.<br>Field sampling collection procedures are described in the Phase 1B-4 RI Work Plan for the Blackburn & Union Privileges Superfund Site, Walpole MA (SHA, July 2006). |
| Are samples representative of receptor exposure for this medium (e.g. sample depth, grab vs composite, filtered vs unfiltered, low flow, etc.)? | Phase 1B-4 Sampling:<br>Soil vapor implants were installed in the vicinity of SB-09 and 10 subsurface soil vapor samples + 1 field duplicate (FD) were collected into Summa canisters and transported to the off-site laboratory in support of quantitative risk assessment. On-site screening-level analyses of soil vapor VOCs were also performed; however, these data were not used in quantitative risk calculations. Soil vapor samples were analyzed for VOCs (project-specific list of 40 VOCs by EPA Method TO-15 plus naphthalene and 2-methylnaphthalene by MADEP APH method) to evaluate the vapor inhalation pathway, as identified in the Baseline Human Health Risk Assessment (BHHRA).<br>Two sub-surface soil samples and one FD were collected at SB-09 between 2-3.5 and 6-7.5 foot depths, during Phase 1B-4 RI. These soils were analyzed for the project-specific list of 40 VOCs plus 2-methylnaphthalene and naphthalene. |
| Assess the effect of field QC results on data usability. | All non-rejected data were considered acceptable for use in the BHHRA based on field QC, following data validation and usability assessment. Field QC included field equipment rinseate blanks (EB), trip blanks (TB), an ambient air sample for soil vapor, and field duplicate (FD) samples for all media. Field QC samples were collected at the proper frequencies (1 EB and 1 FD per 20 field samples and 1 TB per cooler containing VOC samples), with the exception of VOC in soil during Phase 1B-4. During sample collection, SHA contacted NEH to indicate that the EB was possibly contaminated during collection by an outside source. Therefore, an EB was not associated with this sampling effort, which is non-compliant with QAPP protocols. Professional judgment was used to consider the VOC soil data valid without the field EB information as a conservative estimate of risk (*i.e.*, field contamination could not be assessed; therefore, a potential high bias is possible). |

| Data Usability Worksheet – Human Health Risk: Phase 1B-4 Soil Vapor & Soil | |
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| **Activity** | **Comment** |
| | Field EB and TB results showed no introduction of contamination during sample collection. A low level of acetone (1.39 µg/$m^3$) and methylene chloride (12.5 µg/$m^3$) was detected in the ambient air sample associated with the soil vapor collection.<br><br>Validation actions to qualify data as estimated (J) based on FD imprecision have been taken for some analytes. In all cases, the qualified data were evaluated and determined to be usable for risk assessment. See comments on Precision and handling of FD results, below. Also, see the individual NEH *Data Usability Reports* generated by NEH (third-party QAO) for each laboratory sample delivery group (SDG) for each media and each parameter type. A summary of field QC samples is presented in Table 2A, attached. |
| Summarize the effect of field sampling issues on the risk assessment, if applicable. | An internal on-site Field Audit (Technical Systems Audit for sampling) was not performed by SHA during the Phase 1B-4 soil vapor sampling or soil sampling. However, senior level staff from SHA were present during soil vapor and soil sampling activities during the Phase 1B-4 RI. No significant sample collection problems or deviations from the standard operating procedures for soil vapor or sediment sampling were observed by SHA's senior staff during the Phase 1B-4 RI. |
| **Analytical Techniques** | |
| Were the analytical methods appropriate for quantitative risk assessment? | Yes. All definitive analyses were generated by USEPA or MassDEP methods. See the Phase 1B-4 Work Plan (SHA, 2006) and prior QA documents including the *Quality Assurance Project Plan*, November 2000; the *Phase 1-B1 Work Plan*, 2003; the *Phase 1B-2 Work Plan*, 2003; and the *Addendum to the Phase 1B-2 Work Plan*, October 2003. |
| Were detection limits adequate? | Overall, yes.<br><br><u>Soil Vapor</u><br>A majority of the non-detected VOC results in soil vapor met PALs (see Tables 22 and 22A, attached). However, seven VOCs (bromodichloromethane, carbon tetrachloride, chloroform, dibromochloromethane, 1,2-dichloroethane, 1,1,2,2-tetrachloroethane, and 1,1,2-trichloroethane) in all samples were reported as non-detected with detection limits exceeding the human health target soil gas concentrations (*USEPA Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils*, USEPA Region I, September 1999). These exceedances were due to method limitations, even though the best available USEPA and MassDEP analytical methods (GC/MS) |

| Data Usability Worksheet – Human Health Risk: Phase 1B-4 Soil Vapor & Soil | |
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| **Activity** | **Comment** |
| | were used for analysis.<br><br>In addition, several VOC results exceeded PALs due to analytical dilutions required to bring some compounds in several samples within the linear range of the analysis.<br><br><u>Soil</u><br>A majority of the non-detected VOC results in soil met PALs used in the RI (97% of the non-detected results met PALs, see Tables 13 and 13A, attached). Only non-detected results for chloroform and vinyl chloride in sample SB-09A/S-2/09-07-06 exceeded the PALs. Data users should note that the current PALs may differ from the PALs listed in prior Site documents (QAPP, 2000 and Phase 1B-5 Work Plan, 2006).<br><br>All non-detected data for flood plain sediment, soil vapor, and soil are considered usable because of the limitations of "best available technology", necessary dilutions or methods used for analysis, and because the approach of using ½ of the RL in the estimate of exposure point concentrations resulted in most of the compounds achieving adequate detection limits for the BHHRA (see the Uncertainty section of the BHHRA for further details). |
| Summarize the effect of analytical technique issues on the risk assessment, if applicable. | Due to analytical method limitations of the EPA TO-15 method, the laboratory could not analyze two compounds in soil vapor samples that were successfully analyzed in the soils: 2-chloroethylvinyl ether and bromochloromethane (see Worksheet #9b, *Phase 1B-4 Work Plan*, SHA 2006, for further details). As these two compounds were non-detected in the associated soil results at SB-09, it is not expected that they would have been detected in the soil vapor; therefore, this issue does not represent a data gap for risk analysis.<br><br>The laboratory reported soil vapor results for 26 compounds that were not requested in the project-specific list of 40 VOCs in the *Phase 1B-4 Work Plan*. These "extra" compounds were as follows: 1,1,2-trichloro-1,2,2-trifluoroethane; 1,2,4-trichlorobenzene; 1,2,4-trimethylbenzene; 1,2-dibromoethane; 1,2-dichloro-1,1,2,2-tetrafluoroethane; 1,2-dichlorobenzene; 1,3,5-trimethylbenzene; 1,3-butadiene; 1,3-dichlorobenzene; 1,4-dichlorobenzene; 1,4-dioxane; 2,2,4-trimethylpentane; 3-chloropropene; 4-ethyltoluene, benzyl chloride; cyclohexane; dichlorodifluoromethane; ethyl acetate; ethyl alcohol; heptane; hexachlorobutadiene; iso-propyl alcohol; n-hexane; propylene; tetrahydrofuran; and vinyl bromide. The results for these compounds were non-detected or detected at levels below the calibration range (as estimated values). These "extra" soil vapor results were evaluated for their potential contribution to risk, as described in the BHHRA. |

| Data Usability Worksheet – Human Health Risk: Phase 1B-4 Soil Vapor & Soil | |
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| **Activity** | **Comment** |
| **Data Quality Objectives** | |
| Precision – How were duplicates handled? | Field Duplicate (FD), Laboratory Matrix Duplicate (MD), and Matrix Spike Duplicate (MSD) samples were used to evaluate precision. MD, MSD, and FD results were evaluated during the data validation procedure. If precision criteria as defined in the site QAPP (November 2000) and *Phase 1B-4* and *Phase 1B-5 Work Plans* (2006) were not met, the associated data were estimated (qualified J or UJ).<br><br>Following the validation, the MD and MSD data were removed from the project database, and the original results of the duplicate pairs were used in quantitative risk assessment. Results qualified due to MD or MSD imprecision were used with the understanding that they may be imprecise with indeterminate bias.<br><br>FD data were handled in the BHHRA as follows.<br><br>Soil Vapor & Soil:<br>If the precision requirement was not met, the higher concentration measured in the FD pair was used to represent the concentration at that sampling location for detected results. If the precision requirement was met for the FD samples, chemical concentrations were averaged prior to calculation of exposure point concentrations. If a chemical was detected in neither the sample nor its duplicate, the lower RL was used to represent the chemical concentration at that sample location.<br><br>The quantitative measures of FD precision, relative percent difference (RPD) between the FD results, are detailed in Tables 23A and 23E, attached, and discussed further below in the Representativeness section. |
| Accuracy – How were split samples handled? | Split samples were not collected by USEPA for Phase 1B-4 RI activities. Previous split sample results for soil can be found in Split Sampling Reports included in Appendices to the *Phase1A and 1B Data Usability Report*. These previous split sample results showed overall comparability was acceptable between USEPA-contractor results and SHA results for soil. No split sample results were collected by USEPA for soil vapor. |
| Representativeness - Indicate any problems associated with data representativeness (e.g., trip blank or rinsate blank contamination, chain of custody problems, etc.). | All QC results that might affect representativeness for all media tested, including results of trip blanks, equipment rinseate blanks, chain-of-custody interpretation, and FD results, were evaluated during data validation. Appropriate actions were taken to qualify data based on the field QC. These qualified data were determined to be usable for risk, with the following specific observations. |

| Data Usability Worksheet – Human Health Risk: Phase 1B-4 Soil Vapor & Soil | |
|---|---|
| **Activity** | **Comment** |
| | All detected VOC results in soil vapor met FD precision with the one exception of acetone. Evidence of sample heterogeneity was observed in the soil sample SB-09A/S-2/09-07-06 for 2-methylnaphthalene and naphthalene. Details are presented in Tables 23A and 23E.<br>The influence of heterogeneity on the human health risk estimates is discussed in the uncertainty section of the BHHRA. |
| Completeness - Indicate any problems associated with data completeness (e.g., incorrect sample analysis, incomplete sample records, problems with field procedures, etc.). | Completeness is calculated as the amount of valid data obtained *vs*. the amount of data planned for collection. The site DQO for completeness is 90% overall completeness for all data. For the soil vapor and soil data collected during the Phase 1B-4 RI activities, 100% completeness was achieved (no data were rejected), as shown in Tables 3, 3A, 7, and 7A, attached. This completeness statistic indicates that the data set is sufficient in quality and quantity to determine the contaminants of potential concern (COPCs) and calculate exposure point concentrations in the BHHRA. |
| Comparability - Indicate any problems associated with data comparability. | Overall, the data generated in support of risk assessment were considered comparable based on adherence to the QAPP defined criteria for field and analytical methods and quality control, using the same sampling and analytical protocols and the same analytical laboratory as for prior RI rounds. Additionally, previous USEPA split sample results for soils gave a quantitative demonstration of the comparability of the data generated during the RI (reference Phase 1A & 1B RI *Data Usability Report*, 2002 and 2004).<br>One exception is for VOC data in the single soil sample SB-09A/S-2/09-07-06. The 40 VOC results reported from the methanol-preserved (medium-level) soil aliquot include moisture correction (accounting for moisture contribution of the sample to the overall extract volume analyzed) and dry-weight calculations, compliant with the most current USEPA method (SW-846 Method 8000C). Previous medium-level (methanol-preserved) VOC soil data for this Site were not moisture-corrected, based on older versions of the USEPA method. Therefore, the VOC soil data for this one sample is not directly comparable to previous medium-level VOC soil data in the project database. This issue does not affect low-level (water-preserved) VOC soil sample results. Data users are directed to details included in the *Data Usability Report* for *Phase 1B-4 SDG BU114* for further details. |
| Were the DQOs specified in the QAPP satisfied? | Analytical DQOs were defined in the QAPP for precision, accuracy, representativeness, completeness, and comparability (see Table 3-1, QAPP, 2000 and Phase 1B-4 Work Plan, 2006). DQOs were met for representativeness (overall), comparability, and completeness (see |

| Data Usability Worksheet – Human Health Risk: Phase 1B-4 Soil Vapor & Soil | |
|---|---|
| **Activity** | **Comment** |
| | discussions above). Though overall, precision and accuracy DQOs were met, individual chemicals in some samples did not achieve QAPP-specified acceptance criteria for one or more QC indicators of precision and accuracy. In such cases, data were qualified (*e.g.*, U, J, UJ, EB, JEB, TB, JTB, B, JB, and R) during data validation, if applicable. These qualified data were determined to be usable for risk assessment in all cases except for results qualified "R" (see further discussion of "R" data below). Consistent with USEPA guidance (USEPA, April 1992), data that are qualified can be used in human health risk assessment with the documentation of the potential bias (as indicated in the project database and the individual Data Usability Reports, attached). |
| Summarize the effect of DQO issues on the risk assessment, if applicable. | There was minimal effect of DQO issues. No data were rejected (qualified "R") during data validation; therefore, 100% completeness was achieved for these media: soil vapor and soil.<br>All the results that were qualified (J or UJ) in were of indeterminate bias (meaning the bias is unknown). Overall, no significant trends of low or high bias for specific compounds were observed in the validated results for these media. Details can be found in Tables 8, 8A, 12 and 12A, attached.<br>Qualified data of known bias were considered usable – therefore, DQO issues do not significantly impact the risk assessment. No data gaps were identified. |
| **Data Validation and Interpretation** | |
| What are the data validation requirements? | The validation requirements were defined in the Phase 1B-4 Work Plan (SHA, 2006), as well as prior documents for Phase 1A and Phase 1B Work Plans, QAPP (2000), and technical memoranda. In summary, the requirements included the USEPA Region I Tier I-, II- and III-type data validation, with modifications. At a minimum, each media and each definitive parameter underwent a full Tier III-type data validation review of one sample delivery group (SDG). Subsequent SDGs for definitive parameters (to be used in quantitative risk assessment), underwent a Tier II-type validation. Non-definitive parameters (e.g., TOC) underwent a Tier I-type review (enhanced to review method QC). Validations of all data were performed by the third-party validator, New Environmental Horizons, Inc. (NEH). |

| Data Usability Worksheet – Human Health Risk: Phase 1B-4 Soil Vapor & Soil | |
|---|---|
| **Activity** | **Comment** |
| What method or guidance was used to validate the data? | *EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses*, USEPA Region I, December 1996 (inclusive of organic validation guidance) and *Region I Laboratory Data Validation Functional Guidelines for Evaluating Inorganics Analyses*, USEPA Region I, February 1989 were followed for all data validations, with modifications as documented in the 2000 QAPP and the Phase 1B-4 Work Plan, including comments below. |
| Was the data validation method consistent with guidance? Discuss any discrepancies. | Yes. The data validation methods were consistent with the guidance, the 2000 QAPP, and the Phase 1B-4 Work Plan (SHA, 2006). Professional technical judgment, as allowed in the USEPA guidance, was used in cases where the guidance did not cover a specific QC issue. Reference the individual Data Usability Reports for each SDG generated for each medium and parameter for details. No significant instances of professional judgment that affected qualification of data or deviated from validation guidance were noted for these data. |
| Were all data qualifiers defined? Discuss those which were not. | Yes. Refer to the individual Data Usability Reports for each SDG, attached. |
| Which qualifiers represent useable data? | U, UJ, and J represent usable data generated during the Phase 1B-4 RI activities for soil vapor and soil. Any data qualified as such were used in the BHHRA. |
| Which qualifiers represent unusable data? | "R" qualifiers represent rejected data that were not used in the BHHRA; note that no data were qualified "R" for Phase 1B-4 activities for these media. |
| How are tentatively identified compounds handled? | Tentatively identified compounds were not reported for this Site. |
| Summarize the effect of data validation and interpretation issues on the risk assessment, if applicable. | All data generated for soil vapor and soil during the Phase 1B-4 RI activities, including both unqualified and qualified (U, UJ, and J) results, were used in the risk assessment. As previously stated above in the "Completeness" section, 100% completeness of valid/usable results was achieved for each media and each definitive parameter type; therefore, a sufficient data set was generated for Human Health Risk Assessment. No data gaps were identified for the risk assessment. No trends in bias of qualified data were identified that would affect the risk assessment. |

| Data Usability Worksheet – Human Health Risk: Phase 1B-4 Soil Vapor & Soil | |
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| **Activity** | **Comment** |
| Additional notes | Minor QAPP deviations or changes (also see Table 1, attached):<br>1) A Laboratory Fortified Blank (LFB), as designated in the original QAPP (2000), was not requested for the Phase 1B-4 analyses. As compared to previous investigations, the lowest-level initial calibration standards for definitive parameters (VOCs, SVOCs including PAHs, and metals) were at very low concentrations and the laboratory analyzed full target analyte Laboratory Control samples (LCS) as a measure of accuracy of the method. Therefore, the laboratory was not required to perform the LFB analysis.<br>2) A low-level standard was not analyzed with the metals, as required by the original QAPP (2000). However, the laboratory included a low-level standard in the calibration curve that was equivalent to the reporting limit (RL) for each metal. This protocol is considered technically acceptable in support of sensitivity requirements for the BHHRA.<br>3) QAPP Worksheets detailing PALs, PQLs, QC requirements, and analytical methods, as different from the original 2000 QAPP, were generated in support of the Phase 1B-4 RI activities. See Table 1, attached, and the Phase 1B-4 Work Plan (SHA, 2006) for further information. |

| Data Usability Worksheet – Human Health Risk: Phase 1B-5 Media | |
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| **Activity** | **Comment** |
| **Field Sampling** | |
| Discuss sampling problems and field conditions that affect data usability. | There were no sampling problems reported from the field collection programs, Phase 1B-5 Remedial Investigation (RI) for floodplain sediment, groundwater, and surface water that affected usability of the data for human health risk assessment.<br><br>Field sampling collection procedures are described in the Phase 1B-5 RI Work Plan for the Blackburn & Union Privileges Superfund Site, Walpole MA (SHA, September 2006). |
| Are samples representative of receptor exposure for this medium (e.g. sample depth, grab vs. composite, filtered vs. unfiltered, low flow, etc.)? | Phase 1B-5 Sampling:<br>Floodplain samples were listed as "sediment" in the project database, though this medium may be considered soil as the percent solids ranged from 67.6% to 89.9%. These samples were analyzed for metals (arsenic and lead) and SVOCs (project-specific list of 17 PAHs). Twelve floodplain samples plus one FD were collected from the 0-1 ft and 1-3 ft depth intervals. Both depth intervals are considered appropriate for human health risk receptors as identified in the BHHRA.<br>Surface water samples were collected in shallow water by lowering decontaminated bottles to the desired depth and allowing them to fill. SVOCs (project specific list including 17 PAHs plus two additional compounds), VOCs (full project target list of 40 VOCs), and both dissolved and total metals (full project target list of 23 metals) were analyzed in surface water for Phase 1B-5 to support the ecological risk assessment. Though both dissolved and total metals were analyzed in surface water for Phase 1B-5 to support the RI, only the total metals results were discussed in the BHHRA.<br>Groundwater samples were collected using low flow sampling techniques, consistent with EPA Region I protocols. Samples for use in the BHHRA were unfiltered and represent "total" analyte results. |
| Assess the effect of field QC results on data usability. | All non-rejected data were considered acceptable for use in the BHHRA based on field QC, following data validation and usability assessment. Field QC included field equipment rinseate blanks (EB), trip blanks (TB) for VOCs only, an ambient air sample for soil vapor, and field duplicate (FD) samples for all media. As dedicated sample collection bottles were used for surface water collection, field EBs were not required for this medium. Field QC samples were collected at the proper frequencies (1 EB |

| Data Usability Worksheet – Human Health Risk: Phase 1B-5 Media | |
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| **Activity** | **Comment** |
| | and 1 FD per 20 field samples and 1 TB per cooler containing VOC samples).<br><br>Field EB and TB results showed no introduction of contamination during sample collection for sediment, groundwater, or surface water that would require qualification of data.<br><br>Validation actions to qualify data as estimated (J) based on FD imprecision have been taken for some analytes. In all cases, the qualified data were evaluated and determined to be usable for risk assessment. See comments on Precision and handling of FD results, below. Also, see the individual NEH *Data Usability Reports* generated by NEH (third-party QAO) for each laboratory sample delivery group (SDG) for each media and each parameter type. A summary of field QC samples is presented in Table 2B, attached. |
| Summarize the effect of field sampling issues on the risk assessment, if applicable. | Internal on-site Field Audits (Technical Systems Audit for sampling) were performed by SHA during the Phase 1B-5 groundwater sampling and sediment sampling. The field audits were successful in that sampling protocols were consistent with the project requirements and SOPs. No significant field issues were noted in the groundwater or sediment Field Audit Checklists, attached. A field audit was not performed for surface water sample collection; however, senior level staff from SHA performed this sampling. No significant sample collection problems or deviations from the standard operating procedures for surface water sampling were noted by SHA's senior staff during the surface water sampling. |
| **Analytical Techniques** | |
| Were the analytical methods appropriate for quantitative risk assessment? | Yes. All definitive analyses were generated by USEPA methods. See the Phase 1B-5 Work Plan (SHA, 2006) and prior QA documents including the *Quality Assurance Project Plan*, November 2000; the *Phase 1-B1 Work Plan*, 2003; the *Phase 1B-2 Work Plan*, 2003; and the *Addendum to the Phase 1B-2 Work Plan*, October 2003. |
| Were detection limits adequate? | Overall, yes.<br><br><u>Floodplain Sediments</u><br>All non-detected results for metals and PAHs in sediments were reported at detection limits below the Project Action Limits (PALs) and below human health risk based criteria (100% of results met PALs; see Tables 17 and |

| Data Usability Worksheet – Human Health Risk: Phase 1B-5 Media | |
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| **Activity** | **Comment** |
| | 18, attached).<br><br>Surface Water<br>All non-detected results for metals and SVOC/PAHs were reported at detection limits below the PALs, with one exception for dibenz(a,h)anthracene due to method limitations. 12 out of 40 VOC compounds did not meet PALs, also due to method limitations. Non-detected VOC results for bromodichloromethane, carbon tetrachloride, chloroform, dibromochloromethane, 1,2-dichloroethane, 1,2-dichloropropane, cis-1,2-dichloropropene, trans-1,3-dichloropropene, 1,1,2,2-tetrachloroethane, tetrachloroethene, trichloroethene, and vinyl chloride exceeded PALs based on human health risk-based criteria (EPA Region IX Tap Water PRGs). See Tables 19, 20, 20A, 21, and 21A, attached, for details.<br><br>All non-detected data for surface water are considered usable because of the limitations of "best available technology" (EPA GC/MS methods) and because the approach of using ½ of the RL in the estimate of exposure point concentrations resulted in most of the compounds achieving adequate detection limits for the BHHRA (see the Uncertainty section of the BHHRA for further details).<br><br>Groundwater<br>A majority of the non-detected results for metals (96%) met PALs. Exceptions were for a few metals results in high pH (>9 s.u.) groundwater locations SH-01D and SH-01R, due to the complexity of the matrix requiring dilutions during analysis, which elevated the sample-specific detection limits (see Tables 14 and 14A, attached). All non-detected results for SVOCs/PAHs met PALs with the exceptions of benzo(a)pyrene and dibenz(a,h)anthracene, due to method limitations (see Tables 15 and 15A, attached).<br><br>Many VOCs did not meet PALs due to method limitations in achieving the very low-level EPA Region IX Tap Water PRGs and due to necessary dilutions needed to reduce matrix effects of the groundwater samples at certain locations (pH > 9). 11 VOCs were non-detected in all groundwater samples at elevated detection limits that exceeded PALs. These include: bromodichloromethane, bromoform, carbon tetrachloride, dibromochloromethane, 1,2-dichloroethane, 1,2-dichloropropane, cis-1,3-dichloropropene, trans-1,3-dichloropropene, 1,1,2,2-tetrachloroethane, tetrachloroethene, and vinyl chloride (see Tables 16 and 16A, attached).<br><br>A majority of the non-detected results that did not meet PALs in |

| Data Usability Worksheet – Human Health Risk: Phase 1B-5 Media | |
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| **Activity** | **Comment** |
| | groundwater were from samples with complex matrices exhibiting high pH values (>9 s.u.), high specific conductance, and visual observation of color and foaming. These attributes suggest that the cause of the elevated detection limits was due to the complicated nature of Site groundwater in certain locations (in particular, groundwater with pH greater than 9 s.u.) and/or a limitation of currently available analytical methods to successfully quantitate these compounds in the complex medium. Consequently, similar matrix effects and/or analytical difficulty would be anticipated in repeat analyses of these samples. Therefore, all non-detected data for groundwater are considered usable because of the limitations of "best available technology" (EPA GC/MS methods) and necessary dilutions due to the complex groundwater matrix. |
| Summarize the effect of analytical technique issues on the risk assessment, if applicable. | No significant effects other than some sensitivity issues due to limitations of "best available technology" of EPA methods used (see above for details). Some data were reported below the method RL (below the lowest-level in calibration curve). These data were qualified as "J" and have an indeterminate bias. |
| **Data Quality Objectives** | |
| Precision – How were duplicates handled? | Field Duplicate (FD), Laboratory Matrix Duplicate (MD), and Matrix Spike Duplicate (MSD) samples were used to evaluate precision. MD, MSD, and FD results were evaluated during the data validation procedure. If precision criteria as defined in the site QAPP (November 2000) and the Phase 1B-5 Work Plan (2006) were not met, the associated data were estimated (qualified J or UJ).<br><br>Following the validation, the MD and MSD data were removed from the project database, and the original results of the duplicate pairs were used in quantitative risk assessment. Results qualified due to MD or MSD imprecision were used with the understanding that they may be imprecise with indeterminate bias.<br><br>FD data were handled in the BHHRA as follows.<br><br><u>Sediment, Groundwater, and Surface Water</u>:<br>If the precision requirement <u>was not</u> met, the higher concentration measured in the FD pair was used to represent the concentration at that sampling location for detected results. If the precision requirement <u>was</u> met for the FD samples, chemical concentrations were averaged prior to calculation of exposure point concentrations. If a chemical was detected in neither the sample nor its duplicate, the lower RL was used to represent the |

| Data Usability Worksheet – Human Health Risk: Phase 1B-5 Media | |
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| **Activity** | **Comment** |
| | chemical concentration at that sample location.<br><br>The quantitative measure of FD precision, relative percent difference (RPD) between the FD results, is described in the individual Data Usability Reports prepared by NEH for each SDG (attached) and are summarized in Tables 23B, 23C, 23E, 24, and 25 and discussed further below in the Representativeness section. |
| Accuracy – How were split samples handled? | Split samples were not collected by EPA for Phase 1B-5 RI activities. Previous split sample results for these media can be found in Split Sampling Reports included in Appendices to the *Phase1A and 1B Data Usability Report*. These previous split sample results showed overall comparability was acceptable between EPA-contractor results and SHA results. |
| Representativeness - Indicate any problems associated with data representativeness (e.g., trip blank or rinseate blank contamination, chain of custody problems, etc.). | All QC results that might affect representativeness for all media tested, including results of trip blanks, equipment rinseate blanks, chain-of-custody interpretation, and FD results, were evaluated during data validation.<br><br>Appropriate actions were taken to qualify data based on the field QC. These qualified data were determined to be usable for risk, with the following specific observations. FD precision results are presented in Tables 23B, 23C, 23E, 24, and 25.<br><br>Metals results in sediment showed acceptable precision and representativeness in the FD samples. However, evidence of sample heterogeneity was observed in the floodplain sediment FD at location FP-09/0-1/10-13-06 for several PAHs.<br><br>SVOC/PAH, VOC (2 detected results), and metals results in groundwater showed acceptable precision and representativeness in the FD samples.<br><br>Metals in surface water showed acceptable FD results with one exception for copper in the dissolved metals surface water sample. All VOC results in surface water were not detected. Evidence of sample heterogeneity for several PAHs was observed in the surface water location SW-105/09-29-06. |

| Data Usability Worksheet – Human Health Risk: Phase 1B-5 Media | |
|---|---|
| **Activity** | **Comment** |
| | The influence of heterogeneity on the human health risk estimates are discussed in the uncertainty section of the BHHRA. |
| Completeness - Indicate any problems associated with data completeness (e.g., incorrect sample analysis, incomplete sample records, problems with field procedures, etc.). | Completeness is calculated as the amount of valid data obtained *vs*. the amount of data planned for collection. The site DQO for completeness is 90% overall completeness for all data. For the floodplain sediment data collected, 100% completeness was achieved for PAHs and metals (see Tables 5, 5A, and 5B). Surface water data (see summary completeness Table 6) achieved 100% completeness for SVOC/PAHs (see Table 6B) and metals (see Table 6A) and 99.4% completeness for VOCs (see Table 6C; one result rejected for 2-chloroethylvinyl ether in sample SW-108/09-29-06). Groundwater data (see summary completeness Table 4) achieved 100% completeness for SVOC/PAHs (see Table 4B) and metals (see Table 4A) and 99.9% completeness for VOCs (see Table 4C; two results rejected for 2-chloroethylvinyl ether in samples SH-24S/09-28-06 and SH-13S/09-28-06). All results for non-definitive parameters (e.g., TOC, natural attenuation parameters, etc.) achieved 100% completeness.<br><br>The three results for 2-chloroethylvinyl ether were rejected as unusable for risk characterization due to severe matrix effects (less than 10% recovery of the matrix spike/matrix spike duplicate QC samples). The rejected results do not represent a data gap because this compound is not a COPC based on screening results for the BHHRA.<br><br>These completeness statistics indicate that the combined Phase 1B-5 data set is sufficient in quality and quantity to determine the contaminants of potential concern (COPCs) and calculate exposure point concentrations in the BHHRA. |
| Comparability - Indicate any problems associated with data comparability. | Overall, the data generated in support of risk assessment were considered comparable based on adherence to the QAPP defined criteria for field and analytical methods and quality control, using the same sampling and analytical protocols and the same analytical laboratory as for prior RI rounds. Additionally, previous USEPA split sample results for these media gave a quantitative demonstration of the comparability of the data generated during the RI (refer to the Phase 1A & 1B RI *Data Usability Report*, 2002 and 2004). |
| Were the DQOs specified in the QAPP satisfied? | Analytical DQOs were defined in the QAPP for precision, accuracy, representativeness, completeness, and comparability (see Table 3-1, QAPP, 2000 and Phase 1B-5 Work Plan, 2006). DQOs were met for |

| Data Usability Worksheet – Human Health Risk: Phase 1B-5 Media | |
|---|---|
| **Activity** | **Comment** |
| | representativeness (overall), comparability, and completeness (see discussions above). Though overall, precision and accuracy DQOs were met, individual chemicals in some samples did not achieve QAPP-specified acceptance criteria for one or more QC indicators of precision and accuracy. In such cases, data were qualified (*e.g.*, U, J, UJ, EB, JEB, TB, JTB, B, JB, and R) during data validation, if applicable. These qualified data were determined to be usable for risk assessment in all cases except for results qualified "R" (see further discussion of "R" data below). Consistent with USEPA guidance (USEPA, April 1992), data that are qualified can be used in human health risk assessment with the documentation of the potential bias (as indicated in the project database and the individual Data Usability Reports attached to this Appendix). |
| Summarize the effect of DQO issues on the risk assessment, if applicable. | There was minimal effect of DQO issues. Only three results for the VOC 2-chloroethylvinyl ether were rejected (qualified "R") during data validation; therefore, for the entire Phase 1B-5 data set, 100% completeness was achieved for all media for SVOC/PAHs, metals, and non-definitive parameters and 99% completeness achieved for VOCs.<br>A majority of the results that were qualified (J or UJ) in all three media were of indeterminate bias (meaning the bias is unknown). Several PAHs in sediment were qualified as biased low, primarily in one sample (FP-09C/0-1'/10-13-06) due to holding time exceedances. Several metals and individual SVOCs and VOCs were qualified as biased low in groundwater and surface water, but at rates that would not impact usability for risk assessment (<5% qualified as biased low). Overall, no significant trends of low or high bias for specific compounds were observed in the validated results for these media. Details can be found in Tables 9, 9A, 9B, 9C, 10, 10A, 10B,11, 11A, 11B, and 11C.<br>Qualified data of known bias were considered usable – therefore, DQO issues do not significantly impact the risk assessment. No data gaps were identified. |
| **Data Validation and Interpretation** | |
| What are the data validation requirements? | The validation requirements were defined in the Phase 1B-5 Work Plan (SHA, 2006), as well as prior documents for Phase 1A and Phase 1B Work Plans, QAPP (2000), and technical memoranda. In summary, the requirements included the USEPA Region I Tier I-, II- and III-type data validation, with modifications. At a minimum, each media and each definitive parameter underwent a full Tier III-type data validation review of one sample delivery group (SDG). Subsequent SDGs for definitive parameters (to be used in quantitative risk assessment), underwent a Tier II-type validation. Non-definitive parameters (e.g., TOC) underwent a Tier |

| Data Usability Worksheet – Human Health Risk: Phase 1B-5 Media | |
|---|---|
| **Activity** | **Comment** |
| | I-type review (enhanced to review method QC). Validations of all data were performed by the third-party validator, New Environmental Horizons, Inc. (NEH). |
| What method or guidance was used to validate the data? | *EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses*, USEPA Region I, December 1996 (inclusive of organic validation guidance) and *Region I Laboratory Data Validation Functional Guidelines for Evaluating Inorganics Analyses*, USEPA Region I, February 1989 were followed for all data validations, with modifications as documented in the 2000 QAPP and the Phase 1B-5 Work Plan (2006), including comments below. |
| Was the data validation method consistent with guidance? Discuss any discrepancies. | Yes. The data validation methods were consistent with the guidance, the 2000 QAPP, and the Phase 1B-5 Work Plan (SHA, 2006). Professional technical judgment, as allowed in the USEPA guidance, was used in cases where the guidance did not cover a specific QC issue. Reference the individual Data Usability Reports for each SDG generated for each medium and parameter for details. No significant instances of professional judgment that affected qualification of data or deviated from validation guidance were noted for these data. |
| Were all data qualifiers defined? Discuss those which were not. | Yes. Reference the individual Data Usability Reports for each SDG (attached). |
| Which qualifiers represent useable data? | U, UJ, and J represent usable data generated during the Phase 1B-5 RI activities for floodplain sediment, groundwater, and surface water. Any data qualified as such were used in the BHHRA. |
| Which qualifiers represent unusable data? | "R" qualifiers represent rejected data that were not used in the BHHRA. |
| How are tentatively identified compounds handled? | Tentatively identified compounds were not reported for this Site. |
| Summarize the effect of data validation and interpretation issues on the risk assessment, if applicable. | All data generated for sediment, groundwater, and surface water during the Phase 1B-5 RI, including both unqualified and qualified (U, UJ, and J) results, were used in the risk assessment. As previously stated above in the "Completeness" section, 100% completeness of valid/usable results was achieved for each media for SVOC/PAHs and metals and 99% |

| Data Usability Worksheet – Human Health Risk: Phase 1B-5 Media | |
|---|---|
| **Activity** | **Comment** |
| | completeness achieved for VOCs; therefore, a sufficient data set was generated for Human Health Risk Assessment. No data gaps were identified for the risk assessment. No trends in bias of qualified data were identified that would affect the risk assessment. |
| Additional notes | Minor QAPP deviations and changes (also see Table 1, attached):<br>1) A Laboratory Fortified Blank (LFB), as designated in the original QAPP (2000), was not requested for Phase 1B-5 RI analyses. As compared to previous investigations, the lowest-level initial calibration standards for definitive parameters (VOCs, SVOCs including PAHs, and metals) were at very low concentrations and the laboratory analyzed full target analyte Laboratory Control samples (LCS) as a measure of accuracy of the method. Therefore, the laboratory was not required to perform the LFB analysis.<br>2) A low-level standard was not analyzed with the metals, as required by the original QAPP (2000). However, the laboratory included a low-level standard in the calibration curve that was equivalent to the reporting limit (RL) for each metal. This protocol is considered technically acceptable in support of sensitivity requirements for the BHHRA.<br>3) QAPP Worksheets detailing PALs, PQLs, QC requirements, and analytical methods, as different from the original 2000 QAPP, were generated in support of the Phase 1B-5 RI activities. See Table 1, attached, and the Phase 1B-5 Work Plan (SHA, 2006) for further information. |

| Data Usability Worksheet – Ecological Risk: Sediment & Surface Water | |
|---|---|
| **Activity** | **Comment** |
| **Field Sampling** | |
| Discuss sampling problems and field conditions that affect data usability. | There were no sampling problems reported from the field work associated with the Phase 1B-5 Remedial Investigation (RI) including surface water and flood plain "sediments" that could affect data usability.<br>Field sampling collection procedures are described in the Phase 1B-5 RI Work Plan for the Blackburn & Union Privileges Superfund Site, Walpole MA (SHA, September 2006). |
| Are samples representative of receptor exposure for this medium (e.g. sample depth, grab vs. composite, filtered vs. unfiltered, low flow, etc.)? | <u>Phase 1B-5 Sampling</u>:<br>Flood plain samples were listed as "sediment" in the project database, though this medium may be considered soil as the percent solids ranged from 67.6% to 89.9%. These samples were analyzed for two metals (arsenic and lead) and SVOCs (project-specific list of 17 PAHs). Flood plain samples were collected from the 0-1 ft and 1-3 ft depth intervals. The 0-1 ft depth interval is considered appropriate for ecological risk receptors as identified in the Baseline Ecological Risk Assessment (BERA); therefore, the metals and PAH results from this depth interval were incorporated into the BERA.<br><br>Surface water samples were collected in shallow water by lowering decontaminated bottles to the desired depth and allowing them to fill. SVOCs (project specific list including 17 PAHs plus two additional compounds), VOCs (full project target list of 40 VOCs), and both dissolved and total metals (full project target list of 23 metals) were analyzed in surface water for Phase 1B-5 to support the ecological risk assessment. Sample aliquots for dissolved metals were collected unpreserved in the field and filtered (0.45µm) at the laboratory within 24 hours of collection. They were then preserved prior to sample analysis. |
| Assess the effect of field QC results on data usability. | All non-rejected data were considered acceptable for use in ecological risk assessment based on field QC, following data validation and usability assessment. Field QC included field equipment rinseate blanks (EB) for flood plain sediments, trip blanks (TB) for surface water (VOCs only), and field duplicate (FD) samples for both sediments and surface water. As dedicated sample collection bottles were used for surface water collection, field EBs were not required for this medium. EBs and TBs were collected at the proper frequencies (1 EB per 20 field samples and 1 TB per cooler containing VOC samples) and results of these field blanks showed no introduction of contamination during sample collection for |

| Data Usability Worksheet – Ecological Risk: Sediment & Surface Water | |
|---|---|
| **Activity** | **Comment** |
| | sediment or surface water during Phase 1B-5 RI.<br><br>Validation actions to qualify data as estimated (J) based on FD imprecision have been taken for some samples/analytes. In all cases, the qualified data were evaluated and determined to be usable for risk assessment. See comments on Precision and handling of FD results, below. Also, see the individual *NEH Data Usability Reports* generated for each laboratory sample delivery group (SDG) for each media and each parameter type. A summary of field QC samples is presented in Table 2B, attached. |
| Summarize the effect of field sampling issues on the risk assessment, if applicable. | An internal on-site Field Audit (Technical Systems Audit for sampling) was performed by SHA during the Phase 1B-5 flood plain sediment sampling. The field audit was successful in that sampling protocols were consistent with the project requirements and SOPs. No significant field issues were noted in the sediment Field Audit Checklist, attached. A field audit was not performed for surface water sample collection; however, senior level staff from SHA performed this sampling. No significant sample collection problems or deviations from the standard operating procedures for surface water sampling were noted by SHA's senior staff during the surface water sampling. |
| **Analytical Techniques** | |
| Were the analytical methods appropriate for quantitative risk assessment? | Yes. All definitive analyses for metals, PAHs, and VOCs were generated by EPA methods. See the Phase 1B-5 Work Plan (SHA, 2006) and prior QA documents including the *Quality Assurance Project Plan*, November 2000; the *Phase 1-B1 Work Plan*, 2003; the *Phase 1B-2 Work Plan*, 2003; and the *Addendum to the Phase 1B-2 Work Plan*, October 2003. |
| Were detection limits adequate? | Overall, yes. All non-detected results for metals and PAHs in sediments were reported at detection limits below the Project Action Limits (PALs) and below ecological risk based criteria (see Tables 17 and 18, attached). For surface water, all non-detected results for metals and PAHs were reported at detection limits below the PALs (Tables 19, 20, and 20A, attached) and ecological risk based criteria; however, four VOC compounds did not meet ecological risk based criteria (Tables 21 and 21A, attached). Non-detected VOC results for carbon disulfide, cis-1,2-dichloropropene, trans-1,3-dichloropropene, and m,p-xylene exceeded ecological risk-based criteria (ORNL Tier II Secondary Chronic Values for Aquatic Biota, Suter & Tsao, 1996). These exceedances were due to method limitations, even though the best available EPA analytical method |

| Data Usability Worksheet – Ecological Risk: Sediment & Surface Water | |
|---|---|
| **Activity** | **Comment** |
| | (GC/MS) was used for analysis. All such data are considered usable because the approach of using ½ of the RL in the estimate of exposure point concentration will result in values at or below the ecological risk based criteria. |
| Summarize the effect of analytical technique issues on the risk assessment, if applicable. | No significant effects. Some data were reported below the method RL (below the lowest-level in calibration curve). These data were qualified as "J" and have an indeterminate bias. |
| **Data Quality Objectives** | |
| Precision – How were duplicates handled? | Field Duplicate (FD), Laboratory Matrix Duplicate (MD), and Matrix Spike Duplicate (MSD) samples were used to evaluate precision. MD, MSD, and FD results were evaluated during the data validation procedure. If precision criteria as defined in the site QAPP (SHA, November 2000) and *Phase 1B-5 Work Plan* (SHA, 2006) were not met, the associated data were estimated (qualified J or UJ).<br>Following the validation, the MD and MSD data were removed from the project database, and the original results of the duplicate pairs were used in quantitative risk assessment. Results qualified due to MD or MSD imprecision were used with the understanding that they may be imprecise with indeterminate bias.<br><br>FD data for flood plain sediments and surface water were handled in the ecological risk assessment as follows.<br><br>If the precision requirement <u>was not</u> met, we used the higher concentration measured in the field duplicate pair to represent the concentration at that sampling location for detected results. If the precision requirement <u>was</u> met for the FD samples, chemical concentrations were arithmetically averaged prior to calculation of exposure point concentrations. If a chemical was detected in neither the sample nor its duplicate, the lower RL was used to represent the chemical concentration at that sample location.<br><br>The quantitative measures of FD precision, relative percent difference (RPD) between the FD results, are detailed in Tables 23C and 23D, attached, and discussed further below in the Representativeness section. |
| Accuracy – How were split samples handled? | Split samples were not collected by EPA for Phase 1B-5 RI activities. Previous split sample results for these media can be found in Split Sampling Reports included in Appendices to the *Phase1A and 1B Data* |

| Data Usability Worksheet – Ecological Risk: Sediment & Surface Water | |
|---|---|
| **Activity** | **Comment** |
| | *Usability Report*. These previous split sample results showed overall comparability was acceptable between EPA-contractor results and SHA results. |
| Representativeness - Indicate any problems associated with data representativeness (e.g., trip blank or rinseate blank contamination, chain of custody problems, etc.). | All QC results that might affect representativeness for all media tested, including results of trip blanks, equipment rinseate blanks, chain-of-custody interpretation, and FD results, were evaluated during data validation. Appropriate actions were taken to qualify data based on the field QC. These qualified data were determined to be usable for risk, with the following specific observations.<br>Metals results in sediment and surface water showed acceptable precision and representativeness in the FD samples with one exception for copper in the dissolved metals sample. This is an indication of overall acceptable representativeness for metals in the media sampled. All VOC results in surface water were not detected.<br>Evidence of sample heterogeneity was observed for several PAHs in both media, based on relative percent difference (RPD) of FD results exceeding QAPP acceptance criteria. In the flood plain sediment FD samples at location FP-09/0-1/10-13-06, several PAHs showed greater than 50% RPD between FD results and at surface water location SW-105B/09-29-06, several PAHs had greater than 30% RPD between FD results. Details are presented in Tables 23C and 23D, attached. The influence of heterogeneity on the risk estimates are discussed in the uncertainty section of the BERA. |
| Completeness - Indicate any problems associated with data completeness (e.g., incorrect sample analysis, incomplete sample records, problems with field procedures, etc.). | Completeness is calculated as the amount of valid data obtained *vs*. the amount of data planned for collection. The site DQO for completeness is 90% overall completeness for all data. Overall, the completeness criterion of 90% usable data was achieved (see summary completeness Tables 5 and 6). 100% completeness was achieved for metals and PAHs in flood plain sediments (see Tables 5A and 5B) and surface water (see Tables 6A and 6B). 99.4% completeness was achieved for VOCs in surface water (see Table 6C).<br><br>These completeness statistics indicate that the combined Phase 1B-5 sediment and surface water data sets, collected in support of ecological risk assessment, are sufficient in quality and quantity to determine the contaminants of potential concern (COPCs) and calculate exposure point concentrations in the BERA.<br><br>Only one result was rejected as unusable for risk characterization: 2-chloroethylvinyl ether in one surface water sample due to severe matrix |

| Data Usability Worksheet – Ecological Risk: Sediment & Surface Water | |
|---|---|
| **Activity** | **Comment** |
| | effects (less than 10% recovery of the matrix spike/matrix spike duplicate QC samples). The rejected result does not represent a data gap because it is not a COPC and was not carried forward into the BERA. |
| Comparability - Indicate any problems associated with data comparability. | Data generated in support of risk assessment were considered comparable based on adherence to the QAPP defined criteria for field and analytical methods and quality control, using the same sampling and analytical protocols and the same analytical laboratory as for prior RI rounds. Additionally, previous EPA split sample results for sediments and surface water samples provided a quantitative demonstration of the comparability of the data generated during the RI (refer to the Phase 1A & 1B RI *Data Usability Report*, 2002 and 2004). |
| Were the DQOs specified in the QAPP satisfied? | Analytical DQOs were defined in the QAPP for precision, accuracy, representativeness, completeness, and comparability (see Table 3-1, QAPP, 2000 and Phase 1B-5 Work Plan, 2006). DQOs were met for representativeness (overall), comparability, and completeness (see discussions above). Though overall, precision and accuracy DQOs were met, individual chemicals in some samples did not achieve QAPP-specified acceptance criteria for one or more QC indicators of precision and accuracy. In such cases, data were qualified (U, J, UJ, and R) during data validation, if applicable. These qualified data were determined to be usable for risk assessment in all cases except for results qualified "R" (see further discussion of "R" data below). Consistent with EPA guidance, data that are qualified can be used in risk assessment with the documentation of the potential bias (as indicated in the project database and the attached individual Data Usability Reports). |
| Summarize the effect of DQO issues on the risk assessment, if applicable. | There was minimal effect of DQO issues. The one result that was rejected (qualified "R") during data validation (see Completeness comments, above), was not used in risk assessment and does not create a data gap for the risk evaluation. Overall completeness goals of 90% were met for both media (flood plain sediment and surface water) and qualified data of known bias were considered usable – therefore, DQO issues do not significantly impact the risk assessment. The majority of the results that were qualified (J or UJ) were of indeterminate bias (meaning the bias is unknown). 12% of the PAH results were qualified as biased low, primarily in one sample (FP-09C/0-1'/10-13-06) due to holding time exceedances. Overall, no significant trends of low or high bias for specific compounds were observed in the validated results for these media. Details can be found in Tables 10, 10A, 10B, 11, 11A, 11B, and 11C, attached. |

| Data Usability Worksheet – Ecological Risk: Sediment & Surface Water | |
|---|---|
| **Activity** | **Comment** |
| **Data Validation and Interpretation** | |
| What are the data validation requirements? | The validation requirements were defined in the *Quality Assurance Project Plan* for the Phase 1B-5 Work Plan, as well as prior documents for Phase 1A and Phase 1B Work Plans, QAPP, and technical memoranda. In summary, the requirements included the EPA Region I Tier I-, II- and III-type data validation, with modifications. At a minimum, each media and each definitive parameter underwent a full Tier III-type data validation review of one sample delivery group (SDG). Subsequent SDGs for definitive parameters (to be used in quantitative risk assessment), underwent a Tier II-type validation. Non-definitive parameters (e.g., TOC) underwent a Tier I-type (enhanced to review method QC) review. Validations of all data were performed by the third-party validator, New Environmental Horizons, Inc. (NEH). |
| What method or guidance was used to validate the data? | EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses, EPA Region I, December 1996 (inclusive of organic validation guidance) and Region I Laboratory Data Validation Functional Guidelines for Evaluating Inorganics Analyses, EPA Region I, February 1989 were followed for all data validations, with modifications as documented in the 2000 QAPP and the Phase 1B-5 Work Plan (including comments below). |
| Was the data validation method consistent with guidance? Discuss any discrepancies. | Yes. The data validation methods were consistent with the guidance, the 2000 QAPP, and the Phase 1B-5 Work Plan. Professional technical judgment, as allowed in the EPA guidance, was used in cases where the guidance did not cover a specific QC issue. Reference the individual Data Usability Reports for each SDG generated for each medium and parameter for details. No significant instances of professional judgment that affected qualification of data or deviated from validation guidance were noted for these data. |
| Were all data qualifiers defined? Discuss those which were not. | Yes. Reference the individual Data Usability Reports for each SDG, attached. |
| Which qualifiers represent useable data? | U, UJ, and J represent usable data. Any data qualified as such has been used in the BERA. |
| Which qualifiers represent unusable data? | "R" qualifiers represent rejected data that were not used in the BERA. |

| Data Usability Worksheet – Ecological Risk: Sediment & Surface Water | |
|---|---|
| **Activity** | **Comment** |
| How are tentatively identified compounds handled? | Tentatively identified compounds were not reported for this Site. |
| Additional notes | Minor QAPP deviations and changes (also see Table 1, attached):<br><br>1) A Laboratory Fortified Blank (LFB), as designated in the original QAPP (2000), was not requested for the Phase 1B-5 RI analyses. As compared to previous investigations, the lowest-level initial calibration standards for definitive parameters (VOCs, SVOCs including PAHs, and metals) were at very low concentrations and the laboratory analyzed full target analyte Laboratory Control samples (LCS) as a measure of accuracy of the method. Therefore, the laboratory was not required to perform the LFB analysis.<br><br>2) A low-level standard was not analyzed with the metals, as required by the original QAPP (2000). However, the laboratory included a low-level standard in the calibration curve that was equivalent to the reporting limit (RL) for each metal. This protocol is considered technically acceptable in support of sensitivity requirements for the BERA.<br><br>3) QAPP Worksheets detailing PALs, PQLs, QC requirements, and analytical methods, as different from the original 2000 QAPP, were generated in support of the Phase 1B-5 RI activities. See Table 1, attached, and the Phase 1B-5 Work Plan (SHA, 2006) for further information. |

TABLE 1
Summary of QAPP Ammendments/Modifications
Data Usability Assessment
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Date Implemented/Documented | QAPP Ammendment/Modification |
|---|---|
| Phase 1B-4 RI Work Plan (June 2006) & Phase 1B-5 RI Work Plan (September 2006) | A Laboratory Fortified Blank (LFB), as designated in the original QAPP (2000), was not requested for the Phase 1B-4 and Phase 1B-5 RI analyses. As compared to previous investigations, the lowest-level initial calibration standards for definitive parameters (VOCs, SVOCs including PAHs, and metals) were at very low concentrations and the laboratory analyzed full target analyte Laboratory Control samples (LCS) as a measure of accuracy of the method. Therefore, the laboratory was not required to perform the LFB analysis. |
| Phase 1B-4 RI Work Plan (June 2006) & Phase 1B-5 RI Work Plan (September 2006) | A low-level standard was not analyzed with the metals, as required by the original QAPP (2000). However, the laboratory included a low-level standard in the calibration curve that was equivalent to the reporting limit (RL) for each metal. This protocol is considered technically acceptable in support of sensitivity requirements for risk assessment and other data uses. |
| Phase 1B-4 RI Work Plan (June 2006) & Phase 1B-5 RI Work Plan (September 2006) | QAPP Worksheets detailing project-specific or updated PALs, PQLs, QC requirements, and analytical methods, as different from the original 2000 QAPP, were generated in support of the Phase 1B-4 and 1B-5 RI activities. These are included in the Phase 1B-4 and Phase 1B-5 Work Plans (SHA, 2006). In summary, the most significant change was to add soil vapor sampling and analysis (including standard operating procedures for field sampling, laboratory analysis, setting PQLs & PALs, and TO-15 method QC requirements). Other changes pertain to updating PALs for some media and adding parameters to assist in the evaluation of feasibility of remedial alternatives (e.g., for groundwater: ferrous iron, ethane, ethene, and methane were added). |

TABLE 2A

March 31, 2007

Summary of Field and Laboratory Quality Control Samples - Phase 1B-4
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Medium/ Matrix | Analytical Parameter | Analytical Method/ SOP Reference | No. of Sampling Locations[1] | No. of Field Duplicate Samples | Organic | Inorganic | No. of VOA Trip Blanks[2] | No. of Equip. Blanks | No. of PE Samples (external) | No. of LCS Samples (internal)[3] | Total No. of Samples to Lab[4] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | No. of MS/MSD | No. of MS/MD or MD only | | | | | |
| **Soil** (SDG BU114) | VOCs | L-29 | 2 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 6 |
| **Soil Vapor** (SDG BU1001) | Fixed Lab VOCs | L-54, L-55 | 10 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 13 |

Notes:

[1] If samples were collected from different depths at the same horizontal location, each discrete sampling depth was counted as a separate sampling location/station.

[2] The number of trip blanks listed above reflects 1 sample per cooler shipment, per sample delivery group (SDG). These samples are only used when analyzing the SDG for VOCs.

[3] These include a laboratory control sample (LCS) or standard reference material (SRM) sample, which were included in each SDG (internal), performed by the laboratory, and used for the purpose of method performance evaluation.

[4] Total No. Samples to Lab = No. Sampling Locations + No. Field Duplicates + Trip Blanks + Equip Blanks + PE (does not include MS/MSD or LCS samples generated in lab).

Refer to the text of the this report and the Data Usability Reports prepared by New Environmental Horizons, Inc. (NEH) included in Appendix B of this report for further discussion and evaluation of field and laboratory quality assurance/quality control (QA/QC) measures.

TABLE 2B

March 31, 2007

Summary of Field and Laboratory Quality Control Samples - Phase 1B-5
Phases 1B-4 and 1B-5 Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Medium/ Matrix | Analytical Parameter | Analytical Method/ SOP Reference | No. of Sampling Locations[1] | No. of Field Duplicate Samples | Organic | Inorganic | No. of VOA Trip Blanks[2] | No. of Equip. Blanks | No. of PE Samples (external) | No. of LCS Samples (internal)[3] | Total No. of Samples to Lab[4] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | No. of MS/MSD | No. of MS/MD or MD only | | | | | |
| **Groundwater** (SDGs BU212, BU213, BU214 ) | VOCs | L-29 | 45 | 3 | 3 | 0 | 3 | 3 | 0 | 3 | 60 |
| | Methane, Ethane, Ethene | L-59 | 45 | 3 | 0 | 0 | 3 | 3 | 0 | 3 | 57 |
| | 17 PAHs + 2 SVOCs | L-31 | 45 | 3 | 3 | 0 | 0 | 3 | 0 | 3 | 57 |
| | Metals | L-19, L-23 | 45 | 3 | 0 | 3 | 0 | 3 | 0 | 3 | 57 |
| | Ferrous Iron ($Fe^{+2}$) | L-60 | 45 | 3 | 0 | 3 | 0 | 3 | 0 | 3 | 57 |
| | Anions (Chloride, Nitrate, Sulfate), Alkalinity, Sulfide, TDS, TKN, TOC, Density, Viscosity | L-8, L-9, L-40, L-50, L-51, L-56, L-57, L-58 | 45 | 3 | 0 | 3 | 0 | 3 | 0 | 0 | 54 |
| | pH* | Field Screening/ F-1669B | 46 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 46 |
| **Surface Water** (SDG BU303) | VOCs | L-29 | 4 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 8 |
| | 17 PAHs + 2 SVOCs | L-31 | 4 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 7 |
| | Total Metals | L-19, L-23 | 4 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 7 |
| | Dissolved Metals | L-19, L-23 | 4 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 7 |
| | TOC | L-56 | 4 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 6 |
| | pH* | Field Screening/ F-1669B | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| **Sediment** (SDG BU412) | 17 PAHs | L-31 | 12 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 16 |
| | Arsenic, Lead | L-23 | 12 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 16 |

Notes:

[1] If samples were collected from different depths at the same horizontal location, each discrete sampling depth was counted as a separate sampling location/station. This table includes targeted soil samples which were identified in the field on the basis of observations (visual, olfactory, etc.) and/or on the basis of field screening, in addition to random sampling locations identified in the Quality Assurance Project Plan (QAPP), prepared by Sanborn, Head & Associates, Inc. (SHA) dated November 2000.

[2] The number of trip blanks listed above reflects 1 sample per cooler shipment, per sample delivery group (SDG). These samples are only used when analyzing the SDG for VOCs.

[3] These include a laboratory control sample (LCS) or standard reference material (SRM) sample, which were included in each SDG (internal), performed by the laboratory, and used for the purpose of method performance evaluation.

[4] Total No. Samples to Lab = No. Sampling Locations + No. Field Duplicates + Trip Blanks + Equip Blanks + PE (does not include MS/MSD or LCS samples generated in lab).

"*" Field duplicate samples for pH measurement of groundwater and surface water was not performed. Consistent with the procedures included in Standard Operating Procedure (SOP) S-1669F, pH of groundwater was monitored continuously during groundwater collection and stabilized pH measurements were recorded prior to sample collection. Refer to the data assessment memorandum for pH included in Appendix C of the Phase 1B-5 RI report (SHA, 2007) for additional detail.

Refer to the text of the Phase 1B-5 RI report (SHA, 2007) and the Data Usability Worksheets prepared by New Environmental Horizons, Inc. (NEH) for further discussion and evaluation of field and laboratory quality assurance/quality control (QA/QC) measures.

TABLE 3

March 31, 2007

Summary of Overall Completeness - Soil
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Chemical Analyses | Method | Number of Samples Planned for Phase 1B-4 | Number of Results Expected* | Actual Number of Samples Collected | Actual Number of Usable Results Generated** | Percent Overall Completeness |
|---|---|---|---|---|---|---|
| VOCs | USEPA SW-846 Method 8260B | 2 | 84 | 2 | 84 | 100% |

Notes:

1. "*" The "Number of Results Expected" represents the number of planned samples times the number of individual parameters in each type of analysis. For example, if 10 samples were planned to be collected for analysis of SVOCs, and there are 66 individual SVOC compounds, the total "Number of Results Expected"is 10 x 66 = 660.

2. "**" The "Actual Number of Usable Results Generated" represents the number of actual samples collected times the number of individual parameters in each type of analysis, minus the number of results which were rejected during data validation. For example, if 24 samples that were collected for analysis of SVOCs, the "Number of Results Expected" is 974; however, if 6 results were rejected, 968 usable results were generated.

TABLE 3A

March 31, 2007

Summary of Data Validation Qualifiers and Completeness - VOC Analyses - Soil
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Analyte | Number of Non-Qualified Samples | Number of Samples Qualified "J" | Number of Samples Qualified "U" | Number of Samples Qualified "UJ" | Number of Samples Qualified "B" | Number of Samples Qualified "JB" | Number of Samples Qualified "EB" | Number of Samples Qualified "JEB" | Number of Samples Qualified "R" | Total Number of Samples | Detection Frequency | Completeness (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Acetone | | 1 | 1 | | | | | | | 2 | 50% | 100.0 |
| Benzene | | | 1 | 1 | | | | | | 2 | 0% | 100.0 |
| Bromochloromethane | | | 1 | 1 | | | | | | 2 | 0% | 100.0 |
| Bromodichloromethane | | | 1 | 1 | | | | | | 2 | 0% | 100.0 |
| Bromoform | | | 1 | 1 | | | | | | 2 | 0% | 100.0 |
| Bromomethane | | | 1 | 1 | | | | | | 2 | 0% | 100.0 |
| Butanone (2-) | | | 1 | 1 | | | | | | 2 | 0% | 100.0 |
| Carbon disulfide | | | 1 | 1 | | | | | | 2 | 0% | 100.0 |
| Carbon tetrachloride | | | 1 | 1 | | | | | | 2 | 0% | 100.0 |
| Chlorobenzene | | | 1 | 1 | | | | | | 2 | 0% | 100.0 |
| Chloroethane | | | 1 | 1 | | | | | | 2 | 0% | 100.0 |
| Chloroethylvinyl ether (2-) | | | 1 | 1 | | | | | | 2 | 0% | 100.0 |
| Chloroform | | | 1 | 1 | | | | | | 2 | 0% | 100.0 |
| Chloromethane | | | 1 | 1 | | | | | | 2 | 0% | 100.0 |
| Dibromochloromethane | | | 1 | 1 | | | | | | 2 | 0% | 100.0 |
| Dichloroethane (1,1-) | | | 1 | 1 | | | | | | 2 | 0% | 100.0 |
| Dichloroethane (1,2-) | | | 1 | 1 | | | | | | 2 | 0% | 100.0 |
| Dichloroethene (1,1-) | | | 1 | 1 | | | | | | 2 | 0% | 100.0 |
| Dichloroethene (cis-1,2-) | 1 | | | 1 | | | | | | 2 | 50% | 100.0 |
| Dichloroethene (trans-1,2-) | | | 1 | 1 | | | | | | 2 | 0% | 100.0 |
| Dichloropropane (1,2-) | | | 1 | 1 | | | | | | 2 | 0% | 100.0 |
| Dichloropropene (cis-1,3-) | | | 1 | 1 | | | | | | 2 | 0% | 100.0 |
| Dichloropropene (trans-1,3-) | | | 1 | 1 | | | | | | 2 | 0% | 100.0 |
| Ethylbenzene | | | 1 | 1 | | | | | | 2 | 0% | 100.0 |
| Hexanone (2-) | | | 1 | 1 | | | | | | 2 | 0% | 100.0 |
| Methyl-2-pentanone (4-) | | | 1 | 1 | | | | | | 2 | 0% | 100.0 |
| Methylene chloride | | | 1 | 1 | | | | | | 2 | 0% | 100.0 |
| Methylnaphthalene (2-) | | 1 | | 1 | | | | | | 2 | 50% | 100.0 |
| Methyl-tert Butyl Ether | | | 1 | 1 | | | | | | 2 | 0% | 100.0 |
| Naphthalene | | 1 | | 1 | | | | | | 2 | 50% | 100.0 |
| Styrene | | | 1 | 1 | | | | | | 2 | 0% | 100.0 |
| Tetrachloroethane (1,1,2,2-) | | | 1 | 1 | | | | | | 2 | 0% | 100.0 |
| Tetrachloroethene | | | 1 | 1 | | | | | | 2 | 0% | 100.0 |

TABLE 3A

March 31, 2007

Summary of Data Validation Qualifiers and Completeness - VOC Analyses - Soil
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Analyte | Number of Non-Qualified Samples | Number of Samples Qualified "J" | Number of Samples Qualified "U" | Number of Samples Qualified "UJ" | Number of Samples Qualified "B" | Number of Samples Qualified "JB" | Number of Samples Qualified "EB" | Number of Samples Qualified "JEB" | Number of Samples Qualified "R" | Total Number of Samples | Detection Frequency | Completeness (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Toluene | | | 1 | 1 | | | | | | 2 | 0% | 100.0 |
| Trichloroethane (1,1,1-) | | | 1 | 1 | | | | | | 2 | 0% | 100.0 |
| Trichloroethane (1,1,2-) | | | 1 | 1 | | | | | | 2 | 0% | 100.0 |
| Trichloroethene | 1 | 1 | | | | | | | | 2 | 100% | 100.0 |
| Trichlorofluoromethane | | | 1 | 1 | | | | | | 2 | 0% | 100.0 |
| Vinyl acetate | | | 1 | 1 | | | | | | 2 | 0% | 100.0 |
| Vinyl chloride | | | 1 | 1 | | | | | | 2 | 0% | 100.0 |
| Xylene (m,p-) | | | 1 | 1 | | | | | | 2 | 0% | 100.0 |
| Xylene (o-) | | | 1 | 1 | | | | | | 2 | 0% | 100.0 |
| **Total % Completeness for VOCs** | | | | | | | | | | | | **100.0** |

Notes:

1. Detection frequency includes non-rejected primary samples only, and is calculated using the following equation:
Detection Frequency (%) = {1 - [("Number of Samples Assigned a 'U' Qualifier" + "Number of Samples Assigned a 'UJ' Qualifier") ÷ ("Total Number of Samples"-"Number of Samples Assigned an 'R' Qualifier")]} * 100

2. Completeness is calculated according to the following:
Completeness (%) = [("Total Number of Samples" - "Number of Samples Assigned an 'R' Qualifier") ÷ "Total Number of Samples"] * 100

3. A blank field indicates that results were not qualified using this data qualifier.

4. "U" - The compound/analyte was analyzed for but was not detected. The associated numerical value is the sample-specific quantitation (reporting) limit. These results are usable for project objectives.

"UJ" - The compound/analyte was analyzed for but was not detected. The sample-specific quantitation (reporting) limit is estimated. The non-detected result, qualified UJ, is usable for project objectives with the documentation of the bias or uncertainty in the result.

"J" - The compound/analyte was detected and the result is estimated due to QC exceedance(s). Estimated results are usable for project objectives with the documentation of the uncertainty, bias, and/or imprecision.

"B" - The compound/analyte was detected in a non-matrix matched, associated method blank (e.g., aqueous method blank associated with sediment metals analyses). Result is usable with potential uncertainty due to the potential for contamination.

"JB" - The compound/analyte was detected in a non-matrix matched, associated method blank and is also estimated due to other QC exceedances. Result is usable with particular uncertainty due to the potential for contamination.

"EB" - The compound was detected in an associated equipment blank. Result is usable with particular uncertainty due to the potential for contamination.

"JEB" - The compound was detected in an associated equipment blank and is estimated due to other QC exceedances. Result is usable with particular uncertainty due to potential for contamination.

"R" - Compound/analyte result has been rejected to due severe QC exceedance(s). Rejected results are unusable for project objectives.

TABLE 4

March 31, 2007

Summary of Overall Completeness - Groundwater
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Chemical Analyses | Method | Number of Samples Planned for Phase 1B-5 | Number of Results Expected* | Actual Number of Samples Collected | Actual Number of Usable Results Generated** | Percent Overall Completeness |
|---|---|---|---|---|---|---|
| Metals | USEPA SW-846 Methods 6020A and 7470A | 45 | 1035 | 45 | 1035 | 100.0% |
| SVOCs / PAHs | USEPA SW-846 Method 8270C with SIM | 45 | 855 | 45 | 855 | 100.0% |
| VOCs | USEPA SW-846 Method 8260B | 45 | 1800 | 45 | 1798 | 99.9% |

Notes:

1. "*" The "Number of Results Expected" represents the number of planned samples times the number of individual parameters in each type of analysis. For example, if 10 samples were planned to be collected for analysis of SVOCs, and there are 66 individual SVOC compounds, the total "Number of Results Expected"is 10 x 66 = 660.

2. "**" The "Actual Number of Usable Results Generated" represents the number of actual samples collected times the number of individual parameters in each type of analysis, minus the number of results which were rejected during data validation. For example, if from the 24 samples that were collected for analysis of SVOCs, the "Number of Results Expected" is 974; however, if 6 results were rejected, therefore 968 usable results were generated.

TABLE 4A

March 31, 2007

Summary of Data Validation Qualifiers and Completeness - Metals Analyses - Groundwater
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Analyte | Number of Non-Qualified Samples | Number of Samples Qualified "J" | Number of Samples Qualified "U" | Number of Samples Qualified "UJ" | Number of Samples Qualified "B" | Number of Samples Qualified "JB" | Number of Samples Qualified "EB" | Number of Samples Qualified "JEB" | Number of Samples Qualified "R" | Total Number of Samples | Detection Frequency | Completeness (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Metals** | | | | | | | | | | | | |
| Aluminum | 24 | | 21 | | | | | | | 45 | 53% | 100.0 |
| Antimony | 8 | | 37 | | | | | | | 45 | 18% | 100.0 |
| Arsenic | 39 | 4 | 2 | | | | | | | 45 | 96% | 100.0 |
| Barium | 43 | | 2 | | | | | | | 45 | 96% | 100.0 |
| Beryllium | 1 | | 44 | | | | | | | 45 | 2% | 100.0 |
| Cadmium | 6 | | 39 | | | | | | | 45 | 13% | 100.0 |
| Calcium | 17 | 28 | | | | | | | | 45 | 100% | 100.0 |
| Chromium | 31 | | 14 | | | | | | | 45 | 69% | 100.0 |
| Cobalt | 34 | | 11 | | | | | | | 45 | 76% | 100.0 |
| Copper | 23 | | 22 | | | | | | | 45 | 51% | 100.0 |
| Iron | 42 | | 3 | | | | | | | 45 | 93% | 100.0 |
| Lead | 18 | | 27 | | | | | | | 45 | 40% | 100.0 |
| Magnesium | 42 | | 3 | | | | | | | 45 | 93% | 100.0 |
| Manganese | 37 | | 8 | | | | | | | 45 | 82% | 100.0 |
| Mercury | | | 45 | | | | | | | 45 | 0% | 100.0 |
| Nickel | 30 | | 15 | | | | | | | 45 | 67% | 100.0 |
| Potassium | 35 | 4 | | 6 | | | | | | 45 | 87% | 100.0 |
| Selenium | 17 | | 28 | | | | | | | 45 | 38% | 100.0 |
| Silver | 7 | | 38 | | | | | | | 45 | 16% | 100.0 |
| Sodium | 45 | | | | | | | | | 45 | 100% | 100.0 |
| Thallium | | | 45 | | | | | | | 45 | 0% | 100.0 |
| Vanadium | 24 | 10 | 11 | | | | | | | 45 | 76% | 100.0 |
| Zinc | 4 | | 41 | | | | | | | 45 | 9% | 100.0 |
| | | | | | | | | | | **Total % Completeness for Metals** | | **100.0** |

TABLE 4A

March 31, 2007

Summary of Data Validation Qualifiers and Completeness - Metals Analyses - Groundwater
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

Notes:

1. Detection frequency includes non-rejected primary samples only, and is calculated using the following equation:
Detection Frequency (%) = {1 - [("Number of Samples Assigned a 'U' Qualifier" + "Number of Samples Assigned a 'UJ' Qualifier") ÷ ("Total Number of Samples"-"Number of Samples Assigned an 'R' Qualifier")]} * 100

2. Completeness is calculated according to the following:
Completeness (%) = [("Total Number of Samples" - "Number of Samples Assigned an 'R' Qualifier") ÷ "Total Number of Samples"] * 100

3. A blank field indicates that results were not qualified using this data qualifier.

4. "U" - The compound/analyte was analyzed for but was not detected. The associated numerical value is the sample-specific quantitation (reporting) limit. These results are usable for project objectives.
"UJ" - The compound/analyte was analyzed for but was not detected. The sample-specific quantitation (reporting) limit is estimated. The non-detected result, qualified UJ, is usable for project objectives with the documentation of the bias or uncertainty in the result.
"J" - The compound/analyte was detected and the result is estimated due to QC exceedance(s). Estimated results are usable for project objectives with the documentation of the uncertainty, bias, and/or imprecision.
"B" - The compound/analyte was detected in a non-matrix matched, associated method blank (e.g., aqueous method blank associated with sediment metals analyses). Result is usable with potential uncertainty due to the potential for contamination.
"JB" - The compound/analyte was detected in a non-matrix matched, associated method blank and is also estimated due to other QC exceedances. Result is usable with particular uncertainty due to the potential for contamination.
"EB" - The compound was detected in an associated equipment blank. Result is usable with particular uncertainty due to the potential for contamination.
"JEB" - The compound was detected in an associated equipment blank and is estimated due to other QC exceedances. Result is usable with particular uncertainty due to potential for contamination.
"R" - Compound/analyte result has been rejected to due severe QC exceedance(s). Rejected results are unusable for project objectives.

TABLE 4B

March 31, 2007

Summary of Data Validation Qualifiers and Completeness - SVOC/PAH Analyses - Groundwater
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Analyte | Number of Non-Qualified Samples | Number of Samples Qualified "J" | Number of Samples Qualified "U" | Number of Samples Qualified "UJ" | Number of Samples Qualified "B" | Number of Samples Qualified "JB" | Number of Samples Qualified "EB" | Number of Samples Qualified "JEB" | Number of Samples Qualified "R" | Total Number of Samples | Detection Frequency | Completeness (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 14 | 5 | 26 | | | | | | | 45 | 42% | 100.0 |
| Acenaphthylene | 11 | | 34 | | | | | | | 45 | 24% | 100.0 |
| Anthracene | 10 | 1 | 34 | | | | | | | 45 | 24% | 100.0 |
| Benzo(a)anthracene | 11 | 8 | 26 | | | | | | | 45 | 42% | 100.0 |
| Benzo(a)pyrene | 9 | 1 | 35 | | | | | | | 45 | 22% | 100.0 |
| Benzo(b)fluoranthene | 7 | 2 | 36 | | | | | | | 45 | 20% | 100.0 |
| Benzo(g,h,i)perylene | 7 | 2 | 30 | 6 | | | | | | 45 | 20% | 100.0 |
| Benzo(k)fluoranthene | 7 | 1 | 37 | | | | | | | 45 | 18% | 100.0 |
| bis(2-Ethylhexyl)phthalate | 3 | | 42 | | | | | | | 45 | 7% | 100.0 |
| Carbazole | 13 | 4 | 28 | | | | | | | 45 | 38% | 100.0 |
| Chrysene | 11 | 8 | 26 | | | | | | | 45 | 42% | 100.0 |
| Dibenz(a,h)anthracene | 4 | 10 | 31 | | | | | | | 45 | 31% | 100.0 |
| Fluoranthene | 16 | 2 | 27 | | | | | | | 45 | 40% | 100.0 |
| Fluorene | 14 | 1 | 30 | | | | | | | 45 | 33% | 100.0 |
| Indeno(1,2,3-cd)pyrene | 7 | | 38 | | | | | | | 45 | 16% | 100.0 |
| Methylnaphthalene (2-) | 10 | | 35 | | | | | | | 45 | 22% | 100.0 |
| Naphthalene | 12 | | 33 | | | | | | | 45 | 27% | 100.0 |
| Phenanthrene | 13 | | 32 | | | | | | | 45 | 29% | 100.0 |
| Pyrene | 16 | 6 | 23 | | | | | | | 45 | 49% | 100.0 |
| **Total % Completeness for SVOCs/PAHs** | | | | | | | | | | | | **100.0** |

TABLE 4B

March 31, 2007

Summary of Data Validation Qualifiers and Completeness - SVOC/PAH Analyses - Groundwater
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

Notes:

1. Detection frequency includes non-rejected primary samples only, and is calculated using the following equation:

Detection Frequency (%) = {1 - [("Number of Samples Assigned a U Qualifier"+"Number of Samples Assigned a UJ Qualifier")÷("Total Number of Samples"-"Number of Samples Assigned an R Qualifier")]} * 100

2. Completeness is calculated according to the following:

Completeness (%) = [("Total Number of Samples" - "Number of Samples Assigned an 'R' Qualifier") ÷ "Total Number of Samples"] * 100

3. A blank field indicates that results were not qualified using this data qualifier.

4. "U" - The compound/analyte was analyzed for but was not detected. The associated numerical value is the sample-specific quantitation (reporting) limit. These results are usable for project objectives.

"UJ" - The compound/analyte was analyzed for but was not detected. The sample-specific quantitation (reporting) limit is estimated. The non-detected result, qualified UJ, is usable for project objectives with the documentation of the bias or uncertainty in the result.

"J" - The compound/analyte was detected and the result is estimated due to QC exceedance(s). Estimated results are usable for project objectives with the documentation of the uncertainty, bias, and/or imprecision.

"B" - The compound/analyte was detected in a non-matrix matched, associated method blank (e.g., aqueous method blank associated with sediment metals analyses). Result is usable with potential uncertainty due to the potential for contamination.

"JB" - The compound/analyte was detected in a non-matrix matched, associated method blank and is also estimated due to other QC exceedances. Result is usable with particular uncertainty due to the potential for contamination.

"EB" - The compound was detected in an associated equipment blank. Result is usable with particular uncertainty due to the potential for contamination.

"JEB" - The compound was detected in an associated equipment blank and is estimated due to other QC exceedances. Result is usable with particular uncertainty due to potential for contamination.

"R" - Compound/analyte result has been rejected to due severe QC exceedance(s). Rejected results are unusable for project objectives.

TABLE 4C

Summary of Data Validation Qualifiers and Completeness - VOC Analyses - Groundwater

Phases 1B-4 and 1B-5 RI Data Usability Assessment Report

Blackburn & Union Privileges Superfund Site

Walpole, Massachusetts

| Analyte | Number of Non-Qualified Samples | Number of Samples Qualified "J" | Number of Samples Qualified "U" | Number of Samples Qualified "UJ" | Number of Samples Qualified "B" | Number of Samples Qualified "JB" | Number of Samples Qualified "EB" | Number of Samples Qualified "JEB" | Number of Samples Qualified "R" | Total Number of Samples | Detection Frequency | Completeness (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Acetone | | 1 | 42 | 2 | | | | | | 45 | 2% | 100.0 |
| Benzene | 3 | 3 | 39 | | | | | | | 45 | 13% | 100.0 |
| Bromochloromethane | | | 42 | 3 | | | | | | 45 | 0% | 100.0 |
| Bromodichloromethane | | | 42 | 3 | | | | | | 45 | 0% | 100.0 |
| Bromoform | | | 42 | 3 | | | | | | 45 | 0% | 100.0 |
| Bromomethane | | | | 45 | | | | | | 45 | 0% | 100.0 |
| Butanone (2-) | | 1 | 42 | 2 | | | | | | 45 | 2% | 100.0 |
| Carbon disulfide | | | 42 | 3 | | | | | | 45 | 0% | 100.0 |
| Carbon tetrachloride | | | 42 | 3 | | | | | | 45 | 0% | 100.0 |
| Chlorobenzene | | | 42 | 3 | | | | | | 45 | 0% | 100.0 |
| Chloroethane | | | 42 | 3 | | | | | | 45 | 0% | 100.0 |
| Chloroethylvinyl ether (2-) | | | 40 | 3 | | | | | 2 | 45 | 4% | 95.6 |
| Chloroform | 9 | | 33 | 3 | | | | | | 45 | 20% | 100.0 |
| Chloromethane | | | 42 | 3 | | | | | | 45 | 0% | 100.0 |
| Dibromochloromethane | | | 35 | 10 | | | | | | 45 | 0% | 100.0 |
| Dichloroethane (1,1-) | | | 42 | 3 | | | | | | 45 | 0% | 100.0 |
| Dichloroethane (1,2-) | | | 42 | 3 | | | | | | 45 | 0% | 100.0 |
| Dichloroethene (1,1-) | | 1 | 41 | 3 | | | | | | 45 | 2% | 100.0 |
| Dichloroethene (cis-1,2-) | | | 42 | 3 | | | | | | 45 | 0% | 100.0 |
| Dichloroethene (trans-1,2-) | | | 42 | 3 | | | | | | 45 | 0% | 100.0 |
| Dichloropropane (1,2-) | | | 42 | 3 | | | | | | 45 | 0% | 100.0 |
| Dichloropropene (cis-1,3-) | | | 42 | 3 | | | | | | 45 | 0% | 100.0 |
| Dichloropropene (trans-1,3-) | | | 42 | 3 | | | | | | 45 | 0% | 100.0 |
| Ethylbenzene | 1 | 4 | 40 | | | | | | | 45 | 11% | 100.0 |
| Hexanone (2-) | | 1 | 42 | 2 | | | | | | 45 | 2% | 100.0 |
| Methyl-2-pentanone (4-) | | | 42 | 3 | | | | | | 45 | 0% | 100.0 |
| Methylene chloride | | | 42 | 3 | | | | | | 45 | 0% | 100.0 |
| Methyl-tert Butyl Ether | | | 42 | 3 | | | | | | 45 | 0% | 100.0 |
| Styrene | | 2 | 41 | 2 | | | | | | 45 | 4% | 100.0 |
| Tetrachloroethane (1,1,2,2-) | | | 42 | 3 | | | | | | 45 | 0% | 100.0 |
| Tetrachloroethene | | | 42 | 3 | | | | | | 45 | 0% | 100.0 |
| Toluene | 2 | 3 | 40 | | | | | | | 45 | 11% | 100.0 |
| Trichloroethane (1,1,1-) | | 1 | 41 | 3 | | | | | | 45 | 2% | 100.0 |
| Trichloroethane (1,1,2-) | | | 42 | 3 | | | | | | 45 | 0% | 100.0 |
| Trichloroethene | 5 | 3 | 34 | 3 | | | | | | 45 | 18% | 100.0 |
| Trichlorofluoromethane | | | 42 | 3 | | | | | | 45 | 0% | 100.0 |

TABLE 4C
Summary of Data Validation Qualifiers and Completeness - VOC Analyses - Groundwater
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Analyte | Number of Non-Qualified Samples | Number of Samples Qualified "J" | Number of Samples Qualified "U" | Number of Samples Qualified "UJ" | Number of Samples Qualified "B" | Number of Samples Qualified "JB" | Number of Samples Qualified "EB" | Number of Samples Qualified "JEB" | Number of Samples Qualified "R" | Total Number of Samples | Detection Frequency | Completeness (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vinyl acetate | | | 41 | 4 | | | | | | 45 | 0% | 100.0 |
| Vinyl chloride | | | 42 | 3 | | | | | | 45 | 0% | 100.0 |
| Xylene (m,p-) | 1 | 3 | 40 | 1 | | | | | | 45 | 9% | 100.0 |
| Xylene (o-) | 2 | 2 | 40 | 1 | | | | | | 45 | 9% | 100.0 |
| **Total % Completeness for VOCs** | | | | | | | | | | | | **99.9** |

Notes:

1. Detection frequency includes non-rejected primary samples only, and is calculated using the following equation:

Detection Frequency (%) = {1 - [("Number of Samples Assigned a 'U' Qualifier" + "Number of Samples Assigned a 'UJ' Qualifier")÷ ("Total Number of Samples"-"Number of Samples assigned an 'R' Qualifier")]} * 100

2. Completeness is calculated according to the following:

Completeness (%) = [("Total Number of Samples" - "Number of Samples Assigned an 'R' Qualifier") ÷ "Total Number of Samples"] * 100

3. A blank field indicates that results were not qualified using this data qualifier.

4. "U" - The compound/analyte was analyzed for but was not detected. The associated numerical value is the sample-specific quantitation (reporting) limit. These results are usable for project objectives.
"UJ" - The compound/analyte was analyzed for but was not detected. The sample-specific quantitation (reporting) limit is estimated. The non-detected result, qualified UJ, is usable for project objectives with the documentation of the bias or uncertainty in the result.
"J" - The compound/analyte was detected and the result is estimated due to QC exceedance(s). Estimated results are usable for project objectives with the documentation of the uncertainty, bias, and/or imprecision.
"B" - The compound/analyte was detected in a non-matrix matched, associated method blank (e.g., aqueous method blank associated with sediment metals analyses). Result is usable with potential uncertainty due to the potential for contamination.
"JB" - The compound/analyte was detected in a non-matrix matched, associated method blank and is also estimated due to other QC exceedances. Result is usable with particular uncertainty due to the potential for contamination.
"EB" - The compound was detected in an associated equipment blank. Result is usable with particular uncertainty due to the potential for contamination.
"JEB" - The compound was detected in an associated equipment blank and is estimated due to other QC exceedances. Result is usable with particular uncertainty due to potential for contamination.
"R" - Compound/analyte result has been rejected to due severe QC exceedance(s). Rejected results are unusable for project objectives.

TABLE 5

March 31, 2007

Summary of Overall Completeness - Sediment
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Chemical Analyses | Method | Number of Samples Planned for Phase 1B-5 † | Number of Results Expected* | Actual Number of Samples Collected | Actual Number of Usable Results Generated** | Percent Overall Completeness |
|---|---|---|---|---|---|---|
| Metals | USEPA SW-846 Method 6020A | 12 | 24 | 12 | 24 | 100% |
| PAHs | USEPA SW-846 Method 8270C | 12 | 204 | 12 | 204 | 100% |

Notes:

1. "*" The "Number of Results Expected" represents the number of planned samples times the number of individual parameters in each type of analysis. For example, if 10 samples were planned to be collected for analysis of SVOCs, and there are 66 individual SVOC compounds, the total "Number of Results Expected"is 10 x 66 = 660.

2. "**" The "Actual Number of Usable Results Generated" represents the number of actual samples collected times the number of individual parameters in each type of analysis, minus the number of results which were rejected during data validation. For example, if 24 samples were collected for analysis of SVOCs, the "Number of Results Expected" is 974; if, however, 6 results were rejected, 968 usable results were generated.

3. "†" The number of samples planned for Phase 1B-5 was 24. However, SHA was unable to obtain access agreements to collect 12 of the 24 samples. If SHA is able to obtain access to collect the remainning 12 samples, a separate data usability report will be completed for those samples.

TABLE 5A

March 31, 2007

Summary of Data Validation Qualifiers and Completeness - Metals Analyses - Sediment
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Analyte | Number of Non-Qualified Samples | Number of Samples Qualified "J" | Number of Samples Qualified "U" | Number of Samples Qualified "UJ" | Number of Samples Qualified "B" | Number of Samples Qualified "JB" | Number of Samples Qualified "EB" | Number of Samples Qualified "JEB" | Number of Samples Qualified "R" | Total Number of Samples | Detection Frequency | Completeness (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 12 | | | | | | | | | 12 | 100% | 100.0 |
| Lead | 12 | | | | | | | | | 12 | 100% | 100.0 |
| **Total % Completeness for Metals** | | | | | | | | | | | | **100.0** |

Notes:

1. Detection frequency includes non-rejected primary samples only, and is calculated using the following equation:
Detection Frequency (%) = {1 - [("Number of Samples Assigned a 'U' Qualifier" + "Number of Samples Assigned a 'UJ' Qualifier") ÷ ("Total Number of Samples"-"Number of Samples Assigned an 'R' Qualifier")]} * 100

2. Completeness is calculated according to the following:
Completeness (%) = [("Total Number of Samples" - "Number of Samples Assigned an 'R' Qualifier") ÷ "Total Number of Samples"] * 100

3. A blank field indicates that results were not qualified using this data qualifier.

4. "U" - The compound/analyte was analyzed for but was not detected. The associated numerical value is the sample-specific quantitation (reporting) limit. These results are usable for project objectives.
"UJ" - The compound/analyte was analyzed for but was not detected. The sample-specific quantitation (reporting) limit is estimated. The non-detected result, qualified UJ, is usable for project objectives with the documentation of the bias or uncertainty in the result.
"J" - The compound/analyte was detected and the result is estimated due to QC exceedance(s). Estimated results are usable for project objectives with the documentation of the uncertainty, bias, and/or imprecision.
"B" - The compound/analyte was detected in a non-matrix matched, associated method blank (e.g., aqueous method blank associated with sediment metals analyses). Result is usable with potential uncertainty due to the potential for contamination.
"JB" - The compound/analyte was detected in a non-matrix matched, associated method blank and is also estimated due to other QC exceedances. Result is usable with particular uncertainty due to the potential for contamination.
"EB" - The compound was detected in an associated equipment blank. Result is usable with particular uncertainty due to the potential for contamination.
"JEB" - The compound was detected in an associated equipment blank and is estimated due to other QC exceedances. Result is usable with particular uncertainty due to potential for contamination.
"R" - Compound/analyte result has been rejected to due severe QC exceedance(s). Rejected results are unusable for project objectives.

TABLE 5B

March 31, 2007

Summary of Data Validation Qualifiers and Completeness - SVOC/PAH Analyses - Sediment
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Analyte | Number of Non-Qualified Samples | Number of Samples Qualified "J" | Number of Samples Qualified "U" | Number of Samples Qualified "UJ" | Number of Samples Qualified "B" | Number of Samples Qualified "JB" | Number of Samples Qualified "EB" | Number of Samples Qualified "JEB" | Number of Samples Qualified "R" | Total Number of Samples | Detection Frequency | Completeness (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 7 | 5 | | | | | | | | 12 | 100% | 100.0 |
| Acenaphthylene | 7 | 5 | | | | | | | | 12 | 100% | 100.0 |
| Anthracene | 8 | 4 | | | | | | | | 12 | 100% | 100.0 |
| Benzo(a)anthracene | 8 | 4 | | | | | | | | 12 | 100% | 100.0 |
| Benzo(a)pyrene | 7 | 5 | | | | | | | | 12 | 100% | 100.0 |
| Benzo(b)fluoranthene | 10 | 2 | | | | | | | | 12 | 100% | 100.0 |
| Benzo(g,h,i)perylene | 7 | 5 | | | | | | | | 12 | 100% | 100.0 |
| Benzo(k)fluoranthene | 7 | 5 | | | | | | | | 12 | 100% | 100.0 |
| Chrysene | 10 | 2 | | | | | | | | 12 | 100% | 100.0 |
| Dibenz(a,h)anthracene | 8 | 3 | 1 | | | | | | | 12 | 92% | 100.0 |
| Fluoranthene | 10 | 2 | | | | | | | | 12 | 100% | 100.0 |
| Fluorene | 8 | 3 | 1 | | | | | | | 12 | 92% | 100.0 |
| Indeno(1,2,3-cd)pyrene | 7 | 5 | | | | | | | | 12 | 100% | 100.0 |
| Methylnaphthalene (2-) | 8 | 4 | | | | | | | | 12 | 100% | 100.0 |
| Naphthalene | 8 | 4 | | | | | | | | 12 | 100% | 100.0 |
| Phenanthrene | 11 | 1 | | | | | | | | 12 | 100% | 100.0 |
| Pyrene | 10 | 2 | | | | | | | | 12 | 100% | 100.0 |
| | | | | | | | | | **Total % Completeness for SVOCs/PAHs** | | | **100.0** |

Notes:

1. Detection frequency includes non-rejected primary samples only, and is calculated using the following equation:
   Detection Frequency (%) = {1 - [("Number of Samples Assigned a U Qualifier"+"Number of Samples Assigned a UJ Qualifier")÷("Total Number of Samples"-"Number of Samples Assigned an R Qualifier")]} * 100
2. Completeness is calculated according to the following:
   Completeness (%) = [("Total Number of Samples" - "Number of Samples Assigned an 'R' Qualifier") ÷ "Total Number of Samples"] * 100
3. A blank field indicates that results were not qualified using this data qualifier.
4. "U" - The compound/analyte was analyzed for but was not detected. The associated numerical value is the sample-specific quantitation (reporting) limit. These results are usable for project objectives.

"UJ" - The compound/analyte was analyzed for but was not detected. The sample-specific quantitation (reporting) limit is estimated. The non-detected result, qualified UJ, is usable for project objectives with the documentation of the bias or uncertainty in the result.

"J" - The compound/analyte was detected and the result is estimated due to QC exceedance(s). Estimated results are usable for project objectives with the documentation of the uncertainty, bias, and/or imprecision.

"B" - The compound/analyte was detected in a non-matrix matched, associated method blank (e.g., aqueous method blank associated with sediment metals analyses). Result is usable with potential uncertainty due to the potential for contamination.

"JB" - The compound/analyte was detected in a non-matrix matched, associated method blank and is also estimated due to other QC exceedances. Result is usable with particular uncertainty due to the potential for contamination.

"EB" - The compound was detected in an associated equipment blank. Result is usable with particular uncertainty due to the potential for contamination.

"JEB" - The compound was detected in an associated equipment blank and is estimated due to other QC exceedances. Result is usable with particular uncertainty due to potential for contamination.

"R" - Compound/analyte result has been rejected to due severe QC exceedance(s). Rejected results are unusable for project objectives.

TABLE 6

March 31, 2007

Summary of Overall Completeness - Surface Water
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Chemical Analyses | Method | Number of Samples Planned for Phase 1B-5 | Number of Results Expected* | Actual Number of Samples Collected | Actual Number of Usable Results Generated** | Percent Overall Completeness |
|---|---|---|---|---|---|---|
| Metals | USEPA SW-846 Methods 6020A and 7470A | 4 | 184 | 4 | 184 | 100.0% |
| SVOCs / PAHs | USEPA SW-846 Method 8270C with SIM | 4 | 76 | 4 | 76 | 100.0% |
| VOCs | USEPA SW-846 Method 8260B | 4 | 160 | 4 | 159 | 99.4% |

Notes:

1. "*" The "Number of Results Expected" represents the number of planned samples times the number of individual parameters in each type of analysis. For example, if 10 samples were planned to be collected for analysis of SVOCs, and there are 66 individual SVOC compounds, the total "Number of Results Expected"is 10 x 66 = 660.

2. "**" The "Actual Number of Usable Results Generated" represents the number of actual samples collected times the number of individual parameters in each type of analysis, minus the number of results which were rejected during data validation. For example, if from the 24 samples that were collected for analysis of SVOCs, the "Number of Results Expected" is 974; however, if 6 results were rejected, therefore 968 usable results were generated.

TABLE 6A

March 31, 2007

Summary of Data Validation Qualifiers and Completeness - Metals Analyses - Surface Water
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Analyte | Number of Non-Qualified Samples | Number of Samples Qualified "J" | Number of Samples Qualified "U" | Number of Samples Qualified "UJ" | Number of Samples Qualified "B" | Number of Samples Qualified "JB" | Number of Samples Qualified "EB" | Number of Samples Qualified "JEB" | Number of Samples Qualified "R" | Total Number of Samples | Detection Frequency | Completeness (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Dissolved Metals** | | | | | | | | | | | | |
| Aluminum - Dissolved | 1 | | 3 | | | | | | | 4 | 25% | 100.0 |
| Antimony - Dissolved | | | 4 | | | | | | | 4 | 0% | 100.0 |
| Arsenic - Dissolved | | 4 | | | | | | | | 4 | 100% | 100.0 |
| Barium - Dissolved | 4 | | | | | | | | | 4 | 100% | 100.0 |
| Beryllium - Dissolved | | | 4 | | | | | | | 4 | 0% | 100.0 |
| Cadmium - Dissolved | | | 4 | | | | | | | 4 | 0% | 100.0 |
| Calcium - Dissolved | 4 | | | | | | | | | 4 | 100% | 100.0 |
| Chromium - Dissolved | 2 | | 2 | | | | | | | 4 | 50% | 100.0 |
| Cobalt - Dissolved | 1 | | 3 | | | | | | | 4 | 25% | 100.0 |
| Copper - Dissolved | 4 | | | | | | | | | 4 | 100% | 100.0 |
| Iron - Dissolved | 4 | | | | | | | | | 4 | 100% | 100.0 |
| Lead - Dissolved | 1 | | 3 | | | | | | | 4 | 25% | 100.0 |
| Magnesium - Dissolved | 3 | | 1 | | | | | | | 4 | 75% | 100.0 |
| Manganese - Dissolved | 4 | | | | | | | | | 4 | 100% | 100.0 |
| Mercury - Dissolved | | | 4 | | | | | | | 4 | 0% | 100.0 |
| Nickel - Dissolved | 4 | | | | | | | | | 4 | 100% | 100.0 |
| Potassium - Dissolved | 4 | | | | | | | | | 4 | 100% | 100.0 |
| Selenium - Dissolved | | | 4 | | | | | | | 4 | 0% | 100.0 |
| Silver - Dissolved | | | 4 | | | | | | | 4 | 0% | 100.0 |
| Sodium - Dissolved | 4 | | | | | | | | | 4 | 100% | 100.0 |
| Thallium - Dissolved | | | 4 | | | | | | | 4 | 0% | 100.0 |
| Vanadium - Dissolved | 4 | | | | | | | | | 4 | 100% | 100.0 |
| Zinc - Dissolved | 1 | | 3 | | | | | | | 4 | 25% | 100.0 |
| | | | | | | | | | **Total % Completeness for Dissolved Metals** | | | **100.0** |
| **Total Metals** | | | | | | | | | | | | |
| Aluminum - Total | 1 | | 3 | | | | | | | 4 | 25% | 100.0 |
| Antimony - Total | | | 4 | | | | | | | 4 | 0% | 100.0 |
| Arsenic - Total | | 4 | | | | | | | | 4 | 100% | 100.0 |
| Barium - Total | 4 | | | | | | | | | 4 | 100% | 100.0 |
| Beryllium - Total | | | 4 | | | | | | | 4 | 0% | 100.0 |
| Cadmium - Total | | | 4 | | | | | | | 4 | 0% | 100.0 |
| Calcium - Total | 4 | | | | | | | | | 4 | 100% | 100.0 |
| Chromium - Total | 1 | | 3 | | | | | | | 4 | 25% | 100.0 |
| Cobalt - Total | 1 | | 3 | | | | | | | 4 | 25% | 100.0 |
| Copper - Total | 4 | | | | | | | | | 4 | 100% | 100.0 |
| Iron - Total | 4 | | | | | | | | | 4 | 100% | 100.0 |
| Lead - Total | 4 | | | | | | | | | 4 | 100% | 100.0 |

TABLE 6A

March 31, 2007

Summary of Data Validation Qualifiers and Completeness - Metals Analyses - Surface Water
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Analyte | Number of Non-Qualified Samples | Number of Samples Qualified "J" | Number of Samples Qualified "U" | Number of Samples Qualified "UJ" | Number of Samples Qualified "B" | Number of Samples Qualified "JB" | Number of Samples Qualified "EB" | Number of Samples Qualified "JEB" | Number of Samples Qualified "R" | Total Number of Samples | Detection Frequency | Completeness (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Magnesium - Total | 4 | | | | | | | | | 4 | 100% | 100.0 |
| Manganese - Total | 4 | | | | | | | | | 4 | 100% | 100.0 |
| Mercury - Total | | | 4 | | | | | | | 4 | 0% | 100.0 |
| Nickel - Total | 4 | | | | | | | | | 4 | 100% | 100.0 |
| Potassium - Total | 4 | | | | | | | | | 4 | 100% | 100.0 |
| Selenium - Total | 1 | | 3 | | | | | | | 4 | 25% | 100.0 |
| Silver - Total | | | 4 | | | | | | | 4 | 0% | 100.0 |
| Sodium - Total | 4 | | | | | | | | | 4 | 100% | 100.0 |
| Thallium - Total | | | 4 | | | | | | | 4 | 0% | 100.0 |
| Vanadium - Total | 4 | | | | | | | | | 4 | 100% | 100.0 |
| Zinc - Total | 1 | | 3 | | | | | | | 4 | 25% | 100.0 |
| **Total % Completeness for Total Metals** | | | | | | | | | | | | **100.0** |

Notes:

1. Detection frequency includes non-rejected primary samples only, and is calculated using the following equation:
Detection Frequency (%) = {1 - [("Number of Samples Assigned a 'U' Qualifier" + "Number of Samples Assigned a 'UJ' Qualifier") ÷ ("Total Number of Samples"-"Number of Samples Assigned an 'R' Qualifier")]} * 100

2. Completeness is calculated according to the following:
Completeness (%) = [("Total Number of Samples" - "Number of Samples Assigned an 'R' Qualifier") ÷ "Total Number of Samples"] * 100

3. A blank field indicates that results were not qualified using this data qualifier.

4. "U" - The compound/analyte was analyzed for but was not detected. The associated numerical value is the sample-specific quantitation (reporting) limit. These results are usable for project objectives.
"UJ" - The compound/analyte was analyzed for but was not detected. The sample-specific quantitation (reporting) limit is estimated. The non-detected result, qualified UJ, is usable for project objectives with the documentation of the bias or uncertainty in the result.
"J" - The compound/analyte was detected and the result is estimated due to QC exceedance(s). Estimated results are usable for project objectives with the documentation of the uncertainty, bias, and/or imprecision.
"B" - The compound/analyte was detected in a non-matrix matched, associated method blank (e.g., aqueous method blank associated with sediment metals analyses). Result is usable with potential uncertainty due to the potential for contamination.
"JB" - The compound/analyte was detected in a non-matrix matched, associated method blank and is also estimated due to other QC exceedances. Result is usable with particular uncertainty due to the potential for contamination.
"EB" - The compound was detected in an associated equipment blank. Result is usable with particular uncertainty due to the potential for contamination.
"JEB" - The compound was detected in an associated equipment blank and is estimated due to other QC exceedances. Result is usable with particular uncertainty due to potential for contamination.
"R" - Compound/analyte result has been rejected to due severe QC exceedance(s). Rejected results are unusable for project objectives.

TABLE 6B

March 31, 2007

Summary of Data Validation Qualifiers and Completeness - SVOC/PAH Analyses - Surface Water

Phases 1B-4 and 1B-5 RI Data Usability Assessment Report

Blackburn & Union Privileges Superfund Site

Walpole, Massachusetts

| Analyte | Number of Non-Qualified Samples | Number of Samples Qualified "J" | Number of Samples Qualified "U" | Number of Samples Qualified "UJ" | Number of Samples Qualified "B" | Number of Samples Qualified "JB" | Number of Samples Qualified "EB" | Number of Samples Qualified "JEB" | Number of Samples Qualified "R" | Total Number of Samples | Detection Frequency | Completeness (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 1 | 3 | | | | | | | | 4 | 100% | 100.0 |
| Acenaphthylene | 1 | 3 | | | | | | | | 4 | 100% | 100.0 |
| Anthracene | 1 | 2 | 1 | | | | | | | 4 | 75% | 100.0 |
| Benzo(a)anthracene | 1 | 3 | | | | | | | | 4 | 100% | 100.0 |
| Benzo(a)pyrene | 1 | 3 | | | | | | | | 4 | 100% | 100.0 |
| Benzo(b)fluoranthene | 1 | 3 | | | | | | | | 4 | 100% | 100.0 |
| Benzo(g,h,i)perylene | | 1 | | 3 | | | | | | 4 | 25% | 100.0 |
| Benzo(k)fluoranthene | 1 | 3 | | | | | | | | 4 | 100% | 100.0 |
| bis(2-Ethylhexyl)phthalate | 1 | | 3 | | | | | | | 4 | 25% | 100.0 |
| Carbazole | 1 | 1 | 2 | | | | | | | 4 | 50% | 100.0 |
| Chrysene | 1 | 3 | | | | | | | | 4 | 100% | 100.0 |
| Dibenz(a,h)anthracene | 1 | 2 | 1 | | | | | | | 4 | 75% | 100.0 |
| Fluoranthene | 1 | | 3 | | | | | | | 4 | 25% | 100.0 |
| Fluorene | 1 | 3 | | | | | | | | 4 | 100% | 100.0 |
| Indeno(1,2,3-cd)pyrene | 1 | | 3 | | | | | | | 4 | 25% | 100.0 |
| Methylnaphthalene (2-) | | 4 | | | | | | | | 4 | 100% | 100.0 |
| Naphthalene | | 1 | 3 | | | | | | | 4 | 25% | 100.0 |
| Phenanthrene | 1 | | 3 | | | | | | | 4 | 25% | 100.0 |
| Pyrene | 1 | 3 | | | | | | | | 4 | 100% | 100.0 |
| **Total % Completeness for SVOCs/PAHs** | | | | | | | | | | | | **100.0** |

TABLE 6B

March 31, 2007

Summary of Data Validation Qualifiers and Completeness - SVOC/PAH Analyses - Surface Water
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

Notes:

1. Detection frequency includes non-rejected primary samples only, and is calculated using the following equation:

Detection Frequency (%) = {1 - [("Number of Samples Assigned a U Qualifier"+"Number of Samples Assigned a UJ Qualifier")÷("Total Number of Samples"-"Number of Samples Assigned an R Qualifier")]} * 100

2. Completeness is calculated according to the following:

Completeness (%) = [("Total Number of Samples" - "Number of Samples Assigned an 'R' Qualifier") ÷ "Total Number of Samples"] * 100

3. A blank field indicates that results were not qualified using this data qualifier.

4. "U" - The compound/analyte was analyzed for but was not detected. The associated numerical value is the sample-specific quantitation (reporting) limit. These results are usable for project objectives.

"UJ" - The compound/analyte was analyzed for but was not detected. The sample-specific quantitation (reporting) limit is estimated. The non-detected result, qualified UJ, is usable for project objectives with the documentation of the bias or uncertainty in the result.

"J" - The compound/analyte was detected and the result is estimated due to QC exceedance(s). Estimated results are usable for project objectives with the documentation of the uncertainty, bias, and/or imprecision.

"B" - The compound/analyte was detected in a non-matrix matched, associated method blank (e.g., aqueous method blank associated with sediment metals analyses). Result is usable with potential uncertainty due to the potential for contamination.

"JB" - The compound/analyte was detected in a non-matrix matched, associated method blank and is also estimated due to other QC exceedances. Result is usable with particular uncertainty due to the potential for contamination.

"EB" - The compound was detected in an associated equipment blank. Result is usable with particular uncertainty due to the potential for contamination.

"JEB" - The compound was detected in an associated equipment blank and is estimated due to other QC exceedances. Result is usable with particular uncertainty due to potential for contamination.

"R" - Compound/analyte result has been rejected to due severe QC exceedance(s). Rejected results are unusable for project objectives.

TABLE 6C

March 31, 2007

Summary of Data Validation Qualifiers and Completeness - VOC Analyses - Surface Water
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Analyte | Number of Non-Qualified Samples | Number of Samples Qualified "J" | Number of Samples Qualified "U" | Number of Samples Qualified "UJ" | Number of Samples Qualified "B" | Number of Samples Qualified "JB" | Number of Samples Qualified "EB" | Number of Samples Qualified "JEB" | Number of Samples Qualified "R" | Total Number of Samples | Detection Frequency | Completeness (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Acetone | | | 4 | | | | | | | 4 | 0% | 100.0 |
| Benzene | 1 | | 3 | | | | | | | 4 | 25% | 100.0 |
| Bromochloromethane | | | 4 | | | | | | | 4 | 0% | 100.0 |
| Bromodichloromethane | | | 4 | | | | | | | 4 | 0% | 100.0 |
| Bromoform | | | 4 | | | | | | | 4 | 0% | 100.0 |
| Bromomethane | | | | 4 | | | | | | 4 | 0% | 100.0 |
| Butanone (2-) | | | 4 | | | | | | | 4 | 0% | 100.0 |
| Carbon disulfide | | | 4 | | | | | | | 4 | 0% | 100.0 |
| Carbon tetrachloride | | | 4 | | | | | | | 4 | 0% | 100.0 |
| Chlorobenzene | | | 4 | | | | | | | 4 | 0% | 100.0 |
| Chloroethane | | | 4 | | | | | | | 4 | 0% | 100.0 |
| Chloroethylvinyl ether (2-) | | | 3 | | | | | | 1 | 4 | 25% | 75.0 |
| Chloroform | | | 4 | | | | | | | 4 | 0% | 100.0 |
| Chloromethane | | | 4 | | | | | | | 4 | 0% | 100.0 |
| Dibromochloromethane | | | 4 | | | | | | | 4 | 0% | 100.0 |
| Dichloroethane (1,1-) | | | 4 | | | | | | | 4 | 0% | 100.0 |
| Dichloroethane (1,2-) | | | 4 | | | | | | | 4 | 0% | 100.0 |
| Dichloroethene (1,1-) | | | 4 | | | | | | | 4 | 0% | 100.0 |
| Dichloroethene (cis-1,2-) | | | 4 | | | | | | | 4 | 0% | 100.0 |
| Dichloroethene (trans-1,2-) | | | 4 | | | | | | | 4 | 0% | 100.0 |
| Dichloropropane (1,2-) | | | 4 | | | | | | | 4 | 0% | 100.0 |
| Dichloropropene (cis-1,3-) | | | 4 | | | | | | | 4 | 0% | 100.0 |
| Dichloropropene (trans-1,3-) | | | 4 | | | | | | | 4 | 0% | 100.0 |
| Ethylbenzene | | | 4 | | | | | | | 4 | 0% | 100.0 |
| Hexanone (2-) | | | 4 | | | | | | | 4 | 0% | 100.0 |
| Methyl-2-pentanone (4-) | | | 4 | | | | | | | 4 | 0% | 100.0 |
| Methylene chloride | | | 4 | | | | | | | 4 | 0% | 100.0 |
| Methyl-tert Butyl Ether | | | 4 | | | | | | | 4 | 0% | 100.0 |
| Styrene | | | 4 | | | | | | | 4 | 0% | 100.0 |
| Tetrachloroethane (1,1,2,2-) | | | 4 | | | | | | | 4 | 0% | 100.0 |
| Tetrachloroethene | | | 4 | | | | | | | 4 | 0% | 100.0 |
| Toluene | | | 4 | | | | | | | 4 | 0% | 100.0 |
| Trichloroethane (1,1,1-) | | | 4 | | | | | | | 4 | 0% | 100.0 |
| Trichloroethane (1,1,2-) | | | 4 | | | | | | | 4 | 0% | 100.0 |

TABLE 6C

March 31, 2007

Summary of Data Validation Qualifiers and Completeness - VOC Analyses - Surface Water
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Analyte | Number of Non-Qualified Samples | Number of Samples Qualified "J" | Number of Samples Qualified "U" | Number of Samples Qualified "UJ" | Number of Samples Qualified "B" | Number of Samples Qualified "JB" | Number of Samples Qualified "EB" | Number of Samples Qualified "JEB" | Number of Samples Qualified "R" | Total Number of Samples | Detection Frequency | Completeness (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Trichloroethene | | | 4 | | | | | | | 4 | 0% | 100.0 |
| Trichlorofluoromethane | | | 4 | | | | | | | 4 | 0% | 100.0 |
| Vinyl acetate | | | 4 | | | | | | | 4 | 0% | 100.0 |
| Vinyl chloride | | | 4 | | | | | | | 4 | 0% | 100.0 |
| Xylene (m,p-) | | | 4 | | | | | | | 4 | 0% | 100.0 |
| Xylene (o-) | | | 4 | | | | | | | 4 | 0% | 100.0 |
| **Total % Completeness for VOCs** | | | | | | | | | | | | **99.4** |

Notes:

1. Detection frequency includes non-rejected primary samples only, and is calculated using the following equation:

Detection Frequency (%) = {1 - [("Number of Samples Assigned a 'U' Qualifier" + "Number of Samples Assigned a 'UJ' Qualifier")÷ ("Total Number of Samples"-"Number of Samples assigned an 'R' Qualifier")]} * 100

2. Completeness is calculated according to the following:

Completeness (%) = [("Total Number of Samples" - "Number of Samples Assigned an 'R' Qualifier") ÷ "Total Number of Samples"] * 100

3. A blank field indicates that results were not qualified using this data qualifier.

4. "U" - The compound/analyte was analyzed for but was not detected. The associated numerical value is the sample-specific quantitation (reporting) limit. These results are usable for project objectives.
"UJ" - The compound/analyte was analyzed for but was not detected. The sample-specific quantitation (reporting) limit is estimated. The non-detected result, qualified UJ, is usable for project objectives with the documentation of the bias or uncertainty in the result.
"J" - The compound/analyte was detected and the result is estimated due to QC exceedance(s). Estimated results are usable for project objectives with the documentation of the uncertainty, bias, and/or imprecision.
"B" - The compound/analyte was detected in a non-matrix matched, associated method blank (e.g., aqueous method blank associated with sediment metals analyses). Result is usable with potential uncertainty due to the potential for contamination.
"JB" - The compound/analyte was detected in a non-matrix matched, associated method blank and is also estimated due to other QC exceedances. Result is usable with particular uncertainty due to the potential for contamination.
"EB" - The compound was detected in an associated equipment blank. Result is usable with particular uncertainty due to the potential for contamination.
"JEB" - The compound was detected in an associated equipment blank and is estimated due to other QC exceedances. Result is usable with particular uncertainty due to potential for contamination.
"R" - Compound/analyte result has been rejected to due severe QC exceedance(s). Rejected results are unusable for project objectives.

TABLE 7

March 31, 2007

Summary of Overall Completeness - Soil Vapor
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Chemical Analyses | Method | Number of Samples Planned for Phase 1B-4 | Number of Results Expected* | Actual Number of Samples Collected | Actual Number of Usable Results Generated** † | Percent Overall Completeness |
|---|---|---|---|---|---|---|
| VOCs | USEPA Method TO-15 | 10 | 380 | 10 | 380 | 100.0% |
| VOCs | MADEP Method APH Draft-1 | 10 | 20 | 10 | 20 | 100.0% |

Notes:

1. "*" The "Number of Results Expected" represents the number of planned samples times the number of individual parameters in each type of analysis. For example, if 10 samples were planned to be collected for analysis of SVOCs, and there are 66 individual SVOC compounds, the total "Number of Results Expected"is 10 x 66 = 660.

2. "**" The "Actual Number of Usable Results Generated" represents the number of actual samples collected times the number of individual parameters in each type of analysis, minus the number of results which were rejected during data validation. For example, if from the 24 samples that were collected for analysis of SVOCs, the "Number of Results Expected" is 974; however, if 6 results were rejected, therefore 968 usable results were generated.

3. "†" Per the Phase 1B-4 QAPP, Alpha Woods Hole Laboratories was supposed to report 38 individual VOC compounds by USEPA Method TO-15 and 2 VOC compound by MADEP Method APH Draft-1 (2-methylnaphthalene and naphthalene). However, the laboratory reported an extra 26 VOC compounds by USEPA Method TO-15, which are not included in this completeness evaluation.

TABLE 7A

Summary of Data Validation Qualifiers and Completeness - VOC Analyses - Soil Vapor

Phases 1B-4 and 1B-5 RI Data Usability Assessment Report

Blackburn & Union Privileges Superfund Site

Walpole, Massachusetts

| Analyte | Number of Non-Qualified Samples | Number of Samples Qualified "J" | Number of Samples Qualified "U" | Number of Samples Qualified "UJ" | Number of Samples Qualified "B" | Number of Samples Qualified "JB" | Number of Samples Qualified "EB" | Number of Samples Qualified "JEB" | Number of Samples Qualified "R" | Total Number of Samples | Detection Frequency | Completeness (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **MADEP Method APH Draft-1** | | | | | | | | | | | | |
| Methylnaphthalene (2-) | 1 | 2 | 7 | | | | | | | 10 | 30% | 100.0 |
| Naphthalene | 4 | 4 | 2 | | | | | | | 10 | 80% | 100.0 |
| **Total % Completeness for VOCs by MADEP Method APH Draft-1** | | | | | | | | | | | | **100.0** |
| **USEPA Method TO-15** | | | | | | | | | | | | |
| **Requested Compounds** | | | | | | | | | | | | |
| Acetone | 7 | 3 | | | | | | | | 10 | 100% | 100.0 |
| Benzene | 5 | 3 | 2 | | | | | | | 10 | 80% | 100.0 |
| Bromodichloromethane | | | 10 | | | | | | | 10 | 0% | 100.0 |
| Bromoform | | | 10 | | | | | | | 10 | 0% | 100.0 |
| Bromomethane | | | 10 | | | | | | | 10 | 0% | 100.0 |
| Butanone (2-) | 5 | | 5 | | | | | | | 10 | 50% | 100.0 |
| Carbon disulfide | 5 | | 5 | | | | | | | 10 | 50% | 100.0 |
| Carbon tetrachloride | 1 | | 9 | | | | | | | 10 | 10% | 100.0 |
| Chlorobenzene | | | 10 | | | | | | | 10 | 0% | 100.0 |
| Chloroethane | | | 10 | | | | | | | 10 | 0% | 100.0 |
| Chloroform | | 1 | 9 | | | | | | | 10 | 10% | 100.0 |
| Chloromethane | | | 10 | | | | | | | 10 | 0% | 100.0 |
| Dibromochloromethane | | | 10 | | | | | | | 10 | 0% | 100.0 |
| Dichloroethane (1,1-) | | | 10 | | | | | | | 10 | 0% | 100.0 |
| Dichloroethane (1,2-) | | | 10 | | | | | | | 10 | 0% | 100.0 |
| Dichloroethene (1,1-) | | | 10 | | | | | | | 10 | 0% | 100.0 |
| Dichloroethene (cis-1,2-) | 1 | | 9 | | | | | | | 10 | 10% | 100.0 |
| Dichloroethene (trans-1,2-) | | | 10 | | | | | | | 10 | 0% | 100.0 |
| Dichloropropane (1,2-) | | | 10 | | | | | | | 10 | 0% | 100.0 |
| Dichloropropene (cis-1,3-) | | | 10 | | | | | | | 10 | 0% | 100.0 |
| Dichloropropene (trans-1,3-) | | | 10 | | | | | | | 10 | 0% | 100.0 |
| Ethylbenzene | 6 | 1 | 3 | | | | | | | 10 | 70% | 100.0 |
| Hexanone (2-) | | | 10 | | | | | | | 10 | 0% | 100.0 |
| Methyl-2-pentanone (4-) | 2 | | 8 | | | | | | | 10 | 20% | 100.0 |
| Methylene chloride | 4 | 4 | 2 | | | | | | | 10 | 80% | 100.0 |
| Methyl-tert Butyl Ether | | | 10 | | | | | | | 10 | 0% | 100.0 |
| Styrene | 1 | | 9 | | | | | | | 10 | 10% | 100.0 |
| Tetrachloroethane (1,1,2,2-) | | | 10 | | | | | | | 10 | 0% | 100.0 |
| Tetrachloroethene | 1 | 2 | 7 | | | | | | | 10 | 30% | 100.0 |
| Toluene | 10 | | | | | | | | | 10 | 100% | 100.0 |
| Trichloroethane (1,1,1-) | | 1 | 9 | | | | | | | 10 | 10% | 100.0 |
| Trichloroethane (1,1,2-) | | | 10 | | | | | | | 10 | 0% | 100.0 |
| Trichloroethene | 6 | 2 | 2 | | | | | | | 10 | 80% | 100.0 |
| Trichlorofluoromethane | 3 | 2 | 5 | | | | | | | 10 | 50% | 100.0 |
| Vinyl acetate | | | 10 | | | | | | | 10 | 0% | 100.0 |
| Vinyl chloride | | | 10 | | | | | | | 10 | 0% | 100.0 |

TABLE 7A
Summary of Data Validation Qualifiers and Completeness - VOC Analyses - Soil Vapor
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Analyte | Number of Non-Qualified Samples | Number of Samples Qualified "J" | Number of Samples Qualified "U" | Number of Samples Qualified "UJ" | Number of Samples Qualified "B" | Number of Samples Qualified "JB" | Number of Samples Qualified "EB" | Number of Samples Qualified "JEB" | Number of Samples Qualified "R" | Total Number of Samples | Detection Frequency | Completeness (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Xylene (m,p-) | 7 | 1 | 2 | | | | | | | 10 | 80% | 100.0 |
| Xylene (o-) | 7 | 2 | 1 | | | | | | | 10 | 90% | 100.0 |
| **Total % Completeness for VOCs by USEPA Method TO-15** | | | | | | | | | | | | **100.0** |
| **Compounds Not Requested** | | | | | | | | | | | | |
| Benzyl Chloride | | | 10 | | | | | | | 10 | 0% | 100.0 |
| Butadiene (1,3-) | | | 10 | | | | | | | 10 | 0% | 100.0 |
| Chloropropene (3-) | | | 10 | | | | | | | 10 | 0% | 100.0 |
| Cyclohexane | 1 | | 9 | | | | | | | 10 | 10% | 100.0 |
| Dibromoethane (1,2-) | | | 10 | | | | | | | 10 | 0% | 100.0 |
| Dichloro-1,1,2,2-tetrafluoroethane (1,2-) | | | 10 | | | | | | | 10 | 0% | 100.0 |
| Dichlorodifluoromethane | | | 10 | | | | | | | 10 | 0% | 100.0 |
| Dioxane (1,4-) | | | 10 | | | | | | | 10 | 0% | 100.0 |
| Ethyl Alcohol | 8 | 2 | | | | | | | | 10 | 100% | 100.0 |
| Ethylacetate | | | 10 | | | | | | | 10 | 0% | 100.0 |
| Ethyltoluene (4-) | 4 | | 6 | | | | | | | 10 | 40% | 100.0 |
| Heptane | 2 | 1 | 7 | | | | | | | 10 | 30% | 100.0 |
| Hexane (n-) | 4 | 5 | 1 | | | | | | | 10 | 90% | 100.0 |
| Iso-Propyl Alcohol | 2 | | 8 | | | | | | | 10 | 20% | 100.0 |
| Propylene | | | 10 | | | | | | | 10 | 0% | 100.0 |
| Tetrahydrofuran | 3 | 2 | 5 | | | | | | | 10 | 50% | 100.0 |
| Trichloro-1,2,2-trifluoroethane (1,1,2-) | | | 10 | | | | | | | 10 | 0% | 100.0 |
| Trimethylbenzene (1,2,4-) | 3 | | 7 | | | | | | | 10 | 30% | 100.0 |
| Trimethylbenzene (1,3,5-) | 8 | | 2 | | | | | | | 10 | 80% | 100.0 |
| Trimethylpentane (2,2,4-) | | | 10 | | | | | | | 10 | 0% | 100.0 |
| Vinyl Bromide | | | 10 | | | | | | | 10 | 0% | 100.0 |

Notes:

1. Detection frequency includes non-rejected primary samples only, and is calculated using the following equation:
   Detection Frequency (%) = {1 - [("Number of Samples Assigned a 'U' Qualifier" + "Number of Samples Assigned a 'UJ' Qualifier")÷ ("Total Number of Samples"-"Number of Samples assigned an 'R' Qualifier")]} * 100
2. Completeness is calculated according to the following:
   Completeness (%) = [("Total Number of Samples" - "Number of Samples Assigned an 'R' Qualifier") ÷ "Total Number of Samples"] * 100
3. A blank field indicates that results were not qualified using this data qualifier.
4. "U" - The compound/analyte was analyzed for but was not detected. The associated numerical value is the sample-specific quantitation (reporting) limit. These results are usable for project objectives.

"UJ" - The compound/analyte was analyzed for but was not detected. The sample-specific quantitation (reporting) limit is estimated. The non-detected result, qualified UJ, is usable for project objectives with the documentation of the bias or uncertainty in the result.

"J" - The compound/analyte was detected and the result is estimated due to QC exceedance(s). Estimated results are usable for project objectives with the documentation of the uncertainty, bias, and/or imprecision.

"B" - The compound/analyte was detected in a non-matrix matched, associated method blank (e.g., aqueous method blank associated with sediment metals analyses). Result is usable with potential uncertainty due to the potential for contamination.

"JB" - The compound/analyte was detected in a non-matrix matched, associated method blank and is also estimated due to other QC exceedances. Result is usable with particular uncertainty due to the potential for contamination.

"EB" - The compound was detected in an associated equipment blank. Result is usable with particular uncertainty due to the potential for contamination.

"JEB" - The compound was detected in an associated equipment blank and is estimated due to other QC exceedances. Result is usable with particular uncertainty due to potential for contamination.

"R" - Compound/analyte result has been rejected to due severe QC exceedance(s). Rejected results are unusable for project objectives.

TABLE 8
Summary of Overall Data Bias - Soil
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Class | Percentage of Non-Biased Results | Percentage of Results Assigned a "H" Bias | Percentage of Results Assigned a "L" Bias | Percentage of Results Assigned a "I" Bias |
|---|---|---|---|---|
| **All Data - Detected and ND** | | | | |
| VOCs | 46.4% | 0.0% | 0.0% | 53.6% |
| **Overall Bias – Soil** | 46.4% | 0.0% | 0.0% | 53.6% |

Notes:

1. Percentages presented above are calculated using non-rejected data only and do not include duplicate sample results.

2. "H" Bias indicates high bias.
"L" Bias indicates low bias.
"I" Bias indicates indeterminate bias.

TABLE 8A
Summary of Bias in Usable Data - VOC Analyses - Soil
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Analyte | Number of Non-Biased Samples | Number of Samples Assigned a "H" Bias | Number of Samples Assigned a "L" Bias | Number of Samples Assigned a "I" Bias | Total Number of Samples |
|---|---|---|---|---|---|
| Acetone | 1 | | | 1 | 2 |
| Benzene | 1 | | | 1 | 2 |
| Bromochloromethane | 1 | | | 1 | 2 |
| Bromodichloromethane | 1 | | | 1 | 2 |
| Bromoform | 1 | | | 1 | 2 |
| Bromomethane | | | | 2 | 2 |
| Butanone (2-) | 1 | | | 1 | 2 |
| Carbon disulfide | 1 | | | 1 | 2 |
| Carbon tetrachloride | 1 | | | 1 | 2 |
| Chlorobenzene | 1 | | | 1 | 2 |
| Chloroethane | 1 | | | 1 | 2 |
| Chloroethylvinyl ether (2-) | 1 | | | 1 | 2 |
| Chloroform | 1 | | | 1 | 2 |
| Chloromethane | 1 | | | 1 | 2 |
| Dibromochloromethane | 1 | | | 1 | 2 |
| Dichloroethane (1,1-) | 1 | | | 1 | 2 |
| Dichloroethane (1,2-) | 1 | | | 1 | 2 |
| Dichloroethene (1,1-) | 1 | | | 1 | 2 |
| Dichloroethene (cis-1,2-) | 1 | | | 1 | 2 |
| Dichloroethene (trans-1,2-) | 1 | | | 1 | 2 |
| Dichloropropane (1,2-) | 1 | | | 1 | 2 |
| Dichloropropene (cis-1,3-) | 1 | | | 1 | 2 |
| Dichloropropene (trans-1,3-) | 1 | | | 1 | 2 |
| Ethylbenzene | 1 | | | 1 | 2 |
| Hexanone (2-) | 1 | | | 1 | 2 |
| Methyl-2-pentanone (4-) | 1 | | | 1 | 2 |
| Methylene chloride | 1 | | | 1 | 2 |
| Methylnaphthalene (2-) | | | | 2 | 2 |
| Methyl-tert Butyl Ether | 1 | | | 1 | 2 |
| Naphthalene | | | | 2 | 2 |
| Styrene | 1 | | | 1 | 2 |
| Tetrachloroethane (1,1,2,2-) | 1 | | | 1 | 2 |

TABLE 8A

Summary of Bias in Usable Data - VOC Analyses - Soil

Phases 1B-4 and 1B-5 RI Data Usability Assessment Report

Blackburn & Union Privileges Superfund Site

Walpole, Massachusetts

| Analyte | Number of Non-Biased Samples | Number of Samples Assigned a "H" Bias | Number of Samples Assigned a "L" Bias | Number of Samples Assigned a "I" Bias | Total Number of Samples |
|---|---|---|---|---|---|
| Tetrachloroethene | 1 | | | 1 | 2 |
| Toluene | 1 | | | 1 | 2 |
| Trichloroethane (1,1,1-) | 1 | | | 1 | 2 |
| Trichloroethane (1,1,2-) | 1 | | | 1 | 2 |
| Trichloroethene | 1 | | | 1 | 2 |
| Trichlorofluoromethane | 1 | | | 1 | 2 |
| Vinyl acetate | 1 | | | 1 | 2 |
| Vinyl chloride | 1 | | | 1 | 2 |
| Xylene (m,p-) | 1 | | | 1 | 2 |
| Xylene (o-) | 1 | | | 1 | 2 |

Notes:

1. Information presented above is based on non-rejected data only and does not include duplicate sample results.

2. "H" Bias indicates high bias.
   "L" Bias indicates low bias.
   "I" Bias indicates indeterminate bias.

3. A blank field indicates that there were no results assigned this bias.

TABLE 9
Summary of Overall Data Bias - Groundwater
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Class | Percentage of Non-Biased Results | Percentage of Results Assigned a "H" Bias | Percentage of Results Assigned a "L" Bias | Percentage of Results Assigned a "I" Bias |
|---|---|---|---|---|
| **All Data - Detected and ND** | | | | |
| Metals | 95.0% | 0.0% | 4.1% | 1.0% |
| SVOCs / PAHs | 93.3% | 0.0% | 0.1% | 6.5% |
| VOCs | 90.1% | 0.1% | 3.7% | 6.1% |
| **Overall Bias – Groundwater** | 92.2% | 0.1% | 3.0% | 4.8% |

Notes:

1. Percentages presented above are calculated using non-rejected data only and do not include duplicate sample results.

2. "H" Bias indicates high bias.
"L" Bias indicates low bias.
"I" Bias indicates indeterminate bias.

TABLE 9A

Summary of Bias in Usable Data - Metals Analyses - Groundwater
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Analyte | Number of Non-Biased Samples | Number of Samples Assigned a "H" Bias | Number of Samples Assigned a "L" Bias | Number of Samples Assigned a "I" Bias | Total Number of Samples |
|---|---|---|---|---|---|
| **Metals** | | | | | |
| Aluminum | 45 | | | | 45 |
| Antimony | 45 | | | | 45 |
| Arsenic | 41 | | | 4 | 45 |
| Barium | 45 | | | | 45 |
| Beryllium | 45 | | | | 45 |
| Cadmium | 45 | | | | 45 |
| Calcium | 17 | | 28 | | 45 |
| Chromium | 45 | | | | 45 |
| Cobalt | 45 | | | | 45 |
| Copper | 45 | | | | 45 |
| Iron | 45 | | | | 45 |
| Lead | 45 | | | | 45 |
| Magnesium | 45 | | | | 45 |
| Manganese | 45 | | | | 45 |
| Mercury | 45 | | | | 45 |
| Nickel | 45 | | | | 45 |
| Potassium | 35 | | 4 | 6 | 45 |
| Selenium | 45 | | | | 45 |
| Silver | 45 | | | | 45 |
| Sodium | 45 | | | | 45 |
| Thallium | 45 | | | | 45 |
| Vanadium | 35 | | 10 | | 45 |
| Zinc | 45 | | | | 45 |
| **Metals - Totals** | **983** | **0** | **42** | **10** | **1035** |

Notes:

1. Information presented above is based on non-rejected data only and does not include duplicate sample results.

2. "H" Bias indicates high bias.
"L" Bias indicates low bias.
"I" Bias indicates indeterminate bias.

TABLE 9B

Summary of Bias in Usable Data - SVOC/PAH Analyses - Groundwater

Phases 1B-4 and 1B-5 RI Data Usability Assessment Report

Blackburn & Union Privileges Superfund Site

Walpole, Massachusetts

| Analyte | Number of Non-Biased Samples | Number of Samples Assigned a "H" Bias | Number of Samples Assigned a "L" Bias | Number of Samples Assigned a "I" Bias | Total Number of Samples |
|---|---|---|---|---|---|
| **SVOCs / PAHs** | | | | | |
| Acenaphthene | 40 | | | 5 | 45 |
| Acenaphthylene | 45 | | | | 45 |
| Anthracene | 44 | | | 1 | 45 |
| Benzo(a)anthracene | 37 | | | 8 | 45 |
| Benzo(a)pyrene | 44 | | | 1 | 45 |
| Benzo(b)fluoranthene | 43 | | | 2 | 45 |
| Benzo(g,h,i)perylene | 37 | | 1 | 7 | 45 |
| Benzo(k)fluoranthene | 44 | | | 1 | 45 |
| bis(2-Ethylhexyl)phthalate | 45 | | | | 45 |
| Carbazole | 41 | | | 4 | 45 |
| Chrysene | 37 | | | 8 | 45 |
| Dibenz(a,h)anthracene | 35 | | | 10 | 45 |
| Fluoranthene | 43 | | | 2 | 45 |
| Fluorene | 44 | | | 1 | 45 |
| Indeno(1,2,3-cd)pyrene | 45 | | | | 45 |
| Methylnaphthalene (2-) | 45 | | | | 45 |
| Naphthalene | 45 | | | | 45 |
| Phenanthrene | 45 | | | | 45 |
| Pyrene | 39 | | | 6 | 45 |
| **SVOCs / PAHs - Totals** | **798** | **0** | **1** | **56** | **855** |

Notes:

1. Information presented above is based on non-rejected data only and does not include duplicate sample results.

2. "H" Bias indicates high bias.
   "L" Bias indicates low bias.
   "I" Bias indicates indeterminate bias.

3. A blank field indicates that there were no results assigned this bias.

TABLE 9C
Summary of Bias in Usable Data - VOC Analyses - Groundwater
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Analyte | Number of Non-Biased Samples | Number of Samples Assigned a "H" Bias | Number of Samples Assigned a "L" Bias | Number of Samples Assigned a "I" Bias | Total Number of Samples |
|---|---|---|---|---|---|
| **VOCs** | | | | | |
| Acetone | 42 | | | 3 | 45 |
| Benzene | 42 | | 1 | 2 | 45 |
| Bromochloromethane | 42 | | 2 | 1 | 45 |
| Bromodichloromethane | 42 | | 2 | 1 | 45 |
| Bromoform | 42 | | 2 | 1 | 45 |
| Bromomethane | | | | 45 | 45 |
| Butanone (2-) | 42 | | 1 | 2 | 45 |
| Carbon disulfide | 42 | | 2 | 1 | 45 |
| Carbon tetrachloride | 42 | | 2 | 1 | 45 |
| Chlorobenzene | 42 | | 2 | 1 | 45 |
| Chloroethane | 42 | | 2 | 1 | 45 |
| Chloroethylvinyl ether (2-) | 42 | | 2 | 1 | 45 |
| Chloroform | 42 | | 2 | 1 | 45 |
| Chloromethane | 42 | | 2 | 1 | 45 |
| Dibromochloromethane | 35 | | | 10 | 45 |
| Dichloroethane (1,1-) | 42 | | 2 | 1 | 45 |
| Dichloroethane (1,2-) | 42 | | 2 | 1 | 45 |
| Dichloroethene (1,1-) | 41 | | 2 | 2 | 45 |
| Dichloroethene (cis-1,2-) | 42 | | 2 | 1 | 45 |
| Dichloroethene (trans-1,2-) | 42 | | 2 | 1 | 45 |
| Dichloropropane (1,2-) | 42 | | 2 | 1 | 45 |
| Dichloropropene (cis-1,3-) | 42 | | 2 | 1 | 45 |
| Dichloropropene (trans-1,3-) | 42 | | 2 | 1 | 45 |
| Ethylbenzene | 41 | | | 4 | 45 |
| Hexanone (2-) | 42 | | 1 | 2 | 45 |
| Methyl-2-pentanone (4-) | 42 | | 2 | 1 | 45 |
| Methylene chloride | 42 | | 2 | 1 | 45 |
| Methyl-tert Butyl Ether | 42 | | 2 | 1 | 45 |
| Styrene | 41 | | 2 | 2 | 45 |
| Tetrachloroethane (1,1,2,2-) | 42 | | 2 | 1 | 45 |
| Tetrachloroethene | 42 | | 2 | 1 | 45 |
| Toluene | 42 | | 1 | 2 | 45 |
| Trichloroethane (1,1,1-) | 41 | | 2 | 2 | 45 |
| Trichloroethane (1,1,2-) | 42 | | 2 | 1 | 45 |
| Trichloroethene | 39 | 2 | 2 | 2 | 45 |
| Trichlorofluoromethane | 42 | | 2 | 1 | 45 |
| Vinyl acetate | 41 | | 2 | 2 | 45 |
| Vinyl chloride | 42 | | 2 | 1 | 45 |
| Xylene (m,p-) | 41 | | 1 | 3 | 45 |
| Xylene (o-) | 42 | | 1 | 2 | 45 |
| **VOCs - Totals** | **1622** | **2** | **66** | **110** | **1800** |

Notes:

1. Information presented above is based on non-rejected data only and does not include duplicate sample results.

2. "H" Bias indicates high bias.
   "L" Bias indicates low bias.
   "I" Bias indicates indeterminate bias.

3. A blank field indicates that there were no results assigned this bias.

TABLE 10
Summary of Overall Bias - Sediment
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Superfund Site
Walpole, Massachusetts

| Class | Percentage of Non-Biased Results | Percentage of Results Assigned a "H" Bias | Percentage of Results Assigned a "L" Bias | Percentage of Results Assigned a "I" Bias |
|---|---|---|---|---|
| **All Data - Detected and ND** | | | | |
| Metals | 100.0% | 0.0% | 0.0% | 0.0% |
| PAHs | 70.1% | 0.0% | 12.3% | 17.6% |
| **Overall Bias – Sediment** | 73.2% | 0.0% | 11.0% | 15.8% |

Notes:

1. Percentages presented above are calculated using non-rejected data only and do not include duplicate sample results.

2. "H" Bias indicates high bias.
"L" Bias indicates low bias.
"I" Bias indicates indeterminate bias.

TABLE 10A

Summary of Bias in Usable Data - Metals Analyses - Sediment

Phases 1B-4 and 1B-5 RI Data Usability Assessment Report

Blackburn & Union Superfund Site

Walpole, Massachusetts

| Analyte | Number of Non-Biased Samples | Number of Samples Assigned a "H" Bias | Number of Samples Assigned a "L" Bias | Number of Samples Assigned a "I" Bias | Total Number of Samples |
|---|---|---|---|---|---|
| **Metals** | | | | | |
| Arsenic | 12 | | | | 12 |
| Lead | 12 | | | | 12 |
| **Metals - Totals** | **24** | **0** | **0** | **0** | **24** |

Notes:

1. Information presented above is based on non-rejected data only and does not include duplicate sample results.

2. "H" Bias indicates high bias.
   "L" Bias indicates low bias.
   "I" Bias indicates indeterminate bias.

3. A blank field indicates that there were no results assigned this bias.

TABLE 10B
Summary of Bias in Usable Data - SVOC/PAH Analyses - Sediment
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Analyte | Number of Non-Biased Samples | Number of Samples Assigned a "H" Bias | Number of Samples Assigned a "L" Bias | Number of Samples Assigned a "I" Bias | Total Number of Samples |
|---|---|---|---|---|---|
| **PAHs** | | | | | |
| Acenaphthene | 7 | | 1 | 4 | 12 |
| Acenaphthylene | 7 | | 1 | 4 | 12 |
| Anthracene | 8 | | 1 | 3 | 12 |
| Benzo(a)anthracene | 8 | | 2 | 2 | 12 |
| Benzo(a)pyrene | 7 | | 2 | 3 | 12 |
| Benzo(b)fluoranthene | 10 | | 2 | | 12 |
| Benzo(g,h,i)perylene | 7 | | 1 | 4 | 12 |
| Benzo(k)fluoranthene | 7 | | 2 | 3 | 12 |
| Chrysene | 10 | | 2 | | 12 |
| Dibenz(a,h)anthracene | 9 | | 1 | 2 | 12 |
| Fluoranthene | 10 | | 2 | | 12 |
| Fluorene | 9 | | 1 | 2 | 12 |
| Indeno(1,2,3-cd)pyrene | 7 | | 2 | 3 | 12 |
| Methylnaphthalene (2-) | 8 | | 1 | 3 | 12 |
| Naphthalene | 8 | | 1 | 3 | 12 |
| Phenanthrene | 11 | | 1 | | 12 |
| Pyrene | 10 | | 2 | | 12 |
| **PAHs - Totals** | **143** | **0** | **25** | **36** | **204** |

Notes:

1. Information presented above is based on non-rejected data only and does not include duplicate sample results.

2. "H" Bias indicates high bias.
   "L" Bias indicates low bias.
   "I" Bias indicates indeterminate bias.

3. A blank field indicates that there were no results assigned this bias.

TABLE 11
Summary of Overall Data Bias - Surface Water
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Class | Percentage of Non-Biased Results | Percentage of Results Assigned a "H" Bias | Percentage of Results Assigned a "L" Bias | Percentage of Results Assigned a "I" Bias |
|---|---|---|---|---|
| **All Data - Detected and ND** | | | | |
| Metals (Total and Dissolved) | 95.7% | 0.0% | 0.0% | 4.3% |
| SVOCs | 46.1% | 0.0% | 1.3% | 52.6% |
| VOCs | 97.5% | 0.0% | 0.0% | 2.5% |
| **Overall Bias - Surface Water** | 87.4% | 0.0% | 0.2% | 12.4% |

Notes:

1. Percentages presented above are calculated using non-rejected data only and do not include duplicate sample results.

2. "H" Bias indicates high bias.
"L" Bias indicates low bias.
"I" Bias indicates indeterminate bias.

TABLE 11A

Summary of Bias in Usable Data - Metals Analyses - Surface Water

Phases 1B-4 and 1B-5 RI Data Usability Assessment Report

Blackburn & Union Privileges Superfund Site

Walpole, Massachusetts

| Analyte | Number of Non-Biased Samples | Number of Samples Assigned a "H" Bias | Number of Samples Assigned a "L" Bias | Number of Samples Assigned a "I" Bias | Total Number of Samples |
|---|---|---|---|---|---|
| **Total Metals** | | | | | |
| Aluminum | 4 | | | | 4 |
| Antimony | 4 | | | | 4 |
| Arsenic | 0 | | | 4 | 4 |
| Barium | 4 | | | | 4 |
| Beryllium | 4 | | | | 4 |
| Cadmium | 4 | | | | 4 |
| Calcium | 4 | | | | 4 |
| Chromium | 4 | | | | 4 |
| Cobalt | 4 | | | | 4 |
| Copper | 4 | | | | 4 |
| Iron | 4 | | | | 4 |
| Lead | 4 | | | | 4 |
| Magnesium | 4 | | | | 4 |
| Manganese | 4 | | | | 4 |
| Mercury | 4 | | | | 4 |
| Nickel | 4 | | | | 4 |
| Potassium | 4 | | | | 4 |
| Selenium | 4 | | | | 4 |
| Silver | 4 | | | | 4 |
| Sodium | 4 | | | | 4 |
| Thallium | 4 | | | | 4 |
| Vanadium | 4 | | | | 4 |
| Zinc | 4 | | | | 4 |
| **Total Metals - Totals** | **88** | **0** | **0** | **4** | **92** |
| **Dissolved Metals** | | | | | |
| Aluminum | 4 | | | | 4 |
| Antimony | 4 | | | | 4 |
| Arsenic | 0 | | | 4 | 4 |
| Barium | 4 | | | | 4 |
| Beryllium | 4 | | | | 4 |
| Cadmium | 4 | | | | 4 |
| Calcium | 4 | | | | 4 |
| Chromium | 4 | | | | 4 |
| Cobalt | 4 | | | | 4 |
| Copper | 4 | | | | 4 |
| Iron | 4 | | | | 4 |
| Lead | 4 | | | | 4 |
| Magnesium | 4 | | | | 4 |
| Manganese | 4 | | | | 4 |
| Mercury | 4 | | | | 4 |
| Nickel | 4 | | | | 4 |
| Potassium | 4 | | | | 4 |
| Selenium | 4 | | | | 4 |
| Silver | 4 | | | | 4 |
| Sodium | 4 | | | | 4 |
| Thallium | 4 | | | | 4 |
| Vanadium | 4 | | | | 4 |
| Zinc | 4 | | | | 4 |
| **Dissolved Metals - Totals** | **88** | **0** | **0** | **4** | **92** |

Notes:

1. Information presented above is based on non-rejected data only and does not include duplicate sample results.
2. "H" Bias indicates high bias.
   "L" Bias indicates low bias.
   "I" Bias indicates indeterminate bias.
3. A blank field indicates that there were no results assigned this bias.

TABLE 11B
Summary of Bias in Usable Data - SVOC/PAH Analyses - Surface Water
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Analyte | Number of Non-Biased Samples | Number of Samples Assigned a "H" Bias | Number of Samples Assigned a "L" Bias | Number of Samples Assigned a "I" Bias | Total Number of Samples |
|---|---|---|---|---|---|
| **SVOCs/PAHs** | | | | | |
| Acenaphthene | 1 | | | 3 | 4 |
| Acenaphthylene | 1 | | | 3 | 4 |
| Anthracene | 2 | | | 2 | 4 |
| Benzo(a)anthracene | 1 | | | 3 | 4 |
| Benzo(a)pyrene | 1 | | | 3 | 4 |
| Benzo(b)fluoranthene | 1 | | | 3 | 4 |
| Benzo(g,h,i)perylene | | | 1 | 3 | 4 |
| Benzo(k)fluoranthene | 1 | | | 3 | 4 |
| bis(2-Ethylhexyl)phthalate | 4 | | | | 4 |
| Carbazole | 3 | | | 1 | 4 |
| Chrysene | 1 | | | 3 | 4 |
| Dibenz(a,h)anthracene | 2 | | | 2 | 4 |
| Fluoranthene | 4 | | | | 4 |
| Fluorene | 1 | | | 3 | 4 |
| Indeno(1,2,3-cd)pyrene | 4 | | | | 4 |
| Methylnaphthalene (2-) | | | | 4 | 4 |
| Naphthalene | 3 | | | 1 | 4 |
| Phenanthrene | 4 | | | | 4 |
| Pyrene | 1 | | | 3 | 4 |
| **SVOCs/PAHs - Totals** | **35** | **0** | **1** | **40** | **76** |

Notes:

1. Information presented above is based on non-rejected data only and does not include duplicate sample results.

2. "H" Bias indicates high bias.
   "L" Bias indicates low bias.
   "I" Bias indicates indeterminate bias.

3. A blank field indicates that there were no results assigned this bias.

TABLE 11C
Summary of Bias in Usable Data - VOC Analyses - Surface Water
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Analyte | Number of Non-Biased Samples | Number of Samples Assigned a "H" Bias | Number of Samples Assigned a "L" Bias | Number of Samples Assigned a "I" Bias | Total Number of Samples |
|---|---|---|---|---|---|
| **VOCs** | | | | | |
| Acetone | 4 | | | | 4 |
| Benzene | 4 | | | | 4 |
| Bromochloromethane | 4 | | | | 4 |
| Bromodichloromethane | 4 | | | | 4 |
| Bromoform | 4 | | | | 4 |
| Bromomethane | | | | 4 | 4 |
| Butanone (2-) | 4 | | | | 4 |
| Carbon disulfide | 4 | | | | 4 |
| Carbon tetrachloride | 4 | | | | 4 |
| Chlorobenzene | 4 | | | | 4 |
| Chloroethane | 4 | | | | 4 |
| Chloroethylvinyl ether (2-) | 4 | | | | 4 |
| Chloroform | 4 | | | | 4 |
| Chloromethane | 4 | | | | 4 |
| Dibromochloromethane | 4 | | | | 4 |
| Dichloroethane (1,1-) | 4 | | | | 4 |
| Dichloroethane (1,2-) | 4 | | | | 4 |
| Dichloroethene (1,1-) | 4 | | | | 4 |
| Dichloroethene (cis-1,2-) | 4 | | | | 4 |
| Dichloroethene (trans-1,2-) | 4 | | | | 4 |
| Dichloropropane (1,2-) | 4 | | | | 4 |
| Dichloropropene (cis-1,3-) | 4 | | | | 4 |
| Dichloropropene (trans-1,3-) | 4 | | | | 4 |
| Ethylbenzene | 4 | | | | 4 |
| Hexanone (2-) | 4 | | | | 4 |
| Methyl-2-pentanone (4-) | 4 | | | | 4 |
| Methylene chloride | 4 | | | | 4 |
| Methyl-tert Butyl Ether | 4 | | | | 4 |
| Styrene | 4 | | | | 4 |
| Tetrachloroethane (1,1,2,2-) | 4 | | | | 4 |
| Tetrachloroethene | 4 | | | | 4 |
| Toluene | 4 | | | | 4 |
| Trichloroethane (1,1,1-) | 4 | | | | 4 |
| Trichloroethane (1,1,2-) | 4 | | | | 4 |
| Trichloroethene | 4 | | | | 4 |
| Trichlorofluoromethane | 4 | | | | 4 |
| Vinyl acetate | 4 | | | | 4 |
| Vinyl chloride | 4 | | | | 4 |
| Xylene (m,p-) | 4 | | | | 4 |
| Xylene (o-) | 4 | | | | 4 |
| **VOCs - Totals** | **156** | **0** | **0** | **4** | **160** |

Notes:

1. Information presented above is based on non-rejected data only and does not include duplicate sample results.

2. "H" Bias indicates high bias.
   "L" Bias indicates low bias.
   "I" Bias indicates indeterminate bias.

3. A blank field indicates that there were no results assigned this bias.

TABLE 12
Summary of Overall Data Bias - Soil Vapor
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Class | Percentage of Non-Biased Results | Percentage of Results Assigned a "H" Bias | Percentage of Results Assigned a "L" Bias | Percentage of Results Assigned a "I" Bias |
|---|---|---|---|---|
| **All Data - Detected and ND** | | | | |
| VOCs by USEPA Method TO-15 | 94.9% | 0.0% | 0.0% | 5.1% |
| VOCs by MADEP Method APH Draft-1 | 72.7% | 0.0% | 0.0% | 27.3% |
| **Overall Bias – Soil Vapor** | 94.2% | 0.0% | 0.0% | 5.8% |

Notes:

1. Percentages presented above are calculated using non-rejected data only and do not include duplicate sample results.

2. "H" Bias indicates high bias.
   "L" Bias indicates low bias.
   "I" Bias indicates indeterminate bias.

TABLE 12A

March 31, 2007

Summary of Bias in Usable Data - VOC Analyses - Soil Vapor
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Analyte | Number of Non-Biased Samples | Number of Samples Assigned a "H" Bias | Number of Samples Assigned a "L" Bias | Number of Samples Assigned a "I" Bias | Total Number of Samples |
|---|---|---|---|---|---|
| **USEPA Method TO-15** | | | | | |
| Acetone | 7 | | | 4 | 11 |
| Benzene | 8 | | | 3 | 11 |
| Benzyl Chloride | 11 | | | | 11 |
| Bromodichloromethane | 11 | | | | 11 |
| Bromoform | 11 | | | | 11 |
| Bromomethane | 11 | | | | 11 |
| Butadiene (1,3-) | 11 | | | | 11 |
| Butanone (2-) | 11 | | | | 11 |
| Carbon disulfide | 11 | | | | 11 |
| Carbon tetrachloride | 11 | | | | 11 |
| Chlorobenzene | 11 | | | | 11 |
| Chloroethane | 11 | | | | 11 |
| Chloroform | 10 | | | 1 | 11 |
| Chloromethane | 11 | | | | 11 |
| Chloropropene (3-) | 11 | | | | 11 |
| Cyclohexane | 11 | | | | 11 |
| Dibromochloromethane | 11 | | | | 11 |
| Dibromoethane (1,2-) | 11 | | | | 11 |
| Dichloro-1,2-tetrafluoroethane-1,1,2,2 | 11 | | | | 11 |
| Dichlorodifluoromethane | 11 | | | | 11 |
| Dichloroethane (1,1-) | 11 | | | | 11 |
| Dichloroethane (1,2-) | 11 | | | | 11 |
| Dichloroethene (1,1-) | 11 | | | | 11 |
| Dichloroethene (cis-1,2-) | 11 | | | | 11 |
| Dichloroethene (trans-1,2-) | 11 | | | | 11 |
| Dichloropropane (1,2-) | 11 | | | | 11 |
| Dichloropropene (cis-1,3-) | 11 | | | | 11 |
| Dichloropropene (trans-1,3-) | 11 | | | | 11 |
| Dioxane (1,4-) | 11 | | | | 11 |
| Ethyl Alcohol | 9 | | | 2 | 11 |
| Ethylacetate | 11 | | | | 11 |
| Ethylbenzene | 10 | | | 1 | 11 |
| Ethyltoluene (4-) | 11 | | | | 11 |
| Heptane | 10 | | | 1 | 11 |
| Hexane (n-) | 6 | | | 5 | 11 |
| Hexanone (2-) | 11 | | | | 11 |
| Iso-Propyl Alcohol | 11 | | | | 11 |
| Methyl-2-pentanone (4-) | 11 | | | | 11 |
| Methylene chloride | 7 | | | 4 | 11 |
| Methyl-tert Butyl Ether | 11 | | | | 11 |
| Propylene | 11 | | | | 11 |
| Styrene | 11 | | | | 11 |
| Tetrachloroethane (1,1,2,2-) | 11 | | | | 11 |
| Tetrachloroethene | 9 | | | 2 | 11 |
| Tetrahydrofuran | 9 | | | 2 | 11 |
| Toluene | 11 | | | | 11 |
| Trichloro-1,1,2-trifluoroethane-1,2,2 | 11 | | | | 11 |
| Trichloroethane (1,1,1-) | 10 | | | 1 | 11 |
| Trichloroethane (1,1,2-) | 11 | | | | 11 |
| Trichloroethene | 9 | | | 2 | 11 |
| Trichlorofluoromethane | 9 | | | 2 | 11 |
| Trimethylbenzene (1,2,4-) | 11 | | | | 11 |
| Trimethylbenzene (1,3,5-) | 11 | | | | 11 |

TABLE 12A

March 31, 2007

Summary of Bias in Usable Data - VOC Analyses - Soil Vapor
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Analyte | Number of Non-Biased Samples | Number of Samples Assigned a "H" Bias | Number of Samples Assigned a "L" Bias | Number of Samples Assigned a "I" Bias | Total Number of Samples |
|---|---|---|---|---|---|
| Trimethylpentane (2,2,4-) | 11 | | | | 11 |
| Vinyl acetate | 11 | | | | 11 |
| Vinyl Bromide | 11 | | | | 11 |
| Vinyl chloride | 11 | | | | 11 |
| Xylene (m,p-) | 10 | | | 1 | 11 |
| Xylene (o-) | 9 | | | 2 | 11 |
| **MADEP Method APH Draft-1** | | | | | |
| Methylnaphthalene (2-) | 9 | | | 2 | 11 |
| Naphthalene | 7 | | | 4 | 11 |

Notes:

1. Information presented above is based on non-rejected data only and does not include duplicate sample results.

2. "H" Bias indicates high bias.
   "L" Bias indicates low bias.
   "I" Bias indicates indeterminate bias.

3. A blank field indicates that there were no results assigned this bias.

TABLE 13
Summary Comparison of Analytical RLs and PALs - VOC Analyses - Soil
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Analyte | Project Action Limit (PAL) | Total Number of ND Samples | Number of ND Samples Where RL > PAL | Percentage of ND Samples Where RL > PAL |
|---|---|---|---|---|
| **VOCs** | | | | |
| Acetone | 3,000 | 1 | 0 | 0% |
| Benzene | 672 | 2 | 0 | 0% |
| Bromochloromethane | NA | 2 | - | - |
| Bromodichloromethane | 820 | 2 | 0 | 0% |
| Bromoform | 62,000 | 2 | 0 | 0% |
| Bromomethane | 390 | 2 | 0 | 0% |
| Butanone (2-) | 300 | 2 | 0 | 0% |
| Carbon disulfide | 35,534 | 2 | 0 | 0% |
| Carbon tetrachloride | 239 | 2 | 0 | 0% |
| Chlorobenzene | 8,000 | 2 | 0 | 0% |
| Chloroethane | 3,026 | 2 | 0 | 0% |
| Chloroethylvinyl ether (2-) | NA | 2 | - | - |
| Chloroform | 220 | 2 | 1 | 50% |
| Chloromethane | 1,227 | 2 | 0 | 0% |
| Dibromochloromethane | 1,100 | 2 | 0 | 0% |
| Dichloroethane (1,1-) | 3,000 | 2 | 0 | 0% |
| Dichloroethane (1,2-) | 280 | 2 | 0 | 0% |
| Dichloroethene (1,1-) | 2,000 | 2 | 0 | 0% |
| Dichloroethene (cis-1,2-) | 2,000 | 1 | 0 | 0% |
| Dichloroethene (trans-1,2-) | 4,000 | 2 | 0 | 0% |
| Dichloropropane (1,2-) | 340 | 2 | 0 | 0% |
| Dichloropropene (cis-1,3-) | 780 | 2 | 0 | 0% |
| Dichloropropene (trans-1,3-) | 780 | 2 | 0 | 0% |
| Ethylbenzene | 80,000 | 2 | 0 | 0% |
| Hexanone (2-) | NA | 2 | - | - |
| Methyl-2-pentanone (4-) | 500 | 2 | 0 | 0% |
| Methylene chloride | 9,100 | 2 | 0 | 0% |
| Methylnaphthalene (2-) | 4,000 | 1 | 0 | 0% |
| Methyl-tert Butyl Ether | 300 | 2 | 0 | 0% |
| Naphthalene | 4,000 | 1 | 0 | 0% |
| Styrene | 2,000 | 2 | 0 | 0% |
| Tetrachloroethane (1,1,2,2-) | 410 | 2 | 0 | 0% |
| Tetrachloroethene | 500 | 2 | 0 | 0% |
| Toluene | 90,000 | 2 | 0 | 0% |
| Trichloroethane (1,1,1-) | 30,000 | 2 | 0 | 0% |
| Trichloroethane (1,1,2-) | 300 | 2 | 0 | 0% |
| Trichloroethene | 400 | 0 | 0 | - |
| Trichlorofluoromethane | 38,582 | 2 | 0 | 0% |
| Vinyl acetate | 42,573 | 2 | 0 | 0% |
| Vinyl chloride | 22 | 2 | 1 | 50% |
| Xylene (m,p-) | 4,162 | 2 | 0 | 0% |
| Xylene (o-) | 4,162 | 2 | 0 | 0% |
| **Sum of All VOC Parameters** | - | **78** | **2** | **3%** |

Notes:

1. The Reporting Limit (RL) represents a sample-specific RL.

2. The Project Action Limit (PAL) is provided in units of micrograms per liter (µg/L).

3. "NA" = Not applicable; no PAL was established in the QAPP for this parameter.
   "ND" = Not Detected; data qualified "U" or "UJ" during data validation.

TABLE 13A

Detail of Analytical RLs and Risk Assessment Screening Levels - VOC Analyses - Soil
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Sample Name | Analyte | COPC Screening Levels | | | | | | | | | | Result | Qualifier | Bias | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Human Health | | Ecological | | | | | | | | | | | |
| | | | | ORNL Toxicological | | | | USEPA Eco. Soil | | | | | | | |
| | | MCP Method 2 S-1 Soil | USEPA Region IX Res. Soil PRG | Phyto-toxicity | Earth-worm | Avian | Mammal | Plant | Inverte-brate | Mammal | Avian | | | | |
| SB-09A / S-2 / 09-07-06 | Chloroform | 200,000 | 220 | NS | NS | NS | **55,000** | NS | NS | NS | NS | 230 | U | | µg/Kg dry |
| SB-09A / S-2 / 09-07-06 | Vinyl chloride | 300 | 79 | NS | NS | NS | **623** | NS | NS | NS | NS | 230 | U | | µg/Kg dry |

Notes:

1. All concentrations are presented in micrograms per kilogram (µg/kg), which are equivalent to parts per billion (ppb).

2. "COPC Screening Levels" indicates contaminants of potential concern (COPC) screening levels used to determine inclusion of an analyte in the human health or ecological risk assessments. Analyte reporting limits which exceed the lower of the human health screening levels (shaded value) are shaded. Analyte reporting limits which exceed the lowest of the ecological screening levels (**bold** value) are in **bold**.

"MCP Method 2 S-1" indicates Massachusetts Contingency Plan (MCP) Method 2 S-1 Soil Standards for Direct Contact Exposure (310 CMR 40.0000). These values were obtained from the Massachusetts Department of Environmental Protection website www.state.ma.us/dep/bwsc/files/mcp/0975_6a.htm, on April 30, 2004.

"USEPA Region IX Res. Soil PRG" indicates USEPA Region IX Residential Soil Preliminary Remediation Goals (PRGs), dated October 1, 2004. PRGs based on non-cancer effects are multiplied by 0.1 per USEPA Guidance (USEPA Region 1, Risk Update Number 5, September 1999).

"ORNL Toxicological Benchmarks" indicates ecological toxicological benchmarks established by the Oak Ridge National Laboratory (ORNL), as noted below.
"Phytotoxicity" indicates data are from the ORNL paper, "Toxicological Benchmarks for Screening Contaminants of Potential Concern for Effects on Terrestrial Plants: 1997 Revision," by Efroymson, R.A., et al.
"Earthworm" indicates data are from the ORNL paper, "Toxicological Benchmarks for Contaminants of Potential Concern for Effects on Soil and Litter Invertebrates and Heterotrophic Process: 1997 Revision," by Efroymson, R.A., et al.
"Avian" indicates data are from the ORNL paper, "Toxicological Benchmarks for Wildlife: 1996 Revision," by Sample, B.E., et al. Values presented are NOAEL-Based benchmarks for food ingestions for the American Robin.
"Mammal" indicates data are from the ORNL paper, "Toxicological Benchmarks for Wildlife: 1996 Revision," by Sample, B.E., et al. Values presented are NOAEL-Based benchmarks for food ingestions for the Short-tailed Shrew.

"USEPA Ecological Soil Screening Levels" indicates data for plants, soil invertebrates, mammals, and avian (birds) are USEPA Ecological Soil Screening Levels (ESSLs) from the USEPA website www.epa.gov/ecotox/ecossl/, last updated 01/30/04.

TABLE 14 March 31, 2007

Summary Comparison of Analytical RLs and PALs - Metals Analyses - Groundwater
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Analyte | Project Action Limit (PAL) | Total Number of ND Samples | Number of ND Samples Where RL > PAL | Percentage of ND Samples Where RL > PAL |
|---|---|---|---|---|
| **Metals** | | | | |
| Aluminum | 3,600 | 21 | 1 | 5% |
| Antimony | 1.5 | 37 | 2 | 5% |
| Arsenic | 0.045 | 2 | 2 | 100% |
| Barium | 260 | 2 | 0 | 0% |
| Beryllium | 4 | 44 | 2 | 5% |
| Cadmium | 1.8 | 39 | 2 | 5% |
| Calcium | NA | 0 | - | - |
| Chromium | 11 | 14 | 2 | - |
| Cobalt | 73 | 11 | 0 | 0% |
| Copper | 150 | 22 | 0 | 0% |
| Iron | 1,100 | 3 | 2 | 67% |
| Lead | 15 | 27 | 2 | 7% |
| Magnesium | NA | 3 | - | - |
| Manganese | 88 | 8 | 1 | 13% |
| Mercury | 1.1 | 45 | 0 | 0% |
| Nickel | 73 | 15 | 0 | 0% |
| Potassium | NA | 6 | - | - |
| Selenium | 18 | 28 | 2 | 7% |
| Silver | 18 | 38 | 0 | 0% |
| Sodium | NA | 0 | - | - |
| Thallium | 2 | 45 | 2 | 4% |
| Vanadium | 3.6 | 11 | 0 | 0% |
| Zinc | 1,100 | 41 | 0 | 0% |
| **Sum of Metals** | **-** | **462** | **20** | **4%** |

Notes:

1. The Reporting Limit (RL) represents a sample-specific RL.

2. The Project Action Limit (PAL) is provided in units of micrograms per liter (µg/L).

3. "NA" = Not applicable; no PAL was established in the QAPP for this parameter.
"ND" = Not Detected; data qualified "U" or "UJ" during data validation.

TABLE 14A

Detail of Analytical RLs and Risk Assessment Screening Levels - Metals Analyses - Groundwater
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Sample Name | Analyte | COPC Screening Levels | | | Result | Qualifier | Bias | Units |
|---|---|---|---|---|---|---|---|---|
| | | EPA MCL | EPA Region IX Tap Water PRG | EPA Vapor Intrusion Screening | | | | |
| SH-01D / 10-03-06 | Aluminum | NS | **3,600** | NS | **120,000** | U | | µg/l |
| SH-01D / 10-03-06 | Antimony | 6 | **1.5** | NS | **50.0** | U | | µg/l |
| SH-01R / 10-04-06 | Antimony | 6 | **1.5** | NS | **50.0** | U | | µg/l |
| SH-27R / 09-29-06 | Arsenic | 10 | **0.045** | NS | **0.40** | U | | µg/l |
| SH-28D / 09-29-06 | Arsenic | 10 | **0.045** | NS | **0.46** | U | | µg/l |
| SH-01D / 10-03-06 | Beryllium | 4 | **7.3** | NS | **20.0** | U | | µg/l |
| SH-01R / 10-04-06 | Beryllium | 4 | **7.3** | NS | **20.0** | U | | µg/l |
| SH-01D / 10-03-06 | Cadmium | 5 | **1.8** | NS | **10.0** | U | | µg/l |
| SH-01R / 10-04-06 | Cadmium | 5 | **1.8** | NS | **10.0** | U | | µg/l |
| SH-01D / 10-03-06 | Chromium† | 100 | **11** | NS | **50.0** | U | | µg/l |
| SH-01R / 10-04-06 | Chromium† | 100 | **11** | NS | **50.0** | U | | µg/l |
| SH-01D / 10-03-06 | Iron | NS | **1,100** | NS | **5,000** | U | | µg/l |
| SH-01R / 10-04-06 | Iron | NS | **1,100** | NS | **5,000** | U | | µg/l |
| SH-01D / 10-03-06 | Lead‡ | 15 | NS | NS | 50.0 | U | | µg/l |
| SH-01R / 10-04-06 | Lead‡ | 15 | NS | NS | 50.0 | U | | µg/l |
| SH-01D / 10-03-06 | Manganese | NS | **88** | NS | **500** | U | | µg/l |
| SH-01D / 10-03-06 | Selenium | 50 | **18** | NS | **100** | U | | µg/l |
| SH-01R / 10-04-06 | Selenium | 50 | **18** | NS | **100** | U | | µg/l |
| SH-01D / 10-03-06 | Thallium | 2 | **0.24** | NS | **10.0** | U | | µg/l |
| SH-01R / 10-04-06 | Thallium | 2 | **0.24** | NS | **10.0** | U | | µg/l |

Notes:

1. Concentrations are presented in micrograms per liter (µg/l), which are equivalent to parts per billion (ppb)

2. "COPC Screening Levels" indicates contaminants of potential concern (COPC) screening levels used to determine inclusion of an analyte in the human health risk assessment. Analyte detections which exceed the USEPA MCL (shaded values) are shaded. Analyte detections which exceed the EPA Region IX Tap Water PRG (**bold** value) are in **bold** Analyte detections from shallow wells which exceed the EPA Vapor Intrusion Screening Values (italic value) are in italics.

"EPA MCL" indicates the values listed are drinking water Maximum Contaminant Levels (MCLs) from the National Primary Drinking Water Standards, dated June 2003 (http://www.epa.gov/safewater/mcl.html).

"EPA Region IX Tap Water PRG" indicates the values listed are from the USEPA Region IX Preliminary Remediation Goals (PRGs) Table, dated October 1, 2004. PRGs based on non-cancer effects are multiplied by 0.1 per USEPA Guidance (USEPA Region I, Risk Update Number 5, September 1999).

"EPA Vapor Intrusion Screening" indicates values listed are from the USEPA Office of Solid Waste and Emergency Response (OSWER) Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils (Subsurface Vapor Intrusion Guidance), Table 2C, November 29, 2002. These values apply to shallow groundwater (SH-series wells with an S after the well number, and WP-series wells). Target groundwater concentrations based on non-carcinogenic effects are multiplied by 0.1 per USEPA Guidance (USEPA Region I, Risk Update Number 5, September 1999).

3. "†" indicates the MCL presented is for total chromium and the PRG presented is for chromium VI.
"‡" indicates the MCLs presented for copper and lead are treatment technique action levels.

TABLE 15 March 31, 2007

Summary Comparison of Analytical RLs and PALs - SVOC/PAH Analyses - Groundwater

Phases 1B-4 and 1B-5 RI Data Usability Assessment Report

Blackburn & Union Privileges Superfund Site

Walpole, Massachusetts

| Analyte | Project Action Limit (PAL) | Total Number of ND Samples | Number of ND Samples Where RL > PAL | Percentage of ND Samples Where RL > PAL |
|---|---|---|---|---|
| **SVOCs** | | | | |
| Acenaphthene | 20 | 26 | 0 | 0% |
| Acenaphthylene | 300 | 34 | 0 | 0% |
| Anthracene | 180 | 34 | 0 | 0% |
| Benzo(a)anthracene | 0.09 | 26 | 0 | 0% |
| Benzo(a)pyrene | 0.0092 | 35 | 35 | 100% |
| Benzo(b)fluoranthene | 0.09 | 36 | 0 | 0% |
| Benzo(g,h,i)perylene | 300 | 36 | 0 | 0% |
| Benzo(k)fluoranthene | 0.92 | 37 | 0 | 0% |
| bis(2-Ethylhexyl)phthalate | 4.8 | 42 | 0 | 0% |
| Carbazole | 3.4 | 28 | 0 | 0% |
| Chrysene | 2 | 26 | 0 | 0% |
| Dibenz(a,h)anthracene | 0.0092 | 31 | 31 | 100% |
| Fluoranthene | 90 | 27 | 0 | 0% |
| Fluorene | 24 | 30 | 0 | 0% |
| Indeno(1,2,3-cd)pyrene | 0.092 | 38 | 0 | 0% |
| Methylnaphthalene (2-) | 10 | 35 | 0 | 0% |
| Naphthalene | 0.62 | 33 | 0 | 0% |
| Phenanthrene | 300 | 32 | 0 | 0% |
| Pyrene | 18 | 23 | 0 | 0% |
| **Sum of All SVOC Parameters** | **-** | **609** | **66** | **11%** |

Notes:

1. The Reporting Limit (RL) represents a sample-specific RL.

2. The Project Action Limit (PAL) is provided in units of micrograms per liter (µg/L).

3. "ND" = Not Detected; data qualified "U" or "UJ" during data validation.

TABLE 15A March 31, 2007

Detail of Analytical RLs and Risk Assessment Screening Levels - SVOC/PAH Analyses - Groundwater

Phases 1B-4 and 1B-5 RI Data Usability Assessment Report

Blackburn & Union Privileges Superfund Site

Walpole, Massachusetts

| Sample Name | Analyte | COPC Screening Levels | | | Result | Qualifier | Bias | Units |
|---|---|---|---|---|---|---|---|---|
| | | EPA MCLs | EPA Region IX Tap | EPA Vapor Intrusion | | | | |
| SH-02R / 09-29-06 | Benzo(a)pyrene | 0.2 | **0.0092** | NS | **0.01** | U | | µg/l |
| SH-03D / 10-03-06 | Benzo(a)pyrene | 0.2 | **0.0092** | NS | **0.01** | U | | µg/l |
| SH-03S / 09-29-06 | Benzo(a)pyrene | 0.2 | **0.0092** | NS | **0.01** | U | | µg/l |
| SH-05D / 10-02-06 | Benzo(a)pyrene | 0.2 | **0.0092** | NS | **0.01** | U | | µg/l |
| SH-05R-A / 10-03-06 | Benzo(a)pyrene | 0.2 | **0.0092** | NS | **0.011** | U | | µg/l |
| SH-05R-B / 10-03-06 | Benzo(a)pyrene | 0.2 | **0.0092** | NS | **0.011** | U | | µg/l |
| SH-06R-A / 10-02-06 | Benzo(a)pyrene | 0.2 | **0.0092** | NS | **0.011** | U | | µg/l |
| SH-06R-B / 10-02-06 | Benzo(a)pyrene | 0.2 | **0.0092** | NS | **0.01** | U | | µg/l |
| SH-13S / 09-28-06 | Benzo(a)pyrene | 0.2 | **0.0092** | NS | **0.011** | U | | µg/l |
| SH-14D / 10-02-06 | Benzo(a)pyrene | 0.2 | **0.0092** | NS | **0.01** | U | | µg/l |
| SH-15D / 09-27-06 | Benzo(a)pyrene | 0.2 | **0.0092** | NS | **0.01** | U | | µg/l |
| SH-17D / 10-05-06 | Benzo(a)pyrene | 0.2 | **0.0092** | NS | **0.01** | U | | µg/l |
| SH-17R / 10-04-06 | Benzo(a)pyrene | 0.2 | **0.0092** | NS | **0.01** | U | | µg/l |
| SH-17S / 09-25-06 | Benzo(a)pyrene | 0.2 | **0.0092** | NS | **0.01** | U | | µg/l |
| SH-18D / 09-26-06 | Benzo(a)pyrene | 0.2 | **0.0092** | NS | **0.011** | U | | µg/l |
| SH-18S / 09-26-06 | Benzo(a)pyrene | 0.2 | **0.0092** | NS | **0.01** | U | | µg/l |
| SH-19D / 09-25-06 | Benzo(a)pyrene | 0.2 | **0.0092** | NS | **0.011** | U | | µg/l |
| SH-19R / 09-28-06 | Benzo(a)pyrene | 0.2 | **0.0092** | NS | **0.01** | U | | µg/l |
| SH-19S / 09-29-06 | Benzo(a)pyrene | 0.2 | **0.0092** | NS | **0.01** | U | | µg/l |
| SH-22S / 09-25-06 | Benzo(a)pyrene | 0.2 | **0.0092** | NS | **0.01** | U | | µg/l |
| SH-23S / 09-25-06 | Benzo(a)pyrene | 0.2 | **0.0092** | NS | **0.011** | U | | µg/l |
| SH-24R / 09-28-06 | Benzo(a)pyrene | 0.2 | **0.0092** | NS | **0.011** | U | | µg/l |
| SH-24S / 09-28-06 | Benzo(a)pyrene | 0.2 | **0.0092** | NS | **0.011** | U | | µg/l |
| SH-25D / 09-27-06 | Benzo(a)pyrene | 0.2 | **0.0092** | NS | **0.01** | U | | µg/l |
| SH-25S / 09-26-06 | Benzo(a)pyrene | 0.2 | **0.0092** | NS | **0.01** | U | | µg/l |
| SH-27D / 10-02-06 | Benzo(a)pyrene | 0.2 | **0.0092** | NS | **0.011** | U | | µg/l |
| SH-27R / 09-29-06 | Benzo(a)pyrene | 0.2 | **0.0092** | NS | **0.01** | U | | µg/l |
| SH-27S / 09-25-06 | Benzo(a)pyrene | 0.2 | **0.0092** | NS | **0.011** | U | | µg/l |
| SH-28D / 09-27-06 | Benzo(a)pyrene | 0.2 | **0.0092** | NS | **0.01** | U | | µg/l |
| SH-28R / 09-29-06 | Benzo(a)pyrene | 0.2 | **0.0092** | NS | **0.011** | U | | µg/l |
| SH-28S / 09-27-06 | Benzo(a)pyrene | 0.2 | **0.0092** | NS | **0.011** | U | | µg/l |
| WP-01 / 09-26-06 | Benzo(a)pyrene | 0.2 | **0.0092** | NS | **0.011** | U | | µg/l |
| WP-03 / 09-28-06 | Benzo(a)pyrene | 0.2 | **0.0092** | NS | **0.011** | U | | µg/l |
| WP-05 / 09-27-06 | Benzo(a)pyrene | 0.2 | **0.0092** | NS | **0.011** | U | | µg/l |
| WP-06 / 10-05-06 | Benzo(a)pyrene | 0.2 | **0.0092** | NS | **0.011** | U | | µg/l |
| SH-01D / 10-03-06 | Dibenz(a,h)anthracene | NS | **0.0092** | NS | **0.01** | U | | µg/l |
| SH-01S / 10-05-06 | Dibenz(a,h)anthracene | NS | **0.0092** | NS | **0.01** | U | | µg/l |
| SH-03D / 10-03-06 | Dibenz(a,h)anthracene | NS | **0.0092** | NS | **0.01** | U | | µg/l |
| SH-04S / 10-04-06 | Dibenz(a,h)anthracene | NS | **0.0092** | NS | **0.01** | U | | µg/l |
| SH-05D / 10-02-06 | Dibenz(a,h)anthracene | NS | **0.0092** | NS | **0.01** | U | | µg/l |
| SH-06R-A / 10-02-06 | Dibenz(a,h)anthracene | NS | **0.0092** | NS | **0.011** | U | | µg/l |
| SH-14D / 10-02-06 | Dibenz(a,h)anthracene | NS | **0.0092** | NS | **0.01** | U | | µg/l |
| SH-15D / 09-27-06 | Dibenz(a,h)anthracene | NS | **0.0092** | NS | **0.01** | U | | µg/l |
| SH-15S / 10-03-06 | Dibenz(a,h)anthracene | NS | **0.0092** | NS | **0.01** | U | | µg/l |
| SH-17D / 10-05-06 | Dibenz(a,h)anthracene | NS | **0.0092** | NS | **0.01** | U | | µg/l |
| SH-17R / 10-04-06 | Dibenz(a,h)anthracene | NS | **0.0092** | NS | **0.01** | U | | µg/l |
| SH-17S / 09-25-06 | Dibenz(a,h)anthracene | NS | **0.0092** | NS | **0.01** | U | | µg/l |
| SH-18D / 09-26-06 | Dibenz(a,h)anthracene | NS | **0.0092** | NS | **0.011** | U | | µg/l |

TABLE 15A March 31, 2007

Detail of Analytical RLs and Risk Assessment Screening Levels - SVOC/PAH Analyses - Groundwater
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Sample Name | Analyte | COPC Screening Levels | | | Result | Qualifier | Bias | Units |
|---|---|---|---|---|---|---|---|---|
| | | EPA MCLs | EPA Region IX Tap | EPA Vapor Intrusion | | | | |
| SH-18S / 09-26-06 | Dibenz(a,h)anthracene | NS | **0.0092** | NS | **0.01** | U | | µg/l |
| SH-19D / 09-25-06 | Dibenz(a,h)anthracene | NS | **0.0092** | NS | **0.011** | U | | µg/l |
| SH-19R / 09-28-06 | Dibenz(a,h)anthracene | NS | **0.0092** | NS | **0.01** | U | | µg/l |
| SH-19S / 09-29-06 | Dibenz(a,h)anthracene | NS | **0.0092** | NS | **0.01** | U | | µg/l |
| SH-22S / 09-25-06 | Dibenz(a,h)anthracene | NS | **0.0092** | NS | **0.01** | U | | µg/l |
| SH-23S / 09-25-06 | Dibenz(a,h)anthracene | NS | **0.0092** | NS | **0.011** | U | | µg/l |
| SH-24S / 09-28-06 | Dibenz(a,h)anthracene | NS | **0.0092** | NS | **0.011** | U | | µg/l |
| SH-25D / 09-27-06 | Dibenz(a,h)anthracene | NS | **0.0092** | NS | **0.01** | U | | µg/l |
| SH-25S / 09-26-06 | Dibenz(a,h)anthracene | NS | **0.0092** | NS | **0.01** | U | | µg/l |
| SH-26S / 10-04-06 | Dibenz(a,h)anthracene | NS | **0.0092** | NS | **0.01** | U | | µg/l |
| SH-27R / 09-29-06 | Dibenz(a,h)anthracene | NS | **0.0092** | NS | **0.01** | U | | µg/l |
| SH-27S / 09-25-06 | Dibenz(a,h)anthracene | NS | **0.0092** | NS | **0.011** | U | | µg/l |
| SH-28R / 09-29-06 | Dibenz(a,h)anthracene | NS | **0.0092** | NS | **0.011** | U | | µg/l |
| SH-28S / 09-27-06 | Dibenz(a,h)anthracene | NS | **0.0092** | NS | **0.011** | U | | µg/l |
| WP-01 / 09-26-06 | Dibenz(a,h)anthracene | NS | **0.0092** | NS | **0.011** | U | | µg/l |
| WP-03 / 09-28-06 | Dibenz(a,h)anthracene | NS | **0.0092** | NS | **0.011** | U | | µg/l |
| WP-05 / 09-27-06 | Dibenz(a,h)anthracene | NS | **0.0092** | NS | **0.011** | U | | µg/l |
| WP-06 / 10-05-06 | Dibenz(a,h)anthracene | NS | **0.0092** | NS | **0.011** | U | | µg/l |

Notes:

1. All concentrations are presented in micrograms per liter (µg/l), which are equivalent to parts per billion (ppb).

2. "COPC Screening Levels" indicates contaminants of potential concern (COPC) screening levels used to determine inclusion of an analyte in the human health risk assessment. Analyte detections which exceed the USEPA MCL (shaded values) are shaded. Analyte detections which exceed the EPA Region IX Tap Water PRG ( **bold** value) are in **bold**. Analyte detections from shallow wells which exceed the EPA Vapor Intrusion Screening Values ( *italic* value) are in *italics* .

"EPA MCL" indicates the values listed are drinking water Maximum Contaminant Levels (MCLs) from the National Primary Drinking Water Standards, dated June 2003 (http://www.epa.gov/safewater/mcl.html).

"EPA Region IX Tap Water PRG" indicates the values listed are from the USEPA Region IX Preliminary Remediation Goals (PRGs) Table, dated October 1, 2004. PRGs based on non-cancer effects are multiplied by 0.1 per USEPA Guidance (USEPA Region I, Risk Update Number 5, September 1999).

"EPA Vapor Intrusion Screening" indicates values listed are from the USEPA Office of Solid Waste and Emergency Response (OSWER) Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils (Subsurface Vapor Intrusion Guidance), Table 2C, November 29, 2002. These values apply to shallow groundwater (SH-series wells with an S after the well number, and WP-series wells). Target groundwater concentrations based on non-carcinogenic effects are multiplied by 0.1 per USEPA Guidance (USEPA Region I, Risk Update Number 5, September 1999).

TABLE 16
Summary Comparison of Analytical RLs and PALs - VOC Analyses - Groundwater
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Analyte | Project Action Limit (PAL) | Total Number of ND Samples | Number of ND Samples Where RL > PAL | Percentage of ND Samples Where RL > PAL |
|---|---|---|---|---|
| **VOCs** | | | | |
| Acetone | 550 | 44 | 0 | 0% |
| Benzene | 0.35 | 39 | 17 | 44% |
| Bromochloromethane | NA | 45 | - | - |
| Bromodichloromethane | 0.18 | 45 | 45 | 100% |
| Bromoform | 0.0083 | 45 | 45 | 100% |
| Bromomethane | 0.87 | 45 | 22 | 49% |
| Butanone (2-) | 350 | 44 | 0 | 0% |
| Carbon disulfide | 56 | 45 | 0 | 0% |
| Carbon tetrachloride | 0.17 | 45 | 45 | 100% |
| Chlorobenzene | 11 | 45 | 2 | 4% |
| Chloroethane | 4.6 | 45 | 6 | 13% |
| Chloroethylvinyl ether (2-) | NA | 43 | - | - |
| Chloroform | 0.17 | 36 | 36 | 100% |
| Chloromethane | 6.7 | 45 | 6 | 13% |
| Dibromochloromethane | 0.13 | 45 | 45 | 100% |
| Dichloroethane (1,1-) | 70 | 45 | 0 | 0% |
| Dichloroethane (1,2-) | 0.12 | 45 | 45 | 100% |
| Dichloroethene (1,1-) | 7 | 44 | 6 | 14% |
| Dichloroethene (cis-1,2-) | 6.1 | 44 | 6 | 14% |
| Dichloroethene (trans-1,2-) | 12 | 45 | 2 | 4% |
| Dichloropropane (1,2-) | 0.16 | 45 | 45 | 100% |
| Dichloropropene (cis-1,3-) | 0.40 | 45 | 45 | 100% |
| Dichloropropene (trans-1,3-) | 0.40 | 45 | 45 | 100% |
| Ethylbenzene | 130 | 40 | 0 | 0% |
| Hexanone (2-) | NA | 44 | - | - |
| Methyl-2-pentanone (4-) | 200 | 45 | 0 | 0% |
| Methylene chloride | 4.3 | 45 | 6 | 13% |
| Methyl-tert Butyl Ether | 11 | 45 | 2 | 4% |
| Styrene | 100 | 43 | 0 | 0% |
| Tetrachloroethane (1,1,2,2-) | 0.055 | 45 | 45 | 100% |
| Tetrachloroethene | 0.10 | 45 | 45 | 100% |
| Toluene | 72 | 40 | 0 | 0% |
| Trichloroethane (1,1,1-) | 200 | 44 | 0 | 0% |
| Trichloroethane (1,1,2-) | 0.20 | 45 | 22 | 49% |
| Trichloroethene | 0.028 | 37 | 37 | 100% |
| Trichlorofluoromethane | 18 | 45 | 2 | 4% |
| Vinyl acetate | 41 | 45 | 0 | 0% |
| Vinyl chloride | 0.020 | 45 | 45 | 100% |
| Xylene (m,p-) | 21 | 41 | 0 | 0% |
| Xylene (o-) | 21 | 41 | 0 | 0% |
| **Sum of All VOC Parameters** | - | **1749** | **667** | **38%** |

Notes:

1. The Reporting Limit (RL) represents a sample-specific RL.

2. The Project Action Limit (PAL) is provided in units of micrograms per liter (µg/L).

3. "NA" = Not applicable; no PAL was established in the QAPP for this parameter.
   "ND" = Not Detected; data qualified "U" or "UJ" during data validation.

TABLE 16A

Detail of Analytical RLs and Risk Assessment Screening Levels - VOC Analyses - Groundwater

Phases 1B-4 and 1B-5 RI Data Usability Assessment Report

Blackburn & Union Privileges Superfund Site

Walpole, Massachusetts

| Sample Name | Analyte | COPC Screening Levels | | | Result | Qualifier | Bias | Units |
|---|---|---|---|---|---|---|---|---|
| | | EPA MCL | EPA Region IX Tap Water PRG | EPA Vapor Intrusion Screening | | | | |
| SH-02R / 09-29-06 | Benzene $ | 5 | **0.35** | *5* | **2** | U | | µg/l |
| SH-03D / 10-03-06 | Benzene $ | 5 | **0.35** | *5* | **2** | U | | µg/l |
| SH-03S / 09-29-06 | Benzene $ | 5 | **0.35** | *5* | **2** | U | | µg/l |
| SH-05D / 10-02-06 | Benzene $ | 5 | **0.35** | *5* | **2** | U | | µg/l |
| SH-05R-A / 10-03-06 | Benzene $ | 5 | **0.35** | *5* | **2** | U | | µg/l |
| SH-05R-B / 10-03-06 | Benzene $ | 5 | **0.35** | *5* | **2** | U | | µg/l |
| SH-05S / 10-04-06 | Benzene $ | 5 | **0.35** | *5* | ***10*** | U | | µg/l |
| SH-13S / 09-28-06 | Benzene $ | 5 | **0.35** | *5* | **2** | U | | µg/l |
| SH-15S / 10-03-06 | Benzene $ | 5 | **0.35** | *5* | ***10*** | U | | µg/l |
| SH-17R / 10-04-06 | Benzene $ | 5 | **0.35** | *5* | ***10*** | U | | µg/l |
| SH-19R / 09-28-06 | Benzene $ | 5 | **0.35** | *5* | **2** | U | | µg/l |
| SH-24R / 09-28-06 | Benzene $ | 5 | **0.35** | *5* | **2** | U | | µg/l |
| SH-26S / 10-04-06 | Benzene $ | 5 | **0.35** | *5* | **2** | U | | µg/l |
| SH-27R / 09-29-06 | Benzene $ | 5 | **0.35** | *5* | **2** | U | | µg/l |
| SH-28D / 09-27-06 | Benzene $ | 5 | **0.35** | *5* | **2** | U | | µg/l |
| SH-28R / 09-29-06 | Benzene $ | 5 | **0.35** | *5* | **2** | U | | µg/l |
| WP-06 / 10-05-06 | Benzene $ | 5 | **0.35** | *5* | **2** | U | | µg/l |
| SH-01D / 10-03-06 | Bromodichloromethane | NS | **0.18** | *2.1* | ***40*** | UJ | I | µg/l |
| SH-01R / 10-04-06 | Bromodichloromethane | NS | **0.18** | *2.1* | ***40*** | UJ | L | µg/l |
| SH-01S / 10-05-06 | Bromodichloromethane | NS | **0.18** | *2.1* | **2** | U | | µg/l |
| SH-02R / 09-29-06 | Bromodichloromethane | NS | **0.18** | *2.1* | **2** | U | | µg/l |
| SH-03D / 10-03-06 | Bromodichloromethane | NS | **0.18** | *2.1* | **2** | U | | µg/l |
| SH-03S / 09-29-06 | Bromodichloromethane | NS | **0.18** | *2.1* | **2** | U | | µg/l |
| SH-04S / 10-04-06 | Bromodichloromethane | NS | **0.18** | *2.1* | ***10*** | UJ | L | µg/l |
| SH-05D / 10-02-06 | Bromodichloromethane | NS | **0.18** | *2.1* | **2** | U | | µg/l |
| SH-05R-A / 10-03-06 | Bromodichloromethane | NS | **0.18** | *2.1* | **2** | U | | µg/l |
| SH-05R-B / 10-03-06 | Bromodichloromethane | NS | **0.18** | *2.1* | **2** | U | | µg/l |
| SH-05S / 10-04-06 | Bromodichloromethane | NS | **0.18** | *2.1* | ***10*** | U | | µg/l |
| SH-06R-A / 10-02-06 | Bromodichloromethane | NS | **0.18** | *2.1* | **0.2** | U | | µg/l |
| SH-06R-B / 10-02-06 | Bromodichloromethane | NS | **0.18** | *2.1* | **0.2** | U | | µg/l |
| SH-13S / 09-28-06 | Bromodichloromethane | NS | **0.18** | *2.1* | **2** | U | | µg/l |
| SH-14D / 10-02-06 | Bromodichloromethane | NS | **0.18** | *2.1* | **0.2** | U | | µg/l |
| SH-14S / 10-02-06 | Bromodichloromethane | NS | **0.18** | *2.1* | **0.2** | U | | µg/l |
| SH-15D / 09-27-06 | Bromodichloromethane | NS | **0.18** | *2.1* | **0.2** | U | | µg/l |
| SH-15S / 10-03-06 | Bromodichloromethane | NS | **0.18** | *2.1* | ***10*** | U | | µg/l |
| SH-17D / 10-05-06 | Bromodichloromethane | NS | **0.18** | *2.1* | **2** | U | | µg/l |
| SH-17R / 10-04-06 | Bromodichloromethane | NS | **0.18** | *2.1* | ***10*** | U | | µg/l |
| SH-17S / 09-25-06 | Bromodichloromethane | NS | **0.18** | *2.1* | **0.2** | U | | µg/l |
| SH-18D / 09-26-06 | Bromodichloromethane | NS | **0.18** | *2.1* | **0.2** | U | | µg/l |
| SH-18S / 09-26-06 | Bromodichloromethane | NS | **0.18** | *2.1* | **0.2** | U | | µg/l |
| SH-19D / 09-25-06 | Bromodichloromethane | NS | **0.18** | *2.1* | **0.2** | U | | µg/l |
| SH-19R / 09-28-06 | Bromodichloromethane | NS | **0.18** | *2.1* | **2** | U | | µg/l |
| SH-19S / 09-29-06 | Bromodichloromethane | NS | **0.18** | *2.1* | **0.2** | U | | µg/l |
| SH-21S / 09-26-06 | Bromodichloromethane | NS | **0.18** | *2.1* | **0.2** | U | | µg/l |
| SH-22S / 09-25-06 | Bromodichloromethane | NS | **0.18** | *2.1* | **0.2** | U | | µg/l |
| SH-23S / 09-25-06 | Bromodichloromethane | NS | **0.18** | *2.1* | **0.2** | U | | µg/l |
| SH-24R / 09-28-06 | Bromodichloromethane | NS | **0.18** | *2.1* | **2** | U | | µg/l |
| SH-24S / 09-28-06 | Bromodichloromethane | NS | **0.18** | *2.1* | **0.2** | U | | µg/l |
| SH-25D / 09-27-06 | Bromodichloromethane | NS | **0.18** | *2.1* | **0.2** | U | | µg/l |
| SH-25S / 09-26-06 | Bromodichloromethane | NS | **0.18** | *2.1* | **0.2** | U | | µg/l |
| SH-26S / 10-04-06 | Bromodichloromethane | NS | **0.18** | *2.1* | **2** | U | | µg/l |

Detail of Analytical RLs and Risk Assessment Screening Levels - VOC Analyses - Groundwater
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Sample Name | Analyte | COPC Screening Levels | | | Result | Qualifier | Bias | Units |
|---|---|---|---|---|---|---|---|---|
| | | EPA MCL | EPA Region IX Tap Water PRG | EPA Vapor Intrusion Screening | | | | |
| SH-27D / 10-02-06 | Bromodichloromethane | NS | **0.18** | *2.1* | **0.2** | U | | µg/l |
| SH-27R / 09-29-06 | Bromodichloromethane | NS | **0.18** | *2.1* | **2** | U | | µg/l |
| SH-27S / 09-25-06 | Bromodichloromethane | NS | **0.18** | *2.1* | **0.2** | U | | µg/l |
| SH-28D / 09-27-06 | Bromodichloromethane | NS | **0.18** | *2.1* | **2** | U | | µg/l |
| SH-28R / 09-29-06 | Bromodichloromethane | NS | **0.18** | *2.1* | **2** | U | | µg/l |
| SH-28S / 09-27-06 | Bromodichloromethane | NS | **0.18** | *2.1* | **0.2** | U | | µg/l |
| WP-01 / 09-26-06 | Bromodichloromethane | NS | **0.18** | *2.1* | **0.2** | U | | µg/l |
| WP-03 / 09-28-06 | Bromodichloromethane | NS | **0.18** | *2.1* | **0.2** | U | | µg/l |
| WP-04 / 09-27-06 | Bromodichloromethane | NS | **0.18** | *2.1* | **0.2** | U | | µg/l |
| WP-05 / 09-27-06 | Bromodichloromethane | NS | **0.18** | *2.1* | **0.2** | U | | µg/l |
| WP-06 / 10-05-06 | Bromodichloromethane | NS | **0.18** | *2.1* | **2** | U | | µg/l |
| SH-01D / 10-03-06 | Bromoform | NS | **8.5** | *0.0083* | ***40*** | UJ | I | µg/l |
| SH-01R / 10-04-06 | Bromoform | NS | **8.5** | *0.0083* | ***40*** | UJ | L | µg/l |
| SH-01S / 10-05-06 | Bromoform | NS | **8.5** | *0.0083* | *2* | U | | µg/l |
| SH-02R / 09-29-06 | Bromoform | NS | **8.5** | *0.0083* | *2* | U | | µg/l |
| SH-03D / 10-03-06 | Bromoform | NS | **8.5** | *0.0083* | *2* | U | | µg/l |
| SH-03S / 09-29-06 | Bromoform | NS | **8.5** | *0.0083* | *2* | U | | µg/l |
| SH-04S / 10-04-06 | Bromoform | NS | **8.5** | *0.0083* | ***10*** | UJ | L | µg/l |
| SH-05D / 10-02-06 | Bromoform | NS | **8.5** | *0.0083* | *2* | U | | µg/l |
| SH-05R-A / 10-03-06 | Bromoform | NS | **8.5** | *0.0083* | *2* | U | | µg/l |
| SH-05R-B / 10-03-06 | Bromoform | NS | **8.5** | *0.0083* | *2* | U | | µg/l |
| SH-05S / 10-04-06 | Bromoform | NS | **8.5** | *0.0083* | ***10*** | U | | µg/l |
| SH-06R-A / 10-02-06 | Bromoform | NS | **8.5** | *0.0083* | *0.5* | U | | µg/l |
| SH-06R-B / 10-02-06 | Bromoform | NS | **8.5** | *0.0083* | *0.5* | U | | µg/l |
| SH-13S / 09-28-06 | Bromoform | NS | **8.5** | *0.0083* | *2* | U | | µg/l |
| SH-14D / 10-02-06 | Bromoform | NS | **8.5** | *0.0083* | *0.5* | U | | µg/l |
| SH-14S / 10-02-06 | Bromoform | NS | **8.5** | *0.0083* | *0.5* | U | | µg/l |
| SH-15D / 09-27-06 | Bromoform | NS | **8.5** | *0.0083* | *0.5* | U | | µg/l |
| SH-15S / 10-03-06 | Bromoform | NS | **8.5** | *0.0083* | ***10*** | U | | µg/l |
| SH-17D / 10-05-06 | Bromoform | NS | **8.5** | *0.0083* | *2* | U | | µg/l |
| SH-17R / 10-04-06 | Bromoform | NS | **8.5** | *0.0083* | ***10*** | U | | µg/l |
| SH-17S / 09-25-06 | Bromoform | NS | **8.5** | *0.0083* | *0.5* | U | | µg/l |
| SH-18D / 09-26-06 | Bromoform | NS | **8.5** | *0.0083* | *0.5* | U | | µg/l |
| SH-18S / 09-26-06 | Bromoform | NS | **8.5** | *0.0083* | *0.5* | U | | µg/l |
| SH-19D / 09-25-06 | Bromoform | NS | **8.5** | *0.0083* | *0.5* | U | | µg/l |
| SH-19R / 09-28-06 | Bromoform | NS | **8.5** | *0.0083* | *2* | U | | µg/l |
| SH-19S / 09-29-06 | Bromoform | NS | **8.5** | *0.0083* | *0.5* | U | | µg/l |
| SH-21S / 09-26-06 | Bromoform | NS | **8.5** | *0.0083* | *0.5* | U | | µg/l |
| SH-22S / 09-25-06 | Bromoform | NS | **8.5** | *0.0083* | *0.5* | U | | µg/l |
| SH-23S / 09-25-06 | Bromoform | NS | **8.5** | *0.0083* | *0.5* | U | | µg/l |
| SH-24R / 09-28-06 | Bromoform | NS | **8.5** | *0.0083* | *2* | U | | µg/l |
| SH-24S / 09-28-06 | Bromoform | NS | **8.5** | *0.0083* | *0.5* | U | | µg/l |
| SH-25D / 09-27-06 | Bromoform | NS | **8.5** | *0.0083* | *0.5* | U | | µg/l |
| SH-25S / 09-26-06 | Bromoform | NS | **8.5** | *0.0083* | *0.5* | U | | µg/l |
| SH-26S / 10-04-06 | Bromoform | NS | **8.5** | *0.0083* | *2* | U | | µg/l |
| SH-27D / 10-02-06 | Bromoform | NS | **8.5** | *0.0083* | *0.5* | U | | µg/l |
| SH-27R / 09-29-06 | Bromoform | NS | **8.5** | *0.0083* | *2* | U | | µg/l |
| SH-27S / 09-25-06 | Bromoform | NS | **8.5** | *0.0083* | *0.5* | U | | µg/l |
| SH-28D / 09-27-06 | Bromoform | NS | **8.5** | *0.0083* | *2* | U | | µg/l |
| SH-28R / 09-29-06 | Bromoform | NS | **8.5** | *0.0083* | *2* | U | | µg/l |
| SH-28S / 09-27-06 | Bromoform | NS | **8.5** | *0.0083* | *0.5* | U | | µg/l |
| WP-01 / 09-26-06 | Bromoform | NS | **8.5** | *0.0083* | *0.5* | U | | µg/l |

TABLE 16A

Detail of Analytical RLs and Risk Assessment Screening Levels - VOC Analyses - Groundwater

Phases 1B-4 and 1B-5 RI Data Usability Assessment Report

Blackburn & Union Privileges Superfund Site

Walpole, Massachusetts

| Sample Name | Analyte | COPC Screening Levels | | | Result | Qualifier | Bias | Units |
|---|---|---|---|---|---|---|---|---|
| | | EPA MCL | EPA Region IX Tap Water PRG | EPA Vapor Intrusion Screening | | | | |
| WP-03 / 09-28-06 | Bromoform | NS | **8.5** | *0.0083* | *0.5* | U | | µg/l |
| WP-04 / 09-27-06 | Bromoform | NS | **8.5** | *0.0083* | *0.5* | U | | µg/l |
| WP-05 / 09-27-06 | Bromoform | NS | **8.5** | *0.0083* | *0.5* | U | | µg/l |
| WP-06 / 10-05-06 | Bromoform | NS | **8.5** | *0.0083* | *2* | U | | µg/l |
| SH-01D / 10-03-06 | Bromomethane | NS | **0.87** | *2.0* | ***40*** | UJ | I | µg/l |
| SH-01R / 10-04-06 | Bromomethane | NS | **0.87** | *2.0* | ***40*** | UJ | I | µg/l |
| SH-01S / 10-05-06 | Bromomethane | NS | **0.87** | *2.0* | **2** | UJ | I | µg/l |
| SH-02R / 09-29-06 | Bromomethane | NS | **0.87** | *2.0* | **2** | UJ | I | µg/l |
| SH-03D / 10-03-06 | Bromomethane | NS | **0.87** | *2.0* | **2** | UJ | I | µg/l |
| SH-03S / 09-29-06 | Bromomethane | NS | **0.87** | *2.0* | **2** | UJ | I | µg/l |
| SH-04S / 10-04-06 | Bromomethane | NS | **0.87** | *2.0* | ***10*** | UJ | I | µg/l |
| SH-05D / 10-02-06 | Bromomethane | NS | **0.87** | *2.0* | **2** | UJ | I | µg/l |
| SH-05R-A / 10-03-06 | Bromomethane | NS | **0.87** | *2.0* | **2** | UJ | I | µg/l |
| SH-05R-B / 10-03-06 | Bromomethane | NS | **0.87** | *2.0* | **2** | UJ | I | µg/l |
| SH-05S / 10-04-06 | Bromomethane | NS | **0.87** | *2.0* | ***10*** | UJ | I | µg/l |
| SH-13S / 09-28-06 | Bromomethane | NS | **0.87** | *2.0* | **2** | UJ | I | µg/l |
| SH-15S / 10-03-06 | Bromomethane | NS | **0.87** | *2.0* | ***10*** | UJ | I | µg/l |
| SH-17D / 10-05-06 | Bromomethane | NS | **0.87** | *2.0* | **2** | UJ | I | µg/l |
| SH-17R / 10-04-06 | Bromomethane | NS | **0.87** | *2.0* | ***10*** | UJ | I | µg/l |
| SH-19R / 09-28-06 | Bromomethane | NS | **0.87** | *2.0* | **2** | UJ | I | µg/l |
| SH-24R / 09-28-06 | Bromomethane | NS | **0.87** | *2.0* | **2** | UJ | I | µg/l |
| SH-26S / 10-04-06 | Bromomethane | NS | **0.87** | *2.0* | **2** | UJ | I | µg/l |
| SH-27R / 09-29-06 | Bromomethane | NS | **0.87** | *2.0* | **2** | UJ | I | µg/l |
| SH-28D / 09-27-06 | Bromomethane | NS | **0.87** | *2.0* | **2** | UJ | I | µg/l |
| SH-28R / 09-29-06 | Bromomethane | NS | **0.87** | *2.0* | **2** | UJ | I | µg/l |
| WP-06 / 10-05-06 | Bromomethane | NS | **0.87** | *2.0* | **2** | UJ | I | µg/l |
| SH-01D / 10-03-06 | Carbon tetrachloride $ | 5 | **0.17** | *5* | ***40*** | UJ | I | µg/l |
| SH-01R / 10-04-06 | Carbon tetrachloride $ | 5 | **0.17** | *5* | ***40*** | UJ | L | µg/l |
| SH-01S / 10-05-06 | Carbon tetrachloride $ | 5 | **0.17** | *5* | **2** | U | | µg/l |
| SH-02R / 09-29-06 | Carbon tetrachloride $ | 5 | **0.17** | *5* | **2** | U | | µg/l |
| SH-03D / 10-03-06 | Carbon tetrachloride $ | 5 | **0.17** | *5* | **2** | U | | µg/l |
| SH-03S / 09-29-06 | Carbon tetrachloride $ | 5 | **0.17** | *5* | **2** | U | | µg/l |
| SH-04S / 10-04-06 | Carbon tetrachloride $ | 5 | **0.17** | *5* | ***10*** | UJ | L | µg/l |
| SH-05D / 10-02-06 | Carbon tetrachloride $ | 5 | **0.17** | *5* | **2** | U | | µg/l |
| SH-05R-A / 10-03-06 | Carbon tetrachloride $ | 5 | **0.17** | *5* | **2** | U | | µg/l |
| SH-05R-B / 10-03-06 | Carbon tetrachloride $ | 5 | **0.17** | *5* | **2** | U | | µg/l |
| SH-05S / 10-04-06 | Carbon tetrachloride $ | 5 | **0.17** | *5* | ***40*** | U | | µg/l |
| SH-06R-A / 10-02-06 | Carbon tetrachloride $ | 5 | **0.17** | *5* | **2** | U | | µg/l |
| SH-06R-B / 10-02-06 | Carbon tetrachloride $ | 5 | **0.17** | *5* | **2** | U | | µg/l |
| SH-13S / 09-28-06 | Carbon tetrachloride $ | 5 | **0.17** | *5* | **2** | U | | µg/l |
| SH-14D / 10-02-06 | Carbon tetrachloride $ | 5 | **0.17** | *5* | **2** | U | | µg/l |
| SH-14S / 10-02-06 | Carbon tetrachloride $ | 5 | **0.17** | *5* | **2** | U | | µg/l |
| SH-15D / 09-27-06 | Carbon tetrachloride $ | 5 | **0.17** | *5* | **2** | U | | µg/l |
| SH-15S / 10-03-06 | Carbon tetrachloride $ | 5 | **0.17** | *5* | ***10*** | U | | µg/l |
| SH-17D / 10-05-06 | Carbon tetrachloride $ | 5 | **0.17** | *5* | **2** | U | | µg/l |
| SH-17R / 10-04-06 | Carbon tetrachloride $ | 5 | **0.17** | *5* | ***10*** | U | | µg/l |
| SH-17S / 09-25-06 | Carbon tetrachloride $ | 5 | **0.17** | *5* | **2** | U | | µg/l |
| SH-18D / 09-26-06 | Carbon tetrachloride $ | 5 | **0.17** | *5* | **2** | U | | µg/l |
| SH-18S / 09-26-06 | Carbon tetrachloride $ | 5 | **0.17** | *5* | **2** | U | | µg/l |
| SH-19D / 09-25-06 | Carbon tetrachloride $ | 5 | **0.17** | *5* | **2** | U | | µg/l |
| SH-19R / 09-28-06 | Carbon tetrachloride $ | 5 | **0.17** | *5* | **2** | U | | µg/l |

TABLE 16A

Detail of Analytical RLs and Risk Assessment Screening Levels - VOC Analyses - Groundwater

Phases 1B-4 and 1B-5 RI Data Usability Assessment Report

Blackburn & Union Privileges Superfund Site

Walpole, Massachusetts

| Sample Name | Analyte | COPC Screening Levels | | | Result | Qualifier | Bias | Units |
|---|---|---|---|---|---|---|---|---|
| | | EPA MCL | EPA Region IX Tap Water PRG | EPA Vapor Intrusion Screening | | | | |
| SH-19S / 09-29-06 | Carbon tetrachloride $ | 5 | **0.17** | *5* | **2** | U | | µg/l |
| SH-21S / 09-26-06 | Carbon tetrachloride $ | 5 | **0.17** | *5* | **2** | U | | µg/l |
| SH-22S / 09-25-06 | Carbon tetrachloride $ | 5 | **0.17** | *5* | **2** | U | | µg/l |
| SH-23S / 09-25-06 | Carbon tetrachloride $ | 5 | **0.17** | *5* | **2** | U | | µg/l |
| SH-24R / 09-28-06 | Carbon tetrachloride $ | 5 | **0.17** | *5* | **2** | U | | µg/l |
| SH-24S / 09-28-06 | Carbon tetrachloride $ | 5 | **0.17** | *5* | **2** | U | | µg/l |
| SH-25D / 09-27-06 | Carbon tetrachloride $ | 5 | **0.17** | *5* | **2** | U | | µg/l |
| SH-25S / 09-26-06 | Carbon tetrachloride $ | 5 | **0.17** | *5* | **2** | U | | µg/l |
| SH-26S / 10-04-06 | Carbon tetrachloride $ | 5 | **0.17** | *5* | **2** | U | | µg/l |
| SH-27D / 10-02-06 | Carbon tetrachloride $ | 5 | **0.17** | *5* | **2** | U | | µg/l |
| SH-27R / 09-29-06 | Carbon tetrachloride $ | 5 | **0.17** | *5* | **2** | U | | µg/l |
| SH-27S / 09-25-06 | Carbon tetrachloride $ | 5 | **0.17** | *5* | **2** | U | | µg/l |
| SH-28D / 09-27-06 | Carbon tetrachloride $ | 5 | **0.17** | *5* | **2** | U | | µg/l |
| SH-28R / 09-29-06 | Carbon tetrachloride $ | 5 | **0.17** | *5* | **2** | U | | µg/l |
| SH-28S / 09-27-06 | Carbon tetrachloride $ | 5 | **0.17** | *5* | **2** | U | | µg/l |
| WP-01 / 09-26-06 | Carbon tetrachloride $ | 5 | **0.17** | *5* | **2** | U | | µg/l |
| WP-03 / 09-28-06 | Carbon tetrachloride $ | 5 | **0.17** | *5* | **2** | U | | µg/l |
| WP-04 / 09-27-06 | Carbon tetrachloride $ | 5 | **0.17** | *5* | **2** | U | | µg/l |
| WP-05 / 09-27-06 | Carbon tetrachloride $ | 5 | **0.17** | *5* | **2** | U | | µg/l |
| WP-06 / 10-05-06 | Carbon tetrachloride $ | 5 | **0.17** | *5* | **2** | U | | µg/l |
| SH-01D / 10-03-06 | Chlorobenzene | 100 | **11** | *39* | ***40*** | UJ | I | µg/l |
| SH-01R / 10-04-06 | Chlorobenzene | 100 | **11** | *39* | ***40*** | UJ | L | µg/l |
| SH-01D / 10-03-06 | Chloroethane | NS | **4.6** | *2,800* | **40** | UJ | I | µg/l |
| SH-01R / 10-04-06 | Chloroethane | NS | **4.6** | *2,800* | **40** | UJ | L | µg/l |
| SH-04S / 10-04-06 | Chloroethane | NS | **4.6** | *2,800* | **10** | UJ | L | µg/l |
| SH-05S / 10-04-06 | Chloroethane | NS | **4.6** | *2,800* | **10** | U | | µg/l |
| SH-15S / 10-03-06 | Chloroethane | NS | **4.6** | *2,800* | **10** | U | | µg/l |
| SH-17R / 10-04-06 | Chloroethane | NS | **4.6** | *2,800* | **10** | U | | µg/l |
| SH-01D / 10-03-06 | Chloroform $ | NS | **0.17** | *80* | **40** | UJ | I | µg/l |
| SH-01R / 10-04-06 | Chloroform $ | NS | **0.17** | *80* | **40** | UJ | L | µg/l |
| SH-01S / 10-05-06 | Chloroform $ | NS | **0.17** | *80* | **2** | U | | µg/l |
| SH-02R / 09-29-06 | Chloroform $ | NS | **0.17** | *80* | **2** | U | | µg/l |
| SH-03D / 10-03-06 | Chloroform $ | NS | **0.17** | *80* | **2** | U | | µg/l |
| SH-03S / 09-29-06 | Chloroform $ | NS | **0.17** | *80* | **2** | U | | µg/l |
| SH-04S / 10-04-06 | Chloroform $ | NS | **0.17** | *80* | **10** | UJ | L | µg/l |
| SH-05D / 10-02-06 | Chloroform $ | NS | **0.17** | *80* | **2** | U | | µg/l |
| SH-05R-A / 10-03-06 | Chloroform $ | NS | **0.17** | *80* | **2** | U | | µg/l |
| SH-05R-B / 10-03-06 | Chloroform $ | NS | **0.17** | *80* | **2** | U | | µg/l |
| SH-05S / 10-04-06 | Chloroform $ | NS | **0.17** | *80* | **10** | U | | µg/l |
| SH-06R-A / 10-02-06 | Chloroform $ | NS | **0.17** | *80* | **0.2** | U | | µg/l |
| SH-06R-B / 10-02-06 | Chloroform $ | NS | **0.17** | *80* | **0.2** | U | | µg/l |
| SH-13S / 09-28-06 | Chloroform $ | NS | **0.17** | *80* | **2** | U | | µg/l |
| SH-14D / 10-02-06 | Chloroform $ | NS | **0.17** | *80* | **0.2** | U | | µg/l |
| SH-14S / 10-02-06 | Chloroform $ | NS | **0.17** | *80* | **0.2** | U | | µg/l |
| SH-15D / 09-27-06 | Chloroform $ | NS | **0.17** | *80* | **0.2** | U | | µg/l |
| SH-15S / 10-03-06 | Chloroform $ | NS | **0.17** | *80* | **10** | U | | µg/l |
| SH-17D / 10-05-06 | Chloroform $ | NS | **0.17** | *80* | **2** | U | | µg/l |
| SH-17R / 10-04-06 | Chloroform $ | NS | **0.17** | *80* | **10** | U | | µg/l |
| SH-17S / 09-25-06 | Chloroform $ | NS | **0.17** | *80* | **0.2** | U | | µg/l |
| SH-18S / 09-26-06 | Chloroform $ | NS | **0.17** | *80* | **0.2** | U | | µg/l |
| SH-19R / 09-28-06 | Chloroform $ | NS | **0.17** | *80* | **2** | U | | µg/l |
| SH-19S / 09-29-06 | Chloroform $ | NS | **0.17** | *80* | **0.2** | U | | µg/l |

Detail of Analytical RLs and Risk Assessment Screening Levels - VOC Analyses - Groundwater
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Sample Name | Analyte | COPC Screening Levels | | | Result | Qualifier | Bias | Units |
|---|---|---|---|---|---|---|---|---|
| | | EPA MCL | EPA Region IX Tap Water PRG | EPA Vapor Intrusion Screening | | | | |
| SH-23S / 09-25-06 | Chloroform $ | NS | **0.17** | *80* | **0.2** | U | | µg/l |
| SH-24R / 09-28-06 | Chloroform $ | NS | **0.17** | *80* | **2** | U | | µg/l |
| SH-25D / 09-27-06 | Chloroform $ | NS | **0.17** | *80* | **0.2** | U | | µg/l |
| SH-26S / 10-04-06 | Chloroform $ | NS | **0.17** | *80* | **2** | U | | µg/l |
| SH-27R / 09-29-06 | Chloroform $ | NS | **0.17** | *80* | **2** | U | | µg/l |
| SH-28D / 09-27-06 | Chloroform $ | NS | **0.17** | *80* | **2** | U | | µg/l |
| SH-28R / 09-29-06 | Chloroform $ | NS | **0.17** | *80* | **2** | U | | µg/l |
| WP-01 / 09-26-06 | Chloroform $ | NS | **0.17** | *80* | **0.2** | U | | µg/l |
| WP-03 / 09-28-06 | Chloroform $ | NS | **0.17** | *80* | **0.2** | U | | µg/l |
| WP-04 / 09-27-06 | Chloroform $ | NS | **0.17** | *80* | **0.2** | U | | µg/l |
| WP-05 / 09-27-06 | Chloroform $ | NS | **0.17** | *80* | **0.2** | U | | µg/l |
| WP-06 / 10-05-06 | Chloroform $ | NS | **0.17** | *80* | **2** | U | | µg/l |
| SH-01D / 10-03-06 | Chloromethane | NS | **16** | *6.7* | ***40*** | UJ | I | µg/l |
| SH-01R / 10-04-06 | Chloromethane | NS | **16** | *6.7* | ***40*** | UJ | L | µg/l |
| SH-04S / 10-04-06 | Chloromethane | NS | **16** | *6.7* | *10* | UJ | L | µg/l |
| SH-05S / 10-04-06 | Chloromethane | NS | **16** | *6.7* | *10* | U | | µg/l |
| SH-15S / 10-03-06 | Chloromethane | NS | **16** | *6.7* | *10* | U | | µg/l |
| SH-17R / 10-04-06 | Chloromethane | NS | **16** | *6.7* | *10* | U | | µg/l |
| SH-01D / 10-03-06 | Dibromochloromethane | NS | **0.13** | *3.2* | ***40*** | UJ | I | µg/l |
| SH-01R / 10-04-06 | Dibromochloromethane | NS | **0.13** | *3.2* | ***40*** | UJ | I | µg/l |
| SH-01S / 10-05-06 | Dibromochloromethane | NS | **0.13** | *3.2* | **2** | UJ | I | µg/l |
| SH-02R / 09-29-06 | Dibromochloromethane | NS | **0.13** | *3.2* | **2** | U | | µg/l |
| SH-03D / 10-03-06 | Dibromochloromethane | NS | **0.13** | *3.2* | **2** | U | | µg/l |
| SH-03S / 09-29-06 | Dibromochloromethane | NS | **0.13** | *3.2* | **2** | U | | µg/l |
| SH-04S / 10-04-06 | Dibromochloromethane | NS | **0.13** | *3.2* | ***10*** | UJ | I | µg/l |
| SH-05D / 10-02-06 | Dibromochloromethane | NS | **0.13** | *3.2* | **2** | U | | µg/l |
| SH-05R-A / 10-03-06 | Dibromochloromethane | NS | **0.13** | *3.2* | **2** | U | | µg/l |
| SH-05R-B / 10-03-06 | Dibromochloromethane | NS | **0.13** | *3.2* | **2** | U | | µg/l |
| SH-05S / 10-04-06 | Dibromochloromethane | NS | **0.13** | *3.2* | ***10*** | UJ | I | µg/l |
| SH-06R-A / 10-02-06 | Dibromochloromethane | NS | **0.13** | *3.2* | **0.2** | U | | µg/l |
| SH-06R-B / 10-02-06 | Dibromochloromethane | NS | **0.13** | *3.2* | **0.2** | U | | µg/l |
| SH-13S / 09-28-06 | Dibromochloromethane | NS | **0.13** | *3.2* | **2** | U | | µg/l |
| SH-14D / 10-02-06 | Dibromochloromethane | NS | **0.13** | *3.2* | **0.2** | U | | µg/l |
| SH-14S / 10-02-06 | Dibromochloromethane | NS | **0.13** | *3.2* | **0.2** | U | | µg/l |
| SH-15D / 09-27-06 | Dibromochloromethane | NS | **0.13** | *3.2* | **0.2** | U | | µg/l |
| SH-15S / 10-03-06 | Dibromochloromethane | NS | **0.13** | *3.2* | ***10*** | UJ | I | µg/l |
| SH-17D / 10-05-06 | Dibromochloromethane | NS | **0.13** | *3.2* | **2** | UJ | I | µg/l |
| SH-17R / 10-04-06 | Dibromochloromethane | NS | **0.13** | *3.2* | ***10*** | UJ | I | µg/l |
| SH-17S / 09-25-06 | Dibromochloromethane | NS | **0.13** | *3.2* | **0.2** | U | | µg/l |
| SH-18D / 09-26-06 | Dibromochloromethane | NS | **0.13** | *3.2* | **0.2** | U | | µg/l |
| SH-18S / 09-26-06 | Dibromochloromethane | NS | **0.13** | *3.2* | **0.2** | U | | µg/l |
| SH-19D / 09-25-06 | Dibromochloromethane | NS | **0.13** | *3.2* | **0.2** | U | | µg/l |
| SH-19R / 09-28-06 | Dibromochloromethane | NS | **0.13** | *3.2* | **2** | U | | µg/l |
| SH-19S / 09-29-06 | Dibromochloromethane | NS | **0.13** | *3.2* | **0.2** | U | | µg/l |
| SH-21S / 09-26-06 | Dibromochloromethane | NS | **0.13** | *3.2* | **0.2** | U | | µg/l |
| SH-22S / 09-25-06 | Dibromochloromethane | NS | **0.13** | *3.2* | **0.2** | U | | µg/l |
| SH-23S / 09-25-06 | Dibromochloromethane | NS | **0.13** | *3.2* | **0.2** | U | | µg/l |
| SH-24R / 09-28-06 | Dibromochloromethane | NS | **0.13** | *3.2* | **2** | U | | µg/l |
| SH-24S / 09-28-06 | Dibromochloromethane | NS | **0.13** | *3.2* | **0.2** | U | | µg/l |
| SH-25D / 09-27-06 | Dibromochloromethane | NS | **0.13** | *3.2* | **0.2** | U | | µg/l |
| SH-25S / 09-26-06 | Dibromochloromethane | NS | **0.13** | *3.2* | **0.2** | U | | µg/l |

Detail of Analytical RLs and Risk Assessment Screening Levels - VOC Analyses - Groundwater
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Sample Name | Analyte | COPC Screening Levels | | | Result | Qualifier | Bias | Units |
|---|---|---|---|---|---|---|---|---|
| | | EPA MCL | EPA Region IX Tap Water PRG | EPA Vapor Intrusion Screening | | | | |
| SH-26S / 10-04-06 | Dibromochloromethane | NS | **0.13** | *3.2* | **2** | UJ | I | µg/l |
| SH-27D / 10-02-06 | Dibromochloromethane | NS | **0.13** | *3.2* | **0.2** | U | | µg/l |
| SH-27R / 09-29-06 | Dibromochloromethane | NS | **0.13** | *3.2* | **2** | U | | µg/l |
| SH-27S / 09-25-06 | Dibromochloromethane | NS | **0.13** | *3.2* | **0.2** | U | | µg/l |
| SH-28D / 09-27-06 | Dibromochloromethane | NS | **0.13** | *3.2* | **2** | U | | µg/l |
| SH-28R / 09-29-06 | Dibromochloromethane | NS | **0.13** | *3.2* | **2** | U | | µg/l |
| SH-28S / 09-27-06 | Dibromochloromethane | NS | **0.13** | *3.2* | **0.2** | U | | µg/l |
| WP-01 / 09-26-06 | Dibromochloromethane | NS | **0.13** | *3.2* | **0.2** | U | | µg/l |
| WP-03 / 09-28-06 | Dibromochloromethane | NS | **0.13** | *3.2* | **0.2** | U | | µg/l |
| WP-04 / 09-27-06 | Dibromochloromethane | NS | **0.13** | *3.2* | **0.2** | U | | µg/l |
| WP-05 / 09-27-06 | Dibromochloromethane | NS | **0.13** | *3.2* | **0.2** | U | | µg/l |
| WP-06 / 10-05-06 | Dibromochloromethane | NS | **0.13** | *3.2* | **2** | UJ | I | µg/l |
| SH-01D / 10-03-06 | Dichloroethane (1,2-) $ | 5 | **0.12** | *5* | ***40*** | UJ | I | µg/l |
| SH-01R / 10-04-06 | Dichloroethane (1,2-) $ | 5 | **0.12** | *5* | ***40*** | UJ | L | µg/l |
| SH-01S / 10-05-06 | Dichloroethane (1,2-) $ | 5 | **0.12** | *5* | **2** | U | | µg/l |
| SH-02R / 09-29-06 | Dichloroethane (1,2-) $ | 5 | **0.12** | *5* | **2** | U | | µg/l |
| SH-03D / 10-03-06 | Dichloroethane (1,2-) $ | 5 | **0.12** | *5* | **2** | U | | µg/l |
| SH-03S / 09-29-06 | Dichloroethane (1,2-) $ | 5 | **0.12** | *5* | **2** | U | | µg/l |
| SH-04S / 10-04-06 | Dichloroethane (1,2-) $ | 5 | **0.12** | *5* | ***10*** | UJ | L | µg/l |
| SH-05D / 10-02-06 | Dichloroethane (1,2-) $ | 5 | **0.12** | *5* | **2** | U | | µg/l |
| SH-05R-A / 10-03-06 | Dichloroethane (1,2-) $ | 5 | **0.12** | *5* | **2** | U | | µg/l |
| SH-05R-B / 10-03-06 | Dichloroethane (1,2-) $ | 5 | **0.12** | *5* | **2** | U | | µg/l |
| SH-05S / 10-04-06 | Dichloroethane (1,2-) $ | 5 | **0.12** | *5* | ***10*** | U | | µg/l |
| SH-06R-A / 10-02-06 | Dichloroethane (1,2-) $ | 5 | **0.12** | *5* | **0.2** | U | | µg/l |
| SH-06R-B / 10-02-06 | Dichloroethane (1,2-) $ | 5 | **0.12** | *5* | **0.2** | U | | µg/l |
| SH-13S / 09-28-06 | Dichloroethane (1,2-) $ | 5 | **0.12** | *5* | **2** | U | | µg/l |
| SH-14D / 10-02-06 | Dichloroethane (1,2-) $ | 5 | **0.12** | *5* | **0.2** | U | | µg/l |
| SH-14S / 10-02-06 | Dichloroethane (1,2-) $ | 5 | **0.12** | *5* | **0.2** | U | | µg/l |
| SH-15D / 09-27-06 | Dichloroethane (1,2-) $ | 5 | **0.12** | *5* | **0.2** | U | | µg/l |
| SH-15S / 10-03-06 | Dichloroethane (1,2-) $ | 5 | **0.12** | *5* | ***10*** | U | | µg/l |
| SH-17D / 10-05-06 | Dichloroethane (1,2-) $ | 5 | **0.12** | *5* | **2** | U | | µg/l |
| SH-17R / 10-04-06 | Dichloroethane (1,2-) $ | 5 | **0.12** | *5* | ***10*** | U | | µg/l |
| SH-17S / 09-25-06 | Dichloroethane (1,2-) $ | 5 | **0.12** | *5* | **0.2** | U | | µg/l |
| SH-18D / 09-26-06 | Dichloroethane (1,2-) $ | 5 | **0.12** | *5* | **0.2** | U | | µg/l |
| SH-18S / 09-26-06 | Dichloroethane (1,2-) $ | 5 | **0.12** | *5* | **0.2** | U | | µg/l |
| SH-19D / 09-25-06 | Dichloroethane (1,2-) $ | 5 | **0.12** | *5* | **0.2** | U | | µg/l |
| SH-19R / 09-28-06 | Dichloroethane (1,2-) $ | 5 | **0.12** | *5* | **2** | U | | µg/l |
| SH-19S / 09-29-06 | Dichloroethane (1,2-) $ | 5 | **0.12** | *5* | **0.2** | U | | µg/l |
| SH-21S / 09-26-06 | Dichloroethane (1,2-) $ | 5 | **0.12** | *5* | **0.2** | U | | µg/l |
| SH-22S / 09-25-06 | Dichloroethane (1,2-) $ | 5 | **0.12** | *5* | **0.2** | U | | µg/l |
| SH-23S / 09-25-06 | Dichloroethane (1,2-) $ | 5 | **0.12** | *5* | **0.2** | U | | µg/l |
| SH-24R / 09-28-06 | Dichloroethane (1,2-) $ | 5 | **0.12** | *5* | **2** | U | | µg/l |
| SH-24S / 09-28-06 | Dichloroethane (1,2-) $ | 5 | **0.12** | *5* | **0.2** | U | | µg/l |
| SH-25D / 09-27-06 | Dichloroethane (1,2-) $ | 5 | **0.12** | *5* | **0.2** | U | | µg/l |
| SH-25S / 09-26-06 | Dichloroethane (1,2-) $ | 5 | **0.12** | *5* | **0.2** | U | | µg/l |
| SH-26S / 10-04-06 | Dichloroethane (1,2-) $ | 5 | **0.12** | *5* | **2** | U | | µg/l |
| SH-27D / 10-02-06 | Dichloroethane (1,2-) $ | 5 | **0.12** | *5* | **0.2** | U | | µg/l |
| SH-27R / 09-29-06 | Dichloroethane (1,2-) $ | 5 | **0.12** | *5* | **2** | U | | µg/l |
| SH-27S / 09-25-06 | Dichloroethane (1,2-) $ | 5 | **0.12** | *5* | **0.2** | U | | µg/l |
| SH-28D / 09-27-06 | Dichloroethane (1,2-) $ | 5 | **0.12** | *5* | **2** | U | | µg/l |
| SH-28R / 09-29-06 | Dichloroethane (1,2-) $ | 5 | **0.12** | *5* | **2** | U | | µg/l |
| SH-28S / 09-27-06 | Dichloroethane (1,2-) $ | 5 | **0.12** | *5* | **0.2** | U | | µg/l |

TABLE 16A

Detail of Analytical RLs and Risk Assessment Screening Levels - VOC Analyses - Groundwater

Phases 1B-4 and 1B-5 RI Data Usability Assessment Report

Blackburn & Union Privileges Superfund Site

Walpole, Massachusetts

| Sample Name | Analyte | COPC Screening Levels | | | Result | Qualifier | Bias | Units |
|---|---|---|---|---|---|---|---|---|
| | | EPA MCL | EPA Region IX Tap Water PRG | EPA Vapor Intrusion Screening | | | | |
| WP-01 / 09-26-06 | Dichloroethane (1,2-) $ | 5 | **0.12** | *5* | **0.2** | U | | µg/l |
| WP-03 / 09-28-06 | Dichloroethane (1,2-) $ | 5 | **0.12** | *5* | **0.2** | U | | µg/l |
| WP-04 / 09-27-06 | Dichloroethane (1,2-) $ | 5 | **0.12** | *5* | **0.2** | U | | µg/l |
| WP-05 / 09-27-06 | Dichloroethane (1,2-) $ | 5 | **0.12** | *5* | **0.2** | U | | µg/l |
| WP-06 / 10-05-06 | Dichloroethane (1,2-) $ | 5 | **0.12** | *5* | **2** | U | | µg/l |
| SH-01D / 10-03-06 | Dichloroethene (1,1-) | 7 | **34** | *19* | ***40*** | UJ | I | µg/l |
| SH-01R / 10-04-06 | Dichloroethene (1,1-) | 7 | **34** | *19* | ***40*** | UJ | L | µg/l |
| SH-04S / 10-04-06 | Dichloroethene (1,1-) | 7 | **34** | *19* | 10 | UJ | L | µg/l |
| SH-05S / 10-04-06 | Dichloroethene (1,1-) | 7 | **34** | *19* | 10 | U | | µg/l |
| SH-15S / 10-03-06 | Dichloroethene (1,1-) | 7 | **34** | *19* | 10 | U | | µg/l |
| SH-17R / 10-04-06 | Dichloroethene (1,1-) | 7 | **34** | *19* | 10 | U | | µg/l |
| SH-01D / 10-03-06 | Dichloroethene (cis-1,2-) | 70 | **6.1** | *21* | ***40*** | UJ | I | µg/l |
| SH-01R / 10-04-06 | Dichloroethene (cis-1,2-) | 70 | **6.1** | *21* | ***40*** | UJ | L | µg/l |
| SH-04S / 10-04-06 | Dichloroethene (cis-1,2-) | 70 | **6.1** | *21* | **10** | UJ | L | µg/l |
| SH-05S / 10-04-06 | Dichloroethene (cis-1,2-) | 70 | **6.1** | *21* | **10** | U | | µg/l |
| SH-15S / 10-03-06 | Dichloroethene (cis-1,2-) | 70 | **6.1** | *21* | **10** | U | | µg/l |
| SH-17R / 10-04-06 | Dichloroethene (cis-1,2-) | 70 | **6.1** | *21* | **10** | U | | µg/l |
| SH-01D / 10-03-06 | Dichloroethene (trans-1,2-) | 100 | **12** | *18* | ***40*** | UJ | I | µg/l |
| SH-01R / 10-04-06 | Dichloroethene (trans-1,2-) | 100 | **12** | *18* | ***40*** | UJ | L | µg/l |
| SH-01D / 10-03-06 | Dichloropropane (1,2-) | 5 | **0.16** | *3.5* | ***40*** | UJ | I | µg/l |
| SH-01R / 10-04-06 | Dichloropropane (1,2-) | 5 | **0.16** | *3.5* | ***40*** | UJ | L | µg/l |
| SH-01S / 10-05-06 | Dichloropropane (1,2-) | 5 | **0.16** | *3.5* | **2** | U | | µg/l |
| SH-02R / 09-29-06 | Dichloropropane (1,2-) | 5 | **0.16** | *3.5* | **2** | U | | µg/l |
| SH-03D / 10-03-06 | Dichloropropane (1,2-) | 5 | **0.16** | *3.5* | **2** | U | | µg/l |
| SH-03S / 09-29-06 | Dichloropropane (1,2-) | 5 | **0.16** | *3.5* | **2** | U | | µg/l |
| SH-04S / 10-04-06 | Dichloropropane (1,2-) | 5 | **0.16** | *3.5* | ***10*** | UJ | L | µg/l |
| SH-05D / 10-02-06 | Dichloropropane (1,2-) | 5 | **0.16** | *3.5* | **2** | U | | µg/l |
| SH-05R-A / 10-03-06 | Dichloropropane (1,2-) | 5 | **0.16** | *3.5* | **2** | U | | µg/l |
| SH-05R-B / 10-03-06 | Dichloropropane (1,2-) | 5 | **0.16** | *3.5* | **2** | U | | µg/l |
| SH-05S / 10-04-06 | Dichloropropane (1,2-) | 5 | **0.16** | *3.5* | ***10*** | U | | µg/l |
| SH-06R-A / 10-02-06 | Dichloropropane (1,2-) | 5 | **0.16** | *3.5* | **0.5** | U | | µg/l |
| SH-06R-B / 10-02-06 | Dichloropropane (1,2-) | 5 | **0.16** | *3.5* | **0.5** | U | | µg/l |
| SH-13S / 09-28-06 | Dichloropropane (1,2-) | 5 | **0.16** | *3.5* | **2** | U | | µg/l |
| SH-14D / 10-02-06 | Dichloropropane (1,2-) | 5 | **0.16** | *3.5* | **0.5** | U | | µg/l |
| SH-14S / 10-02-06 | Dichloropropane (1,2-) | 5 | **0.16** | *3.5* | **0.5** | U | | µg/l |
| SH-15D / 09-27-06 | Dichloropropane (1,2-) | 5 | **0.16** | *3.5* | **0.5** | U | | µg/l |
| SH-15S / 10-03-06 | Dichloropropane (1,2-) | 5 | **0.16** | *3.5* | ***10*** | U | | µg/l |
| SH-17D / 10-05-06 | Dichloropropane (1,2-) | 5 | **0.16** | *3.5* | **2** | U | | µg/l |
| SH-17R / 10-04-06 | Dichloropropane (1,2-) | 5 | **0.16** | *3.5* | ***10*** | U | | µg/l |
| SH-17S / 09-25-06 | Dichloropropane (1,2-) | 5 | **0.16** | *3.5* | **0.5** | U | | µg/l |
| SH-18D / 09-26-06 | Dichloropropane (1,2-) | 5 | **0.16** | *3.5* | **0.5** | U | | µg/l |
| SH-18S / 09-26-06 | Dichloropropane (1,2-) | 5 | **0.16** | *3.5* | **0.5** | U | | µg/l |
| SH-19D / 09-25-06 | Dichloropropane (1,2-) | 5 | **0.16** | *3.5* | **0.5** | U | | µg/l |
| SH-19R / 09-28-06 | Dichloropropane (1,2-) | 5 | **0.16** | *3.5* | **2** | U | | µg/l |
| SH-19S / 09-29-06 | Dichloropropane (1,2-) | 5 | **0.16** | *3.5* | **0.5** | U | | µg/l |
| SH-21S / 09-26-06 | Dichloropropane (1,2-) | 5 | **0.16** | *3.5* | **0.5** | U | | µg/l |
| SH-22S / 09-25-06 | Dichloropropane (1,2-) | 5 | **0.16** | *3.5* | **0.5** | U | | µg/l |
| SH-23S / 09-25-06 | Dichloropropane (1,2-) | 5 | **0.16** | *3.5* | **0.5** | U | | µg/l |
| SH-24R / 09-28-06 | Dichloropropane (1,2-) | 5 | **0.16** | *3.5* | **2** | U | | µg/l |
| SH-24S / 09-28-06 | Dichloropropane (1,2-) | 5 | **0.16** | *3.5* | **0.5** | U | | µg/l |
| SH-25D / 09-27-06 | Dichloropropane (1,2-) | 5 | **0.16** | *3.5* | **0.5** | U | | µg/l |

TABLE 16A

Detail of Analytical RLs and Risk Assessment Screening Levels - VOC Analyses - Groundwater

Phases 1B-4 and 1B-5 RI Data Usability Assessment Report

Blackburn & Union Privileges Superfund Site

Walpole, Massachusetts

| Sample Name | Analyte | COPC Screening Levels | | | Result | Qualifier | Bias | Units |
|---|---|---|---|---|---|---|---|---|
| | | EPA MCL | EPA Region IX Tap Water PRG | EPA Vapor Intrusion Screening | | | | |
| SH-25S / 09-26-06 | Dichloropropane (1,2-) | 5 | **0.16** | *3.5* | **0.5** | U | | µg/l |
| SH-26S / 10-04-06 | Dichloropropane (1,2-) | 5 | **0.16** | *3.5* | **2** | U | | µg/l |
| SH-27D / 10-02-06 | Dichloropropane (1,2-) | 5 | **0.16** | *3.5* | **0.5** | U | | µg/l |
| SH-27R / 09-29-06 | Dichloropropane (1,2-) | 5 | **0.16** | *3.5* | **2** | U | | µg/l |
| SH-27S / 09-25-06 | Dichloropropane (1,2-) | 5 | **0.16** | *3.5* | **0.5** | U | | µg/l |
| SH-28D / 09-27-06 | Dichloropropane (1,2-) | 5 | **0.16** | *3.5* | **2** | U | | µg/l |
| SH-28R / 09-29-06 | Dichloropropane (1,2-) | 5 | **0.16** | *3.5* | **2** | U | | µg/l |
| SH-28S / 09-27-06 | Dichloropropane (1,2-) | 5 | **0.16** | *3.5* | **0.5** | U | | µg/l |
| WP-01 / 09-26-06 | Dichloropropane (1,2-) | 5 | **0.16** | *3.5* | **0.5** | U | | µg/l |
| WP-03 / 09-28-06 | Dichloropropane (1,2-) | 5 | **0.16** | *3.5* | **0.5** | U | | µg/l |
| WP-04 / 09-27-06 | Dichloropropane (1,2-) | 5 | **0.16** | *3.5* | **0.5** | U | | µg/l |
| WP-05 / 09-27-06 | Dichloropropane (1,2-) | 5 | **0.16** | *3.5* | **0.5** | U | | µg/l |
| WP-06 / 10-05-06 | Dichloropropane (1,2-) | 5 | **0.16** | *3.5* | **2** | U | | µg/l |
| SH-01D / 10-03-06 | Dichloropropene (cis-1,3-) ‡ | NS | **0.40** | *0.84* | ***40*** | UJ | I | µg/l |
| SH-01R / 10-04-06 | Dichloropropene (cis-1,3-) ‡ | NS | **0.40** | *0.84* | ***40*** | UJ | L | µg/l |
| SH-01S / 10-05-06 | Dichloropropene (cis-1,3-) ‡ | NS | **0.40** | *0.84* | ***2*** | U | | µg/l |
| SH-02R / 09-29-06 | Dichloropropene (cis-1,3-) ‡ | NS | **0.40** | *0.84* | ***2*** | U | | µg/l |
| SH-03D / 10-03-06 | Dichloropropene (cis-1,3-) ‡ | NS | **0.40** | *0.84* | ***2*** | U | | µg/l |
| SH-03S / 09-29-06 | Dichloropropene (cis-1,3-) ‡ | NS | **0.40** | *0.84* | ***2*** | U | | µg/l |
| SH-04S / 10-04-06 | Dichloropropene (cis-1,3-) ‡ | NS | **0.40** | *0.84* | ***10*** | UJ | L | µg/l |
| SH-05D / 10-02-06 | Dichloropropene (cis-1,3-) ‡ | NS | **0.40** | *0.84* | ***2*** | U | | µg/l |
| SH-05R-A / 10-03-06 | Dichloropropene (cis-1,3-) ‡ | NS | **0.40** | *0.84* | ***2*** | U | | µg/l |
| SH-05R-B / 10-03-06 | Dichloropropene (cis-1,3-) ‡ | NS | **0.40** | *0.84* | ***2*** | U | | µg/l |
| SH-05S / 10-04-06 | Dichloropropene (cis-1,3-) ‡ | NS | **0.40** | *0.84* | ***10*** | U | | µg/l |
| SH-06R-A / 10-02-06 | Dichloropropene (cis-1,3-) ‡ | NS | **0.40** | *0.84* | **0.5** | U | | µg/l |
| SH-06R-B / 10-02-06 | Dichloropropene (cis-1,3-) ‡ | NS | **0.40** | *0.84* | **0.5** | U | | µg/l |
| SH-13S / 09-28-06 | Dichloropropene (cis-1,3-) ‡ | NS | **0.40** | *0.84* | ***2*** | U | | µg/l |
| SH-14D / 10-02-06 | Dichloropropene (cis-1,3-) ‡ | NS | **0.40** | *0.84* | **0.5** | U | | µg/l |
| SH-14S / 10-02-06 | Dichloropropene (cis-1,3-) ‡ | NS | **0.40** | *0.84* | **0.5** | U | | µg/l |
| SH-15D / 09-27-06 | Dichloropropene (cis-1,3-) ‡ | NS | **0.40** | *0.84* | **0.5** | U | | µg/l |
| SH-15S / 10-03-06 | Dichloropropene (cis-1,3-) ‡ | NS | **0.40** | *0.84* | ***10*** | U | | µg/l |
| SH-17D / 10-05-06 | Dichloropropene (cis-1,3-) ‡ | NS | **0.40** | *0.84* | ***2*** | U | | µg/l |
| SH-17R / 10-04-06 | Dichloropropene (cis-1,3-) ‡ | NS | **0.40** | *0.84* | ***10*** | U | | µg/l |
| SH-17S / 09-25-06 | Dichloropropene (cis-1,3-) ‡ | NS | **0.40** | *0.84* | **0.5** | U | | µg/l |
| SH-18D / 09-26-06 | Dichloropropene (cis-1,3-) ‡ | NS | **0.40** | *0.84* | **0.5** | U | | µg/l |
| SH-18S / 09-26-06 | Dichloropropene (cis-1,3-) ‡ | NS | **0.40** | *0.84* | **0.5** | U | | µg/l |
| SH-19D / 09-25-06 | Dichloropropene (cis-1,3-) ‡ | NS | **0.40** | *0.84* | **0.5** | U | | µg/l |
| SH-19R / 09-28-06 | Dichloropropene (cis-1,3-) ‡ | NS | **0.40** | *0.84* | ***2*** | U | | µg/l |
| SH-19S / 09-29-06 | Dichloropropene (cis-1,3-) ‡ | NS | **0.40** | *0.84* | **0.5** | U | | µg/l |
| SH-21S / 09-26-06 | Dichloropropene (cis-1,3-) ‡ | NS | **0.40** | *0.84* | **0.5** | U | | µg/l |
| SH-22S / 09-25-06 | Dichloropropene (cis-1,3-) ‡ | NS | **0.40** | *0.84* | **0.5** | U | | µg/l |
| SH-23S / 09-25-06 | Dichloropropene (cis-1,3-) ‡ | NS | **0.40** | *0.84* | **0.5** | U | | µg/l |
| SH-24R / 09-28-06 | Dichloropropene (cis-1,3-) ‡ | NS | **0.40** | *0.84* | ***2*** | U | | µg/l |
| SH-24S / 09-28-06 | Dichloropropene (cis-1,3-) ‡ | NS | **0.40** | *0.84* | **0.5** | U | | µg/l |
| SH-25D / 09-27-06 | Dichloropropene (cis-1,3-) ‡ | NS | **0.40** | *0.84* | **0.5** | U | | µg/l |
| SH-25S / 09-26-06 | Dichloropropene (cis-1,3-) ‡ | NS | **0.40** | *0.84* | **0.5** | U | | µg/l |
| SH-26S / 10-04-06 | Dichloropropene (cis-1,3-) ‡ | NS | **0.40** | *0.84* | ***2*** | U | | µg/l |
| SH-27D / 10-02-06 | Dichloropropene (cis-1,3-) ‡ | NS | **0.40** | *0.84* | **0.5** | U | | µg/l |
| SH-27R / 09-29-06 | Dichloropropene (cis-1,3-) ‡ | NS | **0.40** | *0.84* | ***2*** | U | | µg/l |
| SH-27S / 09-25-06 | Dichloropropene (cis-1,3-) ‡ | NS | **0.40** | *0.84* | **0.5** | U | | µg/l |
| SH-28D / 09-27-06 | Dichloropropene (cis-1,3-) ‡ | NS | **0.40** | *0.84* | ***2*** | U | | µg/l |

Detail of Analytical RLs and Risk Assessment Screening Levels - VOC Analyses - Groundwater
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Sample Name | Analyte | COPC Screening Levels | | | Result | Qualifier | Bias | Units |
|---|---|---|---|---|---|---|---|---|
| | | EPA MCL | EPA Region IX Tap Water PRG | EPA Vapor Intrusion Screening | | | | |
| SH-28R / 09-29-06 | Dichloropropene (cis-1,3-) ‡ | NS | **0.40** | *0.84* | ***2*** | U | | µg/l |
| SH-28S / 09-27-06 | Dichloropropene (cis-1,3-) ‡ | NS | **0.40** | *0.84* | **0.5** | U | | µg/l |
| WP-01 / 09-26-06 | Dichloropropene (cis-1,3-) ‡ | NS | **0.40** | *0.84* | **0.5** | U | | µg/l |
| WP-03 / 09-28-06 | Dichloropropene (cis-1,3-) ‡ | NS | **0.40** | *0.84* | **0.5** | U | | µg/l |
| WP-04 / 09-27-06 | Dichloropropene (cis-1,3-) ‡ | NS | **0.40** | *0.84* | **0.5** | U | | µg/l |
| WP-05 / 09-27-06 | Dichloropropene (cis-1,3-) ‡ | NS | **0.40** | *0.84* | **0.5** | U | | µg/l |
| WP-06 / 10-05-06 | Dichloropropene (cis-1,3-) ‡ | NS | **0.40** | *0.84* | ***2*** | U | | µg/l |
| SH-01D / 10-03-06 | Dichloropropene (trans-1,3-) ‡ | NS | **0.40** | *0.84* | ***40*** | UJ | I | µg/l |
| SH-01R / 10-04-06 | Dichloropropene (trans-1,3-) ‡ | NS | **0.40** | *0.84* | ***40*** | UJ | L | µg/l |
| SH-01S / 10-05-06 | Dichloropropene (trans-1,3-) ‡ | NS | **0.40** | *0.84* | ***2*** | U | | µg/l |
| SH-02R / 09-29-06 | Dichloropropene (trans-1,3-) ‡ | NS | **0.40** | *0.84* | ***2*** | U | | µg/l |
| SH-03D / 10-03-06 | Dichloropropene (trans-1,3-) ‡ | NS | **0.40** | *0.84* | ***2*** | U | | µg/l |
| SH-03S / 09-29-06 | Dichloropropene (trans-1,3-) ‡ | NS | **0.40** | *0.84* | ***2*** | U | | µg/l |
| SH-04S / 10-04-06 | Dichloropropene (trans-1,3-) ‡ | NS | **0.40** | *0.84* | ***10*** | UJ | L | µg/l |
| SH-05D / 10-02-06 | Dichloropropene (trans-1,3-) ‡ | NS | **0.40** | *0.84* | ***2*** | U | | µg/l |
| SH-05R-A / 10-03-06 | Dichloropropene (trans-1,3-) ‡ | NS | **0.40** | *0.84* | ***2*** | U | | µg/l |
| SH-05R-B / 10-03-06 | Dichloropropene (trans-1,3-) ‡ | NS | **0.40** | *0.84* | ***2*** | U | | µg/l |
| SH-05S / 10-04-06 | Dichloropropene (trans-1,3-) ‡ | NS | **0.40** | *0.84* | ***10*** | U | | µg/l |
| SH-06R-A / 10-02-06 | Dichloropropene (trans-1,3-) ‡ | NS | **0.40** | *0.84* | **0.5** | U | | µg/l |
| SH-06R-B / 10-02-06 | Dichloropropene (trans-1,3-) ‡ | NS | **0.40** | *0.84* | **0.5** | U | | µg/l |
| SH-13S / 09-28-06 | Dichloropropene (trans-1,3-) ‡ | NS | **0.40** | *0.84* | ***2*** | U | | µg/l |
| SH-14D / 10-02-06 | Dichloropropene (trans-1,3-) ‡ | NS | **0.40** | *0.84* | **0.5** | U | | µg/l |
| SH-14S / 10-02-06 | Dichloropropene (trans-1,3-) ‡ | NS | **0.40** | *0.84* | **0.5** | U | | µg/l |
| SH-15D / 09-27-06 | Dichloropropene (trans-1,3-) ‡ | NS | **0.40** | *0.84* | **0.5** | U | | µg/l |
| SH-15S / 10-03-06 | Dichloropropene (trans-1,3-) ‡ | NS | **0.40** | *0.84* | ***10*** | U | | µg/l |
| SH-17D / 10-05-06 | Dichloropropene (trans-1,3-) ‡ | NS | **0.40** | *0.84* | ***2*** | U | | µg/l |
| SH-17R / 10-04-06 | Dichloropropene (trans-1,3-) ‡ | NS | **0.40** | *0.84* | ***10*** | U | | µg/l |
| SH-17S / 09-25-06 | Dichloropropene (trans-1,3-) ‡ | NS | **0.40** | *0.84* | **0.5** | U | | µg/l |
| SH-18D / 09-26-06 | Dichloropropene (trans-1,3-) ‡ | NS | **0.40** | *0.84* | **0.5** | U | | µg/l |
| SH-18S / 09-26-06 | Dichloropropene (trans-1,3-) ‡ | NS | **0.40** | *0.84* | **0.5** | U | | µg/l |
| SH-19D / 09-25-06 | Dichloropropene (trans-1,3-) ‡ | NS | **0.40** | *0.84* | **0.5** | U | | µg/l |
| SH-19R / 09-28-06 | Dichloropropene (trans-1,3-) ‡ | NS | **0.40** | *0.84* | ***2*** | U | | µg/l |
| SH-19S / 09-29-06 | Dichloropropene (trans-1,3-) ‡ | NS | **0.40** | *0.84* | **0.5** | U | | µg/l |
| SH-21S / 09-26-06 | Dichloropropene (trans-1,3-) ‡ | NS | **0.40** | *0.84* | **0.5** | U | | µg/l |
| SH-22S / 09-25-06 | Dichloropropene (trans-1,3-) ‡ | NS | **0.40** | *0.84* | **0.5** | U | | µg/l |
| SH-23S / 09-25-06 | Dichloropropene (trans-1,3-) ‡ | NS | **0.40** | *0.84* | **0.5** | U | | µg/l |
| SH-24R / 09-28-06 | Dichloropropene (trans-1,3-) ‡ | NS | **0.40** | *0.84* | ***2*** | U | | µg/l |
| SH-24S / 09-28-06 | Dichloropropene (trans-1,3-) ‡ | NS | **0.40** | *0.84* | **0.5** | U | | µg/l |
| SH-25D / 09-27-06 | Dichloropropene (trans-1,3-) ‡ | NS | **0.40** | *0.84* | **0.5** | U | | µg/l |
| SH-25S / 09-26-06 | Dichloropropene (trans-1,3-) ‡ | NS | **0.40** | *0.84* | **0.5** | U | | µg/l |
| SH-26S / 10-04-06 | Dichloropropene (trans-1,3-) ‡ | NS | **0.40** | *0.84* | ***2*** | U | | µg/l |
| SH-27D / 10-02-06 | Dichloropropene (trans-1,3-) ‡ | NS | **0.40** | *0.84* | **0.5** | U | | µg/l |
| SH-27R / 09-29-06 | Dichloropropene (trans-1,3-) ‡ | NS | **0.40** | *0.84* | ***2*** | U | | µg/l |
| SH-27S / 09-25-06 | Dichloropropene (trans-1,3-) ‡ | NS | **0.40** | *0.84* | **0.5** | U | | µg/l |
| SH-28D / 09-27-06 | Dichloropropene (trans-1,3-) ‡ | NS | **0.40** | *0.84* | ***2*** | U | | µg/l |
| SH-28R / 09-29-06 | Dichloropropene (trans-1,3-) ‡ | NS | **0.40** | *0.84* | ***2*** | U | | µg/l |
| SH-28S / 09-27-06 | Dichloropropene (trans-1,3-) ‡ | NS | **0.40** | *0.84* | **0.5** | U | | µg/l |
| WP-01 / 09-26-06 | Dichloropropene (trans-1,3-) ‡ | NS | **0.40** | *0.84* | **0.5** | U | | µg/l |
| WP-03 / 09-28-06 | Dichloropropene (trans-1,3-) ‡ | NS | **0.40** | *0.84* | **0.5** | U | | µg/l |
| WP-04 / 09-27-06 | Dichloropropene (trans-1,3-) ‡ | NS | **0.40** | *0.84* | **0.5** | U | | µg/l |
| WP-05 / 09-27-06 | Dichloropropene (trans-1,3-) ‡ | NS | **0.40** | *0.84* | **0.5** | U | | µg/l |

TABLE 16A

Detail of Analytical RLs and Risk Assessment Screening Levels - VOC Analyses - Groundwater

Phases 1B-4 and 1B-5 RI Data Usability Assessment Report

Blackburn & Union Privileges Superfund Site

Walpole, Massachusetts

| Sample Name | Analyte | COPC Screening Levels | | | Result | Qualifier | Bias | Units |
|---|---|---|---|---|---|---|---|---|
| | | EPA MCL | EPA Region IX Tap Water PRG | EPA Vapor Intrusion Screening | | | | |
| WP-06 / 10-05-06 | Dichloropropene (trans-1,3-) ‡ | NS | **0.40** | *0.84* | ***2*** | U | | µg/l |
| SH-01D / 10-03-06 | Methylene chloride | 5 | **4.3** | *58* | **40** | UJ | I | µg/l |
| SH-01R / 10-04-06 | Methylene chloride | 5 | **4.3** | *58* | **40** | UJ | L | µg/l |
| SH-04S / 10-04-06 | Methylene chloride | 5 | **4.3** | *58* | **10** | UJ | L | µg/l |
| SH-05S / 10-04-06 | Methylene chloride | 5 | **4.3** | *58* | **10** | U | | µg/l |
| SH-15S / 10-03-06 | Methylene chloride | 5 | **4.3** | *58* | **10** | U | | µg/l |
| SH-17R / 10-04-06 | Methylene chloride | 5 | **4.3** | *58* | **10** | U | | µg/l |
| SH-01D / 10-03-06 | Methyl-tert Butyl Ether | NS | **11** | *12,000* | **40** | UJ | I | µg/l |
| SH-01R / 10-04-06 | Methyl-tert Butyl Ether | NS | **11** | *12,000* | **40** | UJ | L | µg/l |
| SH-01D / 10-03-06 | Tetrachloroethane (1,1,2,2-) | NS | **0.055** | *3* | ***40*** | UJ | I | µg/l |
| SH-01R / 10-04-06 | Tetrachloroethane (1,1,2,2-) | NS | **0.055** | *3* | ***40*** | UJ | L | µg/l |
| SH-01S / 10-05-06 | Tetrachloroethane (1,1,2,2-) | NS | **0.055** | *3* | **2** | U | | µg/l |
| SH-02R / 09-29-06 | Tetrachloroethane (1,1,2,2-) | NS | **0.055** | *3* | **2** | U | | µg/l |
| SH-03D / 10-03-06 | Tetrachloroethane (1,1,2,2-) | NS | **0.055** | *3* | **2** | U | | µg/l |
| SH-03S / 09-29-06 | Tetrachloroethane (1,1,2,2-) | NS | **0.055** | *3* | **2** | U | | µg/l |
| SH-04S / 10-04-06 | Tetrachloroethane (1,1,2,2-) | NS | **0.055** | *3* | ***10*** | UJ | L | µg/l |
| SH-05D / 10-02-06 | Tetrachloroethane (1,1,2,2-) | NS | **0.055** | *3* | **2** | U | | µg/l |
| SH-05R-A / 10-03-06 | Tetrachloroethane (1,1,2,2-) | NS | **0.055** | *3* | **2** | U | | µg/l |
| SH-05R-B / 10-03-06 | Tetrachloroethane (1,1,2,2-) | NS | **0.055** | *3* | **2** | U | | µg/l |
| SH-05S / 10-04-06 | Tetrachloroethane (1,1,2,2-) | NS | **0.055** | *3* | ***10*** | U | | µg/l |
| SH-06R-A / 10-02-06 | Tetrachloroethane (1,1,2,2-) | NS | **0.055** | *3* | **0.2** | U | | µg/l |
| SH-06R-B / 10-02-06 | Tetrachloroethane (1,1,2,2-) | NS | **0.055** | *3* | **0.2** | U | | µg/l |
| SH-13S / 09-28-06 | Tetrachloroethane (1,1,2,2-) | NS | **0.055** | *3* | **2** | U | | µg/l |
| SH-14D / 10-02-06 | Tetrachloroethane (1,1,2,2-) | NS | **0.055** | *3* | **0.2** | U | | µg/l |
| SH-14S / 10-02-06 | Tetrachloroethane (1,1,2,2-) | NS | **0.055** | *3* | **0.2** | U | | µg/l |
| SH-15D / 09-27-06 | Tetrachloroethane (1,1,2,2-) | NS | **0.055** | *3* | **0.2** | U | | µg/l |
| SH-15S / 10-03-06 | Tetrachloroethane (1,1,2,2-) | NS | **0.055** | *3* | ***10*** | U | | µg/l |
| SH-17D / 10-05-06 | Tetrachloroethane (1,1,2,2-) | NS | **0.055** | *3* | **2** | U | | µg/l |
| SH-17R / 10-04-06 | Tetrachloroethane (1,1,2,2-) | NS | **0.055** | *3* | ***10*** | U | | µg/l |
| SH-17S / 09-25-06 | Tetrachloroethane (1,1,2,2-) | NS | **0.055** | *3* | **0.2** | U | | µg/l |
| SH-18D / 09-26-06 | Tetrachloroethane (1,1,2,2-) | NS | **0.055** | *3* | **0.2** | U | | µg/l |
| SH-18S / 09-26-06 | Tetrachloroethane (1,1,2,2-) | NS | **0.055** | *3* | **0.2** | U | | µg/l |
| SH-19D / 09-25-06 | Tetrachloroethane (1,1,2,2-) | NS | **0.055** | *3* | **0.2** | U | | µg/l |
| SH-19R / 09-28-06 | Tetrachloroethane (1,1,2,2-) | NS | **0.055** | *3* | **2** | U | | µg/l |
| SH-19S / 09-29-06 | Tetrachloroethane (1,1,2,2-) | NS | **0.055** | *3* | **0.2** | U | | µg/l |
| SH-21S / 09-26-06 | Tetrachloroethane (1,1,2,2-) | NS | **0.055** | *3* | **0.2** | U | | µg/l |
| SH-22S / 09-25-06 | Tetrachloroethane (1,1,2,2-) | NS | **0.055** | *3* | **0.2** | U | | µg/l |
| SH-23S / 09-25-06 | Tetrachloroethane (1,1,2,2-) | NS | **0.055** | *3* | **0.2** | U | | µg/l |
| SH-24R / 09-28-06 | Tetrachloroethane (1,1,2,2-) | NS | **0.055** | *3* | **2** | U | | µg/l |
| SH-24S / 09-28-06 | Tetrachloroethane (1,1,2,2-) | NS | **0.055** | *3* | **0.2** | U | | µg/l |
| SH-25D / 09-27-06 | Tetrachloroethane (1,1,2,2-) | NS | **0.055** | *3* | **0.2** | U | | µg/l |
| SH-25S / 09-26-06 | Tetrachloroethane (1,1,2,2-) | NS | **0.055** | *3* | **0.2** | U | | µg/l |
| SH-26S / 10-04-06 | Tetrachloroethane (1,1,2,2-) | NS | **0.055** | *3* | **2** | U | | µg/l |
| SH-27D / 10-02-06 | Tetrachloroethane (1,1,2,2-) | NS | **0.055** | *3* | **0.2** | U | | µg/l |
| SH-27R / 09-29-06 | Tetrachloroethane (1,1,2,2-) | NS | **0.055** | *3* | **2** | U | | µg/l |
| SH-27S / 09-25-06 | Tetrachloroethane (1,1,2,2-) | NS | **0.055** | *3* | **0.2** | U | | µg/l |
| SH-28D / 09-27-06 | Tetrachloroethane (1,1,2,2-) | NS | **0.055** | *3* | **2** | U | | µg/l |
| SH-28R / 09-29-06 | Tetrachloroethane (1,1,2,2-) | NS | **0.055** | *3* | **2** | U | | µg/l |
| SH-28S / 09-27-06 | Tetrachloroethane (1,1,2,2-) | NS | **0.055** | *3* | **0.2** | U | | µg/l |
| WP-01 / 09-26-06 | Tetrachloroethane (1,1,2,2-) | NS | **0.055** | *3* | **0.2** | U | | µg/l |
| WP-03 / 09-28-06 | Tetrachloroethane (1,1,2,2-) | NS | **0.055** | *3* | **0.2** | U | | µg/l |

TABLE 16A

Detail of Analytical RLs and Risk Assessment Screening Levels - VOC Analyses - Groundwater

Phases 1B-4 and 1B-5 RI Data Usability Assessment Report

Blackburn & Union Privileges Superfund Site

Walpole, Massachusetts

| Sample Name | Analyte | COPC Screening Levels | | | Result | Qualifier | Bias | Units |
|---|---|---|---|---|---|---|---|---|
| | | EPA MCL | EPA Region IX Tap Water PRG | EPA Vapor Intrusion Screening | | | | |
| WP-04 / 09-27-06 | Tetrachloroethane (1,1,2,2-) | NS | **0.055** | *3* | **0.2** | U | | µg/l |
| WP-05 / 09-27-06 | Tetrachloroethane (1,1,2,2-) | NS | **0.055** | *3* | **0.2** | U | | µg/l |
| WP-06 / 10-05-06 | Tetrachloroethane (1,1,2,2-) | NS | **0.055** | *3* | **2** | U | | µg/l |
| SH-01D / 10-03-06 | Tetrachloroethene $ | 5 | **0.1** | *5* | ***40*** | UJ | I | µg/l |
| SH-01R / 10-04-06 | Tetrachloroethene $ | 5 | **0.1** | *5* | ***40*** | UJ | L | µg/l |
| SH-01S / 10-05-06 | Tetrachloroethene $ | 5 | **0.1** | *5* | **2** | U | | µg/l |
| SH-02R / 09-29-06 | Tetrachloroethene $ | 5 | **0.1** | *5* | **2** | U | | µg/l |
| SH-03D / 10-03-06 | Tetrachloroethene $ | 5 | **0.1** | *5* | **2** | U | | µg/l |
| SH-03S / 09-29-06 | Tetrachloroethene $ | 5 | **0.1** | *5* | **2** | U | | µg/l |
| SH-04S / 10-04-06 | Tetrachloroethene $ | 5 | **0.1** | *5* | ***10*** | UJ | L | µg/l |
| SH-05D / 10-02-06 | Tetrachloroethene $ | 5 | **0.1** | *5* | **2** | U | | µg/l |
| SH-05R-A / 10-03-06 | Tetrachloroethene $ | 5 | **0.1** | *5* | **2** | U | | µg/l |
| SH-05R-B / 10-03-06 | Tetrachloroethene $ | 5 | **0.1** | *5* | **2** | U | | µg/l |
| SH-05S / 10-04-06 | Tetrachloroethene $ | 5 | **0.1** | *5* | ***10*** | U | | µg/l |
| SH-06R-A / 10-02-06 | Tetrachloroethene $ | 5 | **0.1** | *5* | **0.2** | U | | µg/l |
| SH-06R-B / 10-02-06 | Tetrachloroethene $ | 5 | **0.1** | *5* | **0.2** | U | | µg/l |
| SH-13S / 09-28-06 | Tetrachloroethene $ | 5 | **0.1** | *5* | **2** | U | | µg/l |
| SH-14D / 10-02-06 | Tetrachloroethene $ | 5 | **0.1** | *5* | **0.2** | U | | µg/l |
| SH-14S / 10-02-06 | Tetrachloroethene $ | 5 | **0.1** | *5* | **0.2** | U | | µg/l |
| SH-15D / 09-27-06 | Tetrachloroethene $ | 5 | **0.1** | *5* | **0.2** | U | | µg/l |
| SH-15S / 10-03-06 | Tetrachloroethene $ | 5 | **0.1** | *5* | ***10*** | U | | µg/l |
| SH-17D / 10-05-06 | Tetrachloroethene $ | 5 | **0.1** | *5* | **2** | U | | µg/l |
| SH-17R / 10-04-06 | Tetrachloroethene $ | 5 | **0.1** | *5* | ***10*** | U | | µg/l |
| SH-17S / 09-25-06 | Tetrachloroethene $ | 5 | **0.1** | *5* | **0.2** | U | | µg/l |
| SH-18D / 09-26-06 | Tetrachloroethene $ | 5 | **0.1** | *5* | **0.2** | U | | µg/l |
| SH-18S / 09-26-06 | Tetrachloroethene $ | 5 | **0.1** | *5* | **0.2** | U | | µg/l |
| SH-19D / 09-25-06 | Tetrachloroethene $ | 5 | **0.1** | *5* | **0.2** | U | | µg/l |
| SH-19R / 09-28-06 | Tetrachloroethene $ | 5 | **0.1** | *5* | **2** | U | | µg/l |
| SH-19S / 09-29-06 | Tetrachloroethene $ | 5 | **0.1** | *5* | **0.2** | U | | µg/l |
| SH-21S / 09-26-06 | Tetrachloroethene $ | 5 | **0.1** | *5* | **0.2** | U | | µg/l |
| SH-22S / 09-25-06 | Tetrachloroethene $ | 5 | **0.1** | *5* | **0.2** | U | | µg/l |
| SH-23S / 09-25-06 | Tetrachloroethene $ | 5 | **0.1** | *5* | **0.2** | U | | µg/l |
| SH-24R / 09-28-06 | Tetrachloroethene $ | 5 | **0.1** | *5* | **2** | U | | µg/l |
| SH-24S / 09-28-06 | Tetrachloroethene $ | 5 | **0.1** | *5* | **0.2** | U | | µg/l |
| SH-25D / 09-27-06 | Tetrachloroethene $ | 5 | **0.1** | *5* | **0.2** | U | | µg/l |
| SH-25S / 09-26-06 | Tetrachloroethene $ | 5 | **0.1** | *5* | **0.2** | U | | µg/l |
| SH-26S / 10-04-06 | Tetrachloroethene $ | 5 | **0.1** | *5* | **2** | U | | µg/l |
| SH-27D / 10-02-06 | Tetrachloroethene $ | 5 | **0.1** | *5* | **0.2** | U | | µg/l |
| SH-27R / 09-29-06 | Tetrachloroethene $ | 5 | **0.1** | *5* | **2** | U | | µg/l |
| SH-27S / 09-25-06 | Tetrachloroethene $ | 5 | **0.1** | *5* | **0.2** | U | | µg/l |
| SH-28D / 09-27-06 | Tetrachloroethene $ | 5 | **0.1** | *5* | **2** | U | | µg/l |
| SH-28R / 09-29-06 | Tetrachloroethene $ | 5 | **0.1** | *5* | **2** | U | | µg/l |
| SH-28S / 09-27-06 | Tetrachloroethene $ | 5 | **0.1** | *5* | **0.2** | U | | µg/l |
| WP-01 / 09-26-06 | Tetrachloroethene $ | 5 | **0.1** | *5* | **0.2** | U | | µg/l |
| WP-03 / 09-28-06 | Tetrachloroethene $ | 5 | **0.1** | *5* | **0.2** | U | | µg/l |
| WP-04 / 09-27-06 | Tetrachloroethene $ | 5 | **0.1** | *5* | **0.2** | U | | µg/l |
| WP-05 / 09-27-06 | Tetrachloroethene $ | 5 | **0.1** | *5* | **0.2** | U | | µg/l |
| WP-06 / 10-05-06 | Tetrachloroethene $ | 5 | **0.1** | *5* | **2** | U | | µg/l |
| SH-01D / 10-03-06 | Trichloroethane (1,1,2-) $ | 5 | **0.20** | *5* | ***40*** | UJ | I | µg/l |
| SH-01R / 10-04-06 | Trichloroethane (1,1,2-) $ | 5 | **0.20** | *5* | ***40*** | UJ | L | µg/l |
| SH-01S / 10-05-06 | Trichloroethane (1,1,2-) $ | 5 | **0.20** | *5* | **2** | U | | µg/l |

TABLE 16A

Detail of Analytical RLs and Risk Assessment Screening Levels - VOC Analyses - Groundwater

Phases 1B-4 and 1B-5 RI Data Usability Assessment Report

Blackburn & Union Privileges Superfund Site

Walpole, Massachusetts

| Sample Name | Analyte | COPC Screening Levels | | | Result | Qualifier | Bias | Units |
|---|---|---|---|---|---|---|---|---|
| | | EPA MCL | EPA Region IX Tap Water PRG | EPA Vapor Intrusion Screening | | | | |
| SH-02R / 09-29-06 | Trichloroethane (1,1,2-) $ | 5 | **0.20** | *5* | **2** | U | | µg/l |
| SH-03D / 10-03-06 | Trichloroethane (1,1,2-) $ | 5 | **0.20** | *5* | **2** | U | | µg/l |
| SH-03S / 09-29-06 | Trichloroethane (1,1,2-) $ | 5 | **0.20** | *5* | **2** | U | | µg/l |
| SH-04S / 10-04-06 | Trichloroethane (1,1,2-) $ | 5 | **0.20** | *5* | ***10*** | UJ | L | µg/l |
| SH-05D / 10-02-06 | Trichloroethane (1,1,2-) $ | 5 | **0.20** | *5* | **2** | U | | µg/l |
| SH-05R-A / 10-03-06 | Trichloroethane (1,1,2-) $ | 5 | **0.20** | *5* | **2** | U | | µg/l |
| SH-05R-B / 10-03-06 | Trichloroethane (1,1,2-) $ | 5 | **0.20** | *5* | **2** | U | | µg/l |
| SH-05S / 10-04-06 | Trichloroethane (1,1,2-) $ | 5 | **0.20** | *5* | ***10*** | U | | µg/l |
| SH-13S / 09-28-06 | Trichloroethane (1,1,2-) $ | 5 | **0.20** | *5* | **2** | U | | µg/l |
| SH-15S / 10-03-06 | Trichloroethane (1,1,2-) $ | 5 | **0.20** | *5* | ***10*** | U | | µg/l |
| SH-17D / 10-05-06 | Trichloroethane (1,1,2-) $ | 5 | **0.20** | *5* | **2** | U | | µg/l |
| SH-17R / 10-04-06 | Trichloroethane (1,1,2-) $ | 5 | **0.20** | *5* | ***10*** | U | | µg/l |
| SH-19R / 09-28-06 | Trichloroethane (1,1,2-) $ | 5 | **0.20** | *5* | **2** | U | | µg/l |
| SH-24R / 09-28-06 | Trichloroethane (1,1,2-) $ | 5 | **0.20** | *5* | **2** | U | | µg/l |
| SH-26S / 10-04-06 | Trichloroethane (1,1,2-) $ | 5 | **0.20** | *5* | **2** | U | | µg/l |
| SH-27R / 09-29-06 | Trichloroethane (1,1,2-) $ | 5 | **0.20** | *5* | **2** | U | | µg/l |
| SH-28D / 09-27-06 | Trichloroethane (1,1,2-) $ | 5 | **0.20** | *5* | **2** | U | | µg/l |
| SH-28R / 09-29-06 | Trichloroethane (1,1,2-) $ | 5 | **0.20** | *5* | **2** | U | | µg/l |
| WP-06 / 10-05-06 | Trichloroethane (1,1,2-) $ | 5 | **0.20** | *5* | **2** | U | | µg/l |
| SH-01D / 10-03-06 | Trichloroethene $ | 5 | **0.028** | *5* | ***40*** | UJ | I | µg/l |
| SH-01R / 10-04-06 | Trichloroethene $ | 5 | **0.028** | *5* | ***40*** | UJ | L | µg/l |
| SH-01S / 10-05-06 | Trichloroethene $ | 5 | **0.028** | *5* | **2** | U | | µg/l |
| SH-02R / 09-29-06 | Trichloroethene $ | 5 | **0.028** | *5* | **2** | U | | µg/l |
| SH-03D / 10-03-06 | Trichloroethene $ | 5 | **0.028** | *5* | **2** | U | | µg/l |
| SH-03S / 09-29-06 | Trichloroethene $ | 5 | **0.028** | *5* | **2** | U | | µg/l |
| SH-04S / 10-04-06 | Trichloroethene $ | 5 | **0.028** | *5* | ***10*** | UJ | L | µg/l |
| SH-05R-A / 10-03-06 | Trichloroethene $ | 5 | **0.028** | *5* | **2** | U | | µg/l |
| SH-05R-B / 10-03-06 | Trichloroethene $ | 5 | **0.028** | *5* | **2** | U | | µg/l |
| SH-05S / 10-04-06 | Trichloroethene $ | 5 | **0.028** | *5* | ***10*** | U | | µg/l |
| SH-13S / 09-28-06 | Trichloroethene $ | 5 | **0.028** | *5* | **2** | U | | µg/l |
| SH-14D / 10-02-06 | Trichloroethene $ | 5 | **0.028** | *5* | **0.2** | U | | µg/l |
| SH-14S / 10-02-06 | Trichloroethene $ | 5 | **0.028** | *5* | **0.2** | U | | µg/l |
| SH-15D / 09-27-06 | Trichloroethene $ | 5 | **0.028** | *5* | **0.2** | U | | µg/l |
| SH-15S / 10-03-06 | Trichloroethene $ | 5 | **0.028** | *5* | **10** | U | | µg/l |
| SH-17D / 10-05-06 | Trichloroethene $ | 5 | **0.028** | *5* | **2** | U | | µg/l |
| SH-17R / 10-04-06 | Trichloroethene $ | 5 | **0.028** | *5* | ***10*** | U | | µg/l |
| SH-17S / 09-25-06 | Trichloroethene $ | 5 | **0.028** | *5* | **0.2** | U | | µg/l |
| SH-18D / 09-26-06 | Trichloroethene $ | 5 | **0.028** | *5* | **0.2** | U | | µg/l |
| SH-18S / 09-26-06 | Trichloroethene $ | 5 | **0.028** | *5* | **0.2** | U | | µg/l |
| SH-19D / 09-25-06 | Trichloroethene $ | 5 | **0.028** | *5* | **0.2** | U | | µg/l |
| SH-19R / 09-28-06 | Trichloroethene $ | 5 | **0.028** | *5* | **2** | U | | µg/l |
| SH-19S / 09-29-06 | Trichloroethene $ | 5 | **0.028** | *5* | **0.2** | U | | µg/l |
| SH-21S / 09-26-06 | Trichloroethene $ | 5 | **0.028** | *5* | **0.2** | U | | µg/l |
| SH-22S / 09-25-06 | Trichloroethene $ | 5 | **0.028** | *5* | **0.2** | U | | µg/l |
| SH-23S / 09-25-06 | Trichloroethene $ | 5 | **0.028** | *5* | **0.2** | U | | µg/l |
| SH-24R / 09-28-06 | Trichloroethene $ | 5 | **0.028** | *5* | **2** | U | | µg/l |
| SH-24S / 09-28-06 | Trichloroethene $ | 5 | **0.028** | *5* | **0.2** | U | | µg/l |
| SH-26S / 10-04-06 | Trichloroethene $ | 5 | **0.028** | *5* | **2** | U | | µg/l |
| SH-27S / 09-25-06 | Trichloroethene $ | 5 | **0.028** | *5* | **0.2** | U | | µg/l |
| SH-28D / 09-27-06 | Trichloroethene $ | 5 | **0.028** | *5* | **2** | U | | µg/l |
| SH-28S / 09-27-06 | Trichloroethene $ | 5 | **0.028** | *5* | **0.2** | U | | µg/l |

TABLE 16A

Detail of Analytical RLs and Risk Assessment Screening Levels - VOC Analyses - Groundwater

Phases 1B-4 and 1B-5 RI Data Usability Assessment Report

Blackburn & Union Privileges Superfund Site

Walpole, Massachusetts

| Sample Name | Analyte | COPC Screening Levels | | | Result | Qualifier | Bias | Units |
|---|---|---|---|---|---|---|---|---|
| | | EPA MCL | EPA Region IX Tap Water PRG | EPA Vapor Intrusion Screening | | | | |
| WP-01 / 09-26-06 | Trichloroethene $ | 5 | **0.028** | *5* | **0.2** | U | | µg/l |
| WP-03 / 09-28-06 | Trichloroethene $ | 5 | **0.028** | *5* | **0.2** | U | | µg/l |
| WP-04 / 09-27-06 | Trichloroethene $ | 5 | **0.028** | *5* | **0.2** | U | | µg/l |
| WP-05 / 09-27-06 | Trichloroethene $ | 5 | **0.028** | *5* | **0.2** | U | | µg/l |
| WP-06 / 10-05-06 | Trichloroethene $ | 5 | **0.028** | *5* | **2** | U | | µg/l |
| SH-01D / 10-03-06 | Trichlorofluoromethane | NS | **130** | *18* | *40* | UJ | I | µg/l |
| SH-01R / 10-04-06 | Trichlorofluoromethane | NS | **130** | *18* | *40* | UJ | L | µg/l |
| SH-01D / 10-03-06 | Vinyl chloride $ | 2 | **0.020** | *2* | ***40*** | UJ | I | µg/l |
| SH-01R / 10-04-06 | Vinyl chloride $ | 2 | **0.020** | *2* | ***40*** | UJ | L | µg/l |
| SH-01S / 10-05-06 | Vinyl chloride $ | 2 | **0.020** | *2* | **2** | U | | µg/l |
| SH-02R / 09-29-06 | Vinyl chloride $ | 2 | **0.020** | *2* | **2** | U | | µg/l |
| SH-03D / 10-03-06 | Vinyl chloride $ | 2 | **0.020** | *2* | **2** | U | | µg/l |
| SH-03S / 09-29-06 | Vinyl chloride $ | 2 | **0.020** | *2* | **2** | U | | µg/l |
| SH-04S / 10-04-06 | Vinyl chloride $ | 2 | **0.020** | *2* | ***10*** | UJ | L | µg/l |
| SH-05D / 10-02-06 | Vinyl chloride $ | 2 | **0.020** | *2* | **2** | U | | µg/l |
| SH-05R-A / 10-03-06 | Vinyl chloride $ | 2 | **0.020** | *2* | **2** | U | | µg/l |
| SH-05R-B / 10-03-06 | Vinyl chloride $ | 2 | **0.020** | *2* | **2** | U | | µg/l |
| SH-05S / 10-04-06 | Vinyl chloride $ | 2 | **0.020** | *2* | ***10*** | U | | µg/l |
| SH-06R-A / 10-02-06 | Vinyl chloride $ | 2 | **0.020** | *2* | **0.5** | U | | µg/l |
| SH-06R-B / 10-02-06 | Vinyl chloride $ | 2 | **0.020** | *2* | **0.5** | U | | µg/l |
| SH-13S / 09-28-06 | Vinyl chloride $ | 2 | **0.020** | *2* | **2** | U | | µg/l |
| SH-14D / 10-02-06 | Vinyl chloride $ | 2 | **0.020** | *2* | **0.5** | U | | µg/l |
| SH-14S / 10-02-06 | Vinyl chloride $ | 2 | **0.020** | *2* | **0.5** | U | | µg/l |
| SH-15D / 09-27-06 | Vinyl chloride $ | 2 | **0.020** | *2* | **0.5** | U | | µg/l |
| SH-15S / 10-03-06 | Vinyl chloride $ | 2 | **0.020** | *2* | ***10*** | U | | µg/l |
| SH-17D / 10-05-06 | Vinyl chloride $ | 2 | **0.020** | *2* | **2** | U | | µg/l |
| SH-17R / 10-04-06 | Vinyl chloride $ | 2 | **0.020** | *2* | ***10*** | U | | µg/l |
| SH-17S / 09-25-06 | Vinyl chloride $ | 2 | **0.020** | *2* | **0.5** | U | | µg/l |
| SH-18D / 09-26-06 | Vinyl chloride $ | 2 | **0.020** | *2* | **0.5** | U | | µg/l |
| SH-18S / 09-26-06 | Vinyl chloride $ | 2 | **0.020** | *2* | **0.5** | U | | µg/l |
| SH-19D / 09-25-06 | Vinyl chloride $ | 2 | **0.020** | *2* | **0.5** | U | | µg/l |
| SH-19R / 09-28-06 | Vinyl chloride $ | 2 | **0.020** | *2* | **2** | U | | µg/l |
| SH-19S / 09-29-06 | Vinyl chloride $ | 2 | **0.020** | *2* | **0.5** | U | | µg/l |
| SH-21S / 09-26-06 | Vinyl chloride $ | 2 | **0.020** | *2* | **0.5** | U | | µg/l |
| SH-22S / 09-25-06 | Vinyl chloride $ | 2 | **0.020** | *2* | **0.5** | U | | µg/l |
| SH-23S / 09-25-06 | Vinyl chloride $ | 2 | **0.020** | *2* | **0.5** | U | | µg/l |
| SH-24R / 09-28-06 | Vinyl chloride $ | 2 | **0.020** | *2* | **2** | U | | µg/l |
| SH-24S / 09-28-06 | Vinyl chloride $ | 2 | **0.020** | *2* | **0.5** | U | | µg/l |
| SH-25D / 09-27-06 | Vinyl chloride $ | 2 | **0.020** | *2* | **0.5** | U | | µg/l |
| SH-25S / 09-26-06 | Vinyl chloride $ | 2 | **0.020** | *2* | **0.5** | U | | µg/l |
| SH-26S / 10-04-06 | Vinyl chloride $ | 2 | **0.020** | *2* | **2** | U | | µg/l |
| SH-27D / 10-02-06 | Vinyl chloride $ | 2 | **0.020** | *2* | **0.5** | U | | µg/l |
| SH-27R / 09-29-06 | Vinyl chloride $ | 2 | **0.020** | *2* | **2** | U | | µg/l |
| SH-27S / 09-25-06 | Vinyl chloride $ | 2 | **0.020** | *2* | **0.5** | U | | µg/l |
| SH-28D / 09-27-06 | Vinyl chloride $ | 2 | **0.020** | *2* | **2** | U | | µg/l |
| SH-28R / 09-29-06 | Vinyl chloride $ | 2 | **0.020** | *2* | **2** | U | | µg/l |
| SH-28S / 09-27-06 | Vinyl chloride $ | 2 | **0.020** | *2* | **0.5** | U | | µg/l |
| WP-01 / 09-26-06 | Vinyl chloride $ | 2 | **0.020** | *2* | **0.5** | U | | µg/l |
| WP-03 / 09-28-06 | Vinyl chloride $ | 2 | **0.020** | *2* | **0.5** | U | | µg/l |
| WP-04 / 09-27-06 | Vinyl chloride $ | 2 | **0.020** | *2* | **0.5** | U | | µg/l |
| WP-05 / 09-27-06 | Vinyl chloride $ | 2 | **0.020** | *2* | **0.5** | U | | µg/l |
| WP-06 / 10-05-06 | Vinyl chloride $ | 2 | **0.020** | *2* | **2** | U | | µg/l |

Detail of Analytical RLs and Risk Assessment Screening Levels - VOC Analyses - Groundwater
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

Notes:

1. All concentrations are presented in micrograms per liter (µg/l), which are equivalent to parts per billion (ppb).

2. "COPC Screening Levels" indicates contaminants of potential concern (COPC) screening levels used to determine inclusion of an analyte in the human health risk assessment. Analyte detections which exceed the USEPA MCL (shaded values) are shaded. Analyte detections which exceed the EPA Region IX Tap Water PRG (**bold** value) are in **bold**. Analyte detections from shallow wells which exceed the EPA Vapor Intrusion Screening Values (*italic* value) are in *italics* .

"EPA MCL" indicates the values listed are drinking water Maximum Contaminant Levels (MCLs) from the National Primary Drinking Water Standards, dated June 2003 (http://www.epa.gov/safewater/mcl.html).

"EPA Region IX Tap Water PRG" indicates the values listed are from the USEPA Region IX Preliminary Remediation Goals (PRGs) Table, dated October 1, 2004. PRGs based on non-cancer effects are multiplied by 0.1 per USEPA Guidance (USEPA Region I, Risk Update Number 5, September 1999).

"EPA Vapor Intrusion Screening" indicates values listed are from the USEPA Office of Solid Waste and Emergency Response (OSWER) Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils (Subsurface Vapor Intrusion Guidance), Table 2C, November 29, 2002. These values apply to shallow groundwater (SH-series wells with an S after the well number, and WP-series wells). Target groundwater concentrations based on non-carcinogenic effects are multiplied by 0.1 per USEPA Guidance (USEPA Region I, Risk Update Number 5, September 1999).

3. "$" indicates the Vapor Intrusion Screening Value guidance document indicates the MCL is used as the Vapor Intrusion Screening Value because the calculated value is less than the MCL.
"‡" indicates the Vapor Intrusion Screening Values and PRG values presented are for 1,3-dichloropropene (isomer unspecified).

TABLE 17

Summary Comparison of Analytical RLs and PALs - Metals Analyses - Sediment
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Analyte | Project Action Limit (PAL) | Total Number of ND Samples | Number of ND Samples Where RL > PAL | Percentage of ND Samples Where RL > PAL |
|---|---|---|---|---|
| **Metals** | | | | |
| Arsenic | 390 | 0 | 0 | - |
| Lead | 31,000 | 0 | 0 | - |
| **Sum of Metals** | **-** | **0** | **0** | **-** |

Notes:

1. The Reporting Limit (RL) represents a sample-specific RL.

2. The Project Action Limit (PAL) is provided in units of micrograms per kilogram (µg/kg) dry weight.

3. "ND" = Not Detected; data qualified "U" or "UJ" during data validation.

TABLE 18 March 31, 2007

Summary Comparison of Analytical RLs and PALs - SVOC/PAH Analyses - Sediment
Phase 1B-5 Remedial Investigation Data Usability Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Analyte | Project Action Limit (PAL) | Total Number of ND Samples | Number of ND Samples Where RL > PAL | Percentage of ND Samples Where RL > PAL |
|---|---|---|---|---|
| **PAHs** | | | | |
| Acenaphthene | 150 | 0 | 0 | - |
| Acenaphthylene | NA | 0 | - | - |
| Anthracene | 85 | 0 | 0 | - |
| Benzo(a)anthracene | 32 | 0 | 0 | - |
| Benzo(a)pyrene | 32 | 0 | 0 | - |
| Benzo(b)fluoranthene | 620 | 0 | 0 | - |
| Benzo(g,h,i)perylene | 170 | 0 | 0 | - |
| Benzo(k)fluoranthene | 240 | 0 | 0 | - |
| Chrysene | 57 | 0 | 0 | - |
| Dibenz(a,h)anthracene | 60 | 1 | 0 | 0% |
| Fluoranthene | 111 | 0 | 0 | - |
| Fluorene | 35 | 1 | 0 | 0% |
| Indeno(1,2,3-cd)pyrene | 200 | 0 | 0 | - |
| Methylnaphthalene (2-) | 65 | 0 | 0 | - |
| Naphthalene | 340 | 0 | 0 | - |
| Phenanthrene | 42 | 0 | 0 | - |
| Pyrene | 53 | 0 | 0 | - |
| **Sum of PAHs** | **-** | **2** | **0** | **0%** |

Notes:

1. The Reporting Limit (RL) represents a sample-specific RL.

2. The Project Action Limit (PAL) is provided in units of micrograms per kilogram (µg/kg) dry weight.

3. "NA" = Not applicable; no PAL was established in the QAPP for this parameter.
"ND" = Not Detected; data qualified "U" or "UJ" during data validation.

TABLE 19 March 31, 2007

Summary Comparison of Analytical RLs and PALs - Metals Analyses - Surface Water
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Analyte | Project Action Limit (PAL) | Total Number of ND Samples | Number of ND Samples Where RL > PAL | Percentage of ND Samples Where RL > PAL |
|---|---|---|---|---|
| **Metals - Dissolved** | | | | |
| Aluminum | 87 | 3 | 0 | 0% |
| Antimony | 1.5 | 4 | 0 | 0% |
| Arsenic | 0.045 | 0 | 0 | - |
| Barium | 3.9 | 0 | 0 | - |
| Beryllium | 0.66 | 4 | 0 | 0% |
| Cadmium | 0.25 | 4 | 0 | 0% |
| Calcium | NA | 0 | - | - |
| Chromium | 11 | 2 | 0 | 0% |
| Cobalt | 3 | 3 | 0 | 0% |
| Copper | 9 | 0 | 0 | - |
| Iron | 1000 | 0 | 0 | - |
| Lead | 2.5 | 3 | 0 | 0% |
| Magnesium | NA | 1 | - | - |
| Manganese | 80 | 0 | 0 | - |
| Mercury | 0.77 | 4 | 0 | 0% |
| Nickel | 52 | 0 | 0 | - |
| Potassium | NA | 0 | - | - |
| Selenium | 5 | 4 | 0 | 0% |
| Silver | 0.36 | 4 | 0 | 0% |
| Sodium | NA | 0 | - | - |
| Thallium | 0.24 | 4 | 0 | 0% |
| Vanadium | 3.6 | 0 | 0 | - |
| Zinc | 120 | 3 | 0 | - |
| **Sum of Dissolved Metals** | - | **43** | **0** | **0%** |
| **Metals - Total** | | | | |
| Aluminum | 87 | 3 | 0 | 0% |
| Antimony | 1.5 | 4 | 0 | 0% |
| Arsenic | 0.045 | 0 | 0 | - |
| Barium | 3.9 | 0 | 0 | - |
| Beryllium | 0.66 | 4 | 0 | 0% |
| Cadmium | 0.25 | 4 | 0 | 0% |
| Calcium | NA | 0 | - | - |
| Chromium | 11 | 3 | 0 | 0% |
| Cobalt | 3 | 3 | 0 | 0% |
| Copper | 9 | 0 | 0 | - |
| Iron | 1000 | 0 | 0 | - |
| Lead | 2.5 | 0 | 0 | - |
| Magnesium | NA | 0 | - | - |
| Manganese | 80 | 0 | 0 | - |

TABLE 19 March 31, 2007

Summary Comparison of Analytical RLs and PALs - Metals Analyses - Surface Water
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Analyte | Project Action Limit (PAL) | Total Number of ND Samples | Number of ND Samples Where RL > PAL | Percentage of ND Samples Where RL > PAL |
|---|---|---|---|---|
| Mercury | 0.77 | 0 | 0 | - |
| Nickel | 52 | 0 | 0 | - |
| Potassium | NA | 0 | - | - |
| Selenium | 5 | 3 | 0 | 0% |
| Silver | 0.36 | 4 | 0 | 0% |
| Sodium | NA | 0 | - | - |
| Thallium | 0.24 | 4 | 0 | 0% |
| Vanadium | 3.6 | 0 | 0 | - |
| Zinc | 120 | 3 | 0 | 0% |
| **Sum of Total Metals** | **-** | **35** | **0** | **0%** |

Notes:

1. The Reporting Limit (RL) represents a sample-specific RL.

2. The Project Action Limit (PAL) is provided in units of micrograms per liter (µg/L).

3. "NA" = Not applicable; no PAL was established in the QAPP for this parameter.
"ND" = Not Detected; data qualified "U" or "UJ" during data validation.

TABLE 20 March 31, 2007

Summary Comparison of Analytical RLs and PALs - SVOC/PAH Analyses - Surface Water
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Analyte | Project Action Limit (PAL) | Total Number of ND Samples | Number of ND Samples Where RL > PAL | Percentage of ND Samples Where RL > PAL |
|---|---|---|---|---|
| **SVOCs/PAHs** | | | | |
| Acenaphthene | 37 | 0 | 0 | - |
| Acenaphthylene | NA | 0 | - | - |
| Anthracene | 0.73 | 1 | 0 | 0% |
| Benzo(a)anthracene | 0.027 | 0 | 0 | - |
| Benzo(a)pyrene | 0.0092 | 0 | 0 | - |
| Benzo(b)fluoranthene | 0.092 | 0 | 0 | - |
| Benzo(g,h,i)perylene | NA | 3 | - | - |
| Benzo(k)fluoranthene | 0.92 | 0 | 0 | - |
| bis(2-Ethylhexyl)phthalate | 3 | 3 | 0 | 0% |
| Carbazole | 3.4 | 2 | 0 | 0% |
| Chrysene | 9.2 | 0 | 0 | - |
| Dibenz(a,h)anthracene | 0.0092 | 1 | 1 | 100% |
| Fluoranthene | 150 | 3 | 0 | 0% |
| Fluorene | 3.9 | 0 | 0 | - |
| Indeno(1,2,3-cd)pyrene | 0.092 | 3 | 0 | 0% |
| Methylnaphthalene (2-) | NA | 0 | - | - |
| Naphthalene | 0.62 | 3 | 0 | 0% |
| Phenanthrene | NA | 3 | - | - |
| Pyrene | 18 | 0 | 0 | - |
| **Sum of SVOCs/PAHs** | **-** | **22** | **1** | **5%** |

Notes:

1. The Reporting Limit (RL) represents a sample-specific RL.

2. The Project Action Limit (PAL) is provided in units of micrograms per liter (µg/L).

3. "NA" = Not applicable; no PAL was established in the QAPP for this parameter.
"ND" = Not Detected; data qualified "U" or "UJ" during data validation.

TABLE 20A March 31, 2007

Detail of Analytical RLs and Risk Assessment Screening Levels - SVOC/PAH Analyses - Surface Water

Phases 1B-4 and 1B-5 RI Data Usability Assessment Report

Blackburn & Union Privileges Superfund Site

Walpole, Massachusetts

| Sample Name | Analyte | COPC Screening Levels | | | | Result | Qualifier | Bias | Units |
|---|---|---|---|---|---|---|---|---|---|
| | | Human Health | Ecological | | | | | | |
| | | EPA Region IX Tap Water PRG | GLWQI Tier II Values | USEPA Aquatic SWQCs | ORNL SCVs | | | | |
| SW-105B / 09-29-06 | Dibenz(a,h)anthracene | 0.0092 | NS | NS | NS | 0.010 | U | | µg/l |

Notes:

1. All concentrations are presented in micrograms per liter (µg/l), which are equivalent to parts per billion (ppb).

2. "COPC Screening Levels" indicates contaminants of potential concern (COPC) screening levels used to determine inclusion of an analyte in the human health or ecological risk assessments. Analyte reporting limits that exceed the human health screening level (shaded value) are shaded. Analyte reporting limits that exceed the lowest of the ecological screening levels (**bold** value) are in **bold**.

"EPA Region IX Tap Water PRG" indicates the values listed are from the USEPA Region IX Preliminary Remediation Goals (PRGs) Table, dated October 1, 2004. PRGs based on non-cancer effects are multiplied by 0.1 per USEPA Guidance (USEPA Region I, Risk Update Number 5, September 1999).

"GLWQI Tier II Values" indicates the values listed are from the Great Lakes Water Quality Initiative (GLWQI) Tier II methodology values, as reported in Ecotox Thresholds table (USEPA, 1998).

"USEPA Aquatic SWQCs" indicates the values listed are from the USEPA National Recommended Surface Water Quality Criteria (SWQC) (314CMR 22) (USEPA, 2006; http://www.epa.gov/waterscience/criteria/wqcriteria.html) for the protection of aquatic life. The values presented are chronic freshwater criteria.

"ORNL SCVs" indicates the values listed are Tier II Secondary Chronic Values for Aquatic Biota (Suter & Tsao, 1996; http://www.esd.ornl.gov/programs/ecorisk/documents/tm96r2.pdf).

TABLE 21
Summary Comparison of Analytical RLs and PALs - VOC Analyses - Surface Water
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Analyte | Project Action Limit (PAL) | Total Number of ND Samples | Number of ND Samples Where RL > PAL | Percentage of ND Samples Where RL > PAL |
|---|---|---|---|---|
| **VOCs** | | | | |
| Acetone | 550 | 4 | 0 | 0% |
| Benzene | 0.35 | 3 | 0 | 0% |
| Bromochloromethane | N/A | 4 | - | - |
| Bromodichloromethane | 0.18 | 4 | 4 | 100% |
| Bromoform | 8.5 | 4 | 0 | 0% |
| Bromomethane | 0.87 | 4 | 0 | 0% |
| Butanone (2-) | 700 | 4 | 0 | 0% |
| Carbon disulfide | 0.92 | 4 | 4 | 100% |
| Carbon tetrachloride | 0.17 | 4 | 4 | 100% |
| Chlorobenzene | 11 | 4 | 0 | 0% |
| Chloroethane | 4.6 | 4 | 0 | 0% |
| Chloroethylvinyl ether (2-) | N/A | 3 | - | - |
| Chloroform | 0.17 | 4 | 4 | 100% |
| Chloromethane | 16 | 4 | 0 | 0% |
| Dibromochloromethane | 0.13 | 4 | 4 | 100% |
| Dichloroethane (1,1-) | 47 | 4 | 0 | 0% |
| Dichloroethane (1,2-) | 0.12 | 4 | 4 | 100% |
| Dichloroethene (1,1-) | 25 | 4 | 0 | 0% |
| Dichloroethene (cis-1,2-) | 6.1 | 4 | 0 | 0% |
| Dichloroethene (trans-1,2-) | 12 | 4 | 0 | 0% |
| Dichloropropane (1,2-) | 0.16 | 4 | 4 | 100% |
| Dichloropropene (cis-1,3-) † | 0.055 | 4 | 4 | 100% |
| Dichloropropene (trans-1,3-) † | 0.055 | 4 | 4 | 100% |
| Ethylbenzene | 7.3 | 4 | 0 | 0% |
| Hexanone (2-) | 99 | 4 | 0 | 0% |
| Methyl-2-pentanone (4-) | 170 | 4 | 0 | 0% |
| Methylene chloride | 4.3 | 4 | 0 | 0% |
| Methyl-tert Butyl Ether | 11 | 4 | 0 | 0% |
| Styrene | 160 | 4 | 0 | 0% |
| Tetrachloroethane (1,1,2,2-) | 0.055 | 4 | 4 | 100% |
| Tetrachloroethene | 0.1 | 4 | 4 | 100% |
| Toluene | 9.8 | 4 | 0 | 0% |
| Trichloroethane (1,1,1-) | 11 | 4 | 0 | 0% |
| Trichloroethane (1,1,2-) | 0.2 | 4 | 0 | 0% |
| Trichloroethene | 0.028 | 4 | 4 | 100% |
| Trichlorofluoromethane | 130 | 4 | 0 | 0% |
| Vinyl acetate | 16 | 4 | 0 | 0% |
| Vinyl chloride | 0.02 | 4 | 4 | 100% |
| Xylene (m,p-) | 1.8 | 4 | 4 | 100% |
| Xylene (o-) | 21 | 4 | 0 | 0% |
| **VOCs** | **-** | **158** | **56** | **35%** |

Notes:

1. The Reporting Limit (RL) represents a sample-specific RL.

2. The Project Action Limit (PAL) is provided in units of micrograms per liter (µg/L).

3. "NA" = Not applicable; no PAL was established in the QAPP for this parameter.
   "ND" = Not Detected; data qualified "U" or "UJ" during data validation.

TABLE 21A

March 31, 2007

Detail of Analytical RLs and Risk Assessment Screening Levels - VOC Analyses - Surface Water
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Sample Name | Analyte | COPC Screening Levels | | | | Result | Qualifier | Bias | Units |
|---|---|---|---|---|---|---|---|---|---|
| | | Human Health | Ecological | | | | | | |
| | | EPA Region IX Tap Water PRG | GLWQI Tier II Values | USEPA Aquatic SWQCs | ORNL SVCs | | | | |
| SW-102 / 09-29-06 | Bromodichloromethane | 0.18 | NS | NS | NS | 0.20 | U | | µg/l |
| SW-105B / 09-29-06 | Bromodichloromethane | 0.18 | NS | NS | NS | 0.20 | U | | µg/l |
| SW-107 / 09-29-06 | Bromodichloromethane | 0.18 | NS | NS | NS | 0.20 | U | | µg/l |
| SW-108 / 09-29-06 | Bromodichloromethane | 0.18 | NS | NS | NS | 0.20 | U | | µg/l |
| SW-102 / 09-29-06 | Carbon disulfide | 100 | NS | NS | **0.92** | **2.0** | U | | µg/l |
| SW-105B / 09-29-06 | Carbon disulfide | 100 | NS | NS | **0.92** | **2.0** | U | | µg/l |
| SW-107 / 09-29-06 | Carbon disulfide | 100 | NS | NS | **0.92** | **2.0** | U | | µg/l |
| SW-108 / 09-29-06 | Carbon disulfide | 100 | NS | NS | **0.92** | **2.0** | U | | µg/l |
| SW-102 / 09-29-06 | Carbon tetrachloride | 0.17 | 240 | NS | **9.8** | 2.0 | U | | µg/l |
| SW-105B / 09-29-06 | Carbon tetrachloride | 0.17 | 240 | NS | **9.8** | 2.0 | U | | µg/l |
| SW-107 / 09-29-06 | Carbon tetrachloride | 0.17 | 240 | NS | **9.8** | 2.0 | U | | µg/l |
| SW-108 / 09-29-06 | Carbon tetrachloride | 0.17 | 240 | NS | **9.8** | 2.0 | U | | µg/l |
| SW-102 / 09-29-06 | Chloroform | 0.17 | NS | NS | **28** | 0.20 | U | | µg/l |
| SW-105B / 09-29-06 | Chloroform | 0.17 | NS | NS | **28** | 0.20 | U | | µg/l |
| SW-107 / 09-29-06 | Chloroform | 0.17 | NS | NS | **28** | 0.20 | U | | µg/l |
| SW-108 / 09-29-06 | Chloroform | 0.17 | NS | NS | **28** | 0.20 | U | | µg/l |
| SW-102 / 09-29-06 | Dibromochloromethane | 0.13 | NS | NS | NS | 0.20 | U | | µg/l |
| SW-105B / 09-29-06 | Dibromochloromethane | 0.13 | NS | NS | NS | 0.20 | U | | µg/l |
| SW-107 / 09-29-06 | Dibromochloromethane | 0.13 | NS | NS | NS | 0.20 | U | | µg/l |
| SW-108 / 09-29-06 | Dibromochloromethane | 0.13 | NS | NS | NS | 0.20 | U | | µg/l |
| SW-102 / 09-29-06 | Dichloroethane (1,2-) | 0.12 | NS | NS | 910 | 0.20 | U | | µg/l |
| SW-105B / 09-29-06 | Dichloroethane (1,2-) | 0.12 | NS | NS | 910 | 0.20 | U | | µg/l |
| SW-107 / 09-29-06 | Dichloroethane (1,2-) | 0.12 | NS | NS | 910 | 0.20 | U | | µg/l |
| SW-108 / 09-29-06 | Dichloroethane (1,2-) | 0.12 | NS | NS | 910 | 0.20 | U | | µg/l |
| SW-102 / 09-29-06 | Dichloropropane (1,2-) | 0.16 | NS | NS | NS | 0.50 | U | | µg/l |
| SW-105B / 09-29-06 | Dichloropropane (1,2-) | 0.16 | NS | NS | NS | 0.50 | U | | µg/l |
| SW-107 / 09-29-06 | Dichloropropane (1,2-) | 0.16 | NS | NS | NS | 0.50 | U | | µg/l |
| SW-108 / 09-29-06 | Dichloropropane (1,2-) | 0.16 | NS | NS | NS | 0.50 | U | | µg/l |
| SW-102 / 09-29-06 | Dichloropropene (cis-1,3-) † | 0.4 | NS | NS | **0.055** | **0.50** | U | | µg/l |
| SW-105B / 09-29-06 | Dichloropropene (cis-1,3-) † | 0.4 | NS | NS | **0.055** | **0.50** | U | | µg/l |
| SW-107 / 09-29-06 | Dichloropropene (cis-1,3-) † | 0.4 | NS | NS | **0.055** | **0.50** | U | | µg/l |
| SW-108 / 09-29-06 | Dichloropropene (cis-1,3-) † | 0.4 | NS | NS | **0.055** | **0.50** | U | | µg/l |
| SW-102 / 09-29-06 | Dichloropropene (trans-1,3-) † | 0.4 | NS | NS | **0.055** | **0.50** | U | | µg/l |
| SW-105B / 09-29-06 | Dichloropropene (trans-1,3-) † | 0.4 | NS | NS | **0.055** | **0.50** | U | | µg/l |
| SW-107 / 09-29-06 | Dichloropropene (trans-1,3-) † | 0.4 | NS | NS | **0.055** | **0.50** | U | | µg/l |
| SW-108 / 09-29-06 | Dichloropropene (trans-1,3-) † | 0.4 | NS | NS | **0.055** | **0.50** | U | | µg/l |
| SW-102 / 09-29-06 | Tetrachloroethane (1,1,2,2-) | 0.055 | **420** | NS | 610 | 0.20 | U | | µg/l |
| SW-105B / 09-29-06 | Tetrachloroethane (1,1,2,2-) | 0.055 | **420** | NS | 610 | 0.20 | U | | µg/l |
| SW-107 / 09-29-06 | Tetrachloroethane (1,1,2,2-) | 0.055 | **420** | NS | 610 | 0.20 | U | | µg/l |
| SW-108 / 09-29-06 | Tetrachloroethane (1,1,2,2-) | 0.055 | **420** | NS | 610 | 0.20 | U | | µg/l |
| SW-102 / 09-29-06 | Tetrachloroethene | 0.1 | 120 | NS | **98** | 0.20 | U | | µg/l |
| SW-105B / 09-29-06 | Tetrachloroethene | 0.1 | 120 | NS | **98** | 0.20 | U | | µg/l |
| SW-107 / 09-29-06 | Tetrachloroethene | 0.1 | 120 | NS | **98** | 0.20 | U | | µg/l |
| SW-108 / 09-29-06 | Tetrachloroethene | 0.1 | 120 | NS | **98** | 0.20 | U | | µg/l |
| SW-102 / 09-29-06 | Trichloroethene | 0.028 | 350 | NS | **47** | 0.20 | U | | µg/l |
| SW-105B / 09-29-06 | Trichloroethene | 0.028 | 350 | NS | **47** | 0.20 | U | | µg/l |
| SW-107 / 09-29-06 | Trichloroethene | 0.028 | 350 | NS | **47** | 0.20 | U | | µg/l |
| SW-108 / 09-29-06 | Trichloroethene | 0.028 | 350 | NS | **47** | 0.20 | U | | µg/l |

TABLE 21A

March 31, 2007

Detail of Analytical RLs and Risk Assessment Screening Levels - VOC Analyses - Surface Water
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Sample Name | Analyte | COPC Screening Levels | | | | Result | Qualifier | Bias | Units |
|---|---|---|---|---|---|---|---|---|---|
| | | Human Health | Ecological | | | | | | |
| | | EPA Region IX Tap Water PRG | GLWQI Tier II Values | USEPA Aquatic SWQCs | ORNL SVCs | | | | |
| SW-102 / 09-29-06 | Vinyl chloride | 0.02 | NS | NS | NS | 0.50 | U | | µg/l |
| SW-105B / 09-29-06 | Vinyl chloride | 0.02 | NS | NS | NS | 0.50 | U | | µg/l |
| SW-107 / 09-29-06 | Vinyl chloride | 0.02 | NS | NS | NS | 0.50 | U | | µg/l |
| SW-108 / 09-29-06 | Vinyl chloride | 0.02 | NS | NS | NS | 0.50 | U | | µg/l |
| SW-102 / 09-29-06 | Xylene (m,p-) | 21 | **1.8** | NS | **1.8** | **4.0** | U | | µg/l |
| SW-105B / 09-29-06 | Xylene (m,p-) | 21 | **1.8** | NS | **1.8** | **4.0** | U | | µg/l |
| SW-107 / 09-29-06 | Xylene (m,p-) | 21 | **1.8** | NS | **1.8** | **4.0** | U | | µg/l |
| SW-108 / 09-29-06 | Xylene (m,p-) | 21 | **1.8** | NS | **1.8** | **4.0** | U | | µg/l |

Notes:

1. All concentrations are presented in micrograms per liter (µg/l), which are equivalent to parts per billion (ppb).

2. "COPC Screening Levels" indicates contaminants of potential concern (COPC) screening levels used to determine inclusion of an analyte in the human health or ecological risk assessments. Analyte reporting limits that exceed the human health screening level (shaded value) are shaded. Analyte reporting limits that exceed the lowest of the ecological screening levels (**bold** value) are in **bold**.

"EPA Region IX Tap Water PRG" indicates the values listed are from the USEPA Region IX Preliminary Remediation Goals (PRGs) Table, dated December 2004. PRGs based on non-cancer effects are multiplied by 0.1 per USEPA Guidance (USEPA Region I, Risk Update Number 5, September 1999).

"GLWQI Tier II Values" indicates the values listed are from the Great Lakes Water Quality Initiative (GLWQI) Tier II methodology values, as reported in Ecotox Thresholds table (USEPA, 1998).

"USEPA Aquatic SWQCs" indicates the values listed are from the USEPA National Recommended Surface Water Quality Criteria (SWQC) (314CMR 22) (USEPA, 2006; http://www.epa.gov/waterscience/criteria/wqcriteria.html) for the protection of aquatic life. The values presented are chronic freshwater criteria.

"ORNL SCVs" indicates the values listed are Tier II Secondary Chronic Values for Aquatic Biota (Suter & Tsao, 1996; http://www.esd.ornl.gov/programs/ecorisk/documents/tm96r2.pdf).

3. "†" indicates the PRG presented is for 1,3-dichloropropene (isomer unspecified).

TABLE 22 March 31, 2007

Summary Comparison of Analytical RLs and PALs - VOC Analyses - Soil Vapor
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Analyte | Project Action Limit (PAL) | Total Number of ND Samples | Number of ND Samples Where RL > PAL | Percentage of ND Samples Where RL > PAL |
|---|---|---|---|---|
| **VOCs / PAHs** | | | | |
| **Requested Compounds** | | | | |
| Acetone | 350 | 0 | 0 | - |
| Benzene | 3.1 | 2 | 1 | 50% |
| Bromodichloromethane | 1.4 | 10 | 10 | 100% |
| Bromoform | 22 | 10 | 1 | 10% |
| Bromomethane | 5.0 | 10 | 1 | 10% |
| Butanone (2-) | 1,000 | 5 | 0 | 0% |
| Carbon disulfide | 700 | 5 | 0 | 0% |
| Carbon tetrachloride | 1.6 | 9 | 9 | 100% |
| Chlorobenzene | 60 | 10 | 0 | 0% |
| Chloroethane | 10,000 | 10 | 0 | 0% |
| Chloroform | 1.1 | 9 | 9 | 100% |
| Chloromethane | 24 | 10 | 0 | 0% |
| Dibromochloromethane | 1.0 | 10 | 10 | 100% |
| Dichloroethane (1,1-) | 500 | 10 | 0 | 0% |
| Dichloroethane (1,2-) | 0.94 | 10 | 10 | 100% |
| Dichloroethene (1,1-) | 200 | 10 | 0 | 0% |
| Dichloroethene (cis-1,2-) | 35 | 9 | 0 | 0% |
| Dichloroethene (trans-1,2-) | 70 | 10 | 0 | 0% |
| Dichloropropane (1,2-) | 4.0 | 10 | 2 | 20% |
| Dichloropropene (cis-1,3-) | 6.1 | 10 | 1 | 10% |
| Dichloropropene (trans-1,3-) | 6.1 | 10 | 1 | 10% |
| Ethylbenzene | 22 | 3 | 0 | 0% |
| Hexanone (2-) | NA | 10 | 0 | - |
| Methyl-2-pentanone (4-) | 80 | 8 | 0 | 0% |
| Methylene chloride | 52 | 2 | 0 | 0% |
| Methylnaphthalene (2-) | 96 | 7 | 0 | 0% |
| Methyl-tert Butyl Ether | 3,000 | 10 | 0 | 0% |
| Naphthalene | 95.8 | 2 | 0 | 0% |
| Styrene | 1,000 | 9 | 0 | 0% |
| Tetrachloroethane (1,1,2,2-) | 0.42 | 10 | 10 | 100% |
| Tetrachloroethene | 8.1 | 7 | 1 | 14% |
| Toluene | 400 | 0 | 0 | - |
| Trichloroethane (1,1,1-) | 2,200 | 9 | 0 | 0% |
| Trichloroethane (1,1,2-) | 1.5 | 10 | 10 | 100% |
| Trichloroethene | 6.8 | 2 | 0 | 0% |
| Trichlorofluoromethane | 700 | 5 | 0 | 0% |
| Vinyl acetate | 200 | 10 | 0 | 0% |
| Vinyl chloride | 2.8 | 10 | 1 | 10% |
| Xylene (m,p-) | 7,000 | 2 | 0 | 0% |
| Xylene (o-) | 7,000 | 1 | 0 | 0% |
| **Sum of Requested VOC / PAH Parameters** | **-** | **296** | **77** | **26%** |

TABLE 22 March 31, 2007

Summary Comparison of Analytical RLs and PALs - VOC Analyses - Soil Vapor
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Analyte | Project Action Limit (PAL) | Total Number of ND Samples | Number of ND Samples Where RL > PAL | Percentage of ND Samples Where RL > PAL |
|---|---|---|---|---|
| **Compounds Not Requested** | | | | |
| Benzyl Chloride | NA | - | - | - |
| Butadiene (1,3-) | NA | - | - | - |
| Chloropropene (3-) | NA | - | - | - |
| Cyclohexane | NA | - | - | - |
| Dibromoethane (1,2-) | NA | - | - | - |
| Dichloro-1,1,2,2-tetrafluoroethane (1,2-) | NA | - | - | - |
| Dichlorobenzene (1,2-) | NA | - | - | - |
| Dichlorobenzene (1,3-) | NA | - | - | - |
| Dichlorobenzene (1,4-) | NA | - | - | - |
| Dichlorodifluoromethane | NA | - | - | - |
| Dioxane (1,4-) | NA | - | - | - |
| Ethyl Alcohol | NA | - | - | - |
| Ethylacetate | NA | - | - | - |
| Ethyltoluene (4-) | NA | - | - | - |
| Heptane | NA | - | - | - |
| Hexachlorobutadiene | NA | - | - | - |
| Hexane (n-) | NA | - | - | - |
| Iso-Propyl Alcohol | NA | - | - | - |
| Propylene | NA | - | - | - |
| Tetrahydrofuran | NA | - | - | - |
| Trichloro-1,2,2-trifluoroethane (1,1,2-) | NA | - | - | - |
| Trichlorobenzene (1,2,4-) | NA | - | - | - |
| Trimethylbenzene (1,2,4-) | NA | - | - | - |
| Trimethylbenzene (1,3,5-) | NA | - | - | - |
| Trimethylpentane (2,2,4-) | NA | - | - | - |
| Vinyl Bromide | NA | - | - | - |

Notes:

1. "Requested Compounds" are the compounds specified to be reported in the Phase 1B-4 Work Plan. The analytical laboratory mistakenly reported an extra 26 compounds ("Compounds Not Requested") for which no PALs were established in the Phase 1B-4 Work Plan.

2. The Reporting Limit (RL) represents a sample-specific RL.

3. The Project Action Limit (PAL) is provided in units of micrograms per liter (µg/L).

4. "NA" = Not applicable; no PAL was established in the QAPP for this parameter.
"ND" = Not Detected; data qualified "U" or "UJ" during data validation.

TABLE 22A

Detail of Analytical RLs and Risk Assessment Screening Levels - VOC Analyses - Soil Vapor

Phases 1B-4 and 1B-5 RI Data Usability Assessment Report

Blackburn & Union Privileges Superfund Site

Walpole, Massachusetts

| Sample Name | Analyte | Target Soil Gas Concentrations | Result | Qualifier | Bias | Units |
|---|---|---|---|---|---|---|
| SV-01 / 09-07-06 | Benzene | **3.1** | **16** | U | | µg/m3 |
| SV-01 / 09-07-06 | Bromodichloromethane | **1.4** | **33.5** | U | | µg/m3 |
| SV-02 / 09-07-06 | Bromodichloromethane | **1.4** | **6.7** | U | | µg/m3 |
| SV-03 / 09-07-06 | Bromodichloromethane | **1.4** | **3.35** | U | | µg/m3 |
| SV-04 / 09-07-06 | Bromodichloromethane | **1.4** | **3.35** | U | | µg/m3 |
| SV-05 / 09-07-06 | Bromodichloromethane | **1.4** | **3.35** | U | | µg/m3 |
| SV-06 / 09-07-06 | Bromodichloromethane | **1.4** | **3.35** | U | | µg/m3 |
| SV-07 / 09-06-06 | Bromodichloromethane | **1.4** | **3.35** | U | | µg/m3 |
| SV-08 / 09-06-06 | Bromodichloromethane | **1.4** | **3.35** | U | | µg/m3 |
| SV-09 / 09-06-06 | Bromodichloromethane | **1.4** | **3.35** | U | | µg/m3 |
| SV-10 / 09-06-06 | Bromodichloromethane | **1.4** | **3.35** | U | | µg/m3 |
| SV-01 / 09-07-06 | Bromoform | **22** | **51.6** | U | | µg/m3 |
| SV-01 / 09-07-06 | Bromomethane | **5.0** | **19.4** | U | | µg/m3 |
| SV-01 / 09-07-06 | Carbon tetrachloride | **1.6** | **31.4** | U | | µg/m3 |
| SV-02 / 09-07-06 | Carbon tetrachloride | **1.6** | **6.29** | U | | µg/m3 |
| SV-03 / 09-07-06 | Carbon tetrachloride | **1.6** | **3.14** | U | | µg/m3 |
| SV-04 / 09-07-06 | Carbon tetrachloride | **1.6** | **3.14** | U | | µg/m3 |
| SV-05 / 09-07-06 | Carbon tetrachloride | **1.6** | **3.14** | U | | µg/m3 |
| SV-06 / 09-07-06 | Carbon tetrachloride | **1.6** | **3.14** | U | | µg/m3 |
| SV-07 / 09-06-06 | Carbon tetrachloride | **1.6** | **3.14** | U | | µg/m3 |
| SV-09 / 09-06-06 | Carbon tetrachloride | **1.6** | **3.14** | U | | µg/m3 |
| SV-10 / 09-06-06 | Carbon tetrachloride | **1.6** | **3.14** | U | | µg/m3 |
| SV-02 / 09-07-06 | Chloroform | **1.1** | **4.88** | U | | µg/m3 |
| SV-03 / 09-07-06 | Chloroform | **1.1** | **2.44** | U | | µg/m3 |
| SV-04 / 09-07-06 | Chloroform | **1.1** | **2.44** | U | | µg/m3 |
| SV-05 / 09-07-06 | Chloroform | **1.1** | **2.44** | U | | µg/m3 |
| SV-06 / 09-07-06 | Chloroform | **1.1** | **2.44** | U | | µg/m3 |
| SV-07 / 09-06-06 | Chloroform | **1.1** | **2.44** | U | | µg/m3 |
| SV-08 / 09-06-06 | Chloroform | **1.1** | **2.44** | U | | µg/m3 |
| SV-09 / 09-06-06 | Chloroform | **1.1** | **2.44** | U | | µg/m3 |
| SV-10 / 09-06-06 | Chloroform | **1.1** | **2.44** | U | | µg/m3 |
| SV-01 / 09-07-06 | Dibromochloromethane | **1.0** | **42.6** | U | | µg/m3 |
| SV-02 / 09-07-06 | Dibromochloromethane | **1.0** | **8.51** | U | | µg/m3 |
| SV-03 / 09-07-06 | Dibromochloromethane | **1.0** | **4.26** | U | | µg/m3 |
| SV-04 / 09-07-06 | Dibromochloromethane | **1.0** | **4.26** | U | | µg/m3 |
| SV-05 / 09-07-06 | Dibromochloromethane | **1.0** | **4.26** | U | | µg/m3 |
| SV-06 / 09-07-06 | Dibromochloromethane | **1.0** | **4.26** | U | | µg/m3 |
| SV-07 / 09-06-06 | Dibromochloromethane | **1.0** | **4.26** | U | | µg/m3 |
| SV-08 / 09-06-06 | Dibromochloromethane | **1.0** | **4.26** | U | | µg/m3 |
| SV-09 / 09-06-06 | Dibromochloromethane | **1.0** | **4.26** | U | | µg/m3 |
| SV-10 / 09-06-06 | Dibromochloromethane | **1.0** | **4.26** | U | | µg/m3 |
| SV-01 / 09-07-06 | Dichloroethane (1,2-) | **0.94** | **20.2** | U | | µg/m3 |
| SV-02 / 09-07-06 | Dichloroethane (1,2-) | **0.94** | **4.04** | U | | µg/m3 |
| SV-03 / 09-07-06 | Dichloroethane (1,2-) | **0.94** | **2.02** | U | | µg/m3 |
| SV-04 / 09-07-06 | Dichloroethane (1,2-) | **0.94** | **2.02** | U | | µg/m3 |
| SV-05 / 09-07-06 | Dichloroethane (1,2-) | **0.94** | **2.02** | U | | µg/m3 |
| SV-06 / 09-07-06 | Dichloroethane (1,2-) | **0.94** | **2.02** | U | | µg/m3 |
| SV-07 / 09-06-06 | Dichloroethane (1,2-) | **0.94** | **2.02** | U | | µg/m3 |
| SV-08 / 09-06-06 | Dichloroethane (1,2-) | **0.94** | **2.02** | U | | µg/m3 |
| SV-09 / 09-06-06 | Dichloroethane (1,2-) | **0.94** | **2.02** | U | | µg/m3 |
| SV-10 / 09-06-06 | Dichloroethane (1,2-) | **0.94** | **2.02** | U | | µg/m3 |
| SV-01 / 09-07-06 | Dichloropropane (1,2-) | **4.0** | **23.1** | U | | µg/m3 |
| SV-02 / 09-07-06 | Dichloropropane (1,2-) | **4.0** | **4.62** | U | | µg/m3 |
| SV-01 / 09-07-06 | Dichloropropene (cis-1,3-) † | **6.1** | **22.7** | U | | µg/m3 |
| SV-01 / 09-07-06 | Dichloropropene (trans-1,3-) † | **6.1** | **22.7** | U | | µg/m3 |

TABLE 22A

Detail of Analytical RLs and Risk Assessment Screening Levels - VOC Analyses - Soil Vapor
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Sample Name | Analyte | Target Soil Gas Concentrations | Result | Qualifier | Bias | Units |
|---|---|---|---|---|---|---|
| SV-01 / 09-07-06 | Tetrachloroethane (1,1,2,2-) | **0.42** | **34.3** | U | | µg/m3 |
| SV-02 / 09-07-06 | Tetrachloroethane (1,1,2,2-) | **0.42** | **6.86** | U | | µg/m3 |
| SV-03 / 09-07-06 | Tetrachloroethane (1,1,2,2-) | **0.42** | **3.43** | U | | µg/m3 |
| SV-04 / 09-07-06 | Tetrachloroethane (1,1,2,2-) | **0.42** | **3.43** | U | | µg/m3 |
| SV-05 / 09-07-06 | Tetrachloroethane (1,1,2,2-) | **0.42** | **3.43** | U | | µg/m3 |
| SV-06 / 09-07-06 | Tetrachloroethane (1,1,2,2-) | **0.42** | **3.43** | U | | µg/m3 |
| SV-07 / 09-06-06 | Tetrachloroethane (1,1,2,2-) | **0.42** | **3.43** | U | | µg/m3 |
| SV-08 / 09-06-06 | Tetrachloroethane (1,1,2,2-) | **0.42** | **3.43** | U | | µg/m3 |
| SV-09 / 09-06-06 | Tetrachloroethane (1,1,2,2-) | **0.42** | **3.43** | U | | µg/m3 |
| SV-10 / 09-06-06 | Tetrachloroethane (1,1,2,2-) | **0.42** | **3.43** | U | | µg/m3 |
| SV-01 / 09-07-06 | Tetrachloroethene | **8.1** | **33.9** | U | | µg/m3 |
| SV-01 / 09-07-06 | Trichloroethane (1,1,2-) | **1.5** | **27.2** | U | | µg/m3 |
| SV-02 / 09-07-06 | Trichloroethane (1,1,2-) | **1.5** | **5.45** | U | | µg/m3 |
| SV-03 / 09-07-06 | Trichloroethane (1,1,2-) | **1.5** | **2.72** | U | | µg/m3 |
| SV-04 / 09-07-06 | Trichloroethane (1,1,2-) | **1.5** | **2.72** | U | | µg/m3 |
| SV-05 / 09-07-06 | Trichloroethane (1,1,2-) | **1.5** | **2.72** | U | | µg/m3 |
| SV-06 / 09-07-06 | Trichloroethane (1,1,2-) | **1.5** | **2.72** | U | | µg/m3 |
| SV-07 / 09-06-06 | Trichloroethane (1,1,2-) | **1.5** | **2.72** | U | | µg/m3 |
| SV-08 / 09-06-06 | Trichloroethane (1,1,2-) | **1.5** | **2.72** | U | | µg/m3 |
| SV-09 / 09-06-06 | Trichloroethane (1,1,2-) | **1.5** | **2.72** | U | | µg/m3 |
| SV-10 / 09-06-06 | Trichloroethane (1,1,2-) | **1.5** | **2.72** | U | | µg/m3 |
| SV-01 / 09-07-06 | Vinyl chloride | **2.8** | **12.8** | U | | µg/m3 |

Notes:

1. Concentrations are presented in micrograms per cubic meter (µg/m3).

2. "COPC Screening Levels" indicates contaminants of potential concern (COPC) screening levels used to determine inclusion of an analyte in the human health risk assessment. Analyte reporting limits which exceed the Target Soil Gas Concentrations (**bold** value) are in **bold**.

"Target Soil Gas Concentrations" indicates the values listed are from Table 2C in the USEPA Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils. Target soil gas concentrations based on non-carcinogenic effects are multiplied by 0.1 per USEPA Guidance (USEPA Region I, Risk Update Number 5, September 1999).

3. "†" indicates the Target Soil Gas Concentration values presented are for 1,3-dichloropropene (isomer unspecified).

TABLE 23A

March 31, 2007

Summary of Field Duplicate Results - Soil

Phases 1B-4 and 1B-5 RI Data Usability Assessment Report

Blackburn & Union Privileges Superfund Site

Walpole, Massachusetts

| Analyte | OW-114 | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | SB-09A / S-2 / 09-07-06 | | | OW-114 / S-2 / 09-07-06 | | | RPD | Validation Action? |
| | Result | Bias | Qualifier | Result | Bias | Qualifier | | |
| **VOCs (µg/kg)** | | | | | | | | |
| Acetone | 630 | | U | 760 | | U | – | – |
| Benzene | 230 | | U | 280 | | U | – | – |
| Bromochloromethane | 230 | | U | 280 | | U | – | – |
| Bromodichloromethane | 230 | | U | 280 | | U | – | – |
| Bromoform | 230 | | U | 280 | | U | – | – |
| Bromomethane | 230 | I | UJ | 280 | I | UJ | – | – |
| Butanone (2-) | 230 | | U | 280 | | U | – | – |
| Carbon disulfide | 230 | | U | 280 | | U | – | – |
| Carbon tetrachloride | 230 | | U | 280 | | U | – | – |
| Chlorobenzene | 230 | | U | 280 | | U | – | – |
| Chloroethane | 230 | | U | 280 | | U | – | – |
| Chloroethylvinyl ether (2-) | 580 | | U | 700 | | U | – | – |
| Chloroform | 230 | | U | 280 | | U | – | – |
| Chloromethane | 230 | | U | 280 | | U | – | – |
| Dibromochloromethane | 230 | | U | 280 | | U | – | – |
| Dichloroethane (1,1-) | 230 | | U | 280 | | U | – | – |
| Dichloroethane (1,2-) | 230 | | U | 280 | | U | – | – |
| Dichloroethene (1,1-) | 230 | | U | 280 | | U | – | – |
| Dichloroethene (cis-1,2-) | 230 | | | 190 | I | J | 19% | None |
| Dichloroethene (trans-1,2-) | 230 | | U | 280 | | U | – | – |
| Dichloropropane (1,2-) | 230 | | U | 280 | | U | – | – |
| Dichloropropene (cis-1,3-) | 230 | | U | 280 | | U | – | – |
| Dichloropropene (trans-1,3-) | 230 | | U | 280 | | U | – | – |
| Ethylbenzene | 230 | | U | 280 | | U | – | – |
| Hexanone (2-) | 230 | | U | 280 | | U | – | – |
| Methyl-2-pentanone (4-) | 230 | | U | 280 | | U | – | – |
| Methylene chloride | 580 | | U | 700 | | U | – | – |
| Methylnaphthalene (2-) | 1600 | I | J | 3900 | I | J | **84%** | **J** |
| Methyl-tert Butyl Ether | 230 | | U | 280 | | U | – | – |
| Naphthalene | 2500 | I | J | 6500 | I | J | **89%** | **J** |
| Styrene | 230 | | U | 280 | | U | – | – |
| Tetrachloroethane (1,1,2,2-) | 230 | | U | 280 | | U | – | – |
| Tetrachloroethene | 230 | | U | 280 | | U | – | – |
| Toluene | 230 | | U | 280 | | U | – | – |
| Trichloroethane (1,1,1-) | 230 | | U | 280 | | U | – | – |
| Trichloroethane (1,1,2-) | 230 | | U | 280 | | U | – | – |
| Trichloroethene | 21000 | | | 27000 | | | 25% | None |
| Trichlorofluoromethane | 230 | | U | 280 | | U | – | – |
| Vinyl acetate | 230 | | U | 280 | | U | – | – |
| Vinyl chloride | 230 | | U | 280 | | U | – | – |
| Xylene (m,p-) | 230 | | U | 280 | | U | – | – |
| Xylene (o-) | 230 | | U | 280 | | U | – | – |

TABLE 23A March 31, 2007

Summary of Field Duplicate Results - Soil
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

Notes:

1. As indicated in USEPA-NE QAPP Worksheet #11b, established measurement performance criteria (MPC) for soil samples must generally be ≤ 50% for results greater than 5x the quantitation limit (QL) for inorganics and 2x QL for organics. If the results are below 5x QL for inorganics, the difference between results must be ± 4x the QL. For organics, if the results are below 2x QL, then professional judgment is used in data assessment. Refer to New Environmental Horizons, Inc.'s (NEH's) Data Usability Reports for BU 112 and 113 for additional detail regarding field duplicates.

2. The following qualifiers and biases were assigned during data validation by NEH. Refer to NEH's Data Usability Reports for BU114 for additional detail regarding qualifiers and bias.

Qualifiers:

"J" The associated numerical value is an estimated quantity due to quality control criteria exceedance(s). The value is usable for project decisions as an estimated result.

"U" The compound was analyzed for, but was not detected. The associated numerical value is the sample-specific reporting limit. The value is usable for project decisions as a non-detect result at the reporting limit.

"UJ" The compound was analyzed for, but was not detected. The associated numerical value is the sample-specific reporting limit and is an estimated quantity. The value is usable for project decisions as a non-detect result at the estimated reporting limit.

"B" The compound/analyte was detected in a non-matrix matched, associated method blank. Result is usable with potential uncertainty due to the potential for contamination.

"JEB" The compound was detected in an associated equipment blank and is therefore estimated. Result is usable with particular uncertainty due to the potential for contamination.

Biases:

"H" High
"L" Low
"I" Indeterminate

3. A "blank" Result field indicates that analysis was not required for this sample.

4. Relative percent difference (RPD) was calculated according to the following equation:

$$RPD\ (\%) = \{(x_1 - x_2) \div [(x_1 + x_2)/2]\} * 100$$

5. "-" Field duplicate precision could not be evaluated for non-detected results.

6. "NA" indicates that one field duplicate sample reported a non-detect value while the other reported a detected result or that one sample was rejected due to other QC exceedances. For inorganics, the difference criterion was applied when one result was non-detect and the other detected.

7. "None" indicates no validation action was taken because the RPD was within acceptable limits.

8. **Bold** and shaded values indicate analytes for which precision between the field duplicate pair was not acceptable.

TABLE 23B March 31, 2007

Summary of Field Duplicate Results - Groundwater
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Analyte | OW-212 | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | SH-28S / 09-27-06 | | | OW-212 / 09-27-06 | | | RPD | Validation Action? |
| | Result | Bias | Qualifier | Result | Bias | Qualifier | | |
| **Metals (µg/l)** | | | | | | | | |
| Aluminum | 50 | | U | 50 | | U | – | – |
| Antimony | 0.5 | | U | 0.5 | | U | – | – |
| Arsenic | 1 | | | 1.1 | | | 10% | None |
| Barium | 17 | | | 17 | | | 0% | None |
| Beryllium | 0.2 | | U | 0.2 | | U | – | – |
| Cadmium | 0.1 | | U | 0.1 | | U | – | – |
| Calcium | 18000 | L | J | 19000 | L | J | 5% | None |
| Chromium | 0.5 | | U | 0.5 | | U | – | – |
| Cobalt | 0.2 | | U | 0.2 | | U | – | – |
| Copper | 2 | | U | 2 | | U | – | – |
| Iron | 110 | | | 110 | | | 0% | None |
| Lead | 0.5 | | U | 0.5 | | U | – | – |
| Magnesium | 5100 | | | 5300 | | | 4% | None |
| Manganese | 19 | | | 20 | | | 5% | None |
| Mercury | 0.2 | | U | 0.2 | | U | – | – |
| Nickel | 2 | | U | 2 | | U | – | – |
| Potassium | 3000 | | | 3200 | | | 6% | None |
| Selenium | 1 | | U | 1 | | U | – | – |
| Silver | 0.1 | | U | 0.1 | | U | – | – |
| Sodium | 62000 | | | 62000 | | | 0% | None |
| Thallium | 0.1 | | U | 0.1 | | U | – | – |
| Vanadium | 1.6 | | | 1.7 | | | 6% | None |
| Zinc | 14 | | U | 14 | | U | – | – |
| **SVOCs - PAHs (ng/l)** | | | | | | | | |
| Acenaphthene | 11 | | U | 11 | | U | – | – |
| Acenaphthylene | 11 | | U | 11 | | U | – | – |
| Anthracene | 11 | | U | 11 | | U | – | – |
| Benzo(a)anthracene | 11 | | U | 11 | | U | – | – |
| Benzo(a)pyrene | 11 | | U | 11 | | U | – | – |
| Benzo(b)fluoranthene | 11 | | U | 11 | | U | – | – |
| Benzo(g,h,i)perylene | 11 | | U | 11 | | U | – | – |
| Benzo(k)fluoranthene | 11 | | U | 11 | | U | – | – |
| Chrysene | 11 | | U | 11 | | U | – | – |
| Dibenz(a,h)anthracene | 11 | | U | 11 | | U | – | – |
| Fluoranthene | 11 | | U | 11 | | U | – | – |
| Fluorene | 11 | | U | 11 | | U | – | – |
| Indeno(1,2,3-cd)pyrene | 11 | | U | 11 | | U | – | – |
| Methylnaphthalene (2-) | 11 | | U | 11 | | U | – | – |
| Naphthalene | 11 | | U | 11 | | U | – | – |
| Phenanthrene | 11 | | U | 11 | | U | – | – |
| Pyrene | 11 | | U | 11 | | U | – | – |
| bis(2-Ethylhexyl)phthalate | 1100 | | U | 1100 | | U | – | – |
| Carbazole | 11 | | U | 11 | | U | – | – |

TABLE 23B
Summary of Field Duplicate Results - Groundwater
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Analyte | OW-212 | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | SH-28S / 09-27-06 | | | OW-212 / 09-27-06 | | | RPD | Validation Action? |
| | Result | Bias | Qualifier | Result | Bias | Qualifier | | |
| **VOCs (µg/l)** | | | | | | | | |
| Acetone | 5 | | U | 5 | | U | – | – |
| Benzene | 0.2 | | U | 0.2 | | U | – | – |
| Bromochloromethane | 2 | | U | 2 | | U | – | – |
| Bromodichloromethane | 0.2 | | U | 0.2 | | U | – | – |
| Bromoform | 0.5 | | U | 0.5 | | U | – | – |
| Bromomethane | 0.2 | I | UJ | 0.2 | I | UJ | – | – |
| Butanone (2-) | 2 | | U | 2 | | U | – | – |
| Carbon disulfide | 2 | | U | 2 | | U | – | – |
| Carbon tetrachloride | 2 | | U | 2 | | U | – | – |
| Chlorobenzene | 2 | | U | 2 | | U | – | – |
| Chloroethane | 2 | | U | 2 | | U | – | – |
| Chloroethylvinyl ether (2-) | 2 | | U | 2 | | U | – | – |
| Chloroform | 0.67 | | | 0.67 | | | 0% | None |
| Chloromethane | 2 | | U | 2 | | U | – | – |
| Dibromochloromethane | 0.2 | | U | 0.2 | | U | – | – |
| Dichloroethane (1,1-) | 2 | | U | 2 | | U | – | – |
| Dichloroethane (1,2-) | 0.2 | | U | 0.2 | | U | – | – |
| Dichloroethene (1,1-) | 2 | | U | 2 | | U | – | – |
| Dichloroethene (cis-1,2-) | 2 | | U | 2 | | U | – | – |
| Dichloroethene (trans-1,2-) | 2 | | U | 2 | | U | – | – |
| Dichloropropane (1,2-) | 0.5 | | U | 0.5 | | U | – | – |
| Dichloropropene (cis-1,3-) | 0.5 | | U | 0.5 | | U | – | – |
| Dichloropropene (trans-1,3-) | 0.5 | | U | 0.5 | | U | – | – |
| Ethylbenzene | 2 | | U | 2 | | U | – | – |
| Hexanone (2-) | 2 | | U | 2 | | U | – | – |
| Methyl-2-pentanone (4-) | 2 | | U | 2 | | U | – | – |
| Methylene chloride | 2 | | U | 2 | | U | – | – |
| Methyl-tert Butyl Ether | 2 | | U | 2 | | U | – | – |
| Styrene | 2 | | U | 2 | | U | – | – |
| Tetrachloroethane (1,1,2,2-) | 0.2 | | U | 0.2 | | U | – | – |
| Tetrachloroethene | 0.2 | | U | 0.2 | | U | – | – |
| Toluene | 2 | | U | 2 | | U | – | – |
| Trichloroethane (1,1,1-) | 2 | | U | 2 | | U | – | – |
| Trichloroethane (1,1,2-) | 0.2 | | U | 0.2 | | U | – | – |
| Trichloroethene | 0.2 | | U | 0.2 | | U | – | – |
| Trichlorofluoromethane | 2 | | U | 2 | | U | – | – |
| Vinyl acetate | 2 | | U | 2 | | U | – | – |
| Vinyl chloride | 0.5 | | U | 0.5 | | U | – | – |
| Xylene (m,p-) | 4 | | U | 4 | | U | – | – |
| Xylene (o-) | 2 | | U | 2 | | U | – | – |

TABLE 23B
Summary of Field Duplicate Results - Groundwater
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Analyte | OW-213 | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | SH-14S / 10-02-06 | | | OW-213 / 10-02-06 | | | RPD | Validation Action? |
| | Result | Bias | Qualifier | Result | Bias | Qualifier | | |
| **Metals (µg/l)** | | | | | | | | |
| Aluminum | 50 | | U | 50 | | U | – | – |
| Antimony | 0.5 | | U | 0.5 | | U | – | – |
| Arsenic | 2.1 | | | 2.2 | | | 5% | None |
| Barium | 22 | | | 22 | | | 0% | None |
| Beryllium | 0.2 | | U | 0.2 | | U | – | – |
| Cadmium | 0.1 | | U | 0.1 | | U | – | – |
| Calcium | 50000 | | | 50000 | | | 0% | None |
| Chromium | 0.5 | | U | 0.5 | | U | – | – |
| Cobalt | 1 | | | 1.1 | | | 10% | None |
| Copper | 2.1 | | | 2 | | | 5% | None |
| Iron | 2800 | | | 2400 | | | 15% | None |
| Lead | 0.5 | | U | 0.5 | | U | – | – |
| Magnesium | 24000 | | | 24000 | | | 0% | None |
| Manganese | 2300 | | | 2100 | | | 9% | None |
| Mercury | 0.2 | | U | 0.2 | | U | – | – |
| Nickel | 6 | | | 6.3 | | | 5% | None |
| Potassium | 1900 | | | 1800 | | | 5% | None |
| Selenium | 1 | | U | 1 | | U | – | – |
| Silver | 0.1 | | U | 0.1 | | U | – | – |
| Sodium | 31000 | | | 32000 | | | 3% | None |
| Thallium | 0.2 | | U | 0.2 | | U | – | – |
| Vanadium | 3 | | | 2.8 | | | 7% | None |
| Zinc | 5 | | U | 5 | | U | – | – |
| **SVOCs - PAHs (ng/l)** | | | | | | | | |
| Acenaphthene | 1.8 | I | J | 1.7 | I | J | 6% | None |
| Acenaphthylene | 10 | | U | 10 | | U | – | – |
| Anthracene | 8.2 | I | J | 9.2 | I | J | 11% | None |
| Benzo(a)anthracene | 17 | | | 18 | | | 6% | None |
| Benzo(a)pyrene | 11 | | | 12 | | | 9% | None |
| Benzo(b)fluoranthene | 10 | | U | 10 | | U | – | – |
| Benzo(g,h,i)perylene | 10 | | U | 10 | | U | – | – |
| Benzo(k)fluoranthene | 10 | | U | 10 | | U | – | – |
| Chrysene | 13 | | U | 15 | | | NA | |
| Dibenz(a,h)anthracene | 1.5 | I | J | 1.4 | I | J | 7% | None |
| Fluoranthene | 42 | | | 41 | | | 2% | None |
| Fluorene | 8 | I | J | 8.5 | I | J | 6% | None |
| Indeno(1,2,3-cd)pyrene | 10 | | U | 10 | | U | – | – |
| Methylnaphthalene (2-) | 10 | | U | 10 | | U | – | – |
| Naphthalene | 840 | | | 960 | | | 13% | None |
| Phenanthrene | 13 | | U | 14 | | U | – | – |
| Pyrene | 68 | | | 71 | | | 4% | None |
| bis(2-Ethylhexyl)phthalate | 1000 | | U | 1000 | | U | – | – |
| Carbazole | 8.6 | I | J | 9.5 | I | J | 10% | None |

TABLE 23B
Summary of Field Duplicate Results - Groundwater
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Analyte | OW-213 | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | SH-14S / 10-02-06 | | | OW-213 / 10-02-06 | | | RPD | Validation Action? |
| | Result | Bias | Qualifier | Result | Bias | Qualifier | | |
| **VOCs (µg/l)** | | | | | | | | |
| Acetone | 5 | | U | 5 | | U | – | – |
| Benzene | 0.61 | | | 0.67 | | | 9% | None |
| Bromochloromethane | 2 | | U | 2 | | U | – | – |
| Bromodichloromethane | 0.2 | | U | 0.2 | | U | – | – |
| Bromoform | 0.5 | | U | 0.5 | | U | – | – |
| Bromomethane | 0.2 | I | UJ | 0.2 | I | UJ | – | – |
| Butanone (2-) | 2 | | U | 2 | | U | – | – |
| Carbon disulfide | 2 | | U | 2 | | U | – | – |
| Carbon tetrachloride | 2 | | U | 2 | | U | – | – |
| Chlorobenzene | 2 | | U | 2 | | U | – | – |
| Chloroethane | 2 | | U | 2 | | U | – | – |
| Chloroethylvinyl ether (2-) | 2 | | U | 2 | | U | – | – |
| Chloroform | 0.2 | | U | 0.2 | | U | – | – |
| Chloromethane | 2 | | U | 2 | | U | – | – |
| Dibromochloromethane | 0.2 | | U | 0.2 | | U | – | – |
| Dichloroethane (1,1-) | 2 | | U | 2 | | U | – | – |
| Dichloroethane (1,2-) | 0.2 | | U | 0.2 | | U | – | – |
| Dichloroethene (1,1-) | 2 | | U | 2 | | U | – | – |
| Dichloroethene (cis-1,2-) | 2 | | U | 2 | | U | – | – |
| Dichloroethene (trans-1,2-) | 2 | | U | 2 | | U | – | – |
| Dichloropropane (1,2-) | 0.5 | | U | 0.5 | | U | – | – |
| Dichloropropene (cis-1,3-) | 0.5 | | U | 0.5 | | U | – | – |
| Dichloropropene (trans-1,3-) | 0.5 | | U | 0.5 | | U | – | – |
| Ethylbenzene | 2 | | U | 2 | | U | – | – |
| Hexanone (2-) | 2 | | U | 2 | | U | – | – |
| Methyl-2-pentanone (4-) | 2 | | U | 2 | | U | – | – |
| Methylene chloride | 2 | | U | 2 | | U | – | – |
| Methyl-tert Butyl Ether | 2 | | U | 2 | | U | – | – |
| Styrene | 2 | | U | 2 | | U | – | – |
| Tetrachloroethane (1,1,2,2-) | 0.2 | | U | 0.2 | | U | – | – |
| Tetrachloroethene | 0.2 | | U | 0.2 | | U | – | – |
| Toluene | 2 | | U | 2 | | U | – | – |
| Trichloroethane (1,1,1-) | 2 | | U | 2 | | U | – | – |
| Trichloroethane (1,1,2-) | 0.2 | | U | 0.2 | | U | – | – |
| Trichloroethene | 0.2 | | U | 0.2 | | U | – | – |
| Trichlorofluoromethane | 2 | | U | 2 | | U | – | – |
| Vinyl acetate | 2 | | U | 2 | | U | – | – |
| Vinyl chloride | 0.5 | | U | 0.5 | | U | – | – |
| Xylene (m,p-) | 4 | | U | 4 | | U | – | – |
| Xylene (o-) | 2 | | U | 2 | | U | – | – |

TABLE 23B
Summary of Field Duplicate Results - Groundwater
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Analyte | OW-214 | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | SH-05S / 10-04-06 | | | OW-214 / 10-04-06 | | | RPD | Validation Action? |
| | Result | Bias | Qualifier | Result | Bias | Qualifier | | |
| **Metals (µg/l)** | | | | | | | | |
| Aluminum | 840 | | | 960 | | | 13% | None |
| Antimony | 2.2 | | | 1.9 | | | 15% | None |
| Arsenic | 11 | | | 11 | | | 0% | None |
| Barium | 9.3 | | | 8.5 | | | 9% | None |
| Beryllium | 0.2 | | U | 0.2 | | U | – | – |
| Cadmium | 0.15 | | | 0.14 | | | 7% | None |
| Calcium | 2700 | L | J | 2700 | L | J | 0% | None |
| Chromium | 5.4 | | | 5 | | | 8% | None |
| Cobalt | 2 | | | 2 | | | 0% | None |
| Copper | 29 | | | 27 | | | 7% | None |
| Iron | 2100 | | | 2000 | | | 5% | None |
| Lead | 26 | | | 25 | | | 4% | None |
| Magnesium | 410 | | | 400 | | | 2% | None |
| Manganese | 150 | | | 150 | | | 0% | None |
| Mercury | 0.2 | | U | 0.2 | | U | – | – |
| Nickel | 8.3 | | | 8.1 | | | 2% | None |
| Potassium | 400 | I | UJ | 400 | I | UJ | – | – |
| Selenium | 1.3 | | | 1.2 | | | 8% | None |
| Silver | 0.13 | | | 0.1 | | U | NA | |
| Sodium | 260000 | | | 270000 | | | 4% | None |
| Thallium | 0.1 | | U | 0.1 | | U | – | – |
| Vanadium | 25 | L | J | 23 | L | J | 8% | None |
| Zinc | 9.6 | | U | 9.2 | | U | – | – |
| **SVOCs - PAHs (ng/l)** | | | | | | | | |
| Acenaphthene | 6800 | | | 6200 | | | 9% | None |
| Acenaphthylene | 1800 | | | 1600 | | | 12% | None |
| Anthracene | 2000 | | | 1900 | | | 5% | None |
| Benzo(a)anthracene | 320 | | | 270 | | | 17% | None |
| Benzo(a)pyrene | 160 | | | 150 | | | 6% | None |
| Benzo(b)fluoranthene | 90 | | | 76 | | | 17% | None |
| Benzo(g,h,i)perylene | 46 | | | 54 | | | 16% | None |
| Benzo(k)fluoranthene | 71 | | | 73 | | | 3% | None |
| Chrysene | 300 | | | 250 | | | 18% | None |
| Dibenz(a,h)anthracene | 18 | | | 19 | | | 5% | None |
| Fluoranthene | 1800 | | | 1600 | | | 12% | None |
| Fluorene | 7200 | | | 6500 | | | 10% | None |
| Indeno(1,2,3-cd)pyrene | 36 | | | 41 | | | 13% | None |
| Methylnaphthalene (2-) | 19000 | | | 16000 | | | 17% | None |
| Naphthalene | 42000 | | | 36000 | | | 15% | None |
| Phenanthrene | 16000 | | | 15000 | | | 6% | None |
| Pyrene | 2200 | | | 1800 | | | 20% | None |
| bis(2-Ethylhexyl)phthalate | 1000 | | U | 1000 | | U | – | – |
| Carbazole | 740 | | | 680 | | | 8% | None |

TABLE 23B
Summary of Field Duplicate Results - Groundwater
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Analyte | OW-214 | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | SH-05S / 10-04-06 | | | OW-214 / 10-04-06 | | | RPD | Validation Action? |
| | Result | Bias | Qualifier | Result | Bias | Qualifier | | |
| **VOCs (µg/l)** | | | | | | | | |
| Acetone | 25 | | U | 6.7 | | U | – | – |
| Benzene | 10 | | U | 3.7 | H | J | NA | |
| Bromochloromethane | 10 | | U | 2 | | U | – | – |
| Bromodichloromethane | 10 | | U | 2 | | U | – | – |
| Bromoform | 10 | | U | 2 | | U | – | – |
| Bromomethane | 10 | I | UJ | 2 | I | UJ | – | – |
| Butanone (2-) | 10 | | U | 2 | | U | – | – |
| Carbon disulfide | 10 | | U | 2 | | U | – | – |
| Carbon tetrachloride | 10 | | U | 2 | | U | – | – |
| Chlorobenzene | 10 | | U | 2 | | U | – | – |
| Chloroethane | 10 | | U | 2 | | U | – | – |
| Chloroethylvinyl ether (2-) | 10 | | U | 2 | | U | – | – |
| Chloroform | 10 | | U | 2 | | U | – | – |
| Chloromethane | 10 | | U | 2 | | U | – | – |
| Dibromochloromethane | 10 | I | UJ | 2 | I | UJ | – | – |
| Dichloroethane (1,1-) | 10 | | U | 2 | | U | – | – |
| Dichloroethane (1,2-) | 10 | | U | 2 | | U | – | – |
| Dichloroethene (1,1-) | 10 | | U | 2 | | U | – | – |
| Dichloroethene (cis-1,2-) | 10 | | U | 2 | | U | – | – |
| Dichloroethene (trans-1,2-) | 10 | | U | 2 | | U | – | – |
| Dichloropropane (1,2-) | 10 | | U | 2 | | U | – | – |
| Dichloropropene (cis-1,3-) | 10 | | U | 2 | | U | – | – |
| Dichloropropene (trans-1,3-) | 10 | | U | 2 | | U | – | – |
| Ethylbenzene | 10 | | U | 3.1 | H | J | NA | |
| Hexanone (2-) | 10 | | U | 2 | | U | – | – |
| Methyl-2-pentanone (4-) | 10 | | U | 2 | | U | – | – |
| Methylene chloride | 10 | | U | 2 | | U | – | – |
| Methyl-tert Butyl Ether | 10 | | U | 2 | | U | – | – |
| Styrene | 10 | | U | 2 | | U | – | – |
| Tetrachloroethane (1,1,2,2-) | 10 | | U | 2 | | U | – | – |
| Tetrachloroethene | 10 | | U | 2 | | U | – | – |
| Toluene | 10 | | U | 4 | H | J | NA | |
| Trichloroethane (1,1,1-) | 10 | | U | 2 | | U | – | – |
| Trichloroethane (1,1,2-) | 10 | | U | 2 | | U | – | – |
| Trichloroethene | 10 | | U | 2 | | U | – | – |
| Trichlorofluoromethane | 10 | | U | 2 | | U | – | – |
| Vinyl acetate | 10 | | U | 2 | | U | – | – |
| Vinyl chloride | 10 | | U | 2 | | U | – | – |
| Xylene (m,p-) | 20 | | U | 8.8 | H | J | NA | |
| Xylene (o-) | 10 | | U | 5 | H | J | NA | |

TABLE 23B March 31, 2007

Summary of Field Duplicate Results - Groundwater
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

Notes:

1. As indicated in USEPA-NE QAPP Worksheet #11b, established measurement performance criteria (MPC) for groundwater sample must generally be ≤ 30% for results greater than 5x the quantitation limit (QL) for inorganics and 2x QL for organics. If the results are below 5x QL for inorganics, the difference between results must be ± 2x the QL. For organics, if the results are below 2x QL, then professional judgment is used in data assessment. Refer to New Environmental Horizons, Inc.'s (NEH's) Data Usability Reports for BU212 through BU214 for additional detail regarding field duplicates.

2. The following qualifiers and biases were assigned during data validation by NEH. Refer to NEH's Data Usability Reports for BU212 through BU214 for additional detail regarding qualifiers and bias.

Qualifiers:

"J" The associated numerical value is an estimated quantity due to quality control criteria exceedance(s). The value is usable for project decisions as an estimated result.

"U" The compound was analyzed for, but was not detected. The associated numerical value is the sample-specific reporting limit. The value is usable for project decisions as a non-detect result at the reporting limit.

"UJ" The compound was analyzed for, but was not detected. The associated numerical value is the sample-specific reporting limit and is an estimated quantity. The value is usable for project decisions as a non-detect result at the estimated reporting limit.

Biases:

"H" High
"L" Low
"I" Indeterminate

3. A "blank" Result field indicates that analysis was not required for this sample.

4. Relative percent difference (RPD) was calculated according to the following equation:

$$RPD\ (\%) = \{(x1 - x2) \div [(x1 + x2)/2]\} * 100$$

5. "*" Although the RPD was greater than 30%, no action was taken because the results were both <2xRL, which meets criteria for SVOCs.

6. "-" Field duplicate precision could not be evaluated for non-detected results.

7. "NA" indicates that one field duplicate sample reported a non-detect value while the other reported a detected result or that one sample was rejected due to other QC exceedances. For inorganics, the difference criterion was applied when one result was non-detect and the other detected.

8. "None" indicates no validation action was taken because the RPD was within acceptable limits.

9. **Bold** and shaded values indicate analytes for which precision between the field duplicate pair was not acceptable.

TABLE 23C
Summary of Field Duplicate Results - Sediment
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Analyte | OW-412 | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | FP-09F / 0-1' / 10-13-06 | | | OW-412 / 0-1' / 10-13-06 | | | RPD | Validation Action? |
| | Result | Bias | Qualifier | Result | Bias | Qualifier | | |
| **Metals (mg/kg dry weight)** | | | | | | | | |
| Arsenic | 1.8 | | | 2.2 | | | 20% | None |
| Lead | 68 | | | 95 | | | 33% | None |
| **SVOCs - PAHs (µg/kg dry weight)** | | | | | | | | |
| Acenaphthene | 4.3 | | | 4.3 | | | 0% | None |
| Acenaphthylene | 31 | I | J | 17 | I | J | **58%** | **J** |
| Anthracene | 23 | | | 14 | | | 49% | None |
| Benzo(a)anthracene | 120 | | | 77 | | | 44% | None |
| Benzo(a)pyrene | 100 | I | J | 53 | I | J | **61%** | **J** |
| Benzo(b)fluoranthene | 160 | | | 100 | | | 46% | None |
| Benzo(g,h,i)perylene | 57 | I | J | 29 | I | J | **65%** | **J** |
| Benzo(k)fluoranthene | 120 | I | J | 68 | I | J | **55%** | **J** |
| Chrysene | 180 | | | 120 | | | 40% | None |
| Dibenz(a,h)anthracene | 24 | I | J | 13 | I | J | **59%** | **J** |
| Fluoranthene | 230 | | | 190 | | | 19% | None |
| Fluorene | 11 | | | 8.2 | | | 29% | None |
| Indeno(1,2,3-cd)pyrene | 58 | I | J | 29 | I | J | **67%** | **J** |
| Methylnaphthalene (2-) | 66 | | | 60 | | | 10% | None |
| Naphthalene | 38 | | | 33 | | | 14% | None |
| Phenanthrene | 170 | | | 110 | | | 43% | None |
| Pyrene | 210 | | | 150 | | | 33% | None |

# TABLE 23C
## Summary of Field Duplicate Results - Sediment
## Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
## Blackburn & Union Privileges Superfund Site
## Walpole, Massachusetts

Notes:

1. As indicated in USEPA-NE QAPP Worksheet #11b, established measurement performance criteria (MPC) for soil samples must generally be ≤ 50% for results greater than 5x the quantitation limit (QL) for inorganics and 2x QL for organics. If the results are below 5x QL for inorganics, the difference between results must be ± 4x the QL. For organics, if the results are below 2x QL, then professional judgment is used in data assessment. Refer to New Environmental Horizons, Inc.'s (NEH's) Data Usability Report for BU412 for additional detail regarding field duplicates.

2. The following qualifiers and biases were assigned during data validation by NEH. Refer to NEH's Data Usability Report for BU412 for additional detail regarding qualifiers and bias.

Qualifiers:

"J" The associated numerical value is an estimated quantity due to quality control criteria exceedance(s). The value is usable for project decisions as an estimated result.

"U" The compound was analyzed for, but was not detected. The associated numerical value is the sample-specific reporting limit. The value is usable for project decisions as a non-detect result at the reporting limit.

"UJ" The compound was analyzed for, but was not detected. The associated numerical value is the sample-specific reporting limit and is an estimated quantity. The value is usable for project decisions as a non-detect result at the estimated reporting limit.

"B" The compound/analyte was detected in a non-matrix matched, associated method blank. Result is usable with potential uncertainty due to the potential for contamination.

"JEB" The compound was detected in an associated equipment blank and is therefore estimated. Result is usable with particular uncertainty due to the potential for contamination.

Biases:

"H" High

"L" Low

"I" Indeterminate

3. A "blank" Result field indicates that analysis was not required for this sample.

4. Relative percent difference (RPD) was calculated according to the following equation:

$$RPD\ (\%) = \{(x_1 - x_2) \div [(x_1 + x_2)/2]\} * 100$$

5. "-" Field duplicate precision could not be evaluated for non-detected results.

6. "NA" indicates that one field duplicate sample reported a non-detect value while the other reported a detected result or that one sample was rejected due to other QC exceedances. For inorganics, the difference criterion was applied when one result was non-detect and the other detected.

7. "None" indicates no validation action was taken because the RPD was within acceptable limits.

8. **Bold** and shaded values indicate analytes for which precision between the field duplicate pair was not acceptable.

TABLE 23D
Summary of Field Duplicate Results - Surface Water
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Analyte | OW-303 | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | SW-105B / 09-29-06 | | | OW-303 / 09-29-06 | | | RPD | Validation Action? |
| | Result | Bias | Qualifier | Result | Bias | Qualifier | | |
| **Metals (µg/l)** | | | | | | | | |
| **Dissolved** | | | | | | | | |
| Aluminum | 50 | | U | 50 | | U | – | – |
| Antimony | 0.5 | | U | 0.5 | | U | – | – |
| Arsenic | 0.46 | I | J | 0.52 | I | J | 12% | None |
| Barium | 17 | | | 17 | | | 0% | None |
| Beryllium | 0.2 | | U | 0.2 | | U | – | – |
| Cadmium | 0.1 | | U | 0.1 | | U | – | – |
| Calcium | 12000 | | | 12000 | | | 0% | None |
| Chromium | 0.52 | | | 0.5 | | U | NA | |
| Cobalt | 0.2 | | U | 0.2 | | U | – | – |
| Copper | 1.6 | | | 2.2 | | | **32%** | **J** |
| Iron | 320 | | | 300 | | | 6% | None |
| Lead | 0.5 | | U | 0.5 | | U | – | – |
| Magnesium | 3100 | | | 3000 | | | 3% | None |
| Manganese | 46 | | | 50 | | | 8% | None |
| Mercury | 0.2 | | U | 0.2 | | U | – | – |
| Nickel | 1.2 | | | 1.1 | | | 9% | None |
| Potassium | 2200 | | | 2100 | | | 5% | None |
| Selenium | 1 | | U | 1 | | U | – | – |
| Silver | 0.2 | | U | 0.2 | | U | – | – |
| Sodium | 36000 | | | 34000 | | | 6% | None |
| Thallium | 0.1 | | U | 0.1 | | U | – | – |
| Vanadium | 1.2 | | | 1 | | U | NA | |
| Zinc | 5 | | U | 5 | | U | – | – |
| **Total** | | | | | | | | |
| Aluminum | 50 | | U | 50 | | U | – | – |
| Antimony | 0.5 | | U | 0.5 | | U | – | – |
| Arsenic | 0.62 | I | J | 0.61 | I | J | 2% | None |
| Barium | 17 | | | 17 | | | 0% | None |
| Beryllium | 0.2 | | U | 0.2 | | U | – | – |
| Cadmium | 0.1 | | U | 0.1 | | U | – | – |
| Calcium | 12000 | | | 12000 | | | 0% | None |
| Chromium | 0.5 | | U | 0.5 | | U | – | – |
| Cobalt | 0.2 | | U | 0.2 | | U | – | – |
| Copper | 1.6 | | | 1.6 | | | 0% | None |
| Iron | 550 | | | 520 | | | 6% | None |
| Lead | 0.54 | | | 0.59 | | | 9% | None |
| Magnesium | 3100 | | | 3100 | | | 0% | None |
| Manganese | 100 | | | 97 | | | 3% | None |
| Mercury | 0.2 | | U | 0.2 | | U | – | – |
| Nickel | 1.1 | | | 1 | | | 10% | None |
| Potassium | 2300 | | | 2200 | | | 4% | None |
| Selenium | 1 | | U | 1 | | U | – | – |
| Silver | 0.2 | | U | 0.2 | | U | – | – |
| Sodium | 35000 | | | 36000 | | | 3% | None |
| Thallium | 0.1 | | U | 0.1 | | U | – | – |
| Vanadium | 1.7 | | | 1 | | U | NA | |

TABLE 23D
Summary of Field Duplicate Results - Surface Water
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Analyte | OW-303 | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | SW-105B / 09-29-06 | | | OW-303 / 09-29-06 | | | RPD | Validation Action? |
| | Result | Bias | Qualifier | Result | Bias | Qualifier | | |
| Zinc | 5 | | U | 5 | | U | – | – |
| **SVOCs - PAHs (ng/l)** | | | | | | | | |
| Acenaphthene | 5.2 | I | J | 6.9 | I | J | 28% | None |
| Acenaphthylene | 1.3 | I | J | 2.4 | I | J | **59%** | **J** |
| Anthracene | 10 | | U | 1.3 | I | J | NA | |
| Benzo(a)anthracene | 1.4 | I | J | 1.7 | I | J | 19% | None |
| Benzo(a)pyrene | 1.1 | I | J | 1.6 | I | J | **37%** | **J** |
| Benzo(b)fluoranthene | 1.4 | I | J | 1.7 | I | J | 19% | None |
| Benzo(g,h,i)perylene | 10 | I | UJ | 10 | I | UJ | – | – |
| Benzo(k)fluoranthene | 1.4 | I | J | 1.9 | I | J | 30% | None |
| Chrysene | 1.6 | I | J | 2.1 | I | J | 27% | None |
| Dibenz(a,h)anthracene | 10 | | U | 1.3 | I | J | NA | |
| Fluoranthene | 10 | | U | 10 | | U | – | – |
| Fluorene | 2.6 | I | J | 3.2 | I | J | 21% | None |
| Indeno(1,2,3-cd)pyrene | 10 | | U | 10 | | U | – | – |
| Methylnaphthalene (2-) | 1.2 | I | J | 2.1 | I | J | **55%** | **J** |
| Naphthalene | 10 | | U | 10 | | U | – | – |
| Phenanthrene | 10 | | U | 10 | | U | – | – |
| Pyrene | 1.8 | I | J | 3.8 | I | J | **71%** | **J** |
| bis(2-Ethylhexyl)phthalate | 1000 | | U | 1000 | | U | – | – |
| Carbazole | 10 | | U | 10 | | U | – | – |
| **VOCs (µg/l)** | | | | | | | | |
| Acetone | 5 | | U | 5 | | U | – | – |
| Benzene | 0.2 | | U | 0.2 | | U | – | – |
| Bromochloromethane | 2 | | U | 2 | | U | – | – |
| Bromodichloromethane | 0.2 | | U | 0.2 | | U | – | – |
| Bromoform | 0.5 | | U | 0.5 | | U | – | – |
| Bromomethane | 0.2 | I | UJ | 0.2 | I | UJ | – | – |
| Butanone (2-) | 2 | | U | 2 | | U | – | – |
| Carbon disulfide | 2 | | U | 2 | | U | – | – |
| Carbon tetrachloride | 2 | | U | 2 | | U | – | – |
| Chlorobenzene | 2 | | U | 2 | | U | – | – |
| Chloroethane | 2 | | U | 2 | | U | – | – |
| Chloroethylvinyl ether (2-) | 2 | | U | 2 | | U | – | – |
| Chloroform | 0.2 | | U | 0.2 | | U | – | – |
| Chloromethane | 2 | | U | 2 | | U | – | – |
| Dibromochloromethane | 0.2 | | U | 0.2 | | U | – | – |
| Dichloroethane (1,1-) | 2 | | U | 2 | | U | – | – |
| Dichloroethane (1,2-) | 0.2 | | U | 0.2 | | U | – | – |
| Dichloroethene (1,1-) | 2 | | U | 2 | | U | – | – |
| Dichloroethene (cis-1,2-) | 2 | | U | 2 | | U | – | – |
| Dichloroethene (trans-1,2-) | 2 | | U | 2 | | U | – | – |
| Dichloropropane (1,2-) | 0.5 | | U | 0.5 | | U | – | – |
| Dichloropropene (cis-1,3-) | 0.5 | | U | 0.5 | | U | – | – |
| Dichloropropene (trans-1,3-) | 0.5 | | U | 0.5 | | U | – | – |
| Ethylbenzene | 2 | | U | 2 | | U | – | – |
| Hexanone (2-) | 2 | | U | 2 | | U | – | – |
| Methyl-2-pentanone (4-) | 2 | | U | 2 | | U | – | – |

TABLE 23D
Summary of Field Duplicate Results - Surface Water
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Analyte | OW-303 | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | SW-105B / 09-29-06 | | | OW-303 / 09-29-06 | | | RPD | Validation Action? |
| | Result | Bias | Qualifier | Result | Bias | Qualifier | | |
| Methylene chloride | 2 | | U | 2 | | U | – | – |
| Methyl-tert Butyl Ether | 2 | | U | 2 | | U | – | – |
| Styrene | 2 | | U | 2 | | U | – | – |
| Tetrachloroethane (1,1,2,2-) | 0.2 | | U | 0.2 | | U | – | – |
| Tetrachloroethene | 0.2 | | U | 0.2 | | U | – | – |
| Toluene | 2 | | U | 2 | | U | – | – |
| Trichloroethane (1,1,1-) | 2 | | U | 2 | | U | – | – |
| Trichloroethane (1,1,2-) | 0.2 | | U | 0.2 | | U | – | – |
| Trichloroethene | 0.2 | | U | 0.2 | | U | – | – |
| Trichlorofluoromethane | 2 | | U | 2 | | U | – | – |
| Vinyl acetate | 2 | | U | 2 | | U | – | – |
| Vinyl chloride | 0.5 | | U | 0.5 | | U | – | – |
| Xylene (m,p-) | 4 | | U | 4 | | U | – | – |
| Xylene (o-) | 2 | | U | 2 | | U | – | – |

Notes:

1. As indicated in USEPA-NE QAPP Worksheet #11b, established measurement performance criteria (MPC) for groundwater sample must generally be ≤ 30% for results greater than 5x the quantitation limit (QL) for inorganics and 2x QL for organics. If the results are below 5x QL for inorganics, the difference between results must be ± 2x the QL. For organics, if the results are below 2x QL, then professional judgment is used in data assessment. Refer to New Environmental Horizons, Inc.'s (NEH's) Data Usability Report for BU303 for additional detail regarding field duplicates.
2. The following qualifiers and biases were assigned during data validation by NEH. Refer to NEH's Data Usability Report for BU303 for additional detail regarding qualifiers and bias.

Qualifiers:

"J" The associated numerical value is an estimated quantity due to quality control criteria exceedance(s). The value is usable for project decisions as an estimated result.

"U" The compound was analyzed for, but was not detected. The associated numerical value is the sample-specific reporting limit. The value is usable for project decisions as a non-detect result at the reporting limit.

"UJ" The compound was analyzed for, but was not detected. The associated numerical value is the sample-specific reporting limit and is an estimated quantity. The value is usable for project decisions as a non-detect result at the estimated reporting limit.

Biases:

"H" High
"L" Low
"I" Indeterminate

3. A "blank" Result field indicates that analysis was not required for this sample.
4. Relative percent difference (RPD) was calculated according to the following equation:

$$RPD\ (\%) = \{(x1 - x2) \div [(x1 + x2)/2]\} * 100$$

5. "-" Field duplicate precision could not be evaluated for non-detected results.
6. "NA" indicates that one field duplicate sample reported a non-detect value while the other reported a detected result or that one sample was rejected due to other QC exceedances. For inorganics, the difference criterion was applied when one result was non-detect and the other detected.
7. "None" indicates no validation action was taken because the RPD was within acceptable limits.
8. **Bold** and shaded values indicate analytes for which precision between the field duplicate pair was not acceptable.

TABLE 23E

March 31, 2007

Summary of Field Duplicate Results - Soil Vapor
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Analyte | OW-1001 | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | SV-01 / 09-07-06 | | | OW-1001 / 09-07-06 | | | RPD | Validation Action? |
| | Result | Bias | Qualifier | Result | Bias | Qualifier | | |
| **VOCs (µg/m$^3$)** | | | | | | | | |
| Acetone | 11.1 | I | J | 8.07 | I | J | **32%** | **J** |
| Benzene | 16 | | U | 16 | | U | – | – |
| Benzyl Chloride | 25.9 | | U | 25.9 | | U | – | – |
| Bromodichloromethane | 33.5 | | U | 33.5 | | U | – | – |
| Bromoform | 51.6 | | U | 51.6 | | U | – | – |
| Bromomethane | 19.4 | | U | 19.4 | | U | – | – |
| Butadiene (1,3-) | 11 | | U | 11 | | U | – | – |
| Butanone (2-) | 14.7 | | U | 14.7 | | U | – | – |
| Carbon disulfide | 15.6 | | U | 15.6 | | U | – | – |
| Carbon tetrachloride | 31.4 | | U | 31.4 | | U | – | – |
| Chlorobenzene | 23 | | U | 23 | | U | – | – |
| Chloroethane | 13.2 | | U | 13.2 | | U | – | – |
| Chloroform | 12.3 | I | J | 24.4 | | U | NA | |
| Chloromethane | 10.3 | | U | 10.3 | | U | – | – |
| Chloropropene (3-) | 15.6 | | U | 15.6 | | U | – | – |
| Cyclohexane | 17.2 | | U | 17.2 | | U | – | – |
| Dibromochloromethane | 42.6 | | U | 42.6 | | U | – | – |
| Dibromoethane (1,2-) | 38.4 | | U | 38.4 | | U | – | – |
| Dichloro-1,2-tetrafluoroethane-1,1,2,2 | 34.9 | | U | 34.9 | | U | – | – |
| Dichlorobenzene (1,2-) | 30 | | U | 30 | | U | – | – |
| Dichlorobenzene (1,3-) | 30 | | U | 30 | | U | – | – |
| Dichlorobenzene (1,4-) | 30 | | U | 30 | | U | – | – |
| Dichlorodifluoromethane | 49.4 | | U | 49.4 | | U | – | – |
| Dichloroethane (1,1-) | 20.2 | | U | 20.2 | | U | – | – |
| Dichloroethane (1,2-) | 20.2 | | U | 20.2 | | U | – | – |
| Dichloroethene (1,1-) | 19.8 | | U | 19.8 | | U | – | – |
| Dichloroethene (cis-1,2-) | 40 | | | 38.8 | | | 3% | None |
| Dichloroethene (trans-1,2-) | 19.8 | | U | 19.8 | | U | – | – |
| Dichloropropane (1,2-) | 23.1 | | U | 23.1 | | U | – | – |
| Dichloropropene (cis-1,3-) | 22.7 | | U | 22.7 | | U | – | – |
| Dichloropropene (trans-1,3-) | 22.7 | | U | 22.7 | | U | – | – |
| Dioxane (1,4-) | 36 | | U | 36 | | U | – | – |
| Ethyl Alcohol | 12.8 | I | J | 37.6 | | U | NA | |
| Ethylacetate | 18 | | U | 18 | | U | – | – |
| Ethylbenzene | 21.7 | | U | 21.7 | | U | – | – |
| Ethyltoluene (4-) | 24.6 | | U | 24.6 | | U | – | – |
| Heptane | 20.5 | | U | 20.5 | | U | – | – |
| Hexachlorobutadiene | 53.3 | | U | 53.3 | | U | – | – |
| Hexane (n-) | 35.2 | | U | 35.2 | | U | – | – |
| Hexanone (2-) | 20.5 | | U | 20.5 | | U | – | – |
| Iso-Propyl Alcohol | 12.3 | | U | 12.3 | | U | – | – |
| Methyl-2-pentanone (4-) | 20.5 | | U | 20.5 | | U | – | – |
| Methylene chloride | 34.7 | | U | 34.7 | | U | – | – |
| Methylnaphthalene (2-) | 2.3 | I | J | 2.32 | I | J | 1% | None |
| Methyl-tert Butyl Ether | 18 | | U | 18 | | U | – | – |
| Naphthalene | 7.15 | | | 8.31 | | | 15% | None |
| Propylene | 17.2 | | U | 17.2 | | U | – | – |
| Styrene | 21.3 | | U | 21.3 | | U | – | – |
| Tetrachloroethane (1,1,2,2-) | 34.3 | | U | 34.3 | | U | – | – |
| Tetrachloroethene | 33.9 | | U | 33.9 | | U | – | – |
| Tetrahydrofuran | 14.7 | | U | 14.7 | | U | – | – |
| Toluene | 74.2 | | | 55.7 | | | 28% | None |
| Trichloro-1,1,2-trifluoroethane-1,2,2 | 38.3 | | U | 38.3 | | U | – | – |
| Trichlorobenzene (1,2,4-) | 37.1 | | U | 37.1 | | U | – | – |
| Trichloroethane (1,1,1-) | 27.2 | | U | 27.2 | | U | – | – |
| Trichloroethane (1,1,2-) | 27.2 | | U | 27.2 | | U | – | – |
| Trichloroethene | 3860 | | | 3840 | | | 1% | None |

TABLE 23E
Summary of Field Duplicate Results - Soil Vapor
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Analyte | OW-1001 | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | SV-01 / 09-07-06 | | | OW-1001 / 09-07-06 | | | RPD | Validation Action? |
| | Result | Bias | Qualifier | Result | Bias | Qualifier | | |
| Trichlorofluoromethane | 28.1 | | U | 28.1 | | U | – | – |
| Trimethylbenzene (1,2,4-) | 24.6 | | U | 24.6 | | U | – | – |
| Trimethylbenzene (1,3,5-) | 28.4 | | | 25.3 | | | 12% | None |
| Trimethylpentane (2,2,4-) | 23.3 | | U | 23.3 | | U | – | – |
| Vinyl acetate | 17.6 | | U | 17.6 | | U | – | – |
| Vinyl Bromide | 21.8 | | U | 21.8 | | U | – | – |
| Vinyl chloride | 12.8 | | U | 12.8 | | U | – | – |
| Xylene (m,p-) | 16.9 | I | J | 12.9 | I | J | 27% | None |
| Xylene (o-) | 9.54 | I | J | 21.7 | | U | NA | |

Notes:

1. As indicated in USEPA-NE QAPP Worksheet #11b, established measurement performance criteria (MPC) for soil vapor samples must generally be ≤ 50% for results greater than 5x the quantitation limit (QL) for inorganics and 2x QL for organics. If the results are below 5x QL for inorganics, the difference between results must be ± 4x the QL. For organics, if the results are below 2x QL, then professional judgment is used in data assessment. Refer to New Environmental Horizons, Inc.'s (NEH's) Data Usability Report for BU1001 for additional detail regarding field duplicates.

2. The following qualifiers and biases were assigned during data validation by NEH. Refer to NEH's Data Usability Report for BU1001 for additional detail regarding qualifiers and bias.

Qualifiers:

"J" The associated numerical value is an estimated quantity due to quality control criteria exceedance(s). The value is usable for project decisions as an estimated result.

"U" The compound was analyzed for, but was not detected. The associated numerical value is the sample-specific reporting limit. The value is usable for project decisions as a non-detect result at the reporting limit.

"UJ" The compound was analyzed for, but was not detected. The associated numerical value is the sample-specific reporting limit and is an estimated quantity. The value is usable for project decisions as a non-detect result at the estimated reporting limit.

"B" The compound/analyte was detected in a non-matrix matched, associated method blank. Result is usable with potential uncertainty due to the potential for contamination.

"JEB" The compound was detected in an associated equipment blank and is therefore estimated. Result is usable with particular uncertainty due to the potential for contamination.

Biases:

"H" High
"L" Low
"I" Indeterminate

3. A "blank" Result field indicates that analysis was not required for this sample.

4. Relative percent difference (RPD) was calculated according to the following equation:

$$RPD\ (\%) = \{(x_1 - x_2) \div [(x_1 + x_2)/2]\} * 100$$

5. "-" Field duplicate precision could not be evaluated for non-detected results.

6. "NA" indicates that one field duplicate sample reported a non-detect value while the other reported a detected result or that one sample was rejected due to other QC exceedances. For inorganics, the difference criterion was applied when one result was non-detect and the other detected.

7. "None" indicates no validation action was taken because the RPD was within acceptable limits.

8. **Bold** and shaded values indicate analytes for which precision between the field duplicate pair was not acceptable.

TABLE 24A

March 31, 2007

Summary of Overall Completeness - Non-Definitive Parameters - Groundwater
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Chemical Analyses | Method | Number of Samples Planned for Phase 1B-5 | Number of Results Expected* | Actual Number of Samples Collected | Actual Number of Usable Results Generated** | Percent Overall Completeness |
|---|---|---|---|---|---|---|
| Natural Attenuation | Anions (chloride, nitrate, sulfate)-Method 300.0; Alkalinity-Method 310.1; TKN-Method 351.2; TDS-Method 160.1; Sulfide-Method 376.2 | 45 | 315 | 45 | 315 | 100.0% |
| Ferrous Iron | USEPA SW-846 Method 7199 (Mod) or SM3500Fe D | 45 | 45 | 45 | 45 | 100.0% |
| Ethane/Ethene/Methane | Method AM20GAX | 45 | 135 | 45 | 135 | 100.0% |
| Density | ASTM Method D-4052 | 45 | 45 | 45 | 45 | 100.0% |
| Viscosity | ASTM D-445 | 45 | 45 | 45 | 45 | 100.0% |
| TOC | USEPA Method 415.1 | 45 | 45 | 45 | 45 | 100.0% |

Notes:

1. "*" The "Number of Results Expected" represents the number of planned samples times the number of individual parameters in each type of analysis. For example, if 10 samples were planned to be collected for analysis of SVOCs, and there are 66 individual SVOC compounds, the total "Number of Results Expected"is 10 x 66 = 660.

2. "**" The "Actual Number of Usable Results Generated" represents the number of actual samples collected times the number of individual parameters in each type of analysis, minus the number of results which were rejected during data validation. For example, if from the 24 samples that were collected for analysis of SVOCs, the "Number of Results Expected" is 974; however, if 6 results were rejected, therefore 968 usable results were generated.

TABLE 24B

March 31, 2007

Summary of Data Validation Qualifiers and Completeness - Non-Definitive Parameters - Groundwater

Phases 1B-4 and 1B-5 RI Data Usability Assessment Report

Blackburn & Union Privileges Superfund Site

Walpole, Massachusetts

| Analyte | Number of Non-Qualified Samples | Number of Samples Qualified "J" | Number of Samples Qualified "U" | Number of Samples Qualified "UJ" | Number of Samples Qualified "B" | Number of Samples Qualified "JB" | Number of Samples Qualified "EB" | Number of Samples Qualified "JEB" | Number of Samples Qualified "R" | Total Number of Samples | Detection Frequency | Completeness (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Non-Definitive Parameters** | | | | | | | | | | | | |
| Alkalinity | 44 | | 1 | | | | | | | 45 | 98% | 100.0 |
| Chloride | 45 | | | | | | | | | 45 | 100% | 100.0 |
| Density | 45 | | | | | | | | | 45 | 100% | 100.0 |
| Ethane | 18 | 1 | 26 | | | | | | | 45 | 42% | 100.0 |
| Ethene | 18 | 8 | 19 | | | | | | | 45 | 58% | 100.0 |
| Iron, Ferrous | 1 | 3 | 34 | 7 | | | | | | 45 | 9% | 100.0 |
| Methane | 20 | 25 | | | | | | | | 45 | 100% | 100.0 |
| Nitrate | 32 | | 13 | | | | | | | 45 | 71% | 100.0 |
| Sulfate | 44 | | 1 | | | | | | | 45 | 98% | 100.0 |
| Sulfide | | 3 | 6 | 36 | | | | | | 45 | 7% | 100.0 |
| TKN | 10 | 1 | 33 | 1 | | | | | | 45 | 24% | 100.0 |
| Total Dissolved Solids | 45 | | | | | | | | | 45 | 100% | 100.0 |
| Viscosity | 45 | | | | | | | | | 45 | 100% | 100.0 |
| | | | | | | | | | **Total % Completeness for Non-Definitive Parameters** | | | **100.0** |

TABLE 24B

March 31, 2007

Summary of Data Validation Qualifiers and Completeness - Non-Definitive Parameters - Groundwater
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

Notes:

1. Detection frequency includes non-rejected primary samples only, and is calculated using the following equation:
Detection Frequency (%) = {1 - [("Number of Samples Assigned a 'U' Qualifier" + "Number of Samples Assigned a 'UJ' Qualifier") ÷ ("Total Number of Samples"-"Number of Samples Assigned an 'R' Qualifier")]} * 100

2. Completeness is calculated according to the following:
Completeness (%) = [("Total Number of Samples" - "Number of Samples Assigned an 'R' Qualifier") ÷ "Total Number of Samples"] * 100

3. A blank field indicates that results were not qualified using this data qualifier.

4. "U" - The compound/analyte was analyzed for but was not detected. The associated numerical value is the sample-specific quantitation (reporting) limit. These results are usable for project objectives.
"UJ" - The compound/analyte was analyzed for but was not detected. The sample-specific quantitation (reporting) limit is estimated. The non-detected result, qualified UJ, is usable for project objectives with the documentation of the bias or uncertainty in the result.
"J" - The compound/analyte was detected and the result is estimated due to QC exceedance(s). Estimated results are usable for project objectives with the documentation of the uncertainty, bias, and/or imprecision.
"B" - The compound/analyte was detected in a non-matrix matched, associated method blank (e.g., aqueous method blank associated with sediment metals analyses). Result is usable with potential uncertainty due to the potential for contamination.
"JB" - The compound/analyte was detected in a non-matrix matched, associated method blank and is also estimated due to other QC exceedances. Result is usable with particular uncertainty due to the potential for contamination.
"EB" - The compound was detected in an associated equipment blank. Result is usable with particular uncertainty due to the potential for contamination.
"JEB" - The compound was detected in an associated equipment blank and is estimated due to other QC exceedances. Result is usable with particular uncertainty due to potential for contamination.
"R" - Compound/analyte result has been rejected to due severe QC exceedance(s). Rejected results are unusable for project objectives.

TABLE 24C

March 31, 2007

Summary of Overall Bias - Non-Definitive Parameters - Groundwater
Phases 1B-4 and 1b-5 RI Data Usability Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Class | Percentage of Non-Biased Results | Percentage of Results Assigned a "H" Bias | Percentage of Results Assigned a "L" Bias | Percentage of Results Assigned a "I" Bias |
|---|---|---|---|---|
| **All Non-Definitive Parameter Data - Detected and ND** | | | | |
| Alkalinity | 100.0% | 0.0% | 0.0% | 0.0% |
| Chloride | 100.0% | 0.0% | 0.0% | 0.0% |
| Nitrate | 100.0% | 0.0% | 0.0% | 0.0% |
| Sulfate | 100.0% | 0.0% | 0.0% | 0.0% |
| Sulfide | 13.3% | 6.7% | 77.8% | 2.2% |
| TKN | 95.6% | 0.0% | 0.0% | 4.4% |
| Total Dissolved Solids | 100.0% | 0.0% | 0.0% | 0.0% |
| Ferrous Iron | 77.8% | 0.0% | 15.6% | 6.7% |
| Ethane/Ethene/Methane | 74.8% | 22.2% | 0.0% | 3.0% |
| Density | 100.0% | 0.0% | 0.0% | 0.0% |
| Viscosity | 100.0% | 0.0% | 0.0% | 0.0% |
| TOC | 86.2% | 5.2% | 6.7% | 1.9% |
| **Overall Bias – Groundwater** | 86.2% | 5.2% | 6.7% | 1.9% |

Notes:

1. Percentages presented above are calculated using non-rejected data only and do not include duplicate sample results.

2. "H" Bias indicates high bias.
"L" Bias indicates low bias.
"I" Bias indicates indeterminate bias.

TABLE 24D March 31, 2007

Summary Comparison of Analytical RLs and PALs - Non-Definitive Parameters - Groundwater

Phases 1B-4 and 1B-5 RI Data Usability Assessment Report

Blackburn & Union Privileges Superfund Site

Walpole, Massachusetts

| Analyte | Project Action Limit (PAL) | Total Number of ND Samples | Number of ND Samples Where RL > PAL | Percentage of ND Samples Where RL > PAL |
|---|---|---|---|---|
| **Non-Definitive Parameters** | | | | |
| Alkalinity | NA | 1 | - | - |
| Chloride | NA | 0 | - | - |
| Density | NA | 0 | - | - |
| Ethane | NA | 26 | - | - |
| Ethene | NA | 19 | - | - |
| Iron, Ferrous | NA | 41 | - | - |
| Methane | NA | 0 | - | - |
| Nitrate | 10,000 | 13 | 0 | 0% |
| Sulfate | NA | 1 | - | - |
| Sulfide | NA | 42 | - | - |
| TKN | NA | 34 | - | - |
| Total Dissolved Solids | NA | 0 | - | - |
| Viscosity | NA | 0 | - | - |
| Total Organic Carbon | NA | 16 | - | - |
| **Sum of Non-Definitive Parameters** | **-** | **193** | **0** | **0%** |

Notes:

1. The Reporting Limit (RL) represents a sample-specific RL.

2. The Project Action Limit (PAL) is provided in units of micrograms per liter (µg/L) for metals and in milligrams per liter (mg/L) for natural attenuation parameters.

3. "NA" = Not applicable; no PAL was established in the QAPP for this parameter.
"ND" = Not Detected; data qualified "U" or "UJ" during data validation.

TABLE 24E

March 31, 2007

Summary of Field Duplicate Results - Non-Definitive Parameters - Groundwater
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Analyte | OW-212 | | | | | | | | OW-213 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | SH-28S / 09-27-06 | | | OW-212 / 09-27-06 | | | RPD | Validation Action? | SH-14S / 10-02-06 | | | OW-213 / 10-02-06 | | | RPD | Validation Action? |
| | Result | Bias | Qualifier | Result | Bias | Qualifier | | | Result | Bias | Qualifier | Result | Bias | Qualifier | | |
| **Non-Definitive Parameters (Units as noted)** | | | | | | | | | | | | | | | | |
| Alkalinity (mg/l) | 28 | | | 28 | | | 0% | None | 250 | | | 250 | | | 0% | None |
| Chloride (mg/l) | 130 | | | 130 | | | 0% | None | 41 | | | 41 | | | 0% | None |
| Ethane (µg/l) | 0.025 | | U | 0.025 | | U | – | – | 0.025 | | U | 0.025 | | U | – | – |
| Ethene (µg/l) | 0.025 | | U | 0.025 | | U | – | – | 1.7 | I | J | 0.83 | I | J | **69%** | **J** |
| Methane (µg/l) | 2.2 | I | J | 1.6 | I | J | **32%** | **J** | 58 | | | 44 | | | 27% | None |
| Iron, Ferrous (mg/l) | 1 | | U | 1 | | U | – | – | 1 | | U | 1 | | U | – | – |
| Nitrate (mg/l) | 1.6 | | | 1.6 | | | 0% | None | 0.4 | | | 0.4 | | | 0% | None |
| Sulfate (mg/l) | 13 | | | 13 | | | 0% | None | 25 | | | 25 | | | 0% | None |
| Sulfide (mg/l) | 0.23 | L | UJ | 0.38 | L | UJ | – | – | 0.2 | L | UJ | 0.2 | L | UJ | – | – |
| TKN (mg/l) | 0.5 | | U | 0.6 | | | NA | | 0.5 | | U | 0.5 | | U | – | – |
| Total Dissolved Solids (mg/l) | 320 | | | 320 | | | 0% | None | 400 | | | 410 | | | 2% | None |
| Density (kg/m3) | 0.9991 | | | 0.999 | | | 0% | None | 0.9994 | | | 0.9993 | | | 0% | None |
| Viscosity (cSt) | 1.17 | | | 1.17 | | | 0% | None | 1.19 | | | 1.18 | | | 1% | None |
| Total Organic Carbon | 2.2 | | | 2.1 | | | 5% | None | 3.9 | | | 4.2 | | | 7% | None |

| Analyte | OW-214 | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | SH-05S / 10-04-06 | | | OW-214 / 10-04-06 | | | RPD | Validation Action? |
| | Result | Bias | Qualifier | Result | Bias | Qualifier | | |
| **Non-Definitive Parameters (Units as noted)** | | | | | | | | |
| Alkalinity (mg/l) | 610 | | | 560 | | | 9% | None |
| Chloride (mg/l) | 6.6 | | | 6.7 | | | 2% | None |
| Ethane (µg/l) | 0.22 | I | J | 0.088 | I | J | **86%** | **J** |
| Ethene (µg/l) | 0.48 | I | J | 0.1 | I | J | **131%** | **J** |
| Methane (µg/l) | 1600 | | | 1900 | | | 17% | None |
| Iron, Ferrous (mg/l) | 1 | L | UJ | 1 | L | UJ | – | – |
| Nitrate (mg/l) | 0.5 | | U | 0.5 | | U | – | – |
| Sulfate (mg/l) | 10 | | | 10 | | | 0% | None |
| Sulfide (mg/l) | 0.2 | | U | 0.2 | | U | – | – |
| TKN (mg/l) | 0.7 | | | 0.6 | | | 15% | None |
| Total Dissolved Solids (mg/l) | 870 | | | 890 | | | 2% | None |
| Density (kg/m3) | 0.999 | | | 0.999 | | | 0% | None |
| Viscosity (cSt) | 1.17 | | | 1.17 | | | 0% | None |
| Total Organic Carbon | 7.2 | | | 7.3 | | | 1% | None |

# TABLE 24E

## Summary of Field Duplicate Results - Non-Definitive Parameters - Groundwater
## Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
## Blackburn & Union Privileges Superfund Site
## Walpole, Massachusetts

Notes:

1. As indicated in USEPA-NE QAPP Worksheet #11b, established measurement performance criteria (MPC) for groundwater sample must generally be ≤ 30% for results greater than 5x the quantitation limit (QL) for inorganics and 2x QL for organics. If the results are below 5x QL for inorganics, the difference between results must be ± 2x the QL. For organics, if the results are below 2x QL, then professional judgment is used in data assessment. Refer to New Environmental Horizons, Inc.'s (NEH's) Data Usability Reports for BU212 through BU214 for additional detail regarding field duplicates.

2. The following qualifiers and biases were assigned during data validation by NEH. Refer to NEH's Data Usability Reports for BU212 through BU214 for additional detail regarding qualifiers and bias.

Qualifiers:

"J" The associated numerical value is an estimated quantity due to quality control criteria exceedance(s). The value is usable for project decisions as an estimated result.

"U" The compound was analyzed for, but was not detected. The associated numerical value is the sample-specific reporting limit. The value is usable for project decisions as a non-detect result at the reporting limit.

"UJ" The compound was analyzed for, but was not detected. The associated numerical value is the sample-specific reporting limit and is an estimated quantity. The value is usable for project decisions as a non-detect result at the estimated reporting limit.

Biases:

"H" High

"L" Low

"I" Indeterminate

3. A "blank" Result field indicates that analysis was not required for this sample.

4. Relative percent difference (RPD) was calculated according to the following equation:

RPD (%) = {(x1 - x2) ÷ [(x1 + x2)/2]} * 100

5. "*" Although the RPD was greater than 30%, no action was taken because the results were both <2xSQL, which meets criteria for SVOCs.

6. "-" Field duplicate precision could not be evaluated for non-detected results.

7. "NA" indicates that one field duplicate sample reported a non-detect value while the other reported a detected result or that one sample was rejected due to other QC exceedances. For inorganics, the difference criterion was applied when one result was non-detect and the other detected.

8. "None" indicates no validation action was taken because the RPD was within acceptable limits.

9. **Bold** and shaded values indicate analytes for which precision between the field duplicate pair was not acceptable.

TABLE 25A

Summary of Overall Completeness - Non-Definitive Parameters - Surface Water

Phases 1B-4 and 1B-5 RI Data Usability Assessment Report

Blackburn & Union Privileges Superfund Site

Walpole, Massachusetts

| Chemical Analyses | Method | Number of Samples Planned for Phase 1B-5 | Number of Results Expected* | Actual Number of Samples Collected | Actual Number of Usable Results Generated** | Percent Overall Completeness |
|---|---|---|---|---|---|---|
| TOC | USEPA Method 415.1 | 4 | 4 | 4 | 4 | 100.0% |

Notes:

1. "*" The "Number of Results Expected" represents the number of planned samples times the number of individual parameters in each type of analysis. For example, if 10 samples were planned to be collected for analysis of SVOCs, and there are 66 individual SVOC compounds, the total "Number of Results Expected"is 10 x 66 = 660.

2. "**" The "Actual Number of Usable Results Generated" represents the number of actual samples collected times the number of individual parameters in each type of analysis, minus the number of results which were rejected during data validation. For example, if from the 24 samples that were collected for analysis of SVOCs, the "Number of Results Expected" is 974; however, if 6 results were rejected, therefore 968 usable results were generated.

TABLE 25B

March 31, 2007

Summary of Data Validation Qualifiers and Completeness - Non-Definitive Parameters - Surface Water
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Analyte | Number of Non-Qualified Samples | Number of Samples Qualified "J" | Number of Samples Qualified "U" | Number of Samples Qualified "UJ" | Number of Samples Qualified "B" | Number of Samples Qualified "JB" | Number of Samples Qualified "EB" | Number of Samples Qualified "JEB" | Number of Samples Qualified "R" | Total Number of Samples | Detection Frequency | Completeness (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **TOC** | | | | | | | | | | | | |
| Total Organic Carbon | 4 | | | | | | | | | 4 | 100% | 100.0 |
| | | | | | | | | | | **Total % Completeness for TOC** | | **100.0** |

Notes:

1. Detection frequency includes non-rejected primary samples only, and is calculated using the following equation:
Detection Frequency (%) = {1 - [("Number of Samples Assigned a 'U' Qualifier" + "Number of Samples Assigned a 'UJ' Qualifier") ÷ ("Total Number of Samples"-"Number of Samples Assigned an 'R' Qualifier")]} * 100

2. Completeness is calculated according to the following:
Completeness (%) = [("Total Number of Samples" - "Number of Samples Assigned an 'R' Qualifier") ÷ "Total Number of Samples"] * 100

3. A blank field indicates that results were not qualified using this data qualifier.

4. "U" - The compound/analyte was analyzed for but was not detected. The associated numerical value is the sample-specific quantitation (reporting) limit. These results are usable for project objectives.
"UJ" - The compound/analyte was analyzed for but was not detected. The sample-specific quantitation (reporting) limit is estimated. The non-detected result, qualified UJ, is usable for project objectives with the documentation of the bias or uncertainty in the result.
"J" - The compound/analyte was detected and the result is estimated due to QC exceedance(s). Estimated results are usable for project objectives with the documentation of the uncertainty, bias, and/or imprecision.
"B" - The compound/analyte was detected in a non-matrix matched, associated method blank (e.g., aqueous method blank associated with sediment metals analyses). Result is usable with potential uncertainty due to the potential for contamination.
"JB" - The compound/analyte was detected in a non-matrix matched, associated method blank and is also estimated due to other QC exceedances. Result is usable with particular uncertainty due to the potential for contamination.
"EB" - The compound was detected in an associated equipment blank. Result is usable with particular uncertainty due to the potential for contamination.
"JEB" - The compound was detected in an associated equipment blank and is estimated due to other QC exceedances. Result is usable with particular uncertainty due to potential for contamination.
"R" - Compound/analyte result has been rejected to due severe QC exceedance(s). Rejected results are unusable for project objectives.

TABLE 25C

March 31, 2007

Summary of Overall Bias - Non-Definitive Parameters - Surface Water
Phases 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Class | Percentage of Non-Biased Results | Percentage of Results Assigned a "H" Bias | Percentage of Results Assigned a "L" Bias | Percentage of Results Assigned a "I" Bias |
|---|---|---|---|---|
| **All Non-Definitive Parameter Data - Detected and ND** | | | | |
| TOC | 100.0% | 0.0% | 0.0% | 0.0% |
| **Overall Bias - Surface Water** | 100.0% | 0.0% | 0.0% | 0.0% |

Notes:

1. Percentages presented above are calculated using non-rejected data only and do not include duplicate sample results.

2. "H" Bias indicates high bias.
"L" Bias indicates low bias.
"I" Bias indicates indeterminate bias.

TABLE 25D March 31, 2007

Summary Comparison of Analytical RLs and PALs - Non-Definitive Parameters - Surface Water

Phases 1B-4 and 1B-5 RI Data Usability Assessment Report

Blackburn & Union Privileges Superfund Site

Walpole, Massachusetts

| Analyte | Project Action Limit (PAL) | Total Number of ND Samples | Number of ND Samples Where RL > PAL | Percentage of ND Samples Where RL > PAL |
|---|---|---|---|---|
| **Total Organic Carbon** | | | | |
| Total Organic Carbon | NA | 0 | - | - |
| **Sum of Non-Definitive Parameters** | **-** | **0** | **-** | **-** |

Notes:

1. The Reporting Limit (RL) represents a sample-specific RL.

2. The Project Action Limit (PAL) is provided in units of micrograms per liter (µg/L).

3. "NA" = Not applicable; no PAL was established in the QAPP for this parameter.
   "ND" = Not Detected; data qualified "U" or "UJ" during data validation.

TABLE 25E March 31, 2007

Summary of Field Duplicate Results - Non-Definitive Parameters - Surface Water
Phses 1B-4 and 1B-5 RI Data Usability Assessment Report
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

| Analyte | OW-303 | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | SW-105B / 09-29-06 | | | OW-303 / 09-29-06 | | | RPD | Validation Action? |
| | Result | Bias | Qualifier | Result | Bias | Qualifier | | |
| **TOC (mg/l)** | | | | | | | | |
| Total Organic Carbon | 5.5 | | | 5.7 | | | 4% | None |

Notes:

1. As indicated in USEPA-NE QAPP Worksheet #11b, established measurement performance criteria (MPC) for groundwater sample must generally be ≤ 30% for results greater than 5x the quantitation limit (QL) for inorganics and 2x QL for organics. If the results are below 5x QL for inorganics, the difference between results must be ± 2x the QL. For organics, if the results are below 2x QL, then professional judgment is used in data assessment. Refer to New Environmental Horizons, Inc.'s (NEH's) Data Usability Report for BU303 for additional detail regarding field duplicates.

2. The following qualifiers and biases were assigned during data validation by NEH. Refer to NEH's Data Usability Report for BU303 for additional detail regarding qualifiers and bias.

Qualifiers:

"J" The associated numerical value is an estimated quantity due to quality control criteria exceedance(s). The value is usable for project decisions as an estimated result.

"U" The compound was analyzed for, but was not detected. The associated numerical value is the sample-specific reporting limit. The value is usable for project decisions as a non-detect result at the reporting limit.

"UJ" The compound was analyzed for, but was not detected. The associated numerical value is the sample-specific reporting limit and is an estimated quantity. The value is usable for project decisions as a non-detect result at the estimated reporting limit.

Biases:

"H" High
"L" Low
"I" Indeterminate

3. A "blank" Result field indicates that analysis was not required for this sample.

4. Relative percent difference (RPD) was calculated according to the following equation:

RPD (%) = {(x1 - x2) ÷ [(x1 + x2)/2]} * 100

5. "-" Field duplicate precision could not be evaluated for non-detected results.

6. "NA" indicates that one field duplicate sample reported a non-detect value while the other reported a detected result or that one sample was rejected due to other QC exceedances. For inorganics, the difference criterion was applied when one result was non-detect and the other detected.

7. "None" indicates no validation action was taken because the RPD was within acceptable limits.

8. **Bold** and shaded values indicate analytes for which precision between the field duplicate pair was not acceptable.

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# DATA USABILITY ASSESSMENT

**Organic Analysis by Method 8260B**
**EPA Region I Tier II – type review**

**Client:** Sanborn, Head & Associates, Inc., Concord, New Hampshire

**Site:** Blackburn & Union Privileges Superfund Site, Walpole, Massachusetts
Phase 1B-4 Remedial Investigation

**Laboratory:** Alpha Woods Hole Labs (AWHL), Raynham, Massachusetts

**SDG:** BU114

**Lab ETR:** 0609028

**# Samples/Analyses:** 3 soils and 1 trip blank for forty-two project-specific Volatile Organic Compounds (VOC)

**Initial Reviewer:** Dr. Nancy C. Rothman, New Environmental Horizons, Inc. NCR

**Senior Reviewer:** Susan D. Chapnick, New Environmental Horizons, Inc.

**Date Completed:** October 18, 2006

An EPA Tier II-type Data Validation/Usability Checklist Review was performed on the data included in this SDG with the following intentions: 1) to determine if the data were generated and reported in accordance with the *Phase 1B-4 Remedial Investigation Work Plan, Blackburn & Union Privileges Superfund Site, Walpole, MA,* prepared by Sanborn, Head & Associates, Inc., July 2006 (Phase IB-4 Work Plan); USEPA *Test Methods for Evaluating Solid Waste, Physical Chemical Methods, SW-846, Third Edition, Final Update, December 1996 Method 8260B;* Region I, *EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses,* December 1996; *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review*; Publication EPA A540/R-99/008, October 1999; and *Guidance for Data Useability in Risk Assessment* (Part A), Publication 9285.7-09A, USEPA 1992; 2) to determine if the data met the project data quality objectives for acceptable accuracy, precision, sensitivity; and technical usability; and 3) to update the project database with appropriate data quality qualifiers.

The Data Review Checklist, attached, was completed during this assessment to document the review. As a consequence of the levels of target compounds detected in the samples, SB-09A/S-2/09-07-06 and OW-114/09-07-06 were analyzed as medium-level volatile samples (*i.e.*, reported from the methanol preserved

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sample aliquots) while sample SB-09A/S-3/09-07-06 was reported from a low-level water preserved volatile analysis. Two analyses of the trip blank, TB-01/09-07-06, were reported: a low-level and a medium-level analysis from the water and methanol preserved aliquots, respectively.

The medium-level soil analyses were reported by AWHL by accounting for the moisture contribution of the sample to the overall extract volume analyzed, as indicated in SW-846 method 8000C (section 11.10.5). For example, for sample OW-114/09-07-06, 5 mL of methanol was present as preservative and 5.54 g of sample was collected which had 79.2% solids content. The moisture contribution of this sample to the total extract volume (methanol + contribution from sample) was 1.15 mL (5.54 g of sample with 20.8 % moisture results in 1.15 "mL of water" and 4.39 g of solid). These data were also reported on a dry weight basis. Data reported previously for this site for medium-level soils (*e.g.,* Phase 1A SDG BU106) were not moisture-corrected, although a spreadsheet with the moisture-corrected data was included in the data review checklists generated by NEH. Therefore, the data user is cautioned to ensure that VOC results for medium-level soils (methanol-preserved) be directly compared, if and only if, they were reported in the same manner with respect to moisture-correction.

Sample SB-09A/S-2/09-07-06 was analyzed initially at a dilution factor (DF) of 2 and trichloroethene was reported at a level exceeding the instrument calibration range. The sample was reanalyzed at DF=5 and all results were reported within range. A comparison of both sets of data was performed and a decision was made to accept all DF=2 data except for trichloroethene which was accepted for reporting from the DF=5 analysis of this sample. The database was edited to reflect this data acceptance strategy so that only one set of VOCs was reported for the sample.

During sample collection, SHA contacted NEH to indicate that the equipment blank was possibly contaminated during collection by an outside source. Therefore, no equipment blank was associated with the samples in this SDG.

Many non-detect results for the medium-level samples were reported at levels exceeding the Project Action Limits (PALs) given in Worksheet #9b. The results for low-level sample SB-09A/S-3/09-07-06 met the sensitivity requirements for all non-detects except for 2-chloroethylvinyl ether, which was reported at a level above the PAL due to issues with the instrument calibration. The data user will have to evaluate the usability of these non-detected results on a case-by-case basis to determine if they can be used for project objectives.

All other quality control information associated with accuracy, precision, and representativeness for the project-specific list of VOCs reported met project criteria for the samples in this SDG with the exceptions in the following table.

Summary of Data Validation/Usability Actions

| Sample ID | Lab Chemical Name | Qualifier | Bias | Note |
|---|---|---|---|---|
| SB-09A/S-2/09-07-06, OW-114/09-07-06, & TB-01/09-07-06 (medium) | Acetone | U | | Blank Action |
| SB-09A/S-2/09-07-06, OW-114/09-07-06, & TB-01/09-07-06 (low) | Methylene Chloride | U | | Blank Action |
| SB-09A/S-2/09-07-06 & OW-114/09-07-06 | Naphthalene & 2-Methylnaphthalene | J | I | FD imprecision |
| All samples except: SB-09A/S-3/09-07-06 | Bromomethane | UJ | I | Initial Calibration outside criteria |
| SB-09A/S-3/09-07-06 | All compounds except Methylene chloride & Bromomethane | UJ | I | MS/MSD imprecision |
| SB-09A/S-3/09-07-06 | Methylene chloride | UJ | I | Blank Action + MS/MSD imprecision |
| SB-09A/S-3/09-07-06 | Bromomethane | UJ | I | MS/MSD imprecision + Initial Calibration outside criteria |
| OW-114/09-07-06 | cis-1,2-Dichloroethene | J | I | Result uncertain below the calibration range |

*Qualifiers: U = Analyte is not detected at the Quantitation Limit (QL). UJ = Non-detect is estimated. J = Result is estimated. R = Result is rejected and is unusable for project decisions.*

*Bias: L = Low; H = High; I = Indeterminate*

The qualified (J, UJ, and U) and unqualified results presented in the validated database, submitted electronically to Sanborn, Head & Associates, Inc. are considered usable for project objectives.

| Sample Name | Collection Date | Sample Matrix | Laboratory Name | Laboratory Sample Identification Number | Analysis Date | Analysis Method Number | Analyte Name | Analyte CAS Number | DV Result Value | DV Result Units | DV Qualifier | Sample-Specific Reporting Limit Value | Dilution Factor | % Solid | Bias | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SB-09A/S-2/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-01 | 9152006 | 8260 | Chloromethane | 74-87-3 | 230 | µg/Kg dry weight | U | 230 | 2 | 85.8 | | |
| SB-09A/S-2/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-01 | 9152006 | 8260 | Vinyl chloride | 75-01-4 | 230 | µg/Kg dry weight | U | 230 | 2 | 85.8 | | |
| SB-09A/S-2/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-01 | 9152006 | 8260 | trans-1,2-Dichloroethene | 156-60-5 | 230 | µg/Kg dry weight | U | 230 | 2 | 85.8 | | |
| SB-09A/S-2/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-01 | 9152006 | 8260 | 1,1-Dichloroethane | 75-34-3 | 230 | µg/Kg dry weight | U | 230 | 2 | 85.8 | | |
| SB-09A/S-2/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-01 | 9152006 | 8260 | Vinyl acetate | 108-05-4 | 230 | µg/Kg dry weight | U | 230 | 2 | 85.8 | | |
| SB-09A/S-2/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-01 | 9152006 | 8260 | 2-Butanone (MEK) | 78-93-3 | 230 | µg/Kg dry weight | U | 230 | 2 | 85.8 | | |
| SB-09A/S-2/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-01 | 9152006 | 8260 | cis-1,2-Dichloroethene | 156-59-2 | 230 | µg/Kg dry weight | | 230 | 2 | 85.8 | | |
| SB-09A/S-2/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-01 | 9152006 | 8260 | Bromochloromethane | 74-97-5 | 230 | µg/Kg dry weight | U | 230 | 2 | 85.8 | | |
| SB-09A/S-2/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-01 | 9152006 | 8260 | Chloroform | 67-66-3 | 230 | µg/Kg dry weight | U | 230 | 2 | 85.8 | | |
| SB-09A/S-2/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-01 | 9152006 | 8260 | 1,1,1-Trichloroethane | 71-55-6 | 230 | µg/Kg dry weight | U | 230 | 2 | 85.8 | | |
| SB-09A/S-2/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-01 | 9152006 | 8260 | Carbon tetrachloride | 56-23-5 | 230 | µg/Kg dry weight | U | 230 | 2 | 85.8 | | |
| SB-09A/S-2/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-01 | 9152006 | 8260 | Benzene | 71-43-2 | 230 | µg/Kg dry weight | U | 230 | 2 | 85.8 | | |
| SB-09A/S-2/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-01 | 9152006 | 8260 | Bromomethane | 74-83-9 | 230 | µg/Kg dry weight | UJ | 230 | 2 | 85.8 | I | Initial Calibration outside criteria |
| SB-09A/S-2/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-01 | 9152006 | 8260 | 1,2-Dichloroethane | 107-06-2 | 230 | µg/Kg dry weight | U | 230 | 2 | 85.8 | | |
| SB-09A/S-2/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-01 | 9182006 | 8260 | Trichloroethene | 79-01-6 | 21000 | µg/Kg dry weight | | 580 | 5 | 85.8 | | |
| SB-09A/S-2/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-01 | 9152006 | 8260 | 1,2-Dichloropropane | 78-87-5 | 230 | µg/Kg dry weight | U | 230 | 2 | 85.8 | | |
| SB-09A/S-2/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-01 | 9152006 | 8260 | Bromodichloromethane | 75-27-4 | 230 | µg/Kg dry weight | U | 230 | 2 | 85.8 | | |
| SB-09A/S-2/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-01 | 9152006 | 8260 | 2-Chloroethylvinyl ether | 110-75-8 | 580 | µg/Kg dry weight | U | 580 | 2 | 85.8 | | |
| SB-09A/S-2/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-01 | 9152006 | 8260 | Methyl isobutyl ketone (MIBK) | 108-10-1 | 230 | µg/Kg dry weight | U | 230 | 2 | 85.8 | | |
| SB-09A/S-2/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-01 | 9152006 | 8260 | cis-1,3-Dichloropropene | 10061-01-5 | 230 | µg/Kg dry weight | U | 230 | 2 | 85.8 | | |
| SB-09A/S-2/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-01 | 9152006 | 8260 | Toluene | 108-88-3 | 230 | µg/Kg dry weight | U | 230 | 2 | 85.8 | | |
| SB-09A/S-2/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-01 | 9152006 | 8260 | trans-1,3-Dichloropropene | 10061-02-6 | 230 | µg/Kg dry weight | U | 230 | 2 | 85.8 | | |
| SB-09A/S-2/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-01 | 9152006 | 8260 | 1,1,2-Trichloroethane | 79-00-5 | 230 | µg/Kg dry weight | U | 230 | 2 | 85.8 | | |
| SB-09A/S-2/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-01 | 9152006 | 8260 | Chloroethane | 75-00-3 | 230 | µg/Kg dry weight | U | 230 | 2 | 85.8 | | |
| SB-09A/S-2/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-01 | 9152006 | 8260 | 2-Hexanone | 591-78-6 | 230 | µg/Kg dry weight | U | 230 | 2 | 85.8 | | |
| SB-09A/S-2/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-01 | 9152006 | 8260 | Tetrachloroethene | 127-18-4 | 230 | µg/Kg dry weight | U | 230 | 2 | 85.8 | | |
| SB-09A/S-2/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-01 | 9152006 | 8260 | Dibromochloromethane | 124-48-1 | 230 | µg/Kg dry weight | U | 230 | 2 | 85.8 | | |
| SB-09A/S-2/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-01 | 9152006 | 8260 | Chlorobenzene | 108-90-7 | 230 | µg/Kg dry weight | U | 230 | 2 | 85.8 | | |
| SB-09A/S-2/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-01 | 9152006 | 8260 | Ethylbenzene | 100-41-4 | 230 | µg/Kg dry weight | U | 230 | 2 | 85.8 | | |
| SB-09A/S-2/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-01 | 9152006 | 8260 | p/m-Xylene | 106-42-3/108 | 230 | µg/Kg dry weight | U | 230 | 2 | 85.8 | | |
| SB-09A/S-2/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-01 | 9152006 | 8260 | o-Xylene | 95-47-6 | 230 | µg/Kg dry weight | U | 230 | 2 | 85.8 | | |
| SB-09A/S-2/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-01 | 9152006 | 8260 | Styrene | 100-42-5 | 230 | µg/Kg dry weight | U | 230 | 2 | 85.8 | | |
| SB-09A/S-2/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-01 | 9152006 | 8260 | Bromoform | 75-25-2 | 230 | µg/Kg dry weight | U | 230 | 2 | 85.8 | | |
| SB-09A/S-2/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-01 | 9152006 | 8260 | 1,1,2,2-Tetrachloroethane | 79-34-5 | 230 | µg/Kg dry weight | U | 230 | 2 | 85.8 | | |
| SB-09A/S-2/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-01 | 9152006 | 8260 | Trichlorofluoromethane | 75-69-4 | 230 | µg/Kg dry weight | U | 230 | 2 | 85.8 | | |
| SB-09A/S-2/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-01 | 9152006 | 8260 | Naphthalene | 91-20-3 | 2500 | µg/Kg dry weight | J | 230 | 2 | 85.8 | I | FD imprecision |
| SB-09A/S-2/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-01 | 9152006 | 8260 | 2-Methylnaphthalene | 91-57-6 | 1600 | µg/Kg dry weight | J | 230 | 2 | 85.8 | I | FD imprecision |
| SB-09A/S-2/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-01 | 9152006 | 8260 | Acetone | 67-64-1 | 630 | µg/Kg dry weight | U | 580 | 2 | 85.8 | | Blank Action |
| SB-09A/S-2/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-01 | 9152006 | 8260 | 1,1-Dichloroethene | 75-35-4 | 230 | µg/Kg dry weight | U | 230 | 2 | 85.8 | | |
| SB-09A/S-2/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-01 | 9152006 | 8260 | Carbon disulfide | 75-15-0 | 230 | µg/Kg dry weight | U | 230 | 2 | 85.8 | | |
| SB-09A/S-2/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-01 | 9152006 | 8260 | Methylene chloride | 75-09-2 | 580 | µg/Kg dry weight | U | 580 | 2 | 85.8 | | Blank Action |
| SB-09A/S-2/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-01 | 9152006 | 8260 | Methyl tert-butyl ether (MTBE) | 1634-04-4 | 230 | µg/Kg dry weight | U | 230 | 2 | 85.8 | | |
| OW-114/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-02 | 9152006 | 8260 | Chloromethane | 74-87-3 | 280 | µg/Kg dry weight | U | 280 | 2 | 79.2 | | |
| OW-114/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-02 | 9152006 | 8260 | Vinyl chloride | 75-01-4 | 280 | µg/Kg dry weight | U | 280 | 2 | 79.2 | | |
| OW-114/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-02 | 9152006 | 8260 | trans-1,2-Dichloroethene | 156-60-5 | 280 | µg/Kg dry weight | U | 280 | 2 | 79.2 | | |
| OW-114/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-02 | 9152006 | 8260 | 1,1-Dichloroethane | 75-34-3 | 280 | µg/Kg dry weight | U | 280 | 2 | 79.2 | | |
| OW-114/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-02 | 9152006 | 8260 | Vinyl acetate | 108-05-4 | 280 | µg/Kg dry weight | U | 280 | 2 | 79.2 | | |
| OW-114/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-02 | 9152006 | 8260 | 2-Butanone (MEK) | 78-93-3 | 280 | µg/Kg dry weight | U | 280 | 2 | 79.2 | | |
| OW-114/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-02 | 9152006 | 8260 | cis-1,2-Dichloroethene | 156-59-2 | 190 | µg/Kg dry weight | J | 280 | 2 | 79.2 | I | Result uncertain below the calibration range |
| OW-114/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-02 | 9152006 | 8260 | Bromochloromethane | 74-97-5 | 280 | µg/Kg dry weight | U | 280 | 2 | 79.2 | | |
| OW-114/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-02 | 9152006 | 8260 | Chloroform | 67-66-3 | 280 | µg/Kg dry weight | U | 280 | 2 | 79.2 | | |
| OW-114/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-02 | 9152006 | 8260 | 1,1,1-Trichloroethane | 71-55-6 | 280 | µg/Kg dry weight | U | 280 | 2 | 79.2 | | |
| OW-114/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-02 | 9152006 | 8260 | Carbon tetrachloride | 56-23-5 | 280 | µg/Kg dry weight | U | 280 | 2 | 79.2 | | |
| OW-114/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-02 | 9152006 | 8260 | Benzene | 71-43-2 | 280 | µg/Kg dry weight | U | 280 | 2 | 79.2 | | |
| OW-114/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-02 | 9152006 | 8260 | Bromomethane | 74-83-9 | 280 | µg/Kg dry weight | UJ | 280 | 2 | 79.2 | I | Initial Calibration outside criteria |
| OW-114/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-02 | 9152006 | 8260 | 1,2-Dichloroethane | 107-06-2 | 280 | µg/Kg dry weight | U | 280 | 2 | 79.2 | | |
| OW-114/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-02 | 9152006 | 8260 | Trichloroethene | 79-01-6 | 27000 | µg/Kg dry weight | | 280 | 2 | 79.2 | | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected.
Bias: L = Low; H = High; I = Indeterminate.

| Sample Name | Collection Date | Sample Matrix | Laboratory Name | Laboratory Sample Identification Number | Analysis Date | Analysis Method Number | Analyte Name | Analyte CAS Number | DV Result Value | DV Result Units | DV Qualifier | Sample-Specific Reporting Limit Value | Dilution Factor | % Solid | Bias | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OW-114/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-02 | 9152006 | 8260 | 1,2-Dichloropropane | 78-87-5 | 280 | µg/Kg dry weight | U | 280 | 2 | 79.2 | | |
| OW-114/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-02 | 9152006 | 8260 | Bromodichloromethane | 75-27-4 | 280 | µg/Kg dry weight | U | 280 | 2 | 79.2 | | |
| OW-114/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-02 | 9152006 | 8260 | 2-Chloroethylvinyl ether | 110-75-8 | 700 | µg/Kg dry weight | U | 700 | 2 | 79.2 | | |
| OW-114/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-02 | 9152006 | 8260 | Methyl isobutyl ketone (MIBK) | 108-10-1 | 280 | µg/Kg dry weight | U | 280 | 2 | 79.2 | | |
| OW-114/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-02 | 9152006 | 8260 | cis-1,3-Dichloropropene | 10061-01-5 | 280 | µg/Kg dry weight | U | 280 | 2 | 79.2 | | |
| OW-114/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-02 | 9152006 | 8260 | Toluene | 108-88-3 | 280 | µg/Kg dry weight | U | 280 | 2 | 79.2 | | |
| OW-114/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-02 | 9152006 | 8260 | trans-1,3-Dichloropropene | 10061-02-6 | 280 | µg/Kg dry weight | U | 280 | 2 | 79.2 | | |
| OW-114/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-02 | 9152006 | 8260 | 1,1,2-Trichloroethane | 79-00-5 | 280 | µg/Kg dry weight | U | 280 | 2 | 79.2 | | |
| OW-114/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-02 | 9152006 | 8260 | Chloroethane | 75-00-3 | 280 | µg/Kg dry weight | U | 280 | 2 | 79.2 | | |
| OW-114/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-02 | 9152006 | 8260 | 2-Hexanone | 591-78-6 | 280 | µg/Kg dry weight | U | 280 | 2 | 79.2 | | |
| OW-114/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-02 | 9152006 | 8260 | Tetrachloroethene | 127-18-4 | 280 | µg/Kg dry weight | U | 280 | 2 | 79.2 | | |
| OW-114/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-02 | 9152006 | 8260 | Dibromochloromethane | 124-48-1 | 280 | µg/Kg dry weight | U | 280 | 2 | 79.2 | | |
| OW-114/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-02 | 9152006 | 8260 | Chlorobenzene | 108-90-7 | 280 | µg/Kg dry weight | U | 280 | 2 | 79.2 | | |
| OW-114/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-02 | 9152006 | 8260 | Ethylbenzene | 100-41-4 | 280 | µg/Kg dry weight | U | 280 | 2 | 79.2 | | |
| OW-114/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-02 | 9152006 | 8260 | p/m-Xylene | 106-42-3/108 | 280 | µg/Kg dry weight | U | 280 | 2 | 79.2 | | |
| OW-114/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-02 | 9152006 | 8260 | o-Xylene | 95-47-6 | 280 | µg/Kg dry weight | U | 280 | 2 | 79.2 | | |
| OW-114/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-02 | 9152006 | 8260 | Styrene | 100-42-5 | 280 | µg/Kg dry weight | U | 280 | 2 | 79.2 | | |
| OW-114/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-02 | 9152006 | 8260 | Bromoform | 75-25-2 | 280 | µg/Kg dry weight | U | 280 | 2 | 79.2 | | |
| OW-114/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-02 | 9152006 | 8260 | 1,1,2,2-Tetrachloroethane | 79-34-5 | 280 | µg/Kg dry weight | U | 280 | 2 | 79.2 | | |
| OW-114/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-02 | 9152006 | 8260 | Trichlorofluoromethane | 75-69-4 | 280 | µg/Kg dry weight | U | 280 | 2 | 79.2 | | |
| OW-114/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-02 | 9152006 | 8260 | Naphthalene | 91-20-3 | 6500 | µg/Kg dry weight | J | 280 | 2 | 79.2 | I | FD imprecision |
| OW-114/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-02 | 9152006 | 8260 | 2-Methylnaphthalene | 91-57-6 | 3900 | µg/Kg dry weight | J | 280 | 2 | 79.2 | I | FD imprecision |
| OW-114/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-02 | 9152006 | 8260 | Acetone | 67-64-1 | 760 | µg/Kg dry weight | U | 700 | 2 | 79.2 | | Blank Action |
| OW-114/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-02 | 9152006 | 8260 | 1,1-Dichloroethene | 75-35-4 | 280 | µg/Kg dry weight | U | 280 | 2 | 79.2 | | |
| OW-114/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-02 | 9152006 | 8260 | Carbon disulfide | 75-15-0 | 280 | µg/Kg dry weight | U | 280 | 2 | 79.2 | | |
| OW-114/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-02 | 9152006 | 8260 | Methylene chloride | 75-09-2 | 700 | µg/Kg dry weight | U | 700 | 2 | 79.2 | | Blank Action |
| OW-114/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-02 | 9152006 | 8260 | Methyl tert-butyl ether (MTBE) | 1634-04-4 | 280 | µg/Kg dry weight | U | 280 | 2 | 79.2 | | |
| SB-09A/S-3/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-03 | 9152006 | 8260 | Chloromethane | 74-87-3 | 2.0 | µg/Kg dry weight | UJ | 2.0 | 1 | 93.9 | I | MS/MSD imprecision |
| SB-09A/S-3/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-03 | 9152006 | 8260 | Vinyl chloride | 75-01-4 | 2.0 | µg/Kg dry weight | UJ | 2.0 | 1 | 93.9 | I | MS/MSD imprecision |
| SB-09A/S-3/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-03 | 9152006 | 8260 | trans-1,2-Dichloroethene | 156-60-5 | 2.0 | µg/Kg dry weight | UJ | 2.0 | 1 | 93.9 | I | MS/MSD imprecision |
| SB-09A/S-3/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-03 | 9152006 | 8260 | 1,1-Dichloroethane | 75-34-3 | 2.0 | µg/Kg dry weight | UJ | 2.0 | 1 | 93.9 | I | MS/MSD imprecision |
| SB-09A/S-3/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-03 | 9152006 | 8260 | Vinyl acetate | 108-05-4 | 2.0 | µg/Kg dry weight | UJ | 2.0 | 1 | 93.9 | I | MS/MSD imprecision |
| SB-09A/S-3/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-03 | 9152006 | 8260 | 2-Butanone (MEK) | 78-93-3 | 2.0 | µg/Kg dry weight | UJ | 2.0 | 1 | 93.9 | I | MS/MSD imprecision |
| SB-09A/S-3/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-03 | 9152006 | 8260 | cis-1,2-Dichloroethene | 156-59-2 | 2.0 | µg/Kg dry weight | UJ | 2.0 | 1 | 93.9 | I | MS/MSD imprecision |
| SB-09A/S-3/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-03 | 9152006 | 8260 | Bromochloromethane | 74-97-5 | 2.0 | µg/Kg dry weight | UJ | 2.0 | 1 | 93.9 | I | MS/MSD imprecision |
| SB-09A/S-3/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-03 | 9152006 | 8260 | Chloroform | 67-66-3 | 2.0 | µg/Kg dry weight | UJ | 2.0 | 1 | 93.9 | I | MS/MSD imprecision |
| SB-09A/S-3/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-03 | 9152006 | 8260 | 1,1,1-Trichloroethane | 71-55-6 | 2.0 | µg/Kg dry weight | UJ | 2.0 | 1 | 93.9 | I | MS/MSD imprecision |
| SB-09A/S-3/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-03 | 9152006 | 8260 | Carbon tetrachloride | 56-23-5 | 2.0 | µg/Kg dry weight | UJ | 2.0 | 1 | 93.9 | I | MS/MSD imprecision |
| SB-09A/S-3/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-03 | 9152006 | 8260 | Benzene | 71-43-2 | 2.0 | µg/Kg dry weight | UJ | 2.0 | 1 | 93.9 | I | MS/MSD imprecision |
| SB-09A/S-3/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-03 | 9152006 | 8260 | Bromomethane | 74-83-9 | 2.0 | µg/Kg dry weight | UJ | 2.0 | 1 | 93.9 | I | MS/MSD imprecision + Initial Calibration outside criteria |
| SB-09A/S-3/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-03 | 9152006 | 8260 | 1,2-Dichloroethane | 107-06-2 | 2.0 | µg/Kg dry weight | UJ | 2.0 | 1 | 93.9 | I | MS/MSD imprecision |
| SB-09A/S-3/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-03 | 9152006 | 8260 | Trichloroethene | 79-01-6 | 2.6 | µg/Kg dry weight | J | 2.0 | 1 | 93.9 | I | MS/MSD imprecision |
| SB-09A/S-3/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-03 | 9152006 | 8260 | 1,2-Dichloropropane | 78-87-5 | 2.0 | µg/Kg dry weight | UJ | 2.0 | 1 | 93.9 | I | MS/MSD imprecision |
| SB-09A/S-3/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-03 | 9152006 | 8260 | Bromodichloromethane | 75-27-4 | 2.0 | µg/Kg dry weight | UJ | 2.0 | 1 | 93.9 | I | MS/MSD imprecision |
| SB-09A/S-3/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-03 | 9152006 | 8260 | 2-Chloroethylvinyl ether | 110-75-8 | 4.9 | µg/Kg dry weight | UJ | 4.9 | 1 | 93.9 | I | MS/MSD imprecision |
| SB-09A/S-3/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-03 | 9152006 | 8260 | Methyl isobutyl ketone (MIBK) | 108-10-1 | 2.0 | µg/Kg dry weight | UJ | 2.0 | 1 | 93.9 | I | MS/MSD imprecision |
| SB-09A/S-3/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-03 | 9152006 | 8260 | cis-1,3-Dichloropropene | 10061-01-5 | 2.0 | µg/Kg dry weight | UJ | 2.0 | 1 | 93.9 | I | MS/MSD imprecision |
| SB-09A/S-3/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-03 | 9152006 | 8260 | Toluene | 108-88-3 | 2.0 | µg/Kg dry weight | UJ | 2.0 | 1 | 93.9 | I | MS/MSD imprecision |
| SB-09A/S-3/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-03 | 9152006 | 8260 | trans-1,3-Dichloropropene | 10061-02-6 | 2.0 | µg/Kg dry weight | UJ | 2.0 | 1 | 93.9 | I | MS/MSD imprecision |
| SB-09A/S-3/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-03 | 9152006 | 8260 | 1,1,2-Trichloroethane | 79-00-5 | 2.0 | µg/Kg dry weight | UJ | 2.0 | 1 | 93.9 | I | MS/MSD imprecision |
| SB-09A/S-3/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-03 | 9152006 | 8260 | Chloroethane | 75-00-3 | 2.0 | µg/Kg dry weight | UJ | 2.0 | 1 | 93.9 | I | MS/MSD imprecision |
| SB-09A/S-3/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-03 | 9152006 | 8260 | 2-Hexanone | 591-78-6 | 2.0 | µg/Kg dry weight | UJ | 2.0 | 1 | 93.9 | I | MS/MSD imprecision |
| SB-09A/S-3/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-03 | 9152006 | 8260 | Tetrachloroethene | 127-18-4 | 2.0 | µg/Kg dry weight | UJ | 2.0 | 1 | 93.9 | I | MS/MSD imprecision |
| SB-09A/S-3/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-03 | 9152006 | 8260 | Dibromochloromethane | 124-48-1 | 2.0 | µg/Kg dry weight | UJ | 2.0 | 1 | 93.9 | I | MS/MSD imprecision |
| SB-09A/S-3/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-03 | 9152006 | 8260 | Chlorobenzene | 108-90-7 | 2.0 | µg/Kg dry weight | UJ | 2.0 | 1 | 93.9 | I | MS/MSD imprecision |
| SB-09A/S-3/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-03 | 9152006 | 8260 | Ethylbenzene | 100-41-4 | 2.0 | µg/Kg dry weight | UJ | 2.0 | 1 | 93.9 | I | MS/MSD imprecision |
| SB-09A/S-3/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-03 | 9152006 | 8260 | p/m-Xylene | 106-42-3/108 | 3.9 | µg/Kg dry weight | UJ | 3.9 | 1 | 93.9 | I | MS/MSD imprecision |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected.
Bias: L = Low; H = High; I = Indeterminate.

| Sample Name | Collection Date | Sample Matrix | Laboratory Name | Laboratory Sample Identification Number | Analysis Date | Analysis Method Number | Analyte Name | Analyte CAS Number | DV Result Value | DV Result Units | DV Qualifier | Sample-Specific Reporting Limit Value | Dilution Factor | % Solid | Bias | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SB-09A/S-3/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-03 | 9152006 | 8260 | o-Xylene | 95-47-6 | 2.0 | µg/Kg dry weight | UJ | 2.0 | 1 | 93.9 | I | MS/MSD imprecision |
| SB-09A/S-3/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-03 | 9152006 | 8260 | Styrene | 100-42-5 | 2.0 | µg/Kg dry weight | UJ | 2.0 | 1 | 93.9 | I | MS/MSD imprecision |
| SB-09A/S-3/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-03 | 9152006 | 8260 | Bromoform | 75-25-2 | 2.0 | µg/Kg dry weight | UJ | 2.0 | 1 | 93.9 | I | MS/MSD imprecision |
| SB-09A/S-3/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-03 | 9152006 | 8260 | 1,1,2,2-Tetrachloroethane | 79-34-5 | 2.0 | µg/Kg dry weight | UJ | 2.0 | 1 | 93.9 | I | MS/MSD imprecision |
| SB-09A/S-3/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-03 | 9152006 | 8260 | Trichlorofluoromethane | 75-69-4 | 2.0 | µg/Kg dry weight | UJ | 2.0 | 1 | 93.9 | I | MS/MSD imprecision |
| SB-09A/S-3/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-03 | 9152006 | 8260 | Naphthalene | 91-20-3 | 2.0 | µg/Kg dry weight | UJ | 2.0 | 1 | 93.9 | I | MS/MSD imprecision |
| SB-09A/S-3/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-03 | 9152006 | 8260 | 2-Methylnaphthalene | 91-57-6 | 2.0 | µg/Kg dry weight | UJ | 2.0 | 1 | 93.9 | I | MS/MSD imprecision |
| SB-09A/S-3/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-03 | 9152006 | 8260 | Acetone | 67-64-1 | 13 | µg/Kg dry weight | J | 4.9 | 1 | 93.9 | I | MS/MSD imprecision |
| SB-09A/S-3/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-03 | 9152006 | 8260 | 1,1-Dichloroethene | 75-35-4 | 2.0 | µg/Kg dry weight | UJ | 2.0 | 1 | 93.9 | I | MS/MSD imprecision |
| SB-09A/S-3/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-03 | 9152006 | 8260 | Carbon disulfide | 75-15-0 | 2.0 | µg/Kg dry weight | UJ | 2.0 | 1 | 93.9 | I | MS/MSD imprecision |
| SB-09A/S-3/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-03 | 9152006 | 8260 | Methylene chloride | 75-09-2 | 4.9 | µg/Kg dry weight | UJ | 4.9 | 1 | 93.9 | I | Blank Action + MS/MSD imprecision |
| SB-09A/S-3/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-03 | 9152006 | 8260 | Methyl tert-butyl ether (MTBE) | 1634-04-4 | 2.0 | µg/Kg dry weight | UJ | 2.0 | 1 | 93.9 | I | MS/MSD imprecision |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04 | 9152006 | 8260 | Chloromethane | 74-87-3 | 2.0 | µg/Kg dry weight | U | 2.0 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04 | 9152006 | 8260 | Vinyl chloride | 75-01-4 | 2.0 | µg/Kg dry weight | U | 2.0 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04 | 9152006 | 8260 | trans-1,2-Dichloroethene | 156-60-5 | 2.0 | µg/Kg dry weight | U | 2.0 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04 | 9152006 | 8260 | 1,1-Dichloroethane | 75-34-3 | 2.0 | µg/Kg dry weight | U | 2.0 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04 | 9152006 | 8260 | Vinyl acetate | 108-05-4 | 2.0 | µg/Kg dry weight | U | 2.0 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04 | 9152006 | 8260 | 2-Butanone (MEK) | 78-93-3 | 2.0 | µg/Kg dry weight | U | 2.0 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04 | 9152006 | 8260 | cis-1,2-Dichloroethene | 156-59-2 | 2.0 | µg/Kg dry weight | U | 2.0 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04 | 9152006 | 8260 | Bromochloromethane | 74-97-5 | 2.0 | µg/Kg dry weight | U | 2.0 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04 | 9152006 | 8260 | Chloroform | 67-66-3 | 2.0 | µg/Kg dry weight | U | 2.0 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04 | 9152006 | 8260 | 1,1,1-Trichloroethane | 71-55-6 | 2.0 | µg/Kg dry weight | U | 2.0 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04 | 9152006 | 8260 | Carbon tetrachloride | 56-23-5 | 2.0 | µg/Kg dry weight | U | 2.0 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04 | 9152006 | 8260 | Benzene | 71-43-2 | 2.0 | µg/Kg dry weight | U | 2.0 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04 | 9152006 | 8260 | Bromomethane | 74-83-9 | 2.0 | µg/Kg dry weight | UJ | 2.0 | 1 | 100 | I | Initial Calibration outside criteria |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04 | 9152006 | 8260 | 1,2-Dichloroethane | 107-06-2 | 2.0 | µg/Kg dry weight | U | 2.0 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04 | 9152006 | 8260 | Trichloroethene | 79-01-6 | 2.0 | µg/Kg dry weight | U | 2.0 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04 | 9152006 | 8260 | 1,2-Dichloropropane | 78-87-5 | 2.0 | µg/Kg dry weight | U | 2.0 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04 | 9152006 | 8260 | Bromodichloromethane | 75-27-4 | 2.0 | µg/Kg dry weight | U | 2.0 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04 | 9152006 | 8260 | 2-Chloroethylvinyl ether | 110-75-8 | 5.0 | µg/Kg dry weight | U | 5.0 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04 | 9152006 | 8260 | Methyl isobutyl ketone (MIBK) | 108-10-1 | 2.0 | µg/Kg dry weight | U | 2.0 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04 | 9152006 | 8260 | cis-1,3-Dichloropropene | 10061-01-5 | 2.0 | µg/Kg dry weight | U | 2.0 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04 | 9152006 | 8260 | Toluene | 108-88-3 | 2.0 | µg/Kg dry weight | U | 2.0 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04 | 9152006 | 8260 | trans-1,3-Dichloropropene | 10061-02-6 | 2.0 | µg/Kg dry weight | U | 2.0 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04 | 9152006 | 8260 | 1,1,2-Trichloroethane | 79-00-5 | 2.0 | µg/Kg dry weight | U | 2.0 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04 | 9152006 | 8260 | Chloroethane | 75-00-3 | 2.0 | µg/Kg dry weight | U | 2.0 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04 | 9152006 | 8260 | 2-Hexanone | 591-78-6 | 2.0 | µg/Kg dry weight | U | 2.0 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04 | 9152006 | 8260 | Tetrachloroethene | 127-18-4 | 2.0 | µg/Kg dry weight | U | 2.0 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04 | 9152006 | 8260 | Dibromochloromethane | 124-48-1 | 2.0 | µg/Kg dry weight | U | 2.0 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04 | 9152006 | 8260 | Chlorobenzene | 108-90-7 | 2.0 | µg/Kg dry weight | U | 2.0 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04 | 9152006 | 8260 | Ethylbenzene | 100-41-4 | 2.0 | µg/Kg dry weight | U | 2.0 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04 | 9152006 | 8260 | p/m-Xylene | 106-42-3/108 | 4.0 | µg/Kg dry weight | U | 4.0 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04 | 9152006 | 8260 | o-Xylene | 95-47-6 | 2.0 | µg/Kg dry weight | U | 2.0 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04 | 9152006 | 8260 | Styrene | 100-42-5 | 2.0 | µg/Kg dry weight | U | 2.0 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04 | 9152006 | 8260 | Bromoform | 75-25-2 | 2.0 | µg/Kg dry weight | U | 2.0 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04 | 9152006 | 8260 | 1,1,2,2-Tetrachloroethane | 79-34-5 | 2.0 | µg/Kg dry weight | U | 2.0 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04 | 9152006 | 8260 | Trichlorofluoromethane | 75-69-4 | 2.0 | µg/Kg dry weight | U | 2.0 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04 | 9152006 | 8260 | Naphthalene | 91-20-3 | 2.0 | µg/Kg dry weight | U | 2.0 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04 | 9152006 | 8260 | 2-Methylnaphthalene | 91-57-6 | 2.0 | µg/Kg dry weight | U | 2.0 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04 | 9152006 | 8260 | Acetone | 67-64-1 | 5.0 | µg/Kg dry weight | U | 5.0 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04 | 9152006 | 8260 | 1,1-Dichloroethene | 75-35-4 | 2.0 | µg/Kg dry weight | U | 2.0 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04 | 9152006 | 8260 | Carbon disulfide | 75-15-0 | 2.0 | µg/Kg dry weight | U | 2.0 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04 | 9152006 | 8260 | Methylene chloride | 75-09-2 | 5.0 | µg/Kg dry weight | U | 5.0 | 1 | 100 | | Blank Action |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04 | 9152006 | 8260 | Methyl tert-butyl ether (MTBE) | 1634-04-4 | 2.0 | µg/Kg dry weight | U | 2.0 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04E | 9152006 | 8260 | Chloromethane | 74-87-3 | 100 | µg/Kg dry weight | U | 100 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04E | 9152006 | 8260 | Vinyl chloride | 75-01-4 | 100 | µg/Kg dry weight | U | 100 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04E | 9152006 | 8260 | trans-1,2-Dichloroethene | 156-60-5 | 100 | µg/Kg dry weight | U | 100 | 1 | 100 | | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected.
Bias: L = Low; H = High; I = Indeterminate.

| Sample Name | Collection Date | Sample Matrix | Laboratory Name | Laboratory Sample Identification Number | Analysis Date | Analysis Method Number | Analyte Name | Analyte CAS Number | DV Result Value | DV Result Units | DV Qualifier | Sample-Specific Reporting Limit Value | Dilution Factor | % Solid | Bias | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04E | 9152006 | 8260 | 1,1-Dichloroethane | 75-34-3 | 100 | µg/Kg dry weight | U | 100 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04E | 9152006 | 8260 | Vinyl acetate | 108-05-4 | 100 | µg/Kg dry weight | U | 100 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04E | 9152006 | 8260 | 2-Butanone (MEK) | 78-93-3 | 100 | µg/Kg dry weight | U | 100 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04E | 9152006 | 8260 | cis-1,2-Dichloroethene | 156-59-2 | 100 | µg/Kg dry weight | U | 100 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04E | 9152006 | 8260 | Bromochloromethane | 74-97-5 | 100 | µg/Kg dry weight | U | 100 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04E | 9152006 | 8260 | Chloroform | 67-66-3 | 100 | µg/Kg dry weight | U | 100 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04E | 9152006 | 8260 | 1,1,1-Trichloroethane | 71-55-6 | 100 | µg/Kg dry weight | U | 100 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04E | 9152006 | 8260 | Carbon tetrachloride | 56-23-5 | 100 | µg/Kg dry weight | U | 100 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04E | 9152006 | 8260 | Benzene | 71-43-2 | 100 | µg/Kg dry weight | U | 100 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04E | 9152006 | 8260 | Bromomethane | 74-83-9 | 100 | µg/Kg dry weight | UJ | 100 | 1 | 100 | I | Initial Calibration outside criteria |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04E | 9152006 | 8260 | 1,2-Dichloroethane | 107-06-2 | 100 | µg/Kg dry weight | U | 100 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04E | 9152006 | 8260 | Trichloroethene | 79-01-6 | 100 | µg/Kg dry weight | U | 100 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04E | 9152006 | 8260 | 1,2-Dichloropropane | 78-87-5 | 100 | µg/Kg dry weight | U | 100 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04E | 9152006 | 8260 | Bromodichloromethane | 75-27-4 | 100 | µg/Kg dry weight | U | 100 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04E | 9152006 | 8260 | 2-Chloroethylvinyl ether | 110-75-8 | 250 | µg/Kg dry weight | U | 250 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04E | 9152006 | 8260 | Methyl isobutyl ketone (MIBK) | 108-10-1 | 100 | µg/Kg dry weight | U | 100 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04E | 9152006 | 8260 | cis-1,3-Dichloropropene | 10061-01-5 | 100 | µg/Kg dry weight | U | 100 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04E | 9152006 | 8260 | Toluene | 108-88-3 | 100 | µg/Kg dry weight | U | 100 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04E | 9152006 | 8260 | trans-1,3-Dichloropropene | 10061-02-6 | 100 | µg/Kg dry weight | U | 100 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04E | 9152006 | 8260 | 1,1,2-Trichloroethane | 79-00-5 | 100 | µg/Kg dry weight | U | 100 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04E | 9152006 | 8260 | Chloroethane | 75-00-3 | 100 | µg/Kg dry weight | U | 100 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04E | 9152006 | 8260 | 2-Hexanone | 591-78-6 | 100 | µg/Kg dry weight | U | 100 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04E | 9152006 | 8260 | Tetrachloroethene | 127-18-4 | 100 | µg/Kg dry weight | U | 100 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04E | 9152006 | 8260 | Dibromochloromethane | 124-48-1 | 100 | µg/Kg dry weight | U | 100 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04E | 9152006 | 8260 | Chlorobenzene | 108-90-7 | 100 | µg/Kg dry weight | U | 100 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04E | 9152006 | 8260 | Ethylbenzene | 100-41-4 | 100 | µg/Kg dry weight | U | 100 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04E | 9152006 | 8260 | p/m-Xylene | 106-42-3/108 | 100 | µg/Kg dry weight | U | 100 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04E | 9152006 | 8260 | o-Xylene | 95-47-6 | 100 | µg/Kg dry weight | U | 100 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04E | 9152006 | 8260 | Styrene | 100-42-5 | 100 | µg/Kg dry weight | U | 100 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04E | 9152006 | 8260 | Bromoform | 75-25-2 | 100 | µg/Kg dry weight | U | 100 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04E | 9152006 | 8260 | 1,1,2,2-Tetrachloroethane | 79-34-5 | 100 | µg/Kg dry weight | U | 100 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04E | 9152006 | 8260 | Trichlorofluoromethane | 75-69-4 | 100 | µg/Kg dry weight | U | 100 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04E | 9152006 | 8260 | Naphthalene | 91-20-3 | 100 | µg/Kg dry weight | U | 100 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04E | 9152006 | 8260 | 2-Methylnaphthalene | 91-57-6 | 100 | µg/Kg dry weight | U | 100 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04E | 9152006 | 8260 | Acetone | 67-64-1 | 250 | µg/Kg dry weight | U | 250 | 1 | 100 | | Blank Action |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04E | 9152006 | 8260 | 1,1-Dichloroethene | 75-35-4 | 100 | µg/Kg dry weight | U | 100 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04E | 9152006 | 8260 | Carbon disulfide | 75-15-0 | 100 | µg/Kg dry weight | U | 100 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04E | 9152006 | 8260 | Methylene chloride | 75-09-2 | 250 | µg/Kg dry weight | U | 250 | 1 | 100 | | |
| TB-01/09-07-06 | 9072006 | Soil | Woods Hole Lab | 0609028-04E | 9152006 | 8260 | Methyl tert-butyl ether (MTBE) | 1634-04-4 | 100 | µg/Kg dry weight | U | 100 | 1 | 100 | | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected.
Bias: L = Low; H = High; I = Indeterminate.

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase IB-4 2006
8260B Data Review Checklist

SDG #: BU 114

Lab: AWHL - Raynham
Date Sampled: 9/7/06
Method of Analysis: 8260B

Lab Project #: 0609028
No. Samples: 3 + 1TB
Matrix: Soil

| | Preservation & HT | Surrogate | LCS | MS | FD W:RPD≤30% Other:RPD≤50% | Tunes ICALs CCALs | IS' | RL & Quant. Correct | Other Issues |
|---|---|---|---|---|---|---|---|---|---|
| All Samples in Project | ✓ | ✓ | ✓ | | | UJ 1 cpd | / | / | Accept J data |
| **Except:** | | | | | | Sa 5-5A | | | |
| SB-09A/S-3/09-07-06 | | | | J/UJ All | | | | | |
| SB-09A/S-2/09-07-06 + | | | | | J Naphthalene + | | | | |
| OW-114/09-07-06 | | | | | 2-methylnaphthalene | | | | |

Comments: Samples were received intact at 4±2°C and there were no COC issues noted. Methanol + Water preserved VOCs, per QAPP, were collected along with unpreserved vial for 70 solids determination.

Samples were all analyzed within 11 days of collection => HT met. No issues with preservation - As shown on page 6 of this checklist, 2 soils + TB analyzed using methanol preserved aliquot (High-level) + 1 soil + TB analyzed using Water preserved vials (low-level).

Date 10/16/06

Data Reviewer [signature]

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase IB-4 2006
8260B Data Review Checklist

Lab: AWHL
Date Sampled: 9/7/06

Lab Project #: 0609028
No. Samples 3 + 1TB

Method of Analysis: 8260B
Matrix: soil

Associated Blanks: MBs: VS091506B07, VS091506B08 + VS091806B02
TB: TB-01/09-07-06
No EB taken due to contamination of EB on-site.

| Blank ID | Contaminant / Level | Matrix Related ? | | Action Level / Action | | | Corrected Result |
|---|---|---|---|---|---|---|---|
| VS091506B07 | Methylene chloride 2.2J mg/kg | Y | | 22 mg/kg | | SB-09A/S-3/09-07-06 3.0 JB mg/kg | 4.9U |
| VS091506B08 | Acetone 130J mg/kg | Y | | 1300 mg/kg | | SB-09A/S-2/09-07-06 630B mg/kg | 630U |
| | | | | | | OW-114/09-07-06 760B mg/kg | 760U |
| | | | | | | TB-01/09-07-06 220 JB mg/kg | 250U |
| VS091506B07 cont'd | methylene chloride 2.2J | Y | | 22 mg/kg | | TB-01/09-07-06 2.8 JB mg/kg | 5.0U |
| VS091506B08 | Methylene chloride 140J | Y | | 1400 mg/kg | | SB-09A/~~09~~ S-2 NOC 10/12/06 450JB mg/kg | 580U |
| | | | | | | OW-114/09-07-06 550 JB mg/kg | 700U |

**8260B Action Summary: see Worksheet #24b**

HT Actions: waters pH >2 or no HCl: 7d<HT≤14 d, J Aromatic det/R Aromatic NDs; Accept all Non-aromatics;
pH < 2, 14d <HT< 28 d; J Aromatic det/R Aromatic NDs; J Non-aromatic det/J Non-aromatic ND
soil/sediment - 14d <HT< 28 d; J Aromatic det/R Aromatic NDs; J Non-aromatic det/J Non-aromatic ND

Surrogate Actions: Recovery > Criteria, J det/Accept ND; 10%≤ Recovery <Criteria, J det/J NDs; Recovery <10%, J det/R NDs

Blank Actions: Surrogates outside criteria - Use Judgment if isolated or analysis related
Non-Matrix related Blank contamination, BB or EB contaminant in all samples associated with Blank
If contamination in blank(s) exist, if Result < RL, U result at RL; RL<Result<Blank Action, U result at level reported

MS Actions: %Rec<10%, J det/ R NDs; 10% <%Rec<Criteria, J det/ J NDs; %Rec >Criteria, J det/Accept NDs- Unspiked Sample only

LCS Actions: %Rec<10%, J det/ R NDs; 10% <%Rec<Criteria, J det/ J NDs; %Rec >Criteria, J det/Accept NDs for all Batch by Compound

FD Action: Both Conc. ≥ 2xRL, RPD >30%, J det; One result ND, other ≥2 x RL, J det/J NDs; Both Conc. < 2xRL; RPD >30%, LCS OK, Accept data

Date 10/16/06

Data Reviewer [signature]

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase IB-4 2006
8260B Data Review Checklist

Lab: AWHL
Date Sampled: 9/7/06
Method of Analysis: 8260B

Lab Project #: 0609028
No. Samples 3 + 1TB
Matrix: Soil

Blank Action Continued

| Blank ID | Contaminant / Level | Matrix Related ? | Action Level / Action | | Corrected Result |
|---|---|---|---|---|---|
| VSOG1806B02 | Acetone 120J mg/kg | Y | 1200 mg/kg | SB-09A/S-2 (DF=5) 910 JB mg/kg | 1400 U |
| | Methylene chloride 99J | Y | 990 mg/kg | SB-09A/S-2 (DF=5) 570 JB | 1400 U |
| | | | | | |
| TB-01 Low-level | None after Blk Actn | | | | |
| | | | | | |
| TB-01 High-level | None after Blk Actn | | | | |

Date 10/16/06

Data Reviewer

Lab: ANHL
Date Sampled: 9/7/06
Method of Analysis: 8260B

Lab Project #: 0609028
No. Samples 3 + 1TB
Matrix: Soil

Additional Notes:

Surrogates - 4 Surrogates used for low-level analyses - (Dibromofluoromethane, 1,2-Dichloroethane-d4, Toluene-d8, + 4-Bromofluorobenzene)
6 Surrogates used for high-level analyses - (2-Bromo-1-chloropropane, 1-chloro-2-fluorobenzene, 1,4-Dichlorobutane, Dibromofluoromethane, Toluene-d8 + 4-Bromofluorobenzene).

All Surrogates were recovered within criteria in all samples + QC => No Action Required.

LCS/LCSD: VS091506LCS03 + VS091506LCSD03 (assoc. w/ VS091506B07 Batch) - All %Rec + RPDs OK for all Targets
~~VS091506LCS03/VS091506LCSD03~~ Nov 10/12/06 LCS/LCSD for Batch VS091506B08 the same as above
VS091806LCS01/VS091806LCSD01 (assoc. w/ VS091806B02) - only for DF=5 of SB-09A/S-2 - %Rec of 1,1-Dichloroethene + Carbon Disulfide low but >10% in LCS + LCSD - No Action since DF=5 only analyzed to report Trichloroethylene within calibration range.

MS/MSD done on SB-09A/S-3/09-07-06 (Low-level analysis) - Form III of package shows %Rec + RPD for only 5 spiked compounds but full list, less 2-methylnaphthalene (QAPP allowed lab to not spike this analyte since it was not part of their standard spike list), was spiked + data sheets present in the data package. Obviously some targets < criteria but all >10%; however, precision between MS + MSD very poor. Narrative indicated that imprecision indicates a "non-homogeneous sample, which is indicated by the difference in sample weights and was also observed by the analyst".

* Action: All data for SB-09A/S-3/09-07-06 qualified as estimated (J and UJ) due to imprecision observed in MS/MSD analysis.

FD pair = OW-114/09-07-06 and SB-09A/S-2/09-07-06 - prior to comparison, DF=2 + DF=5 analysis for SB-09A/S-2 compared - In DF=2 run, all detects within range except Trichloroethene flagged "E" by lab as over-range. Lab analyzed DF=5 + two sets of data compared (DF=2 + DF=5)

Date 10/16/06

Data Reviewer [signature]

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase IB-4 2006
8260B Data Review Checklist

Lab: ANH LL
Date Sampled: 9/7/06
Method of Analysis: 8260B

Lab Project #: 0609028
No. Samples: 3 + ITB
Matrix: Soil

Additional Notes:
All Data for DF=2 accepted except Trichloroethene for DF=5 accepted. Database was edited to reflect this data acceptance strategy (all DF=5 eliminated except Trichloroethene + Trichloroethene for DF=2 eliminated so that only 1 cpd./sample reported).

FD Comparison -

| Compound | SB-09A/S-2 (mg/kg) | | OW-114 (mg/kg) | | RPD | Action |
|---|---|---|---|---|---|---|
| cis-1,2-dichloroethene | 230 | (=QL) | 190 J | (<QL) | NA | None |
| Trichloroethene | 21,000D | (>2×QL) | 27,000 | (>2×QL) | 25% | ↓ |
| Naphthalene | 2,500 | (>2×QL) | 6,500 | (>2×QL) | 89% | J Both |
| 2-methylnaphthalene | 1,600 | (>2×QL) | 3,900 | (>2×QL) | 84% | J Both |

* Action: Naphthalene + 2-methylnaphthalene estimated (J) in SB-09A/S-2/09-07-06 + OW-114/09-07-06 due to FD imprecision (RPD >30% with results >2×QL).

Tunes: T3091502, T3091503 + T3091801 - All 3 Tunes OK - No Action (all samples analyzed within 12 hrs. of tune also).

ICAL: 9/15/06 - 5-6-level ICAL for all Targets - %RSD <30% for all except bromomethane 34.4%, All RRFs >0.05 - Low of lowest std = 2 mg/kg for all Targets except Acetone, methylene chloride + 2-chloroethyl vinyl ether lowest level at 5 mg/kg.

* Action: Bromomethane estimated (UJ) in all samples with Indeterminate blk due to Initial Calibration having outside criteria for this Compd.

Note: Lowest level standard OK ⇒ all met QAPP requirements except for 2-chloroethyl vinyl ether which has a PAL of 3.0 mg/kg ⇒ 5 mg/kg std too high for Residential samples (e.g. SB-09A/S-2 QL for 2-chloroethyl vinyl ether was > PAL (4.9 mg/kg = QL).

Date 10/16/06

Data Reviewer

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase IB-4 2006
8260B Data Review Checklist

Lab: AWHL
Date Sampled: 9/7/06
Method of Analysis: 8260B

Lab Project #: 0609028
No. Samples 3 + 1TB
Matrix: Soil

Additional Notes:

CCALs: C3091502 - %D ≤ ±25% (Region 1 DV criteria) for all except 2-chloroethyl vinyl ether at 43.5% D due to enhanced detection of compound during CCAL as compared to during ICAL + 2-Hexanone 25.5% D also due to enhanced detection. Since Both compounds were ND in sample, no action required (i.e. ND accurate).
C3091801 - %D ≤ ±25% except Bromomethane %D = 32.1% (decreased sensitivity) - since this CCAL preceded DF=5 analysis of SB-09A/S-2 for which only Trichloroethene was chosen for reporting, no action required for bromomethane here.

IS: 3 IS Areas + RTs were in criteria for all Samples + QC => No Action.

Cis-1,2-dichloroethene was reported at a level < QL in Sample OW-114/09-07-06 + qualified "J" by lab. This J result was accepted as an estimated result with indeterminate bias due to reporting at < QL.

SB-09A/S-2/09-07-06 + OW-114/09-07-06 were analyzed as high-level soil VOCs - A check on the RLs indicates that lab accounted for the moisture contribution of the sample to the overall extract volume - In other words for OW-114, 5.54 g of soil at 79.2% solids had 100 µl taken out of a 5mL methanol preservative, diluted at instrument 1-to-2 and pumped in 5mL.

For 2 µg/L lowest-std ICAL targets - $RL = \frac{2 \times (5000\mu l + 1152\mu l) \times 5 \times 2}{(100 \times 5.54 \times 0.792)} = 280\ \mu g/kg$ ✓

where Total extract = 5000µl methanol + (5.54g × (100 - 79.2) × 10) = 5000µl + 1152µl = 6152µl.

QLs for many targets were > PALs due to reporting of results from high-level preservation samples => Data user will need to evaluate data on a sample-by-sample + compound-by-compound basis to determine usability of non-detects at levels > PALs.

There were no other issues noted by lab not addressed above.

Date 10/16/06

Data Reviewer [signature]



New Environmental Horizons, Inc.

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase IB-4 2006
8260B Data Review Checklist

| Sample ID | Date Sampled | Field Blank * | Trip Blank | Method Blank | LCS | Date Analyzed |
|---|---|---|---|---|---|---|
| SB-09A/S-2/09-07-06 | 9/07/06 | NA | TB-01 | VS091506B0K | LCS03/LCSD03 | 9/15/06 High |
| OW-114/09-07-06 | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ High |
| SB-09A/S-3/09-07-06 | ↓ | ↓ | ↓ | VS091506B07 | LCS03/LCSD03 | 9/15/06 Low |
| TB-01/09-07-06 | ↓ | ↓ | NB | Low VS091506B07<br>High VS091506B0K | LCS03/LCSD03 | 9/15/06 Low<br>9/15/06 High |
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| * An EB was planned but problems in the field resulted in contamination of the EB => no EB submitted for analysis | | | | | | |
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Dilute - VS091806B02 9/18/06

Date 10/16/06

Data Reviewer

7032.00A

*New Environmental Horizons, Inc.*

# DATA USABILITY ASSESSMENT

**TAL Metals Analysis by Methods 6020 & 7470A**
**EPA Region I Tier II – type review**
**Natural Attenuation and Miscellaneous Wet Chemistry Parameters**
**EPA Region I Tier I – type review**

DEC 19 2006

**Client:** Sanborn, Head & Associates, Inc., Concord, New Hampshire

**Site:** Blackburn & Union Privileges Superfund Site, Walpole, Massachusetts
Phase 1B-5 Remedial Investigation

**Laboratories:** Alpha Woods Hole Labs (AWHL), Raynham, Massachusetts
Groundwater Analytical, Inc., Buzzards Bay, Massachusetts
Katahdin Analytical Services, Inc., Westbrook, Maine
Microseeps, Pittsburgh, Pennsylvania

**SDG:** BU212

**Lab ETR:** 0609103

**# Samples/Analyses:** 19 groundwaters and 1 equipment rinseate blank (EB) for Total TAL Metals, Alkalinity, Chloride, Nitrate, Sulfate, Sulfide, Total Dissolved Solids (TDS), Total Kjeldahl Nitrogen (TKN), Total Organic Carbon (TOC), and Ferrous Iron ($Fe^{+2}$)
19 groundwaters, 1 EB, and 5 trip blanks for Gases (ethane, ethene, methane)

**Initial Reviewer:** Susan D. Chapnick, New Environmental Horizons, Inc. SDChapnick

**Senior Reviewer:** Dr. Nancy C. Rothman, New Environmental Horizons, Inc.

**Date Completed:** December 4, 2006; *REVISED December 14, 2006* NCR revised for $Fe^{+2}$ results.

An EPA Tier II-type Data Validation/Usability Checklist Review was performed on the TAL Metals data and an EPA Tier I-type review was performed on the remainder of the parameters included in this SDG with the following intentions: 1) to determine if the data were generated and reported in accordance with the *Phase 1B-5 Remedial Investigation Work Plan, Blackburn & Union Privileges Superfund Site, Walpole, MA*, prepared by Sanborn, Head & Associates, Inc., Rev. 02, September 21, 2006 (Phase IB-5 Work Plan); USEPA *Test Methods for Evaluating Solid Waste, Physical Chemical Methods, SW-846, Third*

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*Edition, Final Update, December 1996,* Methods 6020 (ICP-MS metals) and 7470A (CVAA mercury); EPA wet chemistry test methods 310.1 (alkalinity), 300.0 (anions: chloride, nitrate, sulfate), 376.2 (sulfide), 160.1 (TDS), 351.2 (TKN), 415.1 (TOC), 7199 modified ($Fe^{+2}$), and Microseeps SOP AM20GAX (gases: ethane, ethene, methane); Region I, *EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses,* December 1996; *Region I Laboratory Data Validation Functional Guidelines for Evaluating Inorganics Analyses,* February 1989; and *Guidance for Data Useability in Risk Assessment* (Part A), Publication 9285.7-09A, USEPA 1992; 2) to determine if the data met the project data quality objectives for acceptable accuracy, precision, sensitivity; and technical usability; and 3) to update the project database with appropriate data quality qualifiers.

The Data Review Checklist, attached, was completed during this assessment to document the review.

All results for total TAL Metals, Alkalinity, Anions (Chloride, Nitrate, and Sulfate), Sulfide, Total Dissolved Solids (TDS), Total Kjeldahl Nitrogen (TKN), Total Organic Carbon (TOC), Ferrous Iron ($Fe^{+2}$), and Gases (Ethane, Ethene, and Methane) in the samples included in this SDG BU212 are usable for project objectives. Several results have been negated (U) due to blank actions or qualified as estimated (J or UJ) due to quality control criteria exceedance(s). Data users should note the uncertainties in the qualified results as summarized below in Table 1. The qualified (U, J, UJ) and unqualified results are usable for project objectives.

All non-detected results in the groundwater samples included in this SDG met either the project-required quantitation limits (PQLs), or, if those were exceeded, met all applicable project action limits (PALs) as listed in QAPP Worksheet #9b (Phase 1B-5 Work Plan, September 2006). Note that many of the wet chemistry parameters did not have PALs. In addition, the Worksheet #9b had incorrect values and units for PQLs for the Gases. The laboratory reporting limits (RLs) achieved for Ethane (0.025 µg/L), Ethene (0.025 µg/L), and Methane (0.100 µg/L) in these groundwater samples were considered acceptable based on method calibration information.

A low-level standard was not analyzed with the TAL Metals, as required by the original QAPP (2000). However, the laboratory included a low-level standard in the calibration curve for TAL Metals that was equivalent to the RL for each metal. This was considered acceptable to support the RL; therefore, no action was taken other than to note this deviation.

Professional judgment was used to take blank actions for Ethane, Ethene, and Methane due to the observation of low-level contamination of these gases in the equipment blank (EB) and the trip blanks (TB) associated with these groundwater samples. Table 1 summarizes the actions taken to negate (U) or qualify as estimated (J) the affected results. Data users are directed to pages 5 through 7 of the attached Data Usability Checklist Review for further details.

The laboratory reported the Ferrous Iron result for sample SH-19S/09-29-06 from a secondary analysis, run outside of the method holding time, but using the QAPP-specified analytical method (7199 Mod). The initial analysis of this sample was within holding time, but analyzed using Standard Method (SM) 3500 Fe D. The raw data for the initial analysis of this sample was requested from the laboratory and was received on 12/13/06. After review of the raw data, professional judgment was used to accept for reporting the Ferrous Iron result for sample SH-19S/09-29-06 from the initial analysis (9/30/06) because the two methods of analysis are considered to be technically comparable and the initial analysis was within method

holding time. The validated project database was modified to reflect this decision in reporting. Data users are directed to pages 2 through 2c of the attached Data Usability Checklist for further details.

The Chain-of-Custody listed sample "SH-19/09-29-06", which was changed to "SH-19S/09-29-06" based on client communication with the laboratory. The corrected sample identification is included in the validated database file. Several laboratory qualifiers were incorrectly transcribed to the electronic data deliverable for the gases. These were corrected during this review such that the validated database file is an accurate representation of the hard copy data.

All other quality control information associated with accuracy, precision, representativeness, and sensitivity for the Total TAL Metals and the project-specific list of natural attenuation and other wet chemistry parameters reported met project criteria for the samples in this SDG with the exceptions in the following table.

**Table 1. Summary of Data Validation/Usability Actions**

| Sample ID | Analyte | Qualifier | Bias | Comment |
|---|---|---|---|---|
| SH-17S / 09-25-06<br>SH-25D / 09-27-06<br>WP-03 / 09-28-06<br>WP-05 / 09-27-06 | Arsenic | J | I | Uncertain < calibration range |
| OW-212A / 09-28-06 | Arsenic | UJ | I | Uncertain at MDL |
| All 19 Groundwaters | Calcium | J | L | MS low |
| WP-05 / 09-27-06 | Ferrous Iron | J | I | Uncertain < calibration range |
| All 19 Groundwaters | Sulfide | UJ | L | MS low |
| SH-15D / 09-27-06<br>SH-17S / 09-25-06<br>SH-18D / 09-26-06<br>SH-18S / 09-26-06<br>SH-19D / 09-25-06<br>SH-21S / 09-26-06<br>SH-24S / 09-28-06<br>SH-25D / 09-27-06<br>SH-25S / 09-26-06<br>SH-27S / 09-25-06<br>SH-28S / 09-27-06<br>WP-01 / 09-26-06<br>WP-03 / 09-28-06<br>WP-04 / 09-27-06<br>WP-05 / 09-27-06 | Ethane | U | | Blank action |
| OW-212A / 09-28-06<br>TB-501 / 09-25-06<br>TB-502 / 09-26-06<br>TB-503 / 09-27-06<br>TB-505 / 09-28-06 | Ethane | J | I | Uncertain < calibration range |

**Table 1. Summary of Data Validation/Usability Actions** - *continued*

| Sample ID | Analyte | Qualifier | Bias | Comment |
|---|---|---|---|---|
| OW-212 / 09-27-06<br>SH-15D / 09-27-06<br>SH-17S / 09-25-06<br>SH-18D / 09-26-06<br>SH-19D / 09-25-06<br>SH-21S / 09-26-06<br>SH-22S / 09-25-06<br>SH-23S / 09-25-06<br>SH-24S / 09-28-06<br>SH-25D / 09-27-06<br>SH-25S / 09-26-06<br>SH-27S / 09-25-06<br>SH-28S / 09-27-06<br>WP-01 / 09-26-06<br>WP-03 / 09-28-06<br>WP-04 / 09-27-06<br>WP-05 / 09-27-06 | Ethene | U | | Blank action |
| OW-212A / 09-28-06<br>TB-501 / 09-25-06<br>TB-502 / 09-26-06<br>TB-503 / 09-27-06<br>TB-505 / 09-28-06<br>TB-508 / 09-29-06 | Ethene | J | I | Uncertain < calibration range |
| SH-15D / 09-27-06<br>SH-17S / 09-25-06<br>SH-18D / 09-26-06<br>SH-19D / 09-25-06<br>SH-22S / 09-25-06<br>SH-23S / 09-25-06<br>SH-24S / 09-28-06<br>SH-25D / 09-27-06<br>SH-25S / 09-26-06<br>SH-27S / 09-25-06<br>WP-03 / 09-28-06<br>WP-04 / 09-27-06<br>WP-05 / 09-27-06 | Methane | J | H | Detected in EB & TB |
| OW-212 / 09-27-06<br>SH-28S / 09-27-06 | Methane | J | I | FD imprecision +<br>Detected in EB & TB |

**Table 1. Summary of Data Validation/Usability Actions** - *continued*

| Sample ID | Analyte | Qualifier | Bias | Comment |
|---|---|---|---|---|
| TB-501 / 09-25-06<br>TB-502 / 09-26-06<br>TB-505 / 09-28-06<br>TB-508 / 09-29-06 | Methane | J | I | Uncertain < calibration range |

*Qualifiers: U = Analyte is not detected; UJ = Non-detect is estimated; J = Result is estimated; R = Result is rejected and is unusable for project decisions.*

*Bias: L = Low; H = High; I = Indeterminate*

*Acronyms used in Table:*

*EB = Equipment Rinseate Blank*
*FD = Field Duplicate sample(s)*
*HT = Holding Time*
*MDL = Method Detection Limit*
*MS = Matrix Spike sample*
*TB = Trip Blank*
*< "Less Than"*
*> "Greater Than"*

The qualified (J, UJ, and U) and unqualified results presented in the validated database, submitted electronically to Sanborn, Head & Associates, Inc. are considered usable for project objectives. The one rejected (R) result for $Fe^{+2}$ is unusable.

| Smpl | Lab_ID | Anal_Dat | Anal_Method | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-23S / 09-25-06 | WW5217-1 | 10/05/06 | 415.1 | TOC | Total Organic Carbon | 1.0 | mg/L | U | | 1.0 | mg/L | 1 | |
| SH-22S / 09-25-06 | WW5217-2 | 10/05/06 | 415.1 | TOC | Total Organic Carbon | 1.0 | mg/L | U | | 1.0 | mg/L | 1 | |
| SH-19D / 09-25-06 | WW5217-3 | 10/05/06 | 415.1 | TOC | Total Organic Carbon | 1.0 | mg/L | U | | 1.0 | mg/L | 1 | |
| SH-17S / 09-25-06 | WW5217-4 | 10/05/06 | 415.1 | TOC | Total Organic Carbon | 1.2 | mg/L | | | 1.0 | mg/L | 1 | |
| SH-27S / 09-25-06 | WW5217-5 | 10/05/06 | 415.1 | TOC | Total Organic Carbon | 1.3 | mg/L | | | 1.0 | mg/L | 1 | |
| WP-01 / 09-26-06 | WW5217-6 | 10/05/06 | 415.1 | TOC | Total Organic Carbon | 1.5 | mg/L | | | 1.0 | mg/L | 1 | |
| SH-21S / 09-26-06 | WW5217-7 | 10/05/06 | 415.1 | TOC | Total Organic Carbon | 1.3 | mg/L | | | 1.0 | mg/L | 1 | |
| SH-18S / 09-26-06 | WW5217-8 | 10/05/06 | 415.1 | TOC | Total Organic Carbon | 1.7 | mg/L | | | 1.0 | mg/L | 1 | |
| SH-18D / 09-26-06 | WW5217-9 | 10/05/06 | 415.1 | TOC | Total Organic Carbon | 1.0 | mg/L | U | | 1.0 | mg/L | 1 | |
| SH-25S / 09-26-06 | WW5217-10 | 10/05/06 | 415.1 | TOC | Total Organic Carbon | 4.7 | mg/L | | | 1.0 | mg/L | 1 | |
| WP-04 / 09-27-06 | WW5217-11 | 10/05/06 | 415.1 | TOC | Total Organic Carbon | 1.6 | mg/L | | | 1.0 | mg/L | 1 | |
| WP-05 / 09-27-06 | WW5217-12 | 10/05/06 | 415.1 | TOC | Total Organic Carbon | 1.1 | mg/L | | | 1.0 | mg/L | 1 | |
| SH-15D / 09-27-06 | WW5217-13 | 10/05/06 | 415.1 | TOC | Total Organic Carbon | 1.0 | mg/L | U | | 1.0 | mg/L | 1 | |
| SH-28S / 09-27-06 | WW5217-14 | 10/05/06 | 415.1 | TOC | Total Organic Carbon | 2.2 | mg/L | | | 1.0 | mg/L | 1 | |
| SH-25D / 09-27-06 | WW5217-15 | 10/05/06 | 415.1 | TOC | Total Organic Carbon | 1.0 | mg/L | U | | 1.0 | mg/L | 1 | |
| OW-212 / 09-27-06 | WW5217-16 | 10/05/06 | 415.1 | TOC | Total Organic Carbon | 2.1 | mg/L | | | 1.0 | mg/L | 1 | |
| WP-03 / 09-28-06 | WW5217-17 | 10/05/06 | 415.1 | TOC | Total Organic Carbon | 1.3 | mg/L | | | 1.0 | mg/L | 1 | |
| SH-24S / 09-28-06 | WW5217-18 | 10/05/06 | 415.1 | TOC | Total Organic Carbon | 1.0 | mg/L | U | | 1.0 | mg/L | 1 | |
| OW-212A / 09-28-06 | WW5217-19 | 10/05/06 | 415.1 | TOC | Total Organic Carbon | 1.0 | mg/L | U | | 1.0 | mg/L | 1 | |
| SH-19S / 09-29-06 | WW5217-20 | 10/05/06 | 415.1 | TOC | Total Organic Carbon | 3.0 | mg/L | | | 1.0 | mg/L | 1 | |
| SH-23S / 09-25-06 | 99623-01 | 10/12/06 | 351.2 | TKN | Total Kjeldahl Nitrogen | 0.5 | mg/L | U | | 0.5 | mg/L | 1 | |
| SH-22S / 09-25-06 | 99623-02 | 10/12/06 | 351.2 | TKN | Total Kjeldahl Nitrogen | 0.5 | mg/L | U | | 0.5 | mg/L | 1 | |
| SH-19D / 09-25-06 | 99623-03 | 10/12/06 | 351.2 | TKN | Total Kjeldahl Nitrogen | 0.5 | mg/L | U | | 0.5 | mg/L | 1 | |
| SH-17S / 09-25-06 | 99623-04 | 10/12/06 | 351.2 | TKN | Total Kjeldahl Nitrogen | 0.5 | mg/L | U | | 0.5 | mg/L | 1 | |
| SH-27S / 09-25-06 | 99623-05 | 10/12/06 | 351.2 | TKN | Total Kjeldahl Nitrogen | 0.5 | mg/L | U | | 0.5 | mg/L | 1 | |
| WP-01 / 09-26-06 | 99623-06 | 10/12/06 | 351.2 | TKN | Total Kjeldahl Nitrogen | 0.5 | mg/L | U | | 0.5 | mg/L | 1 | |
| SH-21S / 09-26-06 | 99623-07 | 10/12/06 | 351.2 | TKN | Total Kjeldahl Nitrogen | 0.5 | mg/L | U | | 0.5 | mg/L | 1 | |
| SH-18S / 09-26-06 | 99623-08 | 10/12/06 | 351.2 | TKN | Total Kjeldahl Nitrogen | 0.5 | mg/L | U | | 0.5 | mg/L | 1 | |
| SH-18D / 09-26-06 | 99623-09 | 10/12/06 | 351.2 | TKN | Total Kjeldahl Nitrogen | 0.5 | mg/L | U | | 0.5 | mg/L | 1 | |
| SH-25S / 09-26-06 | 99623-10 | 10/12/06 | 351.2 | TKN | Total Kjeldahl Nitrogen | 0.5 | mg/L | U | | 0.5 | mg/L | 1 | |
| WP-04 / 09-27-06 | 99623-11 | 10/12/06 | 351.2 | TKN | Total Kjeldahl Nitrogen | 0.5 | mg/L | U | | 0.5 | mg/L | 1 | |
| WP-05 / 09-27-06 | 99623-12 | 10/12/06 | 351.2 | TKN | Total Kjeldahl Nitrogen | 0.5 | mg/L | U | | 0.5 | mg/L | 1 | |
| SH-15D / 09-27-06 | 99623-13 | 10/12/06 | 351.2 | TKN | Total Kjeldahl Nitrogen | 0.5 | mg/L | U | | 0.5 | mg/L | 1 | |
| SH-28S / 09-27-06 | 99623-14 | 10/12/06 | 351.2 | TKN | Total Kjeldahl Nitrogen | 0.5 | mg/L | U | | 0.5 | mg/L | 1 | |
| SH-25D / 09-27-06 | 99623-15 | 10/12/06 | 351.2 | TKN | Total Kjeldahl Nitrogen | 0.5 | mg/L | U | | 0.5 | mg/L | 1 | |
| OW-212 / 09-27-06 | 99623-16 | 10/12/06 | 351.2 | TKN | Total Kjeldahl Nitrogen | 0.6 | mg/L | | | 0.5 | mg/L | 1 | |
| WP-03 / 09-28-06 | 99623-17 | 10/12/06 | 351.2 | TKN | Total Kjeldahl Nitrogen | 0.5 | mg/L | U | | 0.5 | mg/L | 1 | |
| SH-24S / 09-28-06 | 99623-18 | 10/12/06 | 351.2 | TKN | Total Kjeldahl Nitrogen | 0.5 | mg/L | U | | 0.5 | mg/L | 1 | |
| OW-212A / 09-28-06 | 99623-21 | 10/12/06 | 351.2 | TKN | Total Kjeldahl Nitrogen | 0.5 | mg/L | U | | 0.5 | mg/L | 1 | |
| SH-19S / 09-29-06 | 99623-22 | 10/12/06 | 351.2 | TKN | Total Kjeldahl Nitrogen | 0.8 | mg/L | | | 0.5 | mg/L | 1 | |
| OW-212 / 09-27-06 | P0609469-07 | 09/29/06 | AM20GAX | 74-84-0 | Ethane | 0.025 | µg/L | U | | 0.025 | µg/L | 1 | |
| OW-212A / 09-28-06 | P0609517-06 | 09/30/06 | AM20GAX | 74-84-0 | Ethane | 0.013 | µg/L | J | I | 0.025 | µg/L | 1 | Uncertain < calibration range |
| SH-15D / 09-27-06 | P0609469-04 | 09/29/06 | AM20GAX | 74-84-0 | Ethane | 0.025 | µg/L | U | | 0.025 | µg/L | 1 | Blank action |
| SH-17S / 09-25-06 | P0609403-05 | 09/27/06 | AM20GAX | 74-84-0 | Ethane | 0.025 | µg/L | U | | 0.025 | µg/L | 1 | Blank action |
| SH-18D / 09-26-06 | P0609420-05 | 09/29/06 | AM20GAX | 74-84-0 | Ethane | 0.025 | µg/L | U | | 0.025 | µg/L | 1 | Blank action |
| SH-18S / 09-26-06 | P0609420-04 | 09/29/06 | AM20GAX | 74-84-0 | Ethane | 0.025 | µg/L | U | | 0.025 | µg/L | 1 | Blank action |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low; H = High; I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Anal_Dat | Anal_Method | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-19D / 09-25-06 | P0609403-04 | 09/27/06 | AM20GAX | 74-84-0 | Ethane | 0.025 | µg/L | U | | 0.025 | µg/L | 1 | Blank action |
| SH-19S / 09-29-06 | P0609549-02 | 10/04/06 | AM20GAX | 74-84-0 | Ethane | 0.150 | µg/L | | | 0.025 | µg/L | 1 | |
| SH-21S / 09-26-06 | P0609420-03 | 09/29/06 | AM20GAX | 74-84-0 | Ethane | 0.025 | µg/L | U | | 0.025 | µg/L | 1 | Blank action |
| SH-22S / 09-25-06 | P0609403-03 | 09/27/06 | AM20GAX | 74-84-0 | Ethane | 0.028 | µg/L | | | 0.025 | µg/L | 1 | |
| SH-23S / 09-25-06 | P0609403-02 | 09/27/06 | AM20GAX | 74-84-0 | Ethane | 0.040 | µg/L | | | 0.025 | µg/L | 1 | |
| SH-24S / 09-28-06 | P0609517-03 | 09/30/06 | AM20GAX | 74-84-0 | Ethane | 0.025 | µg/L | U | | 0.025 | µg/L | 1 | Blank action |
| SH-25D / 09-27-06 | P0609469-06 | 09/29/06 | AM20GAX | 74-84-0 | Ethane | 0.025 | µg/L | U | | 0.025 | µg/L | 1 | Blank action |
| SH-25S / 09-26-06 | P0609420-06 | 09/29/06 | AM20GAX | 74-84-0 | Ethane | 0.025 | µg/L | U | | 0.025 | µg/L | 1 | Blank action |
| SH-27S / 09-25-06 | P0609403-06 | 09/27/06 | AM20GAX | 74-84-0 | Ethane | 0.025 | µg/L | U | | 0.025 | µg/L | 1 | Blank action |
| SH-28S / 09-27-06 | P0609469-05 | 09/29/06 | AM20GAX | 74-84-0 | Ethane | 0.025 | µg/L | U | | 0.025 | µg/L | 1 | Blank action |
| TB-501 / 09-25-06 | P0609403-01 | 09/27/06 | AM20GAX | 74-84-0 | Ethane | 0.006 | µg/L | J | I | 0.025 | µg/L | 1 | Uncertain < calibration range |
| TB-502 / 09-26-06 | P0609420-01 | 09/29/06 | AM20GAX | 74-84-0 | Ethane | 0.006 | µg/L | J | I | 0.025 | µg/L | 1 | Uncertain < calibration range |
| TB-503 / 09-27-06 | P0609469-01 | 09/29/06 | AM20GAX | 74-84-0 | Ethane | 0.006 | µg/L | J | I | 0.025 | µg/L | 1 | Uncertain < calibration range |
| TB-505 / 09-28-06 | P0609517-01 | 09/30/06 | AM20GAX | 74-84-0 | Ethane | 0.005 | µg/L | J | I | 0.025 | µg/L | 1 | Uncertain < calibration range |
| TB-508 / 09-29-06 | P0609549-01 | 10/04/06 | AM20GAX | 74-84-0 | Ethane | 0.025 | µg/L | U | | 0.025 | µg/L | 1 | |
| WP-01 / 09-26-06 | P0609420-02 | 09/29/06 | AM20GAX | 74-84-0 | Ethane | 0.025 | µg/L | U | | 0.025 | µg/L | 1 | Blank action |
| WP-03 / 09-28-06 | P0609517-02 | 09/30/06 | AM20GAX | 74-84-0 | Ethane | 0.025 | µg/L | U | | 0.025 | µg/L | 1 | Blank action |
| WP-04 / 09-27-06 | P0609469-02 | 09/29/06 | AM20GAX | 74-84-0 | Ethane | 0.025 | µg/L | U | | 0.025 | µg/L | 1 | Blank action |
| WP-05 / 09-27-06 | P0609469-03 | 09/29/06 | AM20GAX | 74-84-0 | Ethane | 0.025 | µg/L | U | | 0.025 | µg/L | 1 | Blank action |
| OW-212 / 09-27-06 | P0609469-07 | 09/29/06 | AM20GAX | 74-85-1 | Ethene | 0.025 | µg/L | U | | 0.025 | µg/L | 1 | Blank action |
| OW-212A / 09-28-06 | P0609517-06 | 09/30/06 | AM20GAX | 74-85-1 | Ethene | 0.016 | µg/L | J | I | 0.025 | µg/L | 1 | Uncertain < calibration range |
| SH-15D / 09-27-06 | P0609469-04 | 09/29/06 | AM20GAX | 74-85-1 | Ethene | 0.025 | µg/L | U | | 0.025 | µg/L | 1 | Blank action |
| SH-17S / 09-25-06 | P0609403-05 | 09/27/06 | AM20GAX | 74-85-1 | Ethene | 0.025 | µg/L | U | | 0.025 | µg/L | 1 | Blank action |
| SH-18D / 09-26-06 | P0609420-05 | 09/29/06 | AM20GAX | 74-85-1 | Ethene | 0.025 | µg/L | U | | 0.025 | µg/L | 1 | Blank action |
| SH-18S / 09-26-06 | P0609420-04 | 09/29/06 | AM20GAX | 74-85-1 | Ethene | 0.029 | µg/L | | | 0.025 | µg/L | 1 | |
| SH-19D / 09-25-06 | P0609403-04 | 09/27/06 | AM20GAX | 74-85-1 | Ethene | 0.025 | µg/L | U | | 0.025 | µg/L | 1 | Blank action |
| SH-19S / 09-29-06 | P0609549-02 | 10/04/06 | AM20GAX | 74-85-1 | Ethene | 0.180 | µg/L | | | 0.025 | µg/L | 1 | |
| SH-21S / 09-26-06 | P0609420-03 | 09/29/06 | AM20GAX | 74-85-1 | Ethene | 0.025 | µg/L | U | | 0.025 | µg/L | 1 | Blank action |
| SH-22S / 09-25-06 | P0609403-03 | 09/27/06 | AM20GAX | 74-85-1 | Ethene | 0.025 | µg/L | U | | 0.025 | µg/L | 1 | Blank action |
| SH-23S / 09-25-06 | P0609403-02 | 09/27/06 | AM20GAX | 74-85-1 | Ethene | 0.025 | µg/L | U | | 0.025 | µg/L | 1 | Blank action |
| SH-24S / 09-28-06 | P0609517-03 | 09/30/06 | AM20GAX | 74-85-1 | Ethene | 0.025 | µg/L | U | | 0.025 | µg/L | 1 | Blank action |
| SH-25D / 09-27-06 | P0609469-06 | 09/29/06 | AM20GAX | 74-85-1 | Ethene | 0.025 | µg/L | U | | 0.025 | µg/L | 1 | Blank action |
| SH-25S / 09-26-06 | P0609420-06 | 09/29/06 | AM20GAX | 74-85-1 | Ethene | 0.025 | µg/L | U | | 0.025 | µg/L | 1 | Blank action |
| SH-27S / 09-25-06 | P0609403-06 | 09/27/06 | AM20GAX | 74-85-1 | Ethene | 0.025 | µg/L | U | | 0.025 | µg/L | 1 | Blank action |
| SH-28S / 09-27-06 | P0609469-05 | 09/29/06 | AM20GAX | 74-85-1 | Ethene | 0.025 | µg/L | U | | 0.025 | µg/L | 1 | Blank action |
| TB-501 / 09-25-06 | P0609403-01 | 09/27/06 | AM20GAX | 74-85-1 | Ethene | 0.006 | µg/L | J | I | 0.025 | µg/L | 1 | Uncertain < calibration range |
| TB-502 / 09-26-06 | P0609420-01 | 09/29/06 | AM20GAX | 74-85-1 | Ethene | 0.009 | µg/L | J | I | 0.025 | µg/L | 1 | Uncertain < calibration range |
| TB-503 / 09-27-06 | P0609469-01 | 09/29/06 | AM20GAX | 74-85-1 | Ethene | 0.010 | µg/L | J | I | 0.025 | µg/L | 1 | Uncertain < calibration range |
| TB-505 / 09-28-06 | P0609517-01 | 09/30/06 | AM20GAX | 74-85-1 | Ethene | 0.008 | µg/L | J | I | 0.025 | µg/L | 1 | Uncertain < calibration range |
| TB-508 / 09-29-06 | P0609549-01 | 10/04/06 | AM20GAX | 74-85-1 | Ethene | 0.010 | µg/L | J | I | 0.025 | µg/L | 1 | Uncertain < calibration range |
| WP-01 / 09-26-06 | P0609420-02 | 09/29/06 | AM20GAX | 74-85-1 | Ethene | 0.025 | µg/L | U | | 0.025 | µg/L | 1 | Blank action |
| WP-03 / 09-28-06 | P0609517-02 | 09/30/06 | AM20GAX | 74-85-1 | Ethene | 0.025 | µg/L | U | | 0.025 | µg/L | 1 | Blank action |
| WP-04 / 09-27-06 | P0609469-02 | 09/29/06 | AM20GAX | 74-85-1 | Ethene | 0.025 | µg/L | U | | 0.025 | µg/L | 1 | Blank action |
| WP-05 / 09-27-06 | P0609469-03 | 09/29/06 | AM20GAX | 74-85-1 | Ethene | 0.025 | µg/L | U | | 0.025 | µg/L | 1 | Blank action |
| OW-212 / 09-27-06 | P0609469-07 | 09/29/06 | AM20GAX | 74-82-8 | Methane | 1.600 | µg/L | J | I | 0.100 | µg/L | 1 | FD imprecision + Detected in EB & TB |
| OW-212A / 09-28-06 | P0609517-06 | 09/30/06 | AM20GAX | 74-82-8 | Methane | 0.710 | µg/L | | | 0.100 | µg/L | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low; H = High; I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Anal_Dat | Anal_Method | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-15D / 09-27-06 | P0609469-04 | 09/29/06 | AM20GAX | 74-82-8 | Methane | 1.700 | µg/L | J | H | 0.100 | µg/L | 1 | Detected in EB & TB |
| SH-17S / 09-25-06 | P0609403-05 | 09/27/06 | AM20GAX | 74-82-8 | Methane | 0.470 | µg/L | J | H | 0.100 | µg/L | 1 | Detected in EB & TB |
| SH-18D / 09-26-06 | P0609420-05 | 09/29/06 | AM20GAX | 74-82-8 | Methane | 2.900 | µg/L | J | H | 0.100 | µg/L | 1 | Detected in EB & TB |
| SH-18S / 09-26-06 | P0609420-04 | 09/29/06 | AM20GAX | 74-82-8 | Methane | 4.500 | µg/L | | | 0.100 | µg/L | 1 | |
| SH-19D / 09-25-06 | P0609403-04 | 09/27/06 | AM20GAX | 74-82-8 | Methane | 0.490 | µg/L | J | H | 0.100 | µg/L | 1 | Detected in EB & TB |
| SH-19S / 09-29-06 | P0609549-02 | 10/04/06 | AM20GAX | 74-82-8 | Methane | 98.000 | µg/L | | | 0.100 | µg/L | 1 | |
| SH-21S / 09-26-06 | P0609420-03 | 09/29/06 | AM20GAX | 74-82-8 | Methane | 7.000 | µg/L | | | 0.100 | µg/L | 1 | |
| SH-22S / 09-25-06 | P0609403-03 | 09/27/06 | AM20GAX | 74-82-8 | Methane | 0.960 | µg/L | J | H | 0.100 | µg/L | 1 | Detected in EB & TB |
| SH-23S / 09-25-06 | P0609403-02 | 09/27/06 | AM20GAX | 74-82-8 | Methane | 0.850 | µg/L | J | H | 0.100 | µg/L | 1 | Detected in EB & TB |
| SH-24S / 09-28-06 | P0609517-03 | 09/30/06 | AM20GAX | 74-82-8 | Methane | 0.660 | µg/L | J | H | 0.100 | µg/L | 1 | Detected in EB & TB |
| SH-25D / 09-27-06 | P0609469-06 | 09/29/06 | AM20GAX | 74-82-8 | Methane | 1.300 | µg/L | J | H | 0.100 | µg/L | 1 | Detected in EB & TB |
| SH-25S / 09-26-06 | P0609420-06 | 09/29/06 | AM20GAX | 74-82-8 | Methane | 2.400 | µg/L | J | H | 0.100 | µg/L | 1 | Detected in EB & TB |
| SH-27S / 09-25-06 | P0609403-06 | 09/27/06 | AM20GAX | 74-82-8 | Methane | 0.460 | µg/L | J | H | 0.100 | µg/L | 1 | Detected in EB & TB |
| SH-28S / 09-27-06 | P0609469-05 | 09/29/06 | AM20GAX | 74-82-8 | Methane | 2.200 | µg/L | J | I | 0.100 | µg/L | 1 | FD imprecision + Detected in EB & TB |
| TB-501 / 09-25-06 | P0609403-01 | 09/27/06 | AM20GAX | 74-82-8 | Methane | 0.097 | µg/L | J | I | 0.100 | µg/L | 1 | Uncertain < calibration range |
| TB-502 / 09-26-06 | P0609420-01 | 09/29/06 | AM20GAX | 74-82-8 | Methane | 0.097 | µg/L | J | I | 0.100 | µg/L | 1 | Uncertain < calibration range |
| TB-503 / 09-27-06 | P0609469-01 | 09/29/06 | AM20GAX | 74-82-8 | Methane | 0.110 | µg/L | | | 0.100 | µg/L | 1 | |
| TB-505 / 09-28-06 | P0609517-01 | 09/30/06 | AM20GAX | 74-82-8 | Methane | 0.100 | µg/L | J | I | 0.100 | µg/L | 1 | Uncertain < calibration range |
| TB-508 / 09-29-06 | P0609549-01 | 10/04/06 | AM20GAX | 74-82-8 | Methane | 0.093 | µg/L | J | I | 0.100 | µg/L | 1 | Uncertain < calibration range |
| WP-01 / 09-26-06 | P0609420-02 | 09/29/06 | AM20GAX | 74-82-8 | Methane | 29.000 | µg/L | | | 0.100 | µg/L | 1 | |
| WP-03 / 09-28-06 | P0609517-02 | 09/30/06 | AM20GAX | 74-82-8 | Methane | 1.000 | µg/L | J | H | 0.100 | µg/L | 1 | Detected in EB & TB |
| WP-04 / 09-27-06 | P0609469-02 | 09/29/06 | AM20GAX | 74-82-8 | Methane | 3.300 | µg/L | J | H | 0.100 | µg/L | 1 | Detected in EB & TB |
| WP-05 / 09-27-06 | P0609469-03 | 09/29/06 | AM20GAX | 74-82-8 | Methane | 2.300 | µg/L | J | H | 0.100 | µg/L | 1 | Detected in EB & TB |
| OW-212 / 09-27-06 | P0609468-06 | 09/28/06 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1 | mg/L | 1 | |
| OW-212A / 09-28-06 | P0609516-05 | 09/29/06 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1 | mg/L | 1 | |
| SH-15D / 09-27-06 | P0609468-03 | 09/28/06 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1 | mg/L | 1 | |
| SH-17S / 09-25-06 | P0609402-04 | 09/26/06 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1 | mg/L | 1 | |
| SH-18D / 09-26-06 | P0609419-04 | 09/27/06 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1 | mg/L | 1 | |
| SH-18S / 09-26-06 | P0609419-03 | 09/27/06 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1 | mg/L | 1 | |
| SH-19D / 09-25-06 | P0609402-03 | 09/26/06 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1 | mg/L | 1 | |
| SH-19S / 09-29-06 | P0609549-02 | 10/03/06 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | R | | 1 | mg/L | 1 | Unusable: >2x holding time exceedance |
| SH-21S / 09-26-06 | P0609419-02 | 09/27/06 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1 | mg/L | 1 | |
| SH-22S / 09-25-06 | P0609402-02 | 09/26/06 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1 | mg/L | 1 | |
| SH-23S / 09-25-06 | P0609402-01 | 09/26/06 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1 | mg/L | 1 | |
| SH-24S / 09-28-06 | P0609516-02 | 09/29/06 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1 | mg/L | 1 | |
| SH-25D / 09-27-06 | P0609468-05 | 09/28/06 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1 | mg/L | 1 | |
| SH-25S / 09-26-06 | P0609419-05 | 09/27/06 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1 | mg/L | 1 | |
| SH-27S / 09-25-06 | P0609402-05 | 09/26/06 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1 | mg/L | 1 | |
| SH-28S / 09-27-06 | P0609468-04 | 09/28/06 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1 | mg/L | 1 | |
| WP-01 / 09-26-06 | P0609419-01 | 09/27/06 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 2.3 | mg/L | | | 1 | mg/L | 1 | |
| WP-03 / 09-28-06 | P0609516-01 | 09/29/06 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1 | mg/L | 1 | |
| WP-04 / 09-27-06 | P0609468-01 | 09/28/06 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1 | mg/L | 1 | |
| WP-05 / 09-27-06 | P0609468-02 | 09/28/06 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 0.5 | mg/L | J | I | 1 | mg/L | 1 | Uncertain < calibration range |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low; H = High; I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Anal_Dat | Anal_Method | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | %Solid | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OW-212 / 09-27-06 | P0609468-06 | 09/28/06 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1 | mg/L | 1 | | |
| OW-212A / 09-28-06 | P0609516-05 | 09/29/06 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1 | mg/L | 1 | | |
| SH-15D / 09-27-06 | P0609468-03 | 09/28/06 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1 | mg/L | 1 | | |
| SH-17S / 09-25-06 | P0609402-04 | 09/26/06 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1 | mg/L | 1 | | |
| SH-18D / 09-26-06 | P0609419-04 | 09/27/06 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1 | mg/L | 1 | | |
| SH-18S / 09-26-06 | P0609419-03 | 09/27/06 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1 | mg/L | 1 | | |
| SH-19D / 09-25-06 | P0609402-03 | 09/26/06 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1 | mg/L | 1 | | |
| SH-19S / 09-29-06 | P0609549-02 | 09/30/06 | SM3500Fe D | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1 | mg/L | 1 | | |
| SH-21S / 09-26-06 | P0609419-02 | 09/27/06 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1 | mg/L | 1 | | |
| SH-22S / 09-25-06 | P0609402-02 | 09/26/06 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1 | mg/L | 1 | | |
| SH-23S / 09-25-06 | P0609402-01 | 09/26/06 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1 | mg/L | 1 | | |
| SH-24S / 09-28-06 | P0609516-02 | 09/29/06 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1 | mg/L | 1 | | |
| SH-25D / 09-27-06 | P0609468-05 | 09/28/06 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1 | mg/L | 1 | | |
| SH-25S / 09-26-06 | P0609419-05 | 09/27/06 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1 | mg/L | 1 | | |
| SH-27S / 09-25-06 | P0609402-05 | 09/26/06 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1 | mg/L | 1 | | |
| SH-28S / 09-27-06 | P0609468-04 | 09/28/06 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1 | mg/L | 1 | | |
| WP-01 / 09-26-06 | P0609419-01 | 09/27/06 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 2.3 | mg/L | | | 1 | mg/L | 1 | | |
| WP-03 / 09-28-06 | P0609516-01 | 09/29/06 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1 | mg/L | 1 | | |
| WP-04 / 09-27-06 | P0609468-01 | 09/28/06 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1 | mg/L | 1 | | |
| WP-05 / 09-27-06 | P0609468-02 | 09/28/06 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 0.5 | mg/L | J | I | 1 | mg/L | 1 | | Uncertain < calibration range |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low; H = High; I = Indeterminate. See Data Usability Report for details.

## I. Data Package Completeness

***Phase 1B-5 Work Plan Remedial Investigation Work Plan*, Blackburn & Union Privileges Superfund Site, Walpole Massachusetts, Rev 02, September 21, 2006**

Laboratories: *Alpha Woods Hole Labs (AWHL), Raynham, MA* SDG: BU212 Groundwater
*Katahdin Lab, Groundwater Analytical Lab, Microseeps*

AWHL ETR #: 0609103

Review the data package for completeness based on EPA Region I and Site QAPP requirements.

- Were all required reporting forms and associated raw data for field samples and QC included in the data package? (**Yes** / **No**.
- Were all sample analyses requested on the Chain-of-Custody performed by the laboratory? (**Yes** / **No**.

If "No" to any of the above questions, document missing information and resubmittal requests in the comment section below.

Tabulate the number and types of samples in this SDG and the QAPP-required data validation level.

| **Number and Type of Samples** – Groundwaters<br>EB= Equipment Blank<br>TB= Trip Blanks | **Parameter(s)** | **Data Validation Level (EPA Region I Tier)** |
|---|---|---|
| 19 + 1 EB | *TAL Metals (Methods 6020 + 7470A)* | Tier II-type |
| | *Alkalinity (Method 310.1)* | Tier I-type enhanced |
| | *Chloride, Nitrate, Sulfate (Method 300.0)* | |
| | *Sulfide (Method 376.2)* | |
| | *Total Dissolved Solids (TDS Method 160.1)* | |
| | *Total Kjeldahl Nitrogen (TKN Method 351.2)* | |
| | *Total Organic Carbon (TOC Method 415.1)* | |
| + 5 TB | *Gases: Ethane, Ethene, Methane (Microseeps Method AM20GAX)* | |
| | *Ferrous Iron ($Fe^{+2}$ Method 7199 mod)* | |

Comments:
*Note: Site QAPP DQOs do not require a formal data validation report for natural attenuation parameters in groundwater (alkalinity, nitrate, chloride, sulfate, TKN), sulfide, TDS, TOC, gases, or ferrous iron [see QAPP Worksheet #29b and #29c]. These parameters are reviewed herein, if present in this SDG, based on an enhanced Tier I-type review, for completeness, holding time and preservation QC, LCS, MD, FD, and blank contamination, as applicable [see QAPP Worksheets #11b, #23a, #23b, and 24a for applicable QC measures].*
***Density & Viscosity reported in this SDG but not required for validation based on project DQOs.***

Data Reviewer: Susan D. Chapnick Date: 11/30/06

Susan D. Chapnick, Principal Scientist
New Environmental Horizons, Inc.

## II. Review of QC Summary (CLP-like) Forms and Additional QA/QC Parameters

Changed to "Yes" 12/14/06 See below

### A. Holding Times/Preservation Criteria *[QAPP Worksheet #11b and #12b]*

- Were holding time criteria met for all samples/analyses as indicated below? **Yes / No.**
- Were preservation criteria met for all samples/analyses as indicated below? **Yes / No.**

Aqueous (Groundwater/Surface Water, as applicable):

| | |
|---|---|
| ✓ Metals (except Hg) | 180 days from date of collection, preserved to pH ≤ 2 and 4°± 2° C |
| ✓ Mercury | 28 days from date of collection, preserved to pH ≤ 2 and 4°± 2° C |
| ✓ Alkalinity | 14 days from date of collection, maintained at 4°± 2° C |
| ✓ Chloride | 28 days from date of collection, maintained at 4°± 2° C |
| ✓ Nitrate | 48 hours from time of collection, maintained at 4°± 2° C |
| ✓ Sulfate | 28 days from date of collection, maintained at 4°± 2° C |
| ✓ Sulfide | 7 days from date of collection, preserved to pH ≥ 12 and 4°± 2° C |
| ✓ TDS | 7 days from date of collection, maintained at 4°± 2° C |
| ✓ TKN | 28 days from date of collection, preserved to pH ≤ 2 and 4°± 2° C |
| ✓ TOC | 28 days from date of collection, preserved to pH ≤ 2 and 4°± 2° C |
| ✓ Gases | 7 days from date of collection, maintained at 4°± 2° C |
| Ferrous Iron | 48 hours from date of collection, maintained at 4°± 2° C |

see pages 2a through 2c for details

Soils/Sediments[1]:

| | | |
|---|---|---|
| NA | Metals (except Hg) | 180 days from date of collection, maintained at 4°± 2° C |
| | Mercury | 28 days from date of collection, maintained at 4°± 2° C |
| | TOC | 28 days from date of collection, maintained at 4°± 2° C |

[1] Sediments will be freeze-dried prior to preparation/analysis for total metals if % solids < 75% in "native" sample. Soils and Sediments can be maintained frozen to arrest holding times. If frozen, holding time starts when thawed.

**Actions:** If the holding times were exceeded, estimate (J and UJ) positive and nondetect results. If the holding times were grossly exceeded (= >2X HT), estimate (J) positive results and reject (R) nondetect results. If samples were improperly preserved, use professional judgment – may estimate (J and UJ) associated results.

**Holding Time / Preservation Actions**

| Analyte | Holding Time Exceedance | Preservation Issue | Action / Bias | Affected Sample(s) / Comments |
|---|---|---|---|---|
| $Fe^{+2}$ | ~~just under 2x~~ | | ~~UJ / L~~ R | SH-19S / 09-29-06 (lab ID A0609549-02) |
| | >48hr | | ~~J~~ DNC | anal. 10/03/06 |
| REVISED to accept initial analysis within HT | ~~outside HT~~ | | 11/30/06 | ~~Data Rejected~~ >2X HT violation. |
| | See Below DNC | | 12/14/06 | |

Comments: Sampled 9/29/06 @ 8:52; anal. 9/30/06 by SM within HT, anal. 10/3/06 @ 20:28 by IC

Revised: Lab initially ran $Fe^{+2}$ within HT on 9/30/06 by an alternate method, Standard Method (SM) 3500 FeD, and then reran them by the method documented in the QAPP (IC method) for confirmation. Both sets of analyses for these samples were nondetect for $Fe^{+2}$; methods are considered technically comparable; therefore the first set of analyses were accepted for reporting within HT – No Action to qualify data.

Revised 12/14/06 DNC 11/30/06.

SDG BU212

**Debbie Hallo**

**From:** s chapnick [s.chapnick@comcast.net]
**Sent:** Friday, December 08, 2006 1:20 PM
**To:** Debbie Hallo
**Cc:** Brad Green; Kelly Dubois; Elizabeth Porta
**Subject:** Ferrous Iron data Lab Prj # P0609550 & P0609549

Debbie,

I will need pdf files of the original data for ferrous iron that your lab ran for the samples in these two projects. I understand from previous communications that since your lab water was shut off, you initially ran these samples (received on Sat, 9/30/06) by Standard Method 3500FeD to meet the hold times and then re-ran by the IC method (as approved in the QAPP). I will need the data that were produced within holding times so that I can accept these results.

Thank you
Susan

Susan D. Chapnick
President and Principal Scientist
New Environmental Horizons, Inc
2 Farmers Circle
Arlington, MA 02474
phone: 781-643-4294
email: s.chapnick@comcast.net

12/13/2006

2a

12/14/06

SDG B0212



Case Narrative

Batch number: M061005026 Original Run Date: 10/3/06

1. Sample numbers: P0610026-1→7, P0610035-1→4, P0609549-2, P0609550-2→5

Out of Control Event: Samples were received out of holdtime or in jeopardy of missing holdtime.

Corrective Action Taken: Analyzed samples by standard methods + re-analyze samples by IC method M7199.

Result: Results are Comparable.

Observations to support use of data:

2. Sample numbers:

Out of Control Event:

Corrective Action Taken:

Result:

Observations to support use of data:

Manual Integration Checklist and Approval

- Manual Integration approved?: Yes No
- Satisfactorily documented on this narrative?
- Manually integrated chromatogram initialed and dated by analyst?

_____ _____
Signature Lead Analyst or Lab. Mgr. Date

Reviewed by: MD Date: 10/5/06
Manual Integration Conducted YES NO
(Circle One)
Reviewed by: _____ Date: _____
Reviewed & Entered by: RD Date: 10/5/06
Reviewed by: _____ Date: _____
Corrected by: _____ Date: _____



12/14/06

# Ferrous Iron

EPA Method No.: SM 3500 Fe D

Analyst's Name : Maureen O'Donnell

Instrument : Spec. 20 G @ 510 nm

Date of Initial Calibration : 9-30-06

LIMS Batch No. :

Date of Analysis : 9-30-06

NOTE : Absorbance values from the calibration MUST be entered on this data sheet.

| Sample Identification | Std. Conc. (mg / L ) | Measured Absorbance | Dilution Factor | Ferrous Iron ( mg / L ) |
|---|---|---|---|---|
| Blank - Initial Calibration | 0.0 | 0.003 | 1 | |
| Standard - Initial Calibration | 1.0 | 0.105 | 1 | |
| Standard - Initial Calibration | 4.0 | 0.395 | 1 | |
| Standard - Initial Calibration | 6.0 | 0.583 | 1 | |
| Standard - Initial Calibration | 8.0 | 0.790 | 1 | |
| Standard - Initial Calibration | 10.0 | 0.976 | 1 | |
| Slope = 10.27 | | | | |
| Y Intercept = -0.6497 | | | | |
| $R^2$ = 0.9994 | | | | |
| | ICV % Drift = 1% | 0.475 | 1 | 4.83 |
| | ICB | 0.000 | 1 | 0.0 |
| | PBW | 0.000 | 1 | 0.0 |
| Analysis Time | Sample Number | | | |
| 1200 | P0604549-2 | 0.000 | | 0.0 |
| 1205 | 4550-2 | 0.000 | | 0.0 |
| 1209 | 3 | 0.000 | | 0.0 |
| 1210 | 4 | 0.000 | | 0.0 |
| 1212 | 5 | 0.000 | | 0.0 |
| 1230 | 4552-1 | 0.000 | | 0.00 |
| 1235 | 2 | 0.000 | | 0.0 |
| 1240 | 3 | 0.000 | | 0.0 |
| 1245 | 4 | 0.000 | | 0.0 |
| 1250 | 5 | 0.000 | | 0.0 |
| 1300 | CCB 6 | 0.000 | | 0.0 |
| 1305 | CCV 91.8% | 0.481 | | 4.9 |
| 1310 | 4552-6 | 0.000 | | 0.0 |
| 1315 | 7 | 0.00 | | 0.0 |
| 1320 | 8 | 0.00 | | 0.0 |
| 1325 | 9 | 0.06 | | 0.0 |
| 1330 | 10 | 0.00 | | 0.0 |
| 1335 | 11 | 0.00 | | 0.0 |
| 1340 | 4553-1 | 0.975 | | 9.96 |
| 1345 | 2 | 0.000 | | 0.0 |
| | CCB | 0.000 | | 0.0 |
| | CCV 5 | 0.479 | | 4.88% |
| Sample/Dup RPD Calculated: | | | | |

non-detect

97.4%

**Required QC:**

PBW: < lowest standard

Sample/Dup RPD: </= 20%

MS % Rec.: +/- 30%

ICV/CCV: % Drift +/- 10%

ICAL $R^2$: > or = 0.9950

*(Record all calculation results on this data sheet)*

Ferrous Iron is determined from a "Least Squares Fit" line derived from the 6-Point (Blk.& 5 Stds.) calibration.

Your signature indicates all data is within acceptance criteria or justified in a narrative form.

Data entered by : Maureen O'Donnell Date : 9-30-06

Data reviewed & approved by : Date :

MC 12/14/06

**B. Calibration** *[QAPP Worksheet #21 and #24a]*

1. Instrument Calibration

Instrument calibrations were reviewed to ensure that the laboratory followed the correct method procedures.

- Were instrument calibrations performed daily for all methods/instruments used for analysis? **Yes / No.**
- Were the proper number of standards used for each calibration as compliant with SW846 Method requirements? **Yes / No.**
- Were the calibration curves compliant with linearity requirements of the SW846 Method if a linear curve was used ($r \geq 0.995$)? **Yes / No.**

If no to any of the above, list affected samples/analytes and actions in the comment section, below.

2. Initial Calibration Verification (ICV) and Continuing Calibration Verification (CCV) Standards

All ICVs and CCVs were reviewed to assess the accuracy and sensitivity of the results.

- Did all ICVs and CCVs meet the recovery criteria? **Yes / No.** If no, list the outliers and the affected samples in the comment section, below. but no Action; see below.

**Actions:** If the ICV/CCV recovery criteria exceeded the defined limits indicated below, estimate (J) associated positive results; no action is required for nondetect results. If ICV/CCV recoveries were below defined QC limits, estimate (J and UJ) associated positive and nondetect results.

Control Limits

| | |
|---|---|
| Metals by ICP or ICP/MS: | 90-110% |
| Mercury by CVAA: | 90-110% |

[ICV/CCV for other parameters: check lab narrative for deviations; not required in summary QC forms]

Comments: CCVs – several for Pb and Tl >110% – No Action because all associated GW results were non-detected (therefore, a high bias is not suspected) for these metals.



11/30/06

**B. Calibration (continued)**

2. Low Level Standard analyzed consistent with sample-equivalent reporting or quantitation limit. (QL).

- Were the low-level standards in the calibration curves for inorganic analyses (ICP-~~MS~~, ICP-AES, CVAA) analyzed at the correct concentrations to support the laboratory QL? **Yes / No.**

If no, results reported as non-detects and within 2x the QL may be uncertain.

**Actions:** If No, estimate (UJ) all non-detect data for the affected metal(s) and estimate (J) detected results < 2xQL due to potential uncertainty in the sensitivity of analysis and accuracy at the low end of the calibration curve.

| Analyte | Action / Bias | Affected Sample(s) / Comments |
|---|---|---|
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Comments:

Low level std not analyzed for metals - instead, lab included an RL std as the low-level std in the calibration curves. This is acceptable to support sensitivity needs of the project.



11/30/06.

**C. Blank Results**

1. Laboratory Blanks *[QAPP Worksheet #9b, 11b, and #24a]*

Laboratory (preparation and calibration) blank results were reviewed to assess the presence of contaminants that ultimately affect the accuracy and sensitivity of the results. Blanks were assessed compared to the project-required quantitation limits (PQLs) listed in Worksheet 9b of the QAPP and to the laboratory QLs.

- Were all analytes detected in the laboratory blanks at levels less than the PQLs? **Yes / No.** If no, list below the analyte and blank level for the highest detected result above the PQLs.

- Were negative baseline drifts, if observed as negative ICB/CCB or preparation blank results, observed at absolute values less than the PQL? **Yes / No / NA.** If no, list below the analyte and blank level for the negative result with an absolute value above the PQL.

| Analyte | Highest Lab Blank Result (Units) |
|---|---|
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Comments:

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_____



11/30/06

**C. Blank Results (continued)**

2. Field Blank Results *[QAPP Worksheet #9b, 11b, #22a, and #22b]*

Field blank results were reviewed to assess the presence of contaminants that ultimately affect the accuracy and sensitivity of the sample results.

- Was there a field equipment rinsate blank associated with the samples in this SDG? **Yes / No.** If yes, list the field blank(s) and the associated samples in the table below.

| Field Rinsate Blank Sample ID | Associated Field Sample IDs |
|---|---|
| OW-212A/09-28-06 | all field samples in this SDG |
| | |
| | |
| | |
| | |

- Were all analytes detected in the field equipment rinsate blank(s) at levels less than the PQL? **Yes / No.** If no, list contaminants below.

NOTE: Use the maximum field blank concentration in cases where multiple field blanks are associated with the samples in a given SDG.

**Field Blank ID:** OW-212A/09-28-06

| Analyte | Field Blank Result (Units) |
|---|---|
| Na | 56 ug/L |
| TDS | 11 mg/L → Tier I-type |
| Zn | 7.8 J ug/L |
| Ethane | 0.013 ug/L } Tier I-type |
| Ethene | 0.016 ug/L } Tier I-type |
| Methane | 0.710 ug/L } Tier I-type |
| | |
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| | |

Low-level contamination (J if ≤ QL) for Ethane, Ethene, Methane also observed in Trip Blanks → all ~~reported at QL~~ estimated (J) due to uncertainty < RL. 11/30/06

TBs: Methane: 0.093 to 0.110 ug/L
Ethene: 0.006 – 0.010 ug/L (all < RL)
Ethane: 0.005 – 0.0025 ug/L (all < RL)



11/30/06

**C. Blank Results (continued)**

**Actions:** Blank Contamination: Determine the maximum concentration of each analyte based upon a review of all blanks (laboratory blanks and field equipment rinsate blanks). For Water: sample results which are greater than the PQL but less than 5 times the amount found in the associated blank are negated (qualified U) at the level found in the sample. For Soil/Sediment: sample results which are greater than the PQL but less than 5 times the amount found in the associated blanks are qualified "B" to indicate that the analyte was also found in the associated blank(s) – this is the action for non-matrix matched blanks (e.g., aqueous field rinsate blanks associated with soil/sediment samples) -- reference QAPP Worksheet #29c. Data flagged "B" may be biased high. No actions are taken for results greater than 5x the blank level. No actions are taken to qualify field equipment rinsate blank results, unless contamination observed in associated aqueous method blank.

Negative Baseline Drift: Any blank reported with a negative result for which the absolute value was greater than the PQL, are evaluated for this project using the absolute value of the blank result as the rule for action. If the sample result was > PQL but < the absolute value of the blank concentration, estimate the nondetect and detect results (UJ and J). These results may be biased low. No actions are taken for results greater than the absolute value of the blank level (negative baseline drift). The action for negative baseline drift affects all associated field samples and field equipment rinsate blank samples analyzed in the SDG.

| | Analyte | Maximum Blank Concentration (Units) | Blank Action Level (BAL) (Units) | Actions/Affected Samples |
|---|---|---|---|---|
| EB: | Ethane | 0.013 ug/L | NA for Tier I* | See comments: U results reported |
| EB: | Ethene | 0.016 ug/L | NA Tier I* | < QLs at level of QL (=RL) |
| EB: | Methane | 0.7 ug/L J | NA for Tier I* | Negate all results < ~~EB~~ QL level & raise RL to QLs for non-detects. (J) all detects ~~> RL~~ potential high bias from EB. JWC 11/30/06 |
| | | | 5xEB = 3.5 ug/L | |
| | | | <5x EB | |
| | | | | JWC 11/30/06 Action affects all samples except: TBS; SH-185/09-26-06; WP-08/09-26-06; SH-219/09-26-06; SH-193/09-29-06. |
| EB: | TDS | 11 | NA for Tier I* | No Action - all results > order-of-magnitude of EB level. |
| EB: | Na | 56 ug/L | 280 ug/L | No Action - all results > BAL |
| EB: | Zn | 7.8 ug/L | 39.0 ug/L | negate (U) all detected results in GW. |

*Tier I-type DV review does not require "formal" blank actions - judgment used to negate all ethane & ethene results reported < QLs due to observed low-levels ("J" values) < QLs in EB. Methane: judgment to negate (U) all results < ~~EB~~ Level & raise all RLs for non-detects to the QL. JWC 11/30/06

## D. Matrix QC Results

1. Matrix Spike Recoveries *[QAPP Worksheet #11b and #24a]*

Matrix spike (MS) results were reviewed to assess the accuracy of the results relative to the specific sample matrix.

- Were matrix spike (MS) results present for all required analytes at the proper frequency as required by the Site QAPP? (Yes) / No. Were matrix spike recovery criteria met? **Yes** / **No.**

**QAPP MS Recovery Criteria:**

Metals and TOC in all matrices: 75-125%

All other parameters: 80-120%

List the affected analytes and actions in the table below.

**Actions:** If the spike recovery was > upper control limit, estimate (J) all positive results. No action is taken for non-detects. If the spike recovery fell within the range of 30-74% for metals or within the range of 30-79% for the other parameters, estimate (UJ or J) all sample results. If the spike recoveries were less than 30% for any parameter, reject (R) the nondetect results as unusable and estimate (J) the positive results for extremely low bias.

If the sample concentration exceeds the spike-added concentration by a factor of 4 or more, no action is taken because the spike level was "swamped-out" by the native concentration in the sample.

**Matrix Spike (MS) Accuracy Action Table**

| Analyte | MS % Recovery | Action | Comments/Affected Samples |
|---|---|---|---|
| Ca | 60% | (J) | GW All results - potential low bias |
| Na | 51% | NONE | sample >4x spike level |
| Sulfide | 16% | (J) (UJ)* | all GW results - potential low bias since this is a Tier I and because LCS was in-control; professional judgement used to accept all non-detected results as estimated (UJ) rather than reject them - OK for "non-definitive" project uses (not risk assessment). |
| $Fe^{+2}$ | 246% | NONE | MS/MSD recovered high - No action because all results non-detected assoc. with this batch, therefore, a high bias is not expected. |

**MS Sample ID#:** SH-24S / 09-28-06 (Lab #P0609516 data only assoc. with WP-03, SH-24S, and OW-212A only)

Lab qualified Ca "N" all samples even EB. Removed qual from EB during review.

Note: Lab did another MS/MSD on WP-03 and obtained 100% recovery; MS/MSD on SH-24S anomalous.

MS Actions do not affect EB.



DC
11/30/06.

**D. Matrix QC Results (continued)**

2. Sample/Matrix Duplicate Results *[QAPP Worksheet #11b and #24a]*

Matrix (laboratory) duplicate (MD) results were reviewed to access the precision of the results relative to the specific sample matrix.

- Were matrix duplicate (MD) analyses present for all analytes at the proper frequency as required by the Site QAPP? **Yes / No.** Were criteria as defined below, met for all analytes? **Yes / No.**

List the analytes affected and actions in the table below.

| | | |
|---|---|---|
| Site QAPP Control Limits: | Aqueous | RPD ≤ 20% for results > 5x QL<br>difference ± QL for results < 5x QL |
| | Soil/Sediment | RPD ≤ 35% for results > 5x QL<br>difference ± 2x QL for results < 5x QL |

**Actions:** Estimate (J and UJ) all results for analytes which do not meet precision criteria.

**Matrix Duplicate (MD) Precision Action Table**

| Analyte | MD RPD | Action | Comments/Affected Samples |
|---|---|---|---|
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Comments: MD Sample ID #: SH-24S / 09-28-06



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**D. Matrix QC Results (continued)**

3. Field Duplicate Precision: *Worksheet #11b, #22a, and #22b*

Field duplicate sample results were reviewed to assess representativeness of the sample aliquot to the area sampled and the precision of the results relative to field sampling techniques.

- Was a field duplicate pair included in this SDG? (Yes) / **No.** If Yes, identify in the following table.

**Actions:** If field duplicate precision exceeded criteria, below, for any analyte, estimate (J and UJ) positive and non-detected results for the affected analytes in the field duplicate pair only. If severe imprecision was noted in the field duplicate results, qualify the remainder of the associated field sample data based on sound technical judgment.

| | | |
|---|---|---|
| Site QAPP Control Limits: | Aqueous | RPD ≤ 30% for results > 5x QL; difference ± 2x QL for results < 5x QL |
| | Soil/Sediment | RPD ≤ 50% for results > 5x QL; difference ± 4x QL for results < 5x QL |

**Field Duplicate (FD) Precision/Representativeness Actions**

Field Duplicate Pair Samples: SH-285/09-27-06 and OW-212/09-27-06

See Page 10a for field duplicate RPD calculations and Actions

Comments:

Methane – FD imprecision



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Field Duplicate Precision Evaluation Worksheet

**SDG: BU212 Groundwater**

Labs: AWHL for metals, alk, Cl, nitrate, sulfate, sulfide, TDS. Katahdin for TOC; Groundwater Analytical for TKN; Microseeps for gases & Fe+2.

| Analyte | Units | Sample Result SH-28S/09-27-06 | Qual | Field Duplicate Result OW-212/09-27-06 | Qual | Precision RPD* | Action | Comment |
|---|---|---|---|---|---|---|---|---|
| Aluminum - total | ug/L | 50 | U | 50 | U | NC | None | |
| Antimony - total | ug/L | 0.50 | U | 0.50 | U | NC | None | |
| Arsenic - total | ug/L | 1.0 | | 1.1 | | 10 | None | |
| Barium - total | ug/L | 17 | | 17 | | 0 | None | |
| Beryllium - total | ug/L | 0.20 | U | 0.20 | U | NC | None | |
| Cadmium - total | ug/L | 0.10 | U | 0.10 | U | NC | None | |
| Calcium - total | ug/L | 18000 | | 19000 | | 5 | None | |
| Chromium - total | ug/L | 0.50 | U | 0.50 | U | NC | None | |
| Cobalt - total | ug/L | 0.20 | U | 0.20 | U | NC | None | |
| Copper - total | ug/L | 2.0 | U | 2.0 | U | NC | None | |
| Iron - total | ug/L | 110 | | 110 | | 0 | None | |
| Lead - total | ug/L | 0.50 | U | 0.50 | U | NC | None | |
| Magnesium - total | ug/L | 5100 | | 5300 | | 4 | None | |
| Manganese - total | ug/L | 19 | | 20 | | 5 | None | |
| Mercury - total | ug/L | 0.20 | U | 0.20 | U | NC | None | |
| Nickel - total | ug/L | 2.0 | U | 2.0 | U | NC | None | |
| Potassium - total | ug/L | 3000 | | 3200 | | 6 | None | |
| Selenium - total | ug/L | 1.0 | U | 1.0 | U | NC | None | |
| Silver - total | ug/L | 0.10 | U | 0.10 | U | NC | None | |
| Sodium - total | ug/L | 62000 | | 62000 | | 0 | None | |
| Thallium - total | ug/L | 0.10 | U | 0.10 | U | NC | None | |
| Vanadium - total | ug/L | 1.6 | | 1.7 | | 6 | None | |
| Zinc- total | ug/L | 14 | | 14 | | NC | None | |
| Alkalinity | mg/L | 28 | | 28 | | 0 | None | |
| Chloride | mg/L | 130 | | 130 | | 0 | None | |
| Nitrate | mg/L | 1.6 | | 1.6 | | 0 | None | |
| Sulfate | mg/L | 13 | | 13 | | 0 | None | |
| Sulfide | mg/L | 0.23 | U | 0.38 | U | NC | None | |
| Total Dissolved Solids (TDS) | mg/L | 320 | | 320 | | 0 | None | |
| Total Kjeldahl Nitrogen (TKN) | mg/L | 0.5 | U | 0.6 | | 18 | None | |
| Total Organic Carbon (TOC) | mg/L | 2.2 | | 2.1 | | 5 | None | |
| Ethane | ug/L | 0.006 | J | 0.025 | U | 123 | None | Result < 5xQL; meets difference criterion |
| Ethene | ug/L | 0.013 | J | 0.007 | J | 60 | None | Result < 5xQL; meets difference criterion |
| Methane | ug/L | 2.200 | | 1.600 | | 32 | J | FD Imprecision |
| Iron, Ferrous ($Fe^{+2}$) | mg/L | 1.0 | U | 1.0 | U | NC | None | |

NC = Not calculated

* RPD criteria for FD precision: if result is > 5xQL, RPD criterion is < ± 30%; if result is < 5xQL, criterion is difference < ± 2xQL.

Date: 11/30/06 Data Reviewer: _____ New Environmental Horizons, Inc.

## E. Method QC

1. Laboratory Control Sample Recoveries *[QAPP Worksheet #11b and #24a]*

The laboratory control sample (LCS) and/or standard reference material (SRM) recoveries were reviewed to assess the accuracy of the results relative to the laboratory method performance of each step during the preparation, analysis, and reporting of environmental samples for each matrix.

- Was an appropriate (soil, sediment, or water) LCS performed for all analytes at the proper frequency? **Yes / No.**
- Did all analytes meet Site QAPP recovery criteria or 80-120% or vendor control limits for SRM? **Yes / No.**

If no, list the affected analytes and actions in the comment section, below.

**Actions:** If the LCS recovery for any analyte was greater than 120% or the established upper control limit for an SRM, estimate (J) all detected sample results. If the LCS recovery was less than 80% or less than the established lower control limit, estimate (J and UJ) the detected and non-detected results. Use professional judgment if LCS is severely low (< 50%, EPA Region I criterion for total metals), and the MS was out of control, to reject (R) associated results as unusable. Use professional judgment if LCS is out of control and MS is in control, to accept results for acceptable accuracy in the sample matrix.

**Laboratory Control Sample (LCS) Accuracy Action Table**

| Analyte | LCS % Recovery | Action | Comments/Affected Samples |
|---|---|---|---|
| | | | |
| | | | |
| | | | |

Comments:



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**E. Method QC (continued)**

2. ICP Method QC - ICP Interference Check Sample Results *[QAPP Worksheet #24a]*

ICP interference check procedures were performed to evaluate and verify the laboratory's interelement and background corrections for ICP-AES analyses and to generally evaluate interferences for isotope abundances on ICP-MS.

- Were analyte levels in the ICSA and ICSAB reported for all metals? **Yes** / **No**.
- Was the ICSA and ICSAB analyzed at the correct frequency? **Yes** / **No**.
- Did all analytes meet recovery criteria of 80-120% in the ICSAB solution? **Yes** / **No**.

If no to any of the above, list the affected samples, analytes, concentrations and actions in the section below.

Comments:

Not reported on summary form but spot check of raw data — OK

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**E. Method QC (continued)**

3. ICP-MS Method QC - Internal Standard Recovery Results *[QAPP Worksheet #24a]*

   - Were internal standards added to all samples analyzed by ICP-MS? **Yes / No.**
   - Did internal standards meet recovery criteria of 80-120% for CCVs and 30-120% for field samples as defined in the Site QAPP? **Yes / No.**

   If no, results might be uncertain with either a high or low bias dependent upon the internal standard recovery results. Professional judgment should be used to estimate (J and UJ) all affected field results for low (<30%) recoveries of the internal standards and to estimate detected results (J) for high recoveries of the internal standards. For internal standard recoveries that do not meet criteria in the CCV, professional judgment may be used to estimate (J or UJ) associated field sample results bracketed during analysis by the affected CCV.

   All actions must be described below.

Comments:

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**E. Method QC (continued)**

4. ICP Serial Dilution Results *[QAPP Worksheet #24a]*

   - Was a field sample used for ICP serial dilution analysis? **Yes / No.**
     **Sample ID#:** SH-243 09-28-06
   - Did all analytes meet criterion of < 15% Difference (%D) for values that were > 50x QL in the serial dilution results? **Yes / No.**

List the affected samples/analytes and actions in the table below.

**Actions:** Estimate (J) all positive results if the %D > 15% for results that are > 50x the QL.

**Serial Dilution Result Actions**

| Analyte | % Difference | Action / Affected Samples |
|---|---|---|
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## F. Verification of MDLs/RLs, Linear Ranges, IECs

1. Sample Detection Limits *[QAPP Worksheet #9b]*

Analyte detection limits were reviewed to assess if the sensitivity of the results met the project-specific requirements.

Review Form 10, or equivalent. For this project, Method Detection Limits (MDL) should be performed annually.

- Were current (annual) MDLs present for all analytes and all instruments used for analysis? **Yes** / **No.**
- Were the MDLs and/or QLs compliant with project-specific reporting limit (PQL) requirements as listed in Worksheet #9b of the Site QAPP? **Yes** / **No.** all comments OK for PALS

**Actions:** Non-detected results that do not meet required PQLs may not be usable for specific data uses such as risk assessment.

**Table of Results That Do Not Meet QAPP PQL (Sensitivity) Requirements**

| Analyte | Sample ID # (s) Affected | Highest QL reported ug/L (units) | QAPP PQL (units) ug/L | QAPP PAL (units) ug/L | Reason (% solids; blank action; etc.) | Usability Yes/No ? |
|---|---|---|---|---|---|---|
| Zn | SH-19S/09-29-06 | 31 | 20 | 1100 | blank action | Yes <PAL |
| As | OW-21QA EB | 0.092 | 0.092 | 0.045 | Method limitation | Yes- EB only non-detect NOT a FIELD SAMPLE |
| Cu | all non-detects | 2 | 1 | 150 | Lab RL raised due to low-level MB/lab blks | Yes <PAL |
| Ni | " " " | 2 | 0.5 | 73 | | YES <PAL |
| V | " " " | 1 | 0.5 | 3.6 | | YES <PAL |
| Sulfide | several non-detects reported at sample-specific QLs >0.2 mg/L | 0.38 | 0.2 mg/L | NA | method limit. | YES- No PAL |

Comments:

All results reported to RL (supported by low-level m calibration curve) except As to MDL as required by Phase 1B-5 Workplan Worksheet 9B (Sept 2006) to help meet PALS.



Note: Worksheet 9b's have incorrect values + units for PQLs for gases. Lab RLs were considered acceptable for project uses: ethane/ethene = 0.025 ug/L methane = 0.1 ug/L QLs. 11/30/06

**F. Verification of MDLs/RLs, Linear Ranges, IECs - continued**

**2. ICP Interelement Correction Factors** (For ICP-AES only – ~~Not~~ required for ICP-MS)

- Review Form 11, or equivalent, ICP-AES Interelement Correction Factors (Annually)
- Were the current (annual) IECs present in the data package? **Yes / No / NA**

ICP-MS data only

**Actions:** If no, use professional judgment to determine the severity of the affect on the results.

**3. ICP-AES and ICP-MS Linear Ranges (Annual)**

- Review Form 12, or equivalent, ICP Linear Ranges are checked daily and updated, at a minimum, annually for this project.
- Were current (annual) linear range data present in the data package? **Yes / No.**

**Actions:** If no, use professional judgment to determine the severity of the affect on the results.

Comments: LR from April 2005 – but No action taken because of professional judgment ICP-MS linearity range very stable over time.

**G. Preparation and Analysis Logs**

**1. Preparation Logs**

- Were sample preparation logs present and do they contain all samples/analytes performed in the SDG? **Yes / No.**

**2. Analysis Run Logs**

- Were analysis run logs present for all required samples/methods for this SDG? **Yes / No**
- Was the correct analytical sequence followed for the QC for each method? **Yes / No.**
- Were the calibration standards (*i.e.*, CCVs, CCBs, ICSA, ICSAB, ~~etc.~~) analyzed at the proper frequency consistent with the methods and the Site QAPP? **Yes / No.**

If no to questions for Form 13 or 14, list the affected samples/analytes and actions in the comment section, below.

Comments: _____



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NA

## H. Additional QA/QC Issues

### 1. Percent Solids

Percent solids data were reviewed to further assess the affect of the sample matrix on result quantitation.

- Review percent solids results for all soil and sediment samples.

  Specific note for Sediments: For this project, all sediment samples were freeze-dried prior to analysis for total metals. The freeze-dried percent solids value used to calculate the total metals results on a dry-weight basis; therefore, the freeze-dried percent solids is used to compare to EPA Region I DV criteria. For TOC, the "as-received" or "native" percent solids is used as sediment aliquots for these parameters were not freeze-dried prior to preparation and analysis.

- Were percent solids > 30% for all soil and sediment samples? **Yes / No**

If no, list affected samples and actions in the table, below.

**Actions:** If percent solids results were > 30%, no actions are required. If percent solids were < 30% but > 10%, use professional judgment to either estimate (UJ) or reject all non-detected results (R) and estimate (J) all detected results. If percent solids were < 10%, use professional judgment to either estimate (UJ) or reject (R) all results. Professional judgment may be used, for example, if data reported are useful to the risk assessors even in low percent solids sediments.

**Percent Solids Action Table**

| Sample ID | % Solids | Action / Comments |
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## 2. Sample Result Verification – Uncertainty Near the Level of Detection

Detected sample results were reviewed to assess certainty of results near the QLs. Results reported below the lab's QL, down to the IDL or MDL, have uncertainty near this statistically-derived level of detection.

- Were all sample results reported at ≥ QL or PQL? **Yes / (No)**
- If No, actions to estimate these results, reported between the MDL and the QL, may be taken.

**Action:** Estimate (J) all results < ~~2x the lab MDL and <~~ the QL that have not been previously qualified "J" due to other QC criteria, due to uncertainty in the accuracy of the quantitation at this low level. Estimate (UJ) the level of detection if the non-detected result is reported down to the MDL (and if not previously qualified due to other QC criteria exceedance) due to the uncertainty in the statistically-derived MDL.

(truncated IDs)

| Analyte | Sample ID# of affected results / matrix | | Comments |
|---|---|---|---|
| methane ethane ethene | All gases results reported "J" by lab as < QL (& not previously negated due to blank action) had "J" qual. maintained due to uncertainty < RL. | (J) | Uncertain < calibration range |
| As | (UJ): OW-212A | (UJ) | Uncertain at MDL |
| | (J): ~~CSHA-175~~ SH-175 | (J) | Uncertain < calibration range |
| | SH-25D | | |
| | WP-03 | | |
| | WP-05 | | |
| Fe+2 | WP-05 | (J) | Uncertain < calibration range |

Comments: As reported to MDL for PAL needs.



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## III. Review of Overall Data Package Compliance

Review of the overall data package was performed to determine if the laboratory met all EPA SW846 method and project QAPP requirements.

### Case Narrative Review

Review the Case Narrative provided with the data package and list all issues of noncompliance or QA/QC exceedances addressed in the case narrative that have not been previously evaluated in the Data Usability Review. For each issue listed, state what qualification to the data has been taken.

Comments:

Sample SH-19/09-29-06 (on COC) changed ID based on SHA request to SH-19S/09-29-06 (documentation in data pkg).

Removed "J" for methane + ethane Sample SH-19S/09-29-06 from EDD because not added by lab in data pkg (EDD error)

Removed "V" for ethene for this same sample – result detected at 0.150 ug/L.

**Sample result verification through re-calculation from the raw data was not performed, and was not required, for parameters undergoing a Tier II-type review or Tier I-type review.** ***[Reference QAPP Worksheet # 29b and #29c for data validation levels and modifications.]*** As sample result calculation verification was performed for the Tier-III type reviews previously documented for this Site for these media, and no anomalies were noted, it was assumed that the calculations were performed correctly for the remainder of the environmental data.

11/30/06

## Data Summary Key for Data Usability Checklist Review

J - The associated numerical value is an estimated quantity due to quality control criteria exceedance(s). The value is usable for project decisions as an estimated result. The Data Usability Report discusses the potential bias in estimated results.

U - The analyte was analyzed for, but was not detected. The associated numerical value is the sample-specific quantitation limit. The value is usable for project decisions as a nondetect result at the quantitation limit.

UJ - The analyte was analyzed for, but was not detected. The associated numerical value is the sample reporting/quantitation limit and is an estimated quantity. The value is usable for project decisions as a non-detect result at the estimated reporting limit.

B - The analyte was detected in an associated non-matrix-matched blank. The result is usable for project decisions.

R - Reject data due to severe or cumulative exceedance of quality control criteria. The value is unusable (analyte may or may not be present) for project decisions. Re-sampling and reanalysis is necessary for verification.

## List of Inorganic Data Usability Checklist Review Acronyms

| | | |
|---|---|---|
| CCB | - | Continuing Calibration Blank |
| CCV | - | Continuing Calibration Verification Sample |
| CLP | - | Contract Laboratory Program |
| CRDL | - | Contract Required Detection Limit |
| %D | - | Percent Difference |
| DQO | - | Data Quality Objective |
| EPA | - | Environmental Protection Agency |
| FD | - | Field Duplicate |
| g | - | gram |
| ICB | - | Initial Calibration Blank |
| ICP | - | Inductively Coupled Plasma Spectrophotometry |
| ICP-MS | - | ICP-Mass Spectrometry |
| ICS | - | Interference Check Sample |
| ICV | - | Initial Calibration Verification Sample |
| IDL | - | Instrument Detection Limit |
| IEC | - | Interelement Correction Factor |
| IS | - | Internal Standard (ICP-MS only) |
| Kg | - | kilogram |
| L | - | liter |
| LCS | - | Laboratory Control Sample |
| MD | - | Matrix Duplicate |
| MDL | - | Method Detection Limit |
| mg | - | milligram |
| mg/Kg | - | milligram per kilogram |
| MS | - | Matrix Spike |
| NA | - | Not Applicable |
| ND | - | Non-detect |
| PQL | - | Project Quantitation Limit |
| QA | - | Quality Assurance |
| QAPP | - | Quality Assurance Project Plan |
| QC | - | Quality Control |
| QL | - | Quantitation Limit |
| r | - | correlation coefficient of linear regression curve |
| RB | - | Rinsate Blank (equipment rinsate field blank) |
| RPD | - | Relative Percent Difference |
| SDG | - | Sample Delivery Group |
| SRM | - | Standard Reference Material |
| TAL | - | Target Analyte List |
| µg/Kg | - | micrograms per kilogram |
| µg/L | - | micrograms per liter |

## References

1. *Phase 1A Remedial Investigation*, Blackburn & Union Privileges Superfund Site, Walpole, Massachusetts, November 2000; inclusive of the *Project Operations Plan (POP), Sampling and Analysis Plan (SAP), and Quality Assurance Project Plan (QAPP).*

2. *Phase 1B-2 Remedial Investigation Work Plan*, Blackburn & Union Privileges Superfund Site, Walpole, Massachusetts, June 2003.

3. *Phase 1B-5 Work Plan Remedial Investigation Work Plan*, Blackburn & Union Privileges Superfund Site, Walpole Massachusetts, Rev 02, September 21, 2006

4. *EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses*, EPA Region I, December 1996.

5. *Region I Laboratory Data Validation Functional Guidelines for Evaluating Inorganics Analyses*, EPA Region I, February 1989.

6. *Guidance for Data Useability in Risk Assessment* (Part A), Publication 9285.7-09A, EPA 1992.

7. *Test Methods for Evaluating Solid Waste, Physical Chemical Methods, SW-846*, EPA Office of Solid Waste, Third Edition, Final Update, December 1996.

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*New Environmental Horizons, Inc.*

# DATA USABILITY ASSESSMENT

**Organic Analysis by Method 8260B and Method 8270C**
**EPA Region I Tier II – type review**

DEC 0 7 2006

**Client:** Sanborn, Head & Associates, Inc., Concord, New Hampshire

**Site:** Blackburn & Union Privileges Superfund Site, Walpole, Massachusetts
Phase 1B-5 Remedial Investigation

**Laboratory:** Alpha Woods Hole Labs (AWHL), Raynham, Massachusetts

**SDG:** BU212

**Lab ETR:** 0609103

**# Samples/Analyses:** 19 groundwaters, 1 equipment rinsate blank (EB), and 5 trip blanks (TB) for forty project-specific Volatile Organic Compounds (VOC)
19 groundwaters and 1 EB for nineteen project-specific Semivolatile Organic Compounds (SVOC)

**Initial Reviewer:** Dr. Nancy C. Rothman, New Environmental Horizons, Inc.

**Senior Reviewer:** Susan D. Chapnick, New Environmental Horizons, Inc.

**Date Completed:** December 4, 2006

An EPA Tier II-type Data Validation/Usability Checklist Review was performed on the data included in this SDG with the following intentions: 1) to determine if the data were generated and reported in accordance with the *Phase 1B-5 Remedial Investigation Work Plan, Blackburn & Union Privileges Superfund Site, Walpole, MA,* prepared by Sanborn, Head & Associates, Inc., Rev. 02, September 21, 2006 (Phase IB-5 Work Plan); USEPA *Test Methods for Evaluating Solid Waste, Physical Chemical Methods, SW-846, Third Edition, Final Update, December 1996 Method 8260B and Method 8270C;* Region I, *EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses,* December 1996; *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review*; Publication EPA A540/R-99/008, October 1999; and *Guidance for Data Useability in Risk Assessment* (Part A), Publication 9285.7-09A, USEPA 1992; 2) to determine if the data met the project data quality objectives for acceptable accuracy, precision, sensitivity; and technical usability; and 3) to update the project database with appropriate data quality qualifiers.

The Data Review Checklists, attached, were completed during this assessment to document the review.

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*Phone: (908) 874-5686 ◊ (781) 643-4294 Fax: (908) 874-4786*
*Email: n.rothman@patmedia.net ◊ s.chapnick@comcast.net*

The Chain-of-Custody listed sample "SH-19/09-29-06", which was changed to "SH-19S/09-29-06" based on client communication with the laboratory. The corrected sample identification is included in the validated database file.

All results for VOCs and SVOCs in the samples included in this SDG BU212 are usable for project objectives with one exception. The result for 2-chloroethylvinyl ether in sample SH-24S / 09-28-06 was rejected (R) due to less than 10% recovery of this compound in the matrix spike / matrix spike duplicate (MS/MSD) analysis performed on this sample. This result is not usable for project objectives. Several other results have been negated (U) due to blank actions or qualified as estimated (J or UJ) due to quality control criteria exceedance(s). Data users should note the uncertainties in the qualified results as summarized below in Table 1. The qualified (U, J, UJ) and unqualified results are usable for project objectives.

A Laboratory Fortified Blank (LFB), as designated in the original QAPP (2000), was not required for this Phase 1B-5 Remedial Investigation. As compared to previous investigations, the lowest-level initial calibration standards for VOCs and SVOCs were at very low concentrations and the laboratory analyzed full target analyte Laboratory Control samples/Laboratory Control Sample Duplicates (LCS/LCSD). Therefore, the laboratory was not required to perform the LFB analysis.

All non-detect results for VOCs and SVOCs in the groundwater samples met Project Action Limits (PALs) with the following exceptions: VOC compounds bromodichloromethane, bromoform, carbon tetrachloride, chloroform, dibromochloromethane, 1,2-dichloroethane, 1,2-dichloropropane, cis-1,3-dichloropropene, trans-1,3-dichloropropene, 1,1,2,2-tetrachloroethane, tetrachloroethene, trichloroethene, and vinyl chloride; and SVOCs benzo(a)pyrene and dibenz(a,h)anthracene. These non-detects did not meet PALs, as expected, due to method limitations. The data user will have to evaluate the usability of these elevated non-detected data on a case-by-case basis to determine if these data can be used for project objectives.

All other quality control information associated with accuracy, precision, sensitivity, and representativeness for the project-specific list of VOCs and SVOCs reported met project criteria for the samples in this SDG with the exceptions in the following table.

**Table 1. Summary of Data Validation/Usability Actions**

| Sample ID | Lab Chemical Name | Qualifier | Bias | Comment |
|---|---|---|---|---|
| SH-24S / 09-28-06 | 2-Chloroethylvinyl ether | R | | Unusable: < 10% MS/MSD recoveries |
| All samples | Bromomethane | UJ | I | Initial Calibration outside criteria |
| SH-27S / 09-25-06 | 1,1,1-Trichloroethane | J | I | Result uncertain below the calibration range |
| SH-23S / 09-25-06, SH-22S / 09-25-06, SH-27S / 09-25-06, SH-25S / 09-26-06, & SH-15D / 09-27-06 | Benz[a]anthracene | J | I | Result uncertain below the calibration range |

**Table 1. Summary of Data Validation/Usability Actions** - *continued*

| Sample ID | Lab Chemical Name | Qualifier | Bias | Comment |
|---|---|---|---|---|
| SH-15D / 09-27-06 & SH-25D / 09-27-06 | Benzo[g,h,i]perylene | J | I | Result uncertain below the calibration range |
| SH-23S / 09-25-06, SH-22S / 09-25-06, SH-27S / 09-25-06, SH-18D / 09-26-06, SH-25S / 09-26-06, SH-15D / 09-27-06, & SH-25D / 09-27-06 | Chrysene | J | I | Result uncertain below the calibration range |
| SH-27S / 09-25-06 & SH-25S / 09-26-06 | Fluoranthene | J | I | Result uncertain below the calibration range |
| SH-23S / 09-25-06, SH-27S / 09-25-06, SH-18S / 09-26-06, SH-18D / 09-26-06, SH-15D / 09-27-06, & SH-25D / 09-27-06 | Pyrene | J | I | Result uncertain below the calibration range |
| OW-212A / 09-28-06 | Benzo[b]fluoranthene, Benzo[k]fluoranthene, Benzo[a]pyrene, Indeno[1,2,3-cd]pyrene, Dibenz[a,h]anthracene, Acenaphthylene, Acenaphthene, Fluorene, Anthracene, & Carbazole | J | I | Result uncertain below the calibration range |
| All samples except: SH-21S / 09-26-06 | 2-Methylnaphthalene | U | | Negated due to Blank Action |
| WP-04 / 09-27-06 | Acenaphthene | U | | Negated due to Blank Action |
| SH-23S / 09-25-06, SH-18S / 09-26-06, & SH-15D / 09-27-06 | Acenaphthylene | U | | Negated due to Blank Action |
| SH-22S / 09-25-06, SH-17S / 09-25-06, SH-27S / 09-25-06, WP-01 / 09-26-06, SH-18S / 09-26-06, SH-25S / 09-26-06, WP-04 / 09-27-06, WP-03 / 09-28-06, & SH-19S / 09-29-06 | Anthracene | U | | Negated due to Blank Action |
| WP-03 / 09-28-06, SH-24S / 09-28-06, & OW-212A / 09-28-06 | Benz[a]anthracene | U | | Negated due to Blank Action |

**Table 1. Summary of Data Validation/Usability Actions** - *continued*

| Sample ID | Lab Chemical Name | Qualifier | Bias | Comment |
|---|---|---|---|---|
| All GW samples except: SH-19D / 09-25-06, SH-21S / 09-26-06, SH-18D / 09-26-06, WP-04 / 09-27-06, WP-05 / 09-27-06, SH-28S / 09-27-06, OW-212 / 09-27-06, & SH-19S / 09-29-06 | Benzo[a]pyrene | U | | Negated due to Blank Action |
| All GW samples except: SH-19D / 09-25-06, SH-21S / 09-26-06, WP-04 / 09-27-06, WP-05 / 09-27-06, OW-212 / 09-27-06, & SH-19S / 09-29-06 | Benzo[b]fluoranthene | U | | Negated due to Blank Action |
| SH-23S / 09-25-06, SH-22S / 09-25-06, SH-17S / 09-25-06, SH-27S / 09-25-06, WP-01 / 09-26-06, SH-18S / 09-26-06, SH-18D / 09-26-06, SH-25S / 09-26-06, WP-05 / 09-27-06, SH-28S / 09-27-06, & OW-212 / 09-27-06 | Benzo[g,h,i]perylene | U | | Negated due to Blank Action |
| WP-03 / 09-28-06, SH-24S / 09-28-06, OW-212A / 09-28-06, & SH-19S / 09-29-06 | Benzo[g,h,i]perylene | UJ | I | Negated due to Blank Action + Low Calibration verification |
| All GW samples except: SH-19D / 09-25-06, SH-17S / 09-25-06, SH-21S / 09-26-06, WP-04 / 09-27-06, WP-05 / 09-27-06, & OW-212 / 09-27-06 | Benzo[k]fluoranthene | U | | Negated due to Blank Action |
| All samples except: SH-17S / 09-25-06 & WP-03 / 09-28-06 | bis(2-Ethylhexyl)phthalate | U | | Negated due to Blank Action |
| SH-22S / 09-25-06, SH-25S / 09-26-06, & WP-04 / 09-27-06 | Carbazole | U | | Negated due to Blank Action |
| WP-03 / 09-28-06, SH-24S / 09-28-06, & OW-212A / 09-28-06 | Chrysene | U | | Negated due to Blank Action |

**Table 1. Summary of Data Validation/Usability Actions** - *continued*

| Sample ID | Lab Chemical Name | Qualifier | Bias | Comment |
|---|---|---|---|---|
| SH-23S / 09-25-06, SH-22S / 09-25-06, SH-27S / 09-25-06, WP-01 / 09-26-06, SH-18S / 09-26-06, SH-25S / 09-26-06, SH-15D / 09-27-06, SH-25D / 09-27-06, WP-03 / 09-28-06, & SH-24S / 09-28-06 | Dibenz[a,h]anthracene | U | | Negated due to Blank Action |
| All samples except: SH-17S / 09-25-06, SH-27S / 09-25-06, WP-01 / 09-26-06, SH-21S / 09-26-06, SH-25S / 09-26-07, & WP-04 / 09-27-06 | Fluoranthene | U | | Negated due to Blank Action |
| SH-22S / 09-25-06, SH-17S / 09-25-06, WP-04 / 09-27-06, SH-25D / 09-27-06, & WP-03 / 09-28-06 | Fluorene | U | | Negated due to Blank Action |
| All GW samples except: SH-19D / 09-25-06, SH-21S / 09-26-06, & WP-04 / 09-27-06 | Indeno[1,2,3-cd]pyrene | U | | Negated due to Blank Action |
| All samples except: SH-21S / 09-26-06 | Naphthalene | U | | Negated due to Blank Action |
| All samples except: SH-17S / 09-25-06, SH-21S / 09-26-06, & WP-04 / 09-27-06 | Phenanthrene | U | | Negated due to Blank Action |
| WP-03 / 09-28-06, SH-24S / 09-28-06, OW-212A / 09-28-06, & SH-19S / 09-29-06 | Pyrene | U | | Negated due to Blank Action |

*Qualifiers: U = Analyte is not detected; UJ = Non-detect is estimated; J = Result is estimated; R = Result is rejected and is unusable for project decisions.*

*Bias: L = Low; H = High; I = Indeterminate*

The qualified (J, UJ, and U) and unqualified results presented in the validated database, submitted electronically to Sanborn, Head & Associates, Inc. are considered usable for project objectives. The rejected result for 2-chloroethylvinyl ether in sample SH-24S / 09-28-06 is not usable for project decisions.

| Smpl | Lab_ID | Extr_Date | Anal_Date | Anal_Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TB-501 / 09-25-06 | 0609103-01 | | 09/28/06 | 8260 | VOCs | 74-87-3 | Chloromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-501 / 09-25-06 | 0609103-01 | | 09/28/06 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 0.50 | µg/L | U | | 0.50 | 1 | |
| TB-501 / 09-25-06 | 0609103-01 | | 09/28/06 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-501 / 09-25-06 | 0609103-01 | | 09/28/06 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-501 / 09-25-06 | 0609103-01 | | 09/28/06 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-501 / 09-25-06 | 0609103-01 | | 09/28/06 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-501 / 09-25-06 | 0609103-01 | | 09/28/06 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-501 / 09-25-06 | 0609103-01 | | 09/28/06 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-501 / 09-25-06 | 0609103-01 | | 09/28/06 | 8260 | VOCs | 67-66-3 | Chloroform | 0.20 | µg/L | U | | 0.20 | 1 | |
| TB-501 / 09-25-06 | 0609103-01 | | 09/28/06 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-501 / 09-25-06 | 0609103-01 | | 09/28/06 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-501 / 09-25-06 | 0609103-01 | | 09/28/06 | 8260 | VOCs | 71-43-2 | Benzene | 0.20 | µg/L | U | | 0.20 | 1 | |
| TB-501 / 09-25-06 | 0609103-01 | | 09/28/06 | 8260 | VOCs | 74-83-9 | Bromomethane | 0.20 | µg/L | UJ | I | 0.20 | 1 | Initial Calibration outside criteria |
| TB-501 / 09-25-06 | 0609103-01 | | 09/28/06 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| TB-501 / 09-25-06 | 0609103-01 | | 09/28/06 | 8260 | VOCs | 79-01-6 | Trichloroethene | 0.20 | µg/L | U | | 0.20 | 1 | |
| TB-501 / 09-25-06 | 0609103-01 | | 09/28/06 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 0.50 | µg/L | U | | 0.50 | 1 | |
| TB-501 / 09-25-06 | 0609103-01 | | 09/28/06 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| TB-501 / 09-25-06 | 0609103-01 | | 09/28/06 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-501 / 09-25-06 | 0609103-01 | | 09/28/06 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-501 / 09-25-06 | 0609103-01 | | 09/28/06 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 0.50 | µg/L | U | | 0.50 | 1 | |
| TB-501 / 09-25-06 | 0609103-01 | | 09/28/06 | 8260 | VOCs | 108-88-3 | Toluene | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-501 / 09-25-06 | 0609103-01 | | 09/28/06 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 0.50 | µg/L | U | | 0.50 | 1 | |
| TB-501 / 09-25-06 | 0609103-01 | | 09/28/06 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| TB-501 / 09-25-06 | 0609103-01 | | 09/28/06 | 8260 | VOCs | 75-00-3 | Chloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-501 / 09-25-06 | 0609103-01 | | 09/28/06 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-501 / 09-25-06 | 0609103-01 | | 09/28/06 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 0.20 | µg/L | U | | 0.20 | 1 | |
| TB-501 / 09-25-06 | 0609103-01 | | 09/28/06 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| TB-501 / 09-25-06 | 0609103-01 | | 09/28/06 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-501 / 09-25-06 | 0609103-01 | | 09/28/06 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-501 / 09-25-06 | 0609103-01 | | 09/28/06 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4.0 | µg/L | U | | 4.0 | 1 | |
| TB-501 / 09-25-06 | 0609103-01 | | 09/28/06 | 8260 | VOCs | 95-47-6 | o-Xylene | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-501 / 09-25-06 | 0609103-01 | | 09/28/06 | 8260 | VOCs | 100-42-5 | Styrene | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-501 / 09-25-06 | 0609103-01 | | 09/28/06 | 8260 | VOCs | 75-25-2 | Bromoform | 0.50 | µg/L | U | | 0.50 | 1 | |
| TB-501 / 09-25-06 | 0609103-01 | | 09/28/06 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| TB-501 / 09-25-06 | 0609103-01 | | 09/28/06 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-501 / 09-25-06 | 0609103-01 | | 09/28/06 | 8260 | VOCs | 67-64-1 | Acetone | 5.0 | µg/L | U | | 5.0 | 1 | |
| TB-501 / 09-25-06 | 0609103-01 | | 09/28/06 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-501 / 09-25-06 | 0609103-01 | | 09/28/06 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-501 / 09-25-06 | 0609103-01 | | 09/28/06 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-501 / 09-25-06 | 0609103-01 | | 09/28/06 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-23S / 09-25-06 | 0609103-02 | | 09/28/06 | 8260 | VOCs | 74-87-3 | Chloromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-23S / 09-25-06 | 0609103-02 | | 09/28/06 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-23S / 09-25-06 | 0609103-02 | | 09/28/06 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-23S / 09-25-06 | 0609103-02 | | 09/28/06 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-23S / 09-25-06 | 0609103-02 | | 09/28/06 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-23S / 09-25-06 | 0609103-02 | | 09/28/06 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-23S / 09-25-06 | 0609103-02 | | 09/28/06 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-23S / 09-25-06 | 0609103-02 | | 09/28/06 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-23S / 09-25-06 | 0609103-02 | | 09/28/06 | 8260 | VOCs | 67-66-3 | Chloroform | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-23S / 09-25-06 | 0609103-02 | | 09/28/06 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-23S / 09-25-06 | 0609103-02 | | 09/28/06 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-23S / 09-25-06 | 0609103-02 | | 09/28/06 | 8260 | VOCs | 71-43-2 | Benzene | 0.20 | µg/L | U | | 0.20 | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low, H = High, I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Extr_Date | Anal_Date | Anal_Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-23S / 09-25-06 | 0609103-02 | | 09/28/06 | 8260 | VOCs | 74-83-9 | Bromomethane | 0.20 | µg/L | UJ | I | 0.20 | 1 | Initial Calibration outside criteria |
| SH-23S / 09-25-06 | 0609103-02 | | 09/28/06 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-23S / 09-25-06 | 0609103-02 | | 09/28/06 | 8260 | VOCs | 79-01-6 | Trichloroethene | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-23S / 09-25-06 | 0609103-02 | | 09/28/06 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-23S / 09-25-06 | 0609103-02 | | 09/28/06 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-23S / 09-25-06 | 0609103-02 | | 09/28/06 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-23S / 09-25-06 | 0609103-02 | | 09/28/06 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-23S / 09-25-06 | 0609103-02 | | 09/28/06 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-23S / 09-25-06 | 0609103-02 | | 09/28/06 | 8260 | VOCs | 108-88-3 | Toluene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-23S / 09-25-06 | 0609103-02 | | 09/28/06 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-23S / 09-25-06 | 0609103-02 | | 09/28/06 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-23S / 09-25-06 | 0609103-02 | | 09/28/06 | 8260 | VOCs | 75-00-3 | Chloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-23S / 09-25-06 | 0609103-02 | | 09/28/06 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-23S / 09-25-06 | 0609103-02 | | 09/28/06 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-23S / 09-25-06 | 0609103-02 | | 09/28/06 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-23S / 09-25-06 | 0609103-02 | | 09/28/06 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-23S / 09-25-06 | 0609103-02 | | 09/28/06 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-23S / 09-25-06 | 0609103-02 | | 09/28/06 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4.0 | µg/L | U | | 4.0 | 1 | |
| SH-23S / 09-25-06 | 0609103-02 | | 09/28/06 | 8260 | VOCs | 95-47-6 | o-Xylene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-23S / 09-25-06 | 0609103-02 | | 09/28/06 | 8260 | VOCs | 100-42-5 | Styrene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-23S / 09-25-06 | 0609103-02 | | 09/28/06 | 8260 | VOCs | 75-25-2 | Bromoform | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-23S / 09-25-06 | 0609103-02 | | 09/28/06 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-23S / 09-25-06 | 0609103-02 | | 09/28/06 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-23S / 09-25-06 | 0609103-02 | | 09/28/06 | 8260 | VOCs | 67-64-1 | Acetone | 5.0 | µg/L | U | | 5.0 | 1 | |
| SH-23S / 09-25-06 | 0609103-02 | | 09/28/06 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-23S / 09-25-06 | 0609103-02 | | 09/28/06 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-23S / 09-25-06 | 0609103-02 | | 09/28/06 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-23S / 09-25-06 | 0609103-02 | | 09/28/06 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-22S / 09-25-06 | 0609103-03 | | 09/28/06 | 8260 | VOCs | 74-87-3 | Chloromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-22S / 09-25-06 | 0609103-03 | | 09/28/06 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-22S / 09-25-06 | 0609103-03 | | 09/28/06 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-22S / 09-25-06 | 0609103-03 | | 09/28/06 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-22S / 09-25-06 | 0609103-03 | | 09/28/06 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-22S / 09-25-06 | 0609103-03 | | 09/28/06 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-22S / 09-25-06 | 0609103-03 | | 09/28/06 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-22S / 09-25-06 | 0609103-03 | | 09/28/06 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-22S / 09-25-06 | 0609103-03 | | 09/28/06 | 8260 | VOCs | 67-66-3 | Chloroform | 0.40 | µg/L | | | 0.20 | 1 | |
| SH-22S / 09-25-06 | 0609103-03 | | 09/28/06 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-22S / 09-25-06 | 0609103-03 | | 09/28/06 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-22S / 09-25-06 | 0609103-03 | | 09/28/06 | 8260 | VOCs | 71-43-2 | Benzene | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-22S / 09-25-06 | 0609103-03 | | 09/28/06 | 8260 | VOCs | 74-83-9 | Bromomethane | 0.20 | µg/L | UJ | I | 0.20 | 1 | Initial Calibration outside criteria |
| SH-22S / 09-25-06 | 0609103-03 | | 09/28/06 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-22S / 09-25-06 | 0609103-03 | | 09/28/06 | 8260 | VOCs | 79-01-6 | Trichloroethene | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-22S / 09-25-06 | 0609103-03 | | 09/28/06 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-22S / 09-25-06 | 0609103-03 | | 09/28/06 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-22S / 09-25-06 | 0609103-03 | | 09/28/06 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-22S / 09-25-06 | 0609103-03 | | 09/28/06 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-22S / 09-25-06 | 0609103-03 | | 09/28/06 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-22S / 09-25-06 | 0609103-03 | | 09/28/06 | 8260 | VOCs | 108-88-3 | Toluene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-22S / 09-25-06 | 0609103-03 | | 09/28/06 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-22S / 09-25-06 | 0609103-03 | | 09/28/06 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-22S / 09-25-06 | 0609103-03 | | 09/28/06 | 8260 | VOCs | 75-00-3 | Chloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low, H = High, I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Extr_Date | Anal_Date | Anal_Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-22S / 09-25-06 | 0609103-03 | | 09/28/06 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-22S / 09-25-06 | 0609103-03 | | 09/28/06 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-22S / 09-25-06 | 0609103-03 | | 09/28/06 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-22S / 09-25-06 | 0609103-03 | | 09/28/06 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-22S / 09-25-06 | 0609103-03 | | 09/28/06 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-22S / 09-25-06 | 0609103-03 | | 09/28/06 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4.0 | µg/L | U | | 4.0 | 1 | |
| SH-22S / 09-25-06 | 0609103-03 | | 09/28/06 | 8260 | VOCs | 95-47-6 | o-Xylene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-22S / 09-25-06 | 0609103-03 | | 09/28/06 | 8260 | VOCs | 100-42-5 | Styrene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-22S / 09-25-06 | 0609103-03 | | 09/28/06 | 8260 | VOCs | 75-25-2 | Bromoform | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-22S / 09-25-06 | 0609103-03 | | 09/28/06 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-22S / 09-25-06 | 0609103-03 | | 09/28/06 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-22S / 09-25-06 | 0609103-03 | | 09/28/06 | 8260 | VOCs | 67-64-1 | Acetone | 5.0 | µg/L | U | | 5.0 | 1 | |
| SH-22S / 09-25-06 | 0609103-03 | | 09/28/06 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-22S / 09-25-06 | 0609103-03 | | 09/28/06 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-22S / 09-25-06 | 0609103-03 | | 09/28/06 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-22S / 09-25-06 | 0609103-03 | | 09/28/06 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-19D / 09-25-06 | 0609103-04 | | 09/28/06 | 8260 | VOCs | 74-87-3 | Chloromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-19D / 09-25-06 | 0609103-04 | | 09/28/06 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-19D / 09-25-06 | 0609103-04 | | 09/28/06 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-19D / 09-25-06 | 0609103-04 | | 09/28/06 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-19D / 09-25-06 | 0609103-04 | | 09/28/06 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-19D / 09-25-06 | 0609103-04 | | 09/28/06 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-19D / 09-25-06 | 0609103-04 | | 09/28/06 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-19D / 09-25-06 | 0609103-04 | | 09/28/06 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-19D / 09-25-06 | 0609103-04 | | 09/28/06 | 8260 | VOCs | 67-66-3 | Chloroform | 0.26 | µg/L | | | 0.20 | 1 | |
| SH-19D / 09-25-06 | 0609103-04 | | 09/28/06 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-19D / 09-25-06 | 0609103-04 | | 09/28/06 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-19D / 09-25-06 | 0609103-04 | | 09/28/06 | 8260 | VOCs | 71-43-2 | Benzene | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-19D / 09-25-06 | 0609103-04 | | 09/28/06 | 8260 | VOCs | 74-83-9 | Bromomethane | 0.20 | µg/L | UJ | I | 0.20 | 1 | Initial Calibration outside criteria |
| SH-19D / 09-25-06 | 0609103-04 | | 09/28/06 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-19D / 09-25-06 | 0609103-04 | | 09/28/06 | 8260 | VOCs | 79-01-6 | Trichloroethene | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-19D / 09-25-06 | 0609103-04 | | 09/28/06 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-19D / 09-25-06 | 0609103-04 | | 09/28/06 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-19D / 09-25-06 | 0609103-04 | | 09/28/06 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-19D / 09-25-06 | 0609103-04 | | 09/28/06 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-19D / 09-25-06 | 0609103-04 | | 09/28/06 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-19D / 09-25-06 | 0609103-04 | | 09/28/06 | 8260 | VOCs | 108-88-3 | Toluene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-19D / 09-25-06 | 0609103-04 | | 09/28/06 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-19D / 09-25-06 | 0609103-04 | | 09/28/06 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-19D / 09-25-06 | 0609103-04 | | 09/28/06 | 8260 | VOCs | 75-00-3 | Chloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-19D / 09-25-06 | 0609103-04 | | 09/28/06 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-19D / 09-25-06 | 0609103-04 | | 09/28/06 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-19D / 09-25-06 | 0609103-04 | | 09/28/06 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-19D / 09-25-06 | 0609103-04 | | 09/28/06 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-19D / 09-25-06 | 0609103-04 | | 09/28/06 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-19D / 09-25-06 | 0609103-04 | | 09/28/06 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4.0 | µg/L | U | | 4.0 | 1 | |
| SH-19D / 09-25-06 | 0609103-04 | | 09/28/06 | 8260 | VOCs | 95-47-6 | o-Xylene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-19D / 09-25-06 | 0609103-04 | | 09/28/06 | 8260 | VOCs | 100-42-5 | Styrene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-19D / 09-25-06 | 0609103-04 | | 09/28/06 | 8260 | VOCs | 75-25-2 | Bromoform | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-19D / 09-25-06 | 0609103-04 | | 09/28/06 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-19D / 09-25-06 | 0609103-04 | | 09/28/06 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-19D / 09-25-06 | 0609103-04 | | 09/28/06 | 8260 | VOCs | 67-64-1 | Acetone | 5.0 | µg/L | U | | 5.0 | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low, H = High, I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Extr_Date | Anal_Date | Anal_Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-19D / 09-25-06 | 0609103-04 | | 09/28/06 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-19D / 09-25-06 | 0609103-04 | | 09/28/06 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-19D / 09-25-06 | 0609103-04 | | 09/28/06 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-19D / 09-25-06 | 0609103-04 | | 09/28/06 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-17S / 09-25-06 | 0609103-05 | | 09/28/06 | 8260 | VOCs | 74-87-3 | Chloromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-17S / 09-25-06 | 0609103-05 | | 09/28/06 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-17S / 09-25-06 | 0609103-05 | | 09/28/06 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-17S / 09-25-06 | 0609103-05 | | 09/28/06 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-17S / 09-25-06 | 0609103-05 | | 09/28/06 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-17S / 09-25-06 | 0609103-05 | | 09/28/06 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-17S / 09-25-06 | 0609103-05 | | 09/28/06 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-17S / 09-25-06 | 0609103-05 | | 09/28/06 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-17S / 09-25-06 | 0609103-05 | | 09/28/06 | 8260 | VOCs | 67-66-3 | Chloroform | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-17S / 09-25-06 | 0609103-05 | | 09/28/06 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-17S / 09-25-06 | 0609103-05 | | 09/28/06 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-17S / 09-25-06 | 0609103-05 | | 09/28/06 | 8260 | VOCs | 71-43-2 | Benzene | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-17S / 09-25-06 | 0609103-05 | | 09/28/06 | 8260 | VOCs | 74-83-9 | Bromomethane | 0.20 | µg/L | UJ | I | 0.20 | 1 | Initial Calibration outside criteria |
| SH-17S / 09-25-06 | 0609103-05 | | 09/28/06 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-17S / 09-25-06 | 0609103-05 | | 09/28/06 | 8260 | VOCs | 79-01-6 | Trichloroethene | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-17S / 09-25-06 | 0609103-05 | | 09/28/06 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-17S / 09-25-06 | 0609103-05 | | 09/28/06 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-17S / 09-25-06 | 0609103-05 | | 09/28/06 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-17S / 09-25-06 | 0609103-05 | | 09/28/06 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-17S / 09-25-06 | 0609103-05 | | 09/28/06 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-17S / 09-25-06 | 0609103-05 | | 09/28/06 | 8260 | VOCs | 108-88-3 | Toluene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-17S / 09-25-06 | 0609103-05 | | 09/28/06 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-17S / 09-25-06 | 0609103-05 | | 09/28/06 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-17S / 09-25-06 | 0609103-05 | | 09/28/06 | 8260 | VOCs | 75-00-3 | Chloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-17S / 09-25-06 | 0609103-05 | | 09/28/06 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-17S / 09-25-06 | 0609103-05 | | 09/28/06 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-17S / 09-25-06 | 0609103-05 | | 09/28/06 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-17S / 09-25-06 | 0609103-05 | | 09/28/06 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-17S / 09-25-06 | 0609103-05 | | 09/28/06 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-17S / 09-25-06 | 0609103-05 | | 09/28/06 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4.0 | µg/L | U | | 4.0 | 1 | |
| SH-17S / 09-25-06 | 0609103-05 | | 09/28/06 | 8260 | VOCs | 95-47-6 | o-Xylene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-17S / 09-25-06 | 0609103-05 | | 09/28/06 | 8260 | VOCs | 100-42-5 | Styrene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-17S / 09-25-06 | 0609103-05 | | 09/28/06 | 8260 | VOCs | 75-25-2 | Bromoform | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-17S / 09-25-06 | 0609103-05 | | 09/28/06 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-17S / 09-25-06 | 0609103-05 | | 09/28/06 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-17S / 09-25-06 | 0609103-05 | | 09/28/06 | 8260 | VOCs | 67-64-1 | Acetone | 5.0 | µg/L | U | | 5.0 | 1 | |
| SH-17S / 09-25-06 | 0609103-05 | | 09/28/06 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-17S / 09-25-06 | 0609103-05 | | 09/28/06 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-17S / 09-25-06 | 0609103-05 | | 09/28/06 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-17S / 09-25-06 | 0609103-05 | | 09/28/06 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-27S / 09-25-06 | 0609103-06 | | 09/28/06 | 8260 | VOCs | 74-87-3 | Chloromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-27S / 09-25-06 | 0609103-06 | | 09/28/06 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-27S / 09-25-06 | 0609103-06 | | 09/28/06 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-27S / 09-25-06 | 0609103-06 | | 09/28/06 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-27S / 09-25-06 | 0609103-06 | | 09/28/06 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-27S / 09-25-06 | 0609103-06 | | 09/28/06 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-27S / 09-25-06 | 0609103-06 | | 09/28/06 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-27S / 09-25-06 | 0609103-06 | | 09/28/06 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2.0 | µg/L | U | | 2.0 | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low, H = High, I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Extr_Date | Anal_Date | Anal_Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-27S / 09-25-06 | 0609103-06 | | 09/28/06 | 8260 | VOCs | 67-66-3 | Chloroform | 1.0 | µg/L | | | 0.20 | 1 | |
| SH-27S / 09-25-06 | 0609103-06 | | 09/28/06 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 1.1 | µg/L | J | I | 2.0 | 1 | Result uncertain below the calibration range |
| SH-27S / 09-25-06 | 0609103-06 | | 09/28/06 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-27S / 09-25-06 | 0609103-06 | | 09/28/06 | 8260 | VOCs | 71-43-2 | Benzene | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-27S / 09-25-06 | 0609103-06 | | 09/28/06 | 8260 | VOCs | 74-83-9 | Bromomethane | 0.20 | µg/L | UJ | I | 0.20 | 1 | Initial Calibration outside criteria |
| SH-27S / 09-25-06 | 0609103-06 | | 09/28/06 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-27S / 09-25-06 | 0609103-06 | | 09/28/06 | 8260 | VOCs | 79-01-6 | Trichloroethene | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-27S / 09-25-06 | 0609103-06 | | 09/28/06 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-27S / 09-25-06 | 0609103-06 | | 09/28/06 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-27S / 09-25-06 | 0609103-06 | | 09/28/06 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-27S / 09-25-06 | 0609103-06 | | 09/28/06 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-27S / 09-25-06 | 0609103-06 | | 09/28/06 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-27S / 09-25-06 | 0609103-06 | | 09/28/06 | 8260 | VOCs | 108-88-3 | Toluene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-27S / 09-25-06 | 0609103-06 | | 09/28/06 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-27S / 09-25-06 | 0609103-06 | | 09/28/06 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-27S / 09-25-06 | 0609103-06 | | 09/28/06 | 8260 | VOCs | 75-00-3 | Chloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-27S / 09-25-06 | 0609103-06 | | 09/28/06 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-27S / 09-25-06 | 0609103-06 | | 09/28/06 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-27S / 09-25-06 | 0609103-06 | | 09/28/06 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-27S / 09-25-06 | 0609103-06 | | 09/28/06 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-27S / 09-25-06 | 0609103-06 | | 09/28/06 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-27S / 09-25-06 | 0609103-06 | | 09/28/06 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4.0 | µg/L | U | | 4.0 | 1 | |
| SH-27S / 09-25-06 | 0609103-06 | | 09/28/06 | 8260 | VOCs | 95-47-6 | o-Xylene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-27S / 09-25-06 | 0609103-06 | | 09/28/06 | 8260 | VOCs | 100-42-5 | Styrene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-27S / 09-25-06 | 0609103-06 | | 09/28/06 | 8260 | VOCs | 75-25-2 | Bromoform | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-27S / 09-25-06 | 0609103-06 | | 09/28/06 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-27S / 09-25-06 | 0609103-06 | | 09/28/06 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-27S / 09-25-06 | 0609103-06 | | 09/28/06 | 8260 | VOCs | 67-64-1 | Acetone | 5.0 | µg/L | U | | 5.0 | 1 | |
| SH-27S / 09-25-06 | 0609103-06 | | 09/28/06 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-27S / 09-25-06 | 0609103-06 | | 09/28/06 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-27S / 09-25-06 | 0609103-06 | | 09/28/06 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-27S / 09-25-06 | 0609103-06 | | 09/28/06 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-502 / 09-26-06 | 0609103-07 | | 09/28/06 | 8260 | VOCs | 74-87-3 | Chloromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-502 / 09-26-06 | 0609103-07 | | 09/28/06 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 0.50 | µg/L | U | | 0.50 | 1 | |
| TB-502 / 09-26-06 | 0609103-07 | | 09/28/06 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-502 / 09-26-06 | 0609103-07 | | 09/28/06 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-502 / 09-26-06 | 0609103-07 | | 09/28/06 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-502 / 09-26-06 | 0609103-07 | | 09/28/06 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-502 / 09-26-06 | 0609103-07 | | 09/28/06 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-502 / 09-26-06 | 0609103-07 | | 09/28/06 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-502 / 09-26-06 | 0609103-07 | | 09/28/06 | 8260 | VOCs | 67-66-3 | Chloroform | 0.20 | µg/L | U | | 0.20 | 1 | |
| TB-502 / 09-26-06 | 0609103-07 | | 09/28/06 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-502 / 09-26-06 | 0609103-07 | | 09/28/06 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-502 / 09-26-06 | 0609103-07 | | 09/28/06 | 8260 | VOCs | 71-43-2 | Benzene | 0.20 | µg/L | U | | 0.20 | 1 | |
| TB-502 / 09-26-06 | 0609103-07 | | 09/28/06 | 8260 | VOCs | 74-83-9 | Bromomethane | 0.20 | µg/L | UJ | I | 0.20 | 1 | Initial Calibration outside criteria |
| TB-502 / 09-26-06 | 0609103-07 | | 09/28/06 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| TB-502 / 09-26-06 | 0609103-07 | | 09/28/06 | 8260 | VOCs | 79-01-6 | Trichloroethene | 0.20 | µg/L | U | | 0.20 | 1 | |
| TB-502 / 09-26-06 | 0609103-07 | | 09/28/06 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 0.50 | µg/L | U | | 0.50 | 1 | |
| TB-502 / 09-26-06 | 0609103-07 | | 09/28/06 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| TB-502 / 09-26-06 | 0609103-07 | | 09/28/06 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-502 / 09-26-06 | 0609103-07 | | 09/28/06 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-502 / 09-26-06 | 0609103-07 | | 09/28/06 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 0.50 | µg/L | U | | 0.50 | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low, H = High, I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Extr_Date | Anal_Date | Anal_Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TB-502 / 09-26-06 | 0609103-07 | | 09/28/06 | 8260 | VOCs | 108-88-3 | Toluene | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-502 / 09-26-06 | 0609103-07 | | 09/28/06 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 0.50 | µg/L | U | | 0.50 | 1 | |
| TB-502 / 09-26-06 | 0609103-07 | | 09/28/06 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| TB-502 / 09-26-06 | 0609103-07 | | 09/28/06 | 8260 | VOCs | 75-00-3 | Chloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-502 / 09-26-06 | 0609103-07 | | 09/28/06 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-502 / 09-26-06 | 0609103-07 | | 09/28/06 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 0.20 | µg/L | U | | 0.20 | 1 | |
| TB-502 / 09-26-06 | 0609103-07 | | 09/28/06 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| TB-502 / 09-26-06 | 0609103-07 | | 09/28/06 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-502 / 09-26-06 | 0609103-07 | | 09/28/06 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-502 / 09-26-06 | 0609103-07 | | 09/28/06 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4.0 | µg/L | U | | 4.0 | 1 | |
| TB-502 / 09-26-06 | 0609103-07 | | 09/28/06 | 8260 | VOCs | 95-47-6 | o-Xylene | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-502 / 09-26-06 | 0609103-07 | | 09/28/06 | 8260 | VOCs | 100-42-5 | Styrene | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-502 / 09-26-06 | 0609103-07 | | 09/28/06 | 8260 | VOCs | 75-25-2 | Bromoform | 0.50 | µg/L | U | | 0.50 | 1 | |
| TB-502 / 09-26-06 | 0609103-07 | | 09/28/06 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| TB-502 / 09-26-06 | 0609103-07 | | 09/28/06 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-502 / 09-26-06 | 0609103-07 | | 09/28/06 | 8260 | VOCs | 67-64-1 | Acetone | 5.0 | µg/L | U | | 5.0 | 1 | |
| TB-502 / 09-26-06 | 0609103-07 | | 09/28/06 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-502 / 09-26-06 | 0609103-07 | | 09/28/06 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-502 / 09-26-06 | 0609103-07 | | 09/28/06 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-502 / 09-26-06 | 0609103-07 | | 09/28/06 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-01 / 09-26-06 | 0609103-08 | | 09/29/06 | 8260 | VOCs | 74-87-3 | Chloromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-01 / 09-26-06 | 0609103-08 | | 09/29/06 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 0.50 | µg/L | U | | 0.50 | 1 | |
| WP-01 / 09-26-06 | 0609103-08 | | 09/29/06 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-01 / 09-26-06 | 0609103-08 | | 09/29/06 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-01 / 09-26-06 | 0609103-08 | | 09/29/06 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-01 / 09-26-06 | 0609103-08 | | 09/29/06 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-01 / 09-26-06 | 0609103-08 | | 09/29/06 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-01 / 09-26-06 | 0609103-08 | | 09/29/06 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-01 / 09-26-06 | 0609103-08 | | 09/29/06 | 8260 | VOCs | 67-66-3 | Chloroform | 0.20 | µg/L | U | | 0.20 | 1 | |
| WP-01 / 09-26-06 | 0609103-08 | | 09/29/06 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-01 / 09-26-06 | 0609103-08 | | 09/29/06 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-01 / 09-26-06 | 0609103-08 | | 09/29/06 | 8260 | VOCs | 71-43-2 | Benzene | 0.20 | µg/L | U | | 0.20 | 1 | |
| WP-01 / 09-26-06 | 0609103-08 | | 09/29/06 | 8260 | VOCs | 74-83-9 | Bromomethane | 0.20 | µg/L | UJ | I | 0.20 | 1 | Initial Calibration outside criteria |
| WP-01 / 09-26-06 | 0609103-08 | | 09/29/06 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| WP-01 / 09-26-06 | 0609103-08 | | 09/29/06 | 8260 | VOCs | 79-01-6 | Trichloroethene | 0.20 | µg/L | U | | 0.20 | 1 | |
| WP-01 / 09-26-06 | 0609103-08 | | 09/29/06 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 0.50 | µg/L | U | | 0.50 | 1 | |
| WP-01 / 09-26-06 | 0609103-08 | | 09/29/06 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| WP-01 / 09-26-06 | 0609103-08 | | 09/29/06 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-01 / 09-26-06 | 0609103-08 | | 09/29/06 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-01 / 09-26-06 | 0609103-08 | | 09/29/06 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 0.50 | µg/L | U | | 0.50 | 1 | |
| WP-01 / 09-26-06 | 0609103-08 | | 09/29/06 | 8260 | VOCs | 108-88-3 | Toluene | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-01 / 09-26-06 | 0609103-08 | | 09/29/06 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 0.50 | µg/L | U | | 0.50 | 1 | |
| WP-01 / 09-26-06 | 0609103-08 | | 09/29/06 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| WP-01 / 09-26-06 | 0609103-08 | | 09/29/06 | 8260 | VOCs | 75-00-3 | Chloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-01 / 09-26-06 | 0609103-08 | | 09/29/06 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-01 / 09-26-06 | 0609103-08 | | 09/29/06 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 0.20 | µg/L | U | | 0.20 | 1 | |
| WP-01 / 09-26-06 | 0609103-08 | | 09/29/06 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| WP-01 / 09-26-06 | 0609103-08 | | 09/29/06 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-01 / 09-26-06 | 0609103-08 | | 09/29/06 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-01 / 09-26-06 | 0609103-08 | | 09/29/06 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4.0 | µg/L | U | | 4.0 | 1 | |
| WP-01 / 09-26-06 | 0609103-08 | | 09/29/06 | 8260 | VOCs | 95-47-6 | o-Xylene | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-01 / 09-26-06 | 0609103-08 | | 09/29/06 | 8260 | VOCs | 100-42-5 | Styrene | 2.0 | µg/L | U | | 2.0 | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low, H = High, I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Extr_Date | Anal_Date | Anal_Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WP-01 / 09-26-06 | 0609103-08 | | 09/29/06 | 8260 | VOCs | 75-25-2 | Bromoform | 0.50 | µg/L | U | | 0.50 | 1 | |
| WP-01 / 09-26-06 | 0609103-08 | | 09/29/06 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| WP-01 / 09-26-06 | 0609103-08 | | 09/29/06 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-01 / 09-26-06 | 0609103-08 | | 09/29/06 | 8260 | VOCs | 67-64-1 | Acetone | 5.0 | µg/L | U | | 5.0 | 1 | |
| WP-01 / 09-26-06 | 0609103-08 | | 09/29/06 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-01 / 09-26-06 | 0609103-08 | | 09/29/06 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-01 / 09-26-06 | 0609103-08 | | 09/29/06 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-01 / 09-26-06 | 0609103-08 | | 09/29/06 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | | 09/28/06 | 8260 | VOCs | 74-87-3 | Chloromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | | 09/28/06 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | | 09/28/06 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | | 09/28/06 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | | 09/28/06 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | | 09/28/06 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | | 09/28/06 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | | 09/28/06 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | | 09/28/06 | 8260 | VOCs | 67-66-3 | Chloroform | 0.23 | µg/L | | | 0.20 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | | 09/28/06 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | | 09/28/06 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | | 09/28/06 | 8260 | VOCs | 71-43-2 | Benzene | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | | 09/28/06 | 8260 | VOCs | 74-83-9 | Bromomethane | 0.20 | µg/L | UJ | I | 0.20 | 1 | Initial Calibration outside criteria |
| SH-21S / 09-26-06 | 0609103-09 | | 09/28/06 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | | 09/28/06 | 8260 | VOCs | 79-01-6 | Trichloroethene | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | | 09/28/06 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | | 09/28/06 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | | 09/28/06 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | | 09/28/06 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | | 09/28/06 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | | 09/28/06 | 8260 | VOCs | 108-88-3 | Toluene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | | 09/28/06 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | | 09/28/06 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | | 09/28/06 | 8260 | VOCs | 75-00-3 | Chloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | | 09/28/06 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | | 09/28/06 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | | 09/28/06 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | | 09/28/06 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | | 09/28/06 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | | 09/28/06 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4.0 | µg/L | U | | 4.0 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | | 09/28/06 | 8260 | VOCs | 95-47-6 | o-Xylene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | | 09/28/06 | 8260 | VOCs | 100-42-5 | Styrene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | | 09/28/06 | 8260 | VOCs | 75-25-2 | Bromoform | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | | 09/28/06 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | | 09/28/06 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | | 09/28/06 | 8260 | VOCs | 67-64-1 | Acetone | 5.0 | µg/L | U | | 5.0 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | | 09/28/06 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | | 09/28/06 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | | 09/28/06 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | | 09/28/06 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-18S / 09-26-06 | 0609103-10 | | 09/28/06 | 8260 | VOCs | 74-87-3 | Chloromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-18S / 09-26-06 | 0609103-10 | | 09/28/06 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-18S / 09-26-06 | 0609103-10 | | 09/28/06 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-18S / 09-26-06 | 0609103-10 | | 09/28/06 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low, H = High, I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Extr_Date | Anal_Date | Anal_Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-18S / 09-26-06 | 0609103-10 | | 09/28/06 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-18S / 09-26-06 | 0609103-10 | | 09/28/06 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-18S / 09-26-06 | 0609103-10 | | 09/28/06 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-18S / 09-26-06 | 0609103-10 | | 09/28/06 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-18S / 09-26-06 | 0609103-10 | | 09/28/06 | 8260 | VOCs | 67-66-3 | Chloroform | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-18S / 09-26-06 | 0609103-10 | | 09/28/06 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-18S / 09-26-06 | 0609103-10 | | 09/28/06 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-18S / 09-26-06 | 0609103-10 | | 09/28/06 | 8260 | VOCs | 71-43-2 | Benzene | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-18S / 09-26-06 | 0609103-10 | | 09/28/06 | 8260 | VOCs | 74-83-9 | Bromomethane | 0.20 | µg/L | UJ | I | 0.20 | 1 | Initial Calibration outside criteria |
| SH-18S / 09-26-06 | 0609103-10 | | 09/28/06 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-18S / 09-26-06 | 0609103-10 | | 09/28/06 | 8260 | VOCs | 79-01-6 | Trichloroethene | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-18S / 09-26-06 | 0609103-10 | | 09/28/06 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-18S / 09-26-06 | 0609103-10 | | 09/28/06 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-18S / 09-26-06 | 0609103-10 | | 09/28/06 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-18S / 09-26-06 | 0609103-10 | | 09/28/06 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-18S / 09-26-06 | 0609103-10 | | 09/28/06 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-18S / 09-26-06 | 0609103-10 | | 09/28/06 | 8260 | VOCs | 108-88-3 | Toluene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-18S / 09-26-06 | 0609103-10 | | 09/28/06 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-18S / 09-26-06 | 0609103-10 | | 09/28/06 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-18S / 09-26-06 | 0609103-10 | | 09/28/06 | 8260 | VOCs | 75-00-3 | Chloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-18S / 09-26-06 | 0609103-10 | | 09/28/06 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-18S / 09-26-06 | 0609103-10 | | 09/28/06 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-18S / 09-26-06 | 0609103-10 | | 09/28/06 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-18S / 09-26-06 | 0609103-10 | | 09/28/06 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-18S / 09-26-06 | 0609103-10 | | 09/28/06 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-18S / 09-26-06 | 0609103-10 | | 09/28/06 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4.0 | µg/L | U | | 4.0 | 1 | |
| SH-18S / 09-26-06 | 0609103-10 | | 09/28/06 | 8260 | VOCs | 95-47-6 | o-Xylene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-18S / 09-26-06 | 0609103-10 | | 09/28/06 | 8260 | VOCs | 100-42-5 | Styrene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-18S / 09-26-06 | 0609103-10 | | 09/28/06 | 8260 | VOCs | 75-25-2 | Bromoform | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-18S / 09-26-06 | 0609103-10 | | 09/28/06 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-18S / 09-26-06 | 0609103-10 | | 09/28/06 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-18S / 09-26-06 | 0609103-10 | | 09/28/06 | 8260 | VOCs | 67-64-1 | Acetone | 5.0 | µg/L | U | | 5.0 | 1 | |
| SH-18S / 09-26-06 | 0609103-10 | | 09/28/06 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-18S / 09-26-06 | 0609103-10 | | 09/28/06 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-18S / 09-26-06 | 0609103-10 | | 09/28/06 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-18S / 09-26-06 | 0609103-10 | | 09/28/06 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-18D / 09-26-06 | 0609103-11 | | 09/28/06 | 8260 | VOCs | 74-87-3 | Chloromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-18D / 09-26-06 | 0609103-11 | | 09/28/06 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-18D / 09-26-06 | 0609103-11 | | 09/28/06 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-18D / 09-26-06 | 0609103-11 | | 09/28/06 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-18D / 09-26-06 | 0609103-11 | | 09/28/06 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-18D / 09-26-06 | 0609103-11 | | 09/28/06 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-18D / 09-26-06 | 0609103-11 | | 09/28/06 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-18D / 09-26-06 | 0609103-11 | | 09/28/06 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-18D / 09-26-06 | 0609103-11 | | 09/28/06 | 8260 | VOCs | 67-66-3 | Chloroform | 0.32 | µg/L | | | 0.20 | 1 | |
| SH-18D / 09-26-06 | 0609103-11 | | 09/28/06 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-18D / 09-26-06 | 0609103-11 | | 09/28/06 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-18D / 09-26-06 | 0609103-11 | | 09/28/06 | 8260 | VOCs | 71-43-2 | Benzene | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-18D / 09-26-06 | 0609103-11 | | 09/28/06 | 8260 | VOCs | 74-83-9 | Bromomethane | 0.20 | µg/L | UJ | I | 0.20 | 1 | Initial Calibration outside criteria |
| SH-18D / 09-26-06 | 0609103-11 | | 09/28/06 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-18D / 09-26-06 | 0609103-11 | | 09/28/06 | 8260 | VOCs | 79-01-6 | Trichloroethene | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-18D / 09-26-06 | 0609103-11 | | 09/28/06 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 0.50 | µg/L | U | | 0.50 | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low, H = High, I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Extr_Date | Anal_Date | Anal_Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-18D / 09-26-06 | 0609103-11 | | 09/28/06 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-18D / 09-26-06 | 0609103-11 | | 09/28/06 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-18D / 09-26-06 | 0609103-11 | | 09/28/06 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-18D / 09-26-06 | 0609103-11 | | 09/28/06 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-18D / 09-26-06 | 0609103-11 | | 09/28/06 | 8260 | VOCs | 108-88-3 | Toluene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-18D / 09-26-06 | 0609103-11 | | 09/28/06 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-18D / 09-26-06 | 0609103-11 | | 09/28/06 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-18D / 09-26-06 | 0609103-11 | | 09/28/06 | 8260 | VOCs | 75-00-3 | Chloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-18D / 09-26-06 | 0609103-11 | | 09/28/06 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-18D / 09-26-06 | 0609103-11 | | 09/28/06 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-18D / 09-26-06 | 0609103-11 | | 09/28/06 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-18D / 09-26-06 | 0609103-11 | | 09/28/06 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-18D / 09-26-06 | 0609103-11 | | 09/28/06 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-18D / 09-26-06 | 0609103-11 | | 09/28/06 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4.0 | µg/L | U | | 4.0 | 1 | |
| SH-18D / 09-26-06 | 0609103-11 | | 09/28/06 | 8260 | VOCs | 95-47-6 | o-Xylene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-18D / 09-26-06 | 0609103-11 | | 09/28/06 | 8260 | VOCs | 100-42-5 | Styrene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-18D / 09-26-06 | 0609103-11 | | 09/28/06 | 8260 | VOCs | 75-25-2 | Bromoform | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-18D / 09-26-06 | 0609103-11 | | 09/28/06 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-18D / 09-26-06 | 0609103-11 | | 09/28/06 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-18D / 09-26-06 | 0609103-11 | | 09/28/06 | 8260 | VOCs | 67-64-1 | Acetone | 5.0 | µg/L | U | | 5.0 | 1 | |
| SH-18D / 09-26-06 | 0609103-11 | | 09/28/06 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-18D / 09-26-06 | 0609103-11 | | 09/28/06 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-18D / 09-26-06 | 0609103-11 | | 09/28/06 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-18D / 09-26-06 | 0609103-11 | | 09/28/06 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-25S / 09-26-06 | 0609103-12 | | 09/29/06 | 8260 | VOCs | 74-87-3 | Chloromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-25S / 09-26-06 | 0609103-12 | | 09/29/06 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-25S / 09-26-06 | 0609103-12 | | 09/29/06 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-25S / 09-26-06 | 0609103-12 | | 09/29/06 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-25S / 09-26-06 | 0609103-12 | | 09/29/06 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-25S / 09-26-06 | 0609103-12 | | 09/29/06 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-25S / 09-26-06 | 0609103-12 | | 09/29/06 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-25S / 09-26-06 | 0609103-12 | | 09/29/06 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-25S / 09-26-06 | 0609103-12 | | 09/29/06 | 8260 | VOCs | 67-66-3 | Chloroform | 0.21 | µg/L | | | 0.20 | 1 | |
| SH-25S / 09-26-06 | 0609103-12 | | 09/29/06 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-25S / 09-26-06 | 0609103-12 | | 09/29/06 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-25S / 09-26-06 | 0609103-12 | | 09/29/06 | 8260 | VOCs | 71-43-2 | Benzene | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-25S / 09-26-06 | 0609103-12 | | 09/29/06 | 8260 | VOCs | 74-83-9 | Bromomethane | 0.20 | µg/L | UJ | I | 0.20 | 1 | Initial Calibration outside criteria |
| SH-25S / 09-26-06 | 0609103-12 | | 09/29/06 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-25S / 09-26-06 | 0609103-12 | | 09/29/06 | 8260 | VOCs | 79-01-6 | Trichloroethene | 0.42 | µg/L | | | 0.20 | 1 | |
| SH-25S / 09-26-06 | 0609103-12 | | 09/29/06 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-25S / 09-26-06 | 0609103-12 | | 09/29/06 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-25S / 09-26-06 | 0609103-12 | | 09/29/06 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-25S / 09-26-06 | 0609103-12 | | 09/29/06 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-25S / 09-26-06 | 0609103-12 | | 09/29/06 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-25S / 09-26-06 | 0609103-12 | | 09/29/06 | 8260 | VOCs | 108-88-3 | Toluene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-25S / 09-26-06 | 0609103-12 | | 09/29/06 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-25S / 09-26-06 | 0609103-12 | | 09/29/06 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-25S / 09-26-06 | 0609103-12 | | 09/29/06 | 8260 | VOCs | 75-00-3 | Chloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-25S / 09-26-06 | 0609103-12 | | 09/29/06 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-25S / 09-26-06 | 0609103-12 | | 09/29/06 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-25S / 09-26-06 | 0609103-12 | | 09/29/06 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-25S / 09-26-06 | 0609103-12 | | 09/29/06 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2.0 | µg/L | U | | 2.0 | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low, H = High, I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Extr_Date | Anal_Date | Anal_Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-25S / 09-26-06 | 0609103-12 | | 09/29/06 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-25S / 09-26-06 | 0609103-12 | | 09/29/06 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4.0 | µg/L | U | | 4.0 | 1 | |
| SH-25S / 09-26-06 | 0609103-12 | | 09/29/06 | 8260 | VOCs | 95-47-6 | o-Xylene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-25S / 09-26-06 | 0609103-12 | | 09/29/06 | 8260 | VOCs | 100-42-5 | Styrene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-25S / 09-26-06 | 0609103-12 | | 09/29/06 | 8260 | VOCs | 75-25-2 | Bromoform | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-25S / 09-26-06 | 0609103-12 | | 09/29/06 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-25S / 09-26-06 | 0609103-12 | | 09/29/06 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-25S / 09-26-06 | 0609103-12 | | 09/29/06 | 8260 | VOCs | 67-64-1 | Acetone | 5.0 | µg/L | U | | 5.0 | 1 | |
| SH-25S / 09-26-06 | 0609103-12 | | 09/29/06 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-25S / 09-26-06 | 0609103-12 | | 09/29/06 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-25S / 09-26-06 | 0609103-12 | | 09/29/06 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-25S / 09-26-06 | 0609103-12 | | 09/29/06 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-503 / 09-27-06 | 0609103-13 | | 09/28/06 | 8260 | VOCs | 74-87-3 | Chloromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-503 / 09-27-06 | 0609103-13 | | 09/28/06 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 0.50 | µg/L | U | | 0.50 | 1 | |
| TB-503 / 09-27-06 | 0609103-13 | | 09/28/06 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-503 / 09-27-06 | 0609103-13 | | 09/28/06 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-503 / 09-27-06 | 0609103-13 | | 09/28/06 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-503 / 09-27-06 | 0609103-13 | | 09/28/06 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-503 / 09-27-06 | 0609103-13 | | 09/28/06 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-503 / 09-27-06 | 0609103-13 | | 09/28/06 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-503 / 09-27-06 | 0609103-13 | | 09/28/06 | 8260 | VOCs | 67-66-3 | Chloroform | 0.20 | µg/L | U | | 0.20 | 1 | |
| TB-503 / 09-27-06 | 0609103-13 | | 09/28/06 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-503 / 09-27-06 | 0609103-13 | | 09/28/06 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-503 / 09-27-06 | 0609103-13 | | 09/28/06 | 8260 | VOCs | 71-43-2 | Benzene | 0.20 | µg/L | U | | 0.20 | 1 | |
| TB-503 / 09-27-06 | 0609103-13 | | 09/28/06 | 8260 | VOCs | 74-83-9 | Bromomethane | 0.20 | µg/L | UJ | I | 0.20 | 1 | Initial Calibration outside criteria |
| TB-503 / 09-27-06 | 0609103-13 | | 09/28/06 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| TB-503 / 09-27-06 | 0609103-13 | | 09/28/06 | 8260 | VOCs | 79-01-6 | Trichloroethene | 0.20 | µg/L | U | | 0.20 | 1 | |
| TB-503 / 09-27-06 | 0609103-13 | | 09/28/06 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 0.50 | µg/L | U | | 0.50 | 1 | |
| TB-503 / 09-27-06 | 0609103-13 | | 09/28/06 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| TB-503 / 09-27-06 | 0609103-13 | | 09/28/06 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-503 / 09-27-06 | 0609103-13 | | 09/28/06 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-503 / 09-27-06 | 0609103-13 | | 09/28/06 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 0.50 | µg/L | U | | 0.50 | 1 | |
| TB-503 / 09-27-06 | 0609103-13 | | 09/28/06 | 8260 | VOCs | 108-88-3 | Toluene | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-503 / 09-27-06 | 0609103-13 | | 09/28/06 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 0.50 | µg/L | U | | 0.50 | 1 | |
| TB-503 / 09-27-06 | 0609103-13 | | 09/28/06 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| TB-503 / 09-27-06 | 0609103-13 | | 09/28/06 | 8260 | VOCs | 75-00-3 | Chloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-503 / 09-27-06 | 0609103-13 | | 09/28/06 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-503 / 09-27-06 | 0609103-13 | | 09/28/06 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 0.20 | µg/L | U | | 0.20 | 1 | |
| TB-503 / 09-27-06 | 0609103-13 | | 09/28/06 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| TB-503 / 09-27-06 | 0609103-13 | | 09/28/06 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-503 / 09-27-06 | 0609103-13 | | 09/28/06 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-503 / 09-27-06 | 0609103-13 | | 09/28/06 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4.0 | µg/L | U | | 4.0 | 1 | |
| TB-503 / 09-27-06 | 0609103-13 | | 09/28/06 | 8260 | VOCs | 95-47-6 | o-Xylene | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-503 / 09-27-06 | 0609103-13 | | 09/28/06 | 8260 | VOCs | 100-42-5 | Styrene | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-503 / 09-27-06 | 0609103-13 | | 09/28/06 | 8260 | VOCs | 75-25-2 | Bromoform | 0.50 | µg/L | U | | 0.50 | 1 | |
| TB-503 / 09-27-06 | 0609103-13 | | 09/28/06 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| TB-503 / 09-27-06 | 0609103-13 | | 09/28/06 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-503 / 09-27-06 | 0609103-13 | | 09/28/06 | 8260 | VOCs | 67-64-1 | Acetone | 5.0 | µg/L | U | | 5.0 | 1 | |
| TB-503 / 09-27-06 | 0609103-13 | | 09/28/06 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-503 / 09-27-06 | 0609103-13 | | 09/28/06 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-503 / 09-27-06 | 0609103-13 | | 09/28/06 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-503 / 09-27-06 | 0609103-13 | | 09/28/06 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2.0 | µg/L | U | | 2.0 | 1 | |

| Smpl | Lab_ID | Extr_Date | Anal_Date | Anal_Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WP-04 / 09-27-06 | 0609103-14 | | 09/29/06 | 8260 | VOCs | 74-87-3 | Chloromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-04 / 09-27-06 | 0609103-14 | | 09/29/06 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 0.50 | µg/L | U | | 0.50 | 1 | |
| WP-04 / 09-27-06 | 0609103-14 | | 09/29/06 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-04 / 09-27-06 | 0609103-14 | | 09/29/06 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-04 / 09-27-06 | 0609103-14 | | 09/29/06 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-04 / 09-27-06 | 0609103-14 | | 09/29/06 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-04 / 09-27-06 | 0609103-14 | | 09/29/06 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-04 / 09-27-06 | 0609103-14 | | 09/29/06 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-04 / 09-27-06 | 0609103-14 | | 09/29/06 | 8260 | VOCs | 67-66-3 | Chloroform | 0.20 | µg/L | U | | 0.20 | 1 | |
| WP-04 / 09-27-06 | 0609103-14 | | 09/29/06 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-04 / 09-27-06 | 0609103-14 | | 09/29/06 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-04 / 09-27-06 | 0609103-14 | | 09/29/06 | 8260 | VOCs | 71-43-2 | Benzene | 0.20 | µg/L | U | | 0.20 | 1 | |
| WP-04 / 09-27-06 | 0609103-14 | | 09/29/06 | 8260 | VOCs | 74-83-9 | Bromomethane | 0.20 | µg/L | UJ | I | 0.20 | 1 | Initial Calibration outside criteria |
| WP-04 / 09-27-06 | 0609103-14 | | 09/29/06 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| WP-04 / 09-27-06 | 0609103-14 | | 09/29/06 | 8260 | VOCs | 79-01-6 | Trichloroethene | 0.20 | µg/L | U | | 0.20 | 1 | |
| WP-04 / 09-27-06 | 0609103-14 | | 09/29/06 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 0.50 | µg/L | U | | 0.50 | 1 | |
| WP-04 / 09-27-06 | 0609103-14 | | 09/29/06 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| WP-04 / 09-27-06 | 0609103-14 | | 09/29/06 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-04 / 09-27-06 | 0609103-14 | | 09/29/06 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-04 / 09-27-06 | 0609103-14 | | 09/29/06 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 0.50 | µg/L | U | | 0.50 | 1 | |
| WP-04 / 09-27-06 | 0609103-14 | | 09/29/06 | 8260 | VOCs | 108-88-3 | Toluene | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-04 / 09-27-06 | 0609103-14 | | 09/29/06 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 0.50 | µg/L | U | | 0.50 | 1 | |
| WP-04 / 09-27-06 | 0609103-14 | | 09/29/06 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| WP-04 / 09-27-06 | 0609103-14 | | 09/29/06 | 8260 | VOCs | 75-00-3 | Chloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-04 / 09-27-06 | 0609103-14 | | 09/29/06 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-04 / 09-27-06 | 0609103-14 | | 09/29/06 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 0.20 | µg/L | U | | 0.20 | 1 | |
| WP-04 / 09-27-06 | 0609103-14 | | 09/29/06 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| WP-04 / 09-27-06 | 0609103-14 | | 09/29/06 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-04 / 09-27-06 | 0609103-14 | | 09/29/06 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-04 / 09-27-06 | 0609103-14 | | 09/29/06 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4.0 | µg/L | U | | 4.0 | 1 | |
| WP-04 / 09-27-06 | 0609103-14 | | 09/29/06 | 8260 | VOCs | 95-47-6 | o-Xylene | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-04 / 09-27-06 | 0609103-14 | | 09/29/06 | 8260 | VOCs | 100-42-5 | Styrene | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-04 / 09-27-06 | 0609103-14 | | 09/29/06 | 8260 | VOCs | 75-25-2 | Bromoform | 0.50 | µg/L | U | | 0.50 | 1 | |
| WP-04 / 09-27-06 | 0609103-14 | | 09/29/06 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| WP-04 / 09-27-06 | 0609103-14 | | 09/29/06 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-04 / 09-27-06 | 0609103-14 | | 09/29/06 | 8260 | VOCs | 67-64-1 | Acetone | 5.0 | µg/L | U | | 5.0 | 1 | |
| WP-04 / 09-27-06 | 0609103-14 | | 09/29/06 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-04 / 09-27-06 | 0609103-14 | | 09/29/06 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-04 / 09-27-06 | 0609103-14 | | 09/29/06 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-04 / 09-27-06 | 0609103-14 | | 09/29/06 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-05 / 09-27-06 | 0609103-15 | | 09/29/06 | 8260 | VOCs | 74-87-3 | Chloromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-05 / 09-27-06 | 0609103-15 | | 09/29/06 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 0.50 | µg/L | U | | 0.50 | 1 | |
| WP-05 / 09-27-06 | 0609103-15 | | 09/29/06 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-05 / 09-27-06 | 0609103-15 | | 09/29/06 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-05 / 09-27-06 | 0609103-15 | | 09/29/06 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-05 / 09-27-06 | 0609103-15 | | 09/29/06 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-05 / 09-27-06 | 0609103-15 | | 09/29/06 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-05 / 09-27-06 | 0609103-15 | | 09/29/06 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-05 / 09-27-06 | 0609103-15 | | 09/29/06 | 8260 | VOCs | 67-66-3 | Chloroform | 0.20 | µg/L | U | | 0.20 | 1 | |
| WP-05 / 09-27-06 | 0609103-15 | | 09/29/06 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-05 / 09-27-06 | 0609103-15 | | 09/29/06 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-05 / 09-27-06 | 0609103-15 | | 09/29/06 | 8260 | VOCs | 71-43-2 | Benzene | 0.20 | µg/L | U | | 0.20 | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low, H = High, I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Extr_Date | Anal_Date | Anal_Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WP-05 / 09-27-06 | 0609103-15 | | 09/29/06 | 8260 | VOCs | 74-83-9 | Bromomethane | 0.20 | µg/L | UJ | I | 0.20 | 1 | Initial Calibration outside criteria |
| WP-05 / 09-27-06 | 0609103-15 | | 09/29/06 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| WP-05 / 09-27-06 | 0609103-15 | | 09/29/06 | 8260 | VOCs | 79-01-6 | Trichloroethene | 0.20 | µg/L | U | | 0.20 | 1 | |
| WP-05 / 09-27-06 | 0609103-15 | | 09/29/06 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 0.50 | µg/L | U | | 0.50 | 1 | |
| WP-05 / 09-27-06 | 0609103-15 | | 09/29/06 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| WP-05 / 09-27-06 | 0609103-15 | | 09/29/06 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-05 / 09-27-06 | 0609103-15 | | 09/29/06 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-05 / 09-27-06 | 0609103-15 | | 09/29/06 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 0.50 | µg/L | U | | 0.50 | 1 | |
| WP-05 / 09-27-06 | 0609103-15 | | 09/29/06 | 8260 | VOCs | 108-88-3 | Toluene | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-05 / 09-27-06 | 0609103-15 | | 09/29/06 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 0.50 | µg/L | U | | 0.50 | 1 | |
| WP-05 / 09-27-06 | 0609103-15 | | 09/29/06 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| WP-05 / 09-27-06 | 0609103-15 | | 09/29/06 | 8260 | VOCs | 75-00-3 | Chloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-05 / 09-27-06 | 0609103-15 | | 09/29/06 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-05 / 09-27-06 | 0609103-15 | | 09/29/06 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 0.20 | µg/L | U | | 0.20 | 1 | |
| WP-05 / 09-27-06 | 0609103-15 | | 09/29/06 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| WP-05 / 09-27-06 | 0609103-15 | | 09/29/06 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-05 / 09-27-06 | 0609103-15 | | 09/29/06 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-05 / 09-27-06 | 0609103-15 | | 09/29/06 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4.0 | µg/L | U | | 4.0 | 1 | |
| WP-05 / 09-27-06 | 0609103-15 | | 09/29/06 | 8260 | VOCs | 95-47-6 | o-Xylene | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-05 / 09-27-06 | 0609103-15 | | 09/29/06 | 8260 | VOCs | 100-42-5 | Styrene | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-05 / 09-27-06 | 0609103-15 | | 09/29/06 | 8260 | VOCs | 75-25-2 | Bromoform | 0.50 | µg/L | U | | 0.50 | 1 | |
| WP-05 / 09-27-06 | 0609103-15 | | 09/29/06 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| WP-05 / 09-27-06 | 0609103-15 | | 09/29/06 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-05 / 09-27-06 | 0609103-15 | | 09/29/06 | 8260 | VOCs | 67-64-1 | Acetone | 5.0 | µg/L | U | | 5.0 | 1 | |
| WP-05 / 09-27-06 | 0609103-15 | | 09/29/06 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-05 / 09-27-06 | 0609103-15 | | 09/29/06 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-05 / 09-27-06 | 0609103-15 | | 09/29/06 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-05 / 09-27-06 | 0609103-15 | | 09/29/06 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-15D / 09-27-06 | 0609103-16 | | 09/28/06 | 8260 | VOCs | 74-87-3 | Chloromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-15D / 09-27-06 | 0609103-16 | | 09/28/06 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-15D / 09-27-06 | 0609103-16 | | 09/28/06 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-15D / 09-27-06 | 0609103-16 | | 09/28/06 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-15D / 09-27-06 | 0609103-16 | | 09/28/06 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-15D / 09-27-06 | 0609103-16 | | 09/28/06 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-15D / 09-27-06 | 0609103-16 | | 09/28/06 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-15D / 09-27-06 | 0609103-16 | | 09/28/06 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-15D / 09-27-06 | 0609103-16 | | 09/28/06 | 8260 | VOCs | 67-66-3 | Chloroform | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-15D / 09-27-06 | 0609103-16 | | 09/28/06 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-15D / 09-27-06 | 0609103-16 | | 09/28/06 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-15D / 09-27-06 | 0609103-16 | | 09/28/06 | 8260 | VOCs | 71-43-2 | Benzene | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-15D / 09-27-06 | 0609103-16 | | 09/28/06 | 8260 | VOCs | 74-83-9 | Bromomethane | 0.20 | µg/L | UJ | I | 0.20 | 1 | Initial Calibration outside criteria |
| SH-15D / 09-27-06 | 0609103-16 | | 09/28/06 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-15D / 09-27-06 | 0609103-16 | | 09/28/06 | 8260 | VOCs | 79-01-6 | Trichloroethene | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-15D / 09-27-06 | 0609103-16 | | 09/28/06 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-15D / 09-27-06 | 0609103-16 | | 09/28/06 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-15D / 09-27-06 | 0609103-16 | | 09/28/06 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-15D / 09-27-06 | 0609103-16 | | 09/28/06 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-15D / 09-27-06 | 0609103-16 | | 09/28/06 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-15D / 09-27-06 | 0609103-16 | | 09/28/06 | 8260 | VOCs | 108-88-3 | Toluene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-15D / 09-27-06 | 0609103-16 | | 09/28/06 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-15D / 09-27-06 | 0609103-16 | | 09/28/06 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-15D / 09-27-06 | 0609103-16 | | 09/28/06 | 8260 | VOCs | 75-00-3 | Chloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low, H = High, I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Extr_Date | Anal_Date | Anal_Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-15D / 09-27-06 | 0609103-16 | | 09/28/06 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-15D / 09-27-06 | 0609103-16 | | 09/28/06 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-15D / 09-27-06 | 0609103-16 | | 09/28/06 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-15D / 09-27-06 | 0609103-16 | | 09/28/06 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-15D / 09-27-06 | 0609103-16 | | 09/28/06 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-15D / 09-27-06 | 0609103-16 | | 09/28/06 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4.0 | µg/L | U | | 4.0 | 1 | |
| SH-15D / 09-27-06 | 0609103-16 | | 09/28/06 | 8260 | VOCs | 95-47-6 | o-Xylene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-15D / 09-27-06 | 0609103-16 | | 09/28/06 | 8260 | VOCs | 100-42-5 | Styrene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-15D / 09-27-06 | 0609103-16 | | 09/28/06 | 8260 | VOCs | 75-25-2 | Bromoform | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-15D / 09-27-06 | 0609103-16 | | 09/28/06 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-15D / 09-27-06 | 0609103-16 | | 09/28/06 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-15D / 09-27-06 | 0609103-16 | | 09/28/06 | 8260 | VOCs | 67-64-1 | Acetone | 5.0 | µg/L | U | | 5.0 | 1 | |
| SH-15D / 09-27-06 | 0609103-16 | | 09/28/06 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-15D / 09-27-06 | 0609103-16 | | 09/28/06 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-15D / 09-27-06 | 0609103-16 | | 09/28/06 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-15D / 09-27-06 | 0609103-16 | | 09/28/06 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-28S / 09-27-06 | 0609103-17 | | 09/29/06 | 8260 | VOCs | 74-87-3 | Chloromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-28S / 09-27-06 | 0609103-17 | | 09/29/06 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-28S / 09-27-06 | 0609103-17 | | 09/29/06 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-28S / 09-27-06 | 0609103-17 | | 09/29/06 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-28S / 09-27-06 | 0609103-17 | | 09/29/06 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-28S / 09-27-06 | 0609103-17 | | 09/29/06 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-28S / 09-27-06 | 0609103-17 | | 09/29/06 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-28S / 09-27-06 | 0609103-17 | | 09/29/06 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-28S / 09-27-06 | 0609103-17 | | 09/29/06 | 8260 | VOCs | 67-66-3 | Chloroform | 0.67 | µg/L | | | 0.20 | 1 | |
| SH-28S / 09-27-06 | 0609103-17 | | 09/29/06 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-28S / 09-27-06 | 0609103-17 | | 09/29/06 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-28S / 09-27-06 | 0609103-17 | | 09/29/06 | 8260 | VOCs | 71-43-2 | Benzene | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-28S / 09-27-06 | 0609103-17 | | 09/29/06 | 8260 | VOCs | 74-83-9 | Bromomethane | 0.20 | µg/L | UJ | I | 0.20 | 1 | Initial Calibration outside criteria |
| SH-28S / 09-27-06 | 0609103-17 | | 09/29/06 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-28S / 09-27-06 | 0609103-17 | | 09/29/06 | 8260 | VOCs | 79-01-6 | Trichloroethene | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-28S / 09-27-06 | 0609103-17 | | 09/29/06 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-28S / 09-27-06 | 0609103-17 | | 09/29/06 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-28S / 09-27-06 | 0609103-17 | | 09/29/06 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-28S / 09-27-06 | 0609103-17 | | 09/29/06 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-28S / 09-27-06 | 0609103-17 | | 09/29/06 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-28S / 09-27-06 | 0609103-17 | | 09/29/06 | 8260 | VOCs | 108-88-3 | Toluene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-28S / 09-27-06 | 0609103-17 | | 09/29/06 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-28S / 09-27-06 | 0609103-17 | | 09/29/06 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-28S / 09-27-06 | 0609103-17 | | 09/29/06 | 8260 | VOCs | 75-00-3 | Chloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-28S / 09-27-06 | 0609103-17 | | 09/29/06 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-28S / 09-27-06 | 0609103-17 | | 09/29/06 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-28S / 09-27-06 | 0609103-17 | | 09/29/06 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-28S / 09-27-06 | 0609103-17 | | 09/29/06 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-28S / 09-27-06 | 0609103-17 | | 09/29/06 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-28S / 09-27-06 | 0609103-17 | | 09/29/06 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4.0 | µg/L | U | | 4.0 | 1 | |
| SH-28S / 09-27-06 | 0609103-17 | | 09/29/06 | 8260 | VOCs | 95-47-6 | o-Xylene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-28S / 09-27-06 | 0609103-17 | | 09/29/06 | 8260 | VOCs | 100-42-5 | Styrene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-28S / 09-27-06 | 0609103-17 | | 09/29/06 | 8260 | VOCs | 75-25-2 | Bromoform | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-28S / 09-27-06 | 0609103-17 | | 09/29/06 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-28S / 09-27-06 | 0609103-17 | | 09/29/06 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-28S / 09-27-06 | 0609103-17 | | 09/29/06 | 8260 | VOCs | 67-64-1 | Acetone | 5.0 | µg/L | U | | 5.0 | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low, H = High, I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Extr_Date | Anal_Date | Anal_Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-28S / 09-27-06 | 0609103-17 | | 09/29/06 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-28S / 09-27-06 | 0609103-17 | | 09/29/06 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-28S / 09-27-06 | 0609103-17 | | 09/29/06 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-28S / 09-27-06 | 0609103-17 | | 09/29/06 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-25D / 09-27-06 | 0609103-18 | | 09/29/06 | 8260 | VOCs | 74-87-3 | Chloromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-25D / 09-27-06 | 0609103-18 | | 09/29/06 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-25D / 09-27-06 | 0609103-18 | | 09/29/06 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-25D / 09-27-06 | 0609103-18 | | 09/29/06 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-25D / 09-27-06 | 0609103-18 | | 09/29/06 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-25D / 09-27-06 | 0609103-18 | | 09/29/06 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-25D / 09-27-06 | 0609103-18 | | 09/29/06 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-25D / 09-27-06 | 0609103-18 | | 09/29/06 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-25D / 09-27-06 | 0609103-18 | | 09/29/06 | 8260 | VOCs | 67-66-3 | Chloroform | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-25D / 09-27-06 | 0609103-18 | | 09/29/06 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-25D / 09-27-06 | 0609103-18 | | 09/29/06 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-25D / 09-27-06 | 0609103-18 | | 09/29/06 | 8260 | VOCs | 71-43-2 | Benzene | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-25D / 09-27-06 | 0609103-18 | | 09/29/06 | 8260 | VOCs | 74-83-9 | Bromomethane | 0.20 | µg/L | UJ | I | 0.20 | 1 | Initial Calibration outside criteria |
| SH-25D / 09-27-06 | 0609103-18 | | 09/29/06 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-25D / 09-27-06 | 0609103-18 | | 09/29/06 | 8260 | VOCs | 79-01-6 | Trichloroethene | 1.1 | µg/L | | | 0.20 | 1 | |
| SH-25D / 09-27-06 | 0609103-18 | | 09/29/06 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-25D / 09-27-06 | 0609103-18 | | 09/29/06 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-25D / 09-27-06 | 0609103-18 | | 09/29/06 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-25D / 09-27-06 | 0609103-18 | | 09/29/06 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-25D / 09-27-06 | 0609103-18 | | 09/29/06 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-25D / 09-27-06 | 0609103-18 | | 09/29/06 | 8260 | VOCs | 108-88-3 | Toluene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-25D / 09-27-06 | 0609103-18 | | 09/29/06 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-25D / 09-27-06 | 0609103-18 | | 09/29/06 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-25D / 09-27-06 | 0609103-18 | | 09/29/06 | 8260 | VOCs | 75-00-3 | Chloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-25D / 09-27-06 | 0609103-18 | | 09/29/06 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-25D / 09-27-06 | 0609103-18 | | 09/29/06 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-25D / 09-27-06 | 0609103-18 | | 09/29/06 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-25D / 09-27-06 | 0609103-18 | | 09/29/06 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-25D / 09-27-06 | 0609103-18 | | 09/29/06 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-25D / 09-27-06 | 0609103-18 | | 09/29/06 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4.0 | µg/L | U | | 4.0 | 1 | |
| SH-25D / 09-27-06 | 0609103-18 | | 09/29/06 | 8260 | VOCs | 95-47-6 | o-Xylene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-25D / 09-27-06 | 0609103-18 | | 09/29/06 | 8260 | VOCs | 100-42-5 | Styrene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-25D / 09-27-06 | 0609103-18 | | 09/29/06 | 8260 | VOCs | 75-25-2 | Bromoform | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-25D / 09-27-06 | 0609103-18 | | 09/29/06 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-25D / 09-27-06 | 0609103-18 | | 09/29/06 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-25D / 09-27-06 | 0609103-18 | | 09/29/06 | 8260 | VOCs | 67-64-1 | Acetone | 5.0 | µg/L | U | | 5.0 | 1 | |
| SH-25D / 09-27-06 | 0609103-18 | | 09/29/06 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-25D / 09-27-06 | 0609103-18 | | 09/29/06 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-25D / 09-27-06 | 0609103-18 | | 09/29/06 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-25D / 09-27-06 | 0609103-18 | | 09/29/06 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2.0 | µg/L | U | | 2.0 | 1 | |
| OW-212 / 09-27-06 | 0609103-19 | | 09/29/06 | 8260 | VOCs | 74-87-3 | Chloromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| OW-212 / 09-27-06 | 0609103-19 | | 09/29/06 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 0.50 | µg/L | U | | 0.50 | 1 | |
| OW-212 / 09-27-06 | 0609103-19 | | 09/29/06 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| OW-212 / 09-27-06 | 0609103-19 | | 09/29/06 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| OW-212 / 09-27-06 | 0609103-19 | | 09/29/06 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2.0 | µg/L | U | | 2.0 | 1 | |
| OW-212 / 09-27-06 | 0609103-19 | | 09/29/06 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2.0 | µg/L | U | | 2.0 | 1 | |
| OW-212 / 09-27-06 | 0609103-19 | | 09/29/06 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| OW-212 / 09-27-06 | 0609103-19 | | 09/29/06 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2.0 | µg/L | U | | 2.0 | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low, H = High, I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Extr_Date | Anal_Date | Anal_Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OW-212 / 09-27-06 | 0609103-19 | | 09/29/06 | 8260 | VOCs | 67-66-3 | Chloroform | 0.67 | µg/L | | | 0.20 | 1 | |
| OW-212 / 09-27-06 | 0609103-19 | | 09/29/06 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| OW-212 / 09-27-06 | 0609103-19 | | 09/29/06 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2.0 | µg/L | U | | 2.0 | 1 | |
| OW-212 / 09-27-06 | 0609103-19 | | 09/29/06 | 8260 | VOCs | 71-43-2 | Benzene | 0.20 | µg/L | U | | 0.20 | 1 | |
| OW-212 / 09-27-06 | 0609103-19 | | 09/29/06 | 8260 | VOCs | 74-83-9 | Bromomethane | 0.20 | µg/L | UJ | I | 0.20 | 1 | Initial Calibration outside criteria |
| OW-212 / 09-27-06 | 0609103-19 | | 09/29/06 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| OW-212 / 09-27-06 | 0609103-19 | | 09/29/06 | 8260 | VOCs | 79-01-6 | Trichloroethene | 0.20 | µg/L | U | | 0.20 | 1 | |
| OW-212 / 09-27-06 | 0609103-19 | | 09/29/06 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 0.50 | µg/L | U | | 0.50 | 1 | |
| OW-212 / 09-27-06 | 0609103-19 | | 09/29/06 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| OW-212 / 09-27-06 | 0609103-19 | | 09/29/06 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2.0 | µg/L | U | | 2.0 | 1 | |
| OW-212 / 09-27-06 | 0609103-19 | | 09/29/06 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2.0 | µg/L | U | | 2.0 | 1 | |
| OW-212 / 09-27-06 | 0609103-19 | | 09/29/06 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 0.50 | µg/L | U | | 0.50 | 1 | |
| OW-212 / 09-27-06 | 0609103-19 | | 09/29/06 | 8260 | VOCs | 108-88-3 | Toluene | 2.0 | µg/L | U | | 2.0 | 1 | |
| OW-212 / 09-27-06 | 0609103-19 | | 09/29/06 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 0.50 | µg/L | U | | 0.50 | 1 | |
| OW-212 / 09-27-06 | 0609103-19 | | 09/29/06 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| OW-212 / 09-27-06 | 0609103-19 | | 09/29/06 | 8260 | VOCs | 75-00-3 | Chloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| OW-212 / 09-27-06 | 0609103-19 | | 09/29/06 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2.0 | µg/L | U | | 2.0 | 1 | |
| OW-212 / 09-27-06 | 0609103-19 | | 09/29/06 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 0.20 | µg/L | U | | 0.20 | 1 | |
| OW-212 / 09-27-06 | 0609103-19 | | 09/29/06 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| OW-212 / 09-27-06 | 0609103-19 | | 09/29/06 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2.0 | µg/L | U | | 2.0 | 1 | |
| OW-212 / 09-27-06 | 0609103-19 | | 09/29/06 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2.0 | µg/L | U | | 2.0 | 1 | |
| OW-212 / 09-27-06 | 0609103-19 | | 09/29/06 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4.0 | µg/L | U | | 4.0 | 1 | |
| OW-212 / 09-27-06 | 0609103-19 | | 09/29/06 | 8260 | VOCs | 95-47-6 | o-Xylene | 2.0 | µg/L | U | | 2.0 | 1 | |
| OW-212 / 09-27-06 | 0609103-19 | | 09/29/06 | 8260 | VOCs | 100-42-5 | Styrene | 2.0 | µg/L | U | | 2.0 | 1 | |
| OW-212 / 09-27-06 | 0609103-19 | | 09/29/06 | 8260 | VOCs | 75-25-2 | Bromoform | 0.50 | µg/L | U | | 0.50 | 1 | |
| OW-212 / 09-27-06 | 0609103-19 | | 09/29/06 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| OW-212 / 09-27-06 | 0609103-19 | | 09/29/06 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| OW-212 / 09-27-06 | 0609103-19 | | 09/29/06 | 8260 | VOCs | 67-64-1 | Acetone | 5.0 | µg/L | U | | 5.0 | 1 | |
| OW-212 / 09-27-06 | 0609103-19 | | 09/29/06 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| OW-212 / 09-27-06 | 0609103-19 | | 09/29/06 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2.0 | µg/L | U | | 2.0 | 1 | |
| OW-212 / 09-27-06 | 0609103-19 | | 09/29/06 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2.0 | µg/L | U | | 2.0 | 1 | |
| OW-212 / 09-27-06 | 0609103-19 | | 09/29/06 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-505 / 09-28-06 | 0609103-20 | | 10/02/06 | 8260 | VOCs | 74-87-3 | Chloromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-505 / 09-28-06 | 0609103-20 | | 10/02/06 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 0.50 | µg/L | U | | 0.50 | 1 | |
| TB-505 / 09-28-06 | 0609103-20 | | 10/02/06 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-505 / 09-28-06 | 0609103-20 | | 10/02/06 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-505 / 09-28-06 | 0609103-20 | | 10/02/06 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-505 / 09-28-06 | 0609103-20 | | 10/02/06 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-505 / 09-28-06 | 0609103-20 | | 10/02/06 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-505 / 09-28-06 | 0609103-20 | | 10/02/06 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-505 / 09-28-06 | 0609103-20 | | 10/02/06 | 8260 | VOCs | 67-66-3 | Chloroform | 0.20 | µg/L | U | | 0.20 | 1 | |
| TB-505 / 09-28-06 | 0609103-20 | | 10/02/06 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-505 / 09-28-06 | 0609103-20 | | 10/02/06 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-505 / 09-28-06 | 0609103-20 | | 10/02/06 | 8260 | VOCs | 71-43-2 | Benzene | 0.20 | µg/L | U | | 0.20 | 1 | |
| TB-505 / 09-28-06 | 0609103-20 | | 10/02/06 | 8260 | VOCs | 74-83-9 | Bromomethane | 0.20 | µg/L | UJ | I | 0.20 | 1 | Initial Calibration outside criteria |
| TB-505 / 09-28-06 | 0609103-20 | | 10/02/06 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| TB-505 / 09-28-06 | 0609103-20 | | 10/02/06 | 8260 | VOCs | 79-01-6 | Trichloroethene | 0.20 | µg/L | U | | 0.20 | 1 | |
| TB-505 / 09-28-06 | 0609103-20 | | 10/02/06 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 0.50 | µg/L | U | | 0.50 | 1 | |
| TB-505 / 09-28-06 | 0609103-20 | | 10/02/06 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| TB-505 / 09-28-06 | 0609103-20 | | 10/02/06 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-505 / 09-28-06 | 0609103-20 | | 10/02/06 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-505 / 09-28-06 | 0609103-20 | | 10/02/06 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 0.50 | µg/L | U | | 0.50 | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low, H = High, I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Extr_Date | Anal_Date | Anal_Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TB-505 / 09-28-06 | 0609103-20 | | 10/02/06 | 8260 | VOCs | 108-88-3 | Toluene | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-505 / 09-28-06 | 0609103-20 | | 10/02/06 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 0.50 | µg/L | U | | 0.50 | 1 | |
| TB-505 / 09-28-06 | 0609103-20 | | 10/02/06 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| TB-505 / 09-28-06 | 0609103-20 | | 10/02/06 | 8260 | VOCs | 75-00-3 | Chloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-505 / 09-28-06 | 0609103-20 | | 10/02/06 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-505 / 09-28-06 | 0609103-20 | | 10/02/06 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 0.20 | µg/L | U | | 0.20 | 1 | |
| TB-505 / 09-28-06 | 0609103-20 | | 10/02/06 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| TB-505 / 09-28-06 | 0609103-20 | | 10/02/06 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-505 / 09-28-06 | 0609103-20 | | 10/02/06 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-505 / 09-28-06 | 0609103-20 | | 10/02/06 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4.0 | µg/L | U | | 4.0 | 1 | |
| TB-505 / 09-28-06 | 0609103-20 | | 10/02/06 | 8260 | VOCs | 95-47-6 | o-Xylene | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-505 / 09-28-06 | 0609103-20 | | 10/02/06 | 8260 | VOCs | 100-42-5 | Styrene | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-505 / 09-28-06 | 0609103-20 | | 10/02/06 | 8260 | VOCs | 75-25-2 | Bromoform | 0.50 | µg/L | U | | 0.50 | 1 | |
| TB-505 / 09-28-06 | 0609103-20 | | 10/02/06 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| TB-505 / 09-28-06 | 0609103-20 | | 10/02/06 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-505 / 09-28-06 | 0609103-20 | | 10/02/06 | 8260 | VOCs | 67-64-1 | Acetone | 5.0 | µg/L | U | | 5.0 | 1 | |
| TB-505 / 09-28-06 | 0609103-20 | | 10/02/06 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-505 / 09-28-06 | 0609103-20 | | 10/02/06 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-505 / 09-28-06 | 0609103-20 | | 10/02/06 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-505 / 09-28-06 | 0609103-20 | | 10/02/06 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-03 / 09-28-06 | 0609103-21 | | 10/02/06 | 8260 | VOCs | 74-87-3 | Chloromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-03 / 09-28-06 | 0609103-21 | | 10/02/06 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 0.50 | µg/L | U | | 0.50 | 1 | |
| WP-03 / 09-28-06 | 0609103-21 | | 10/02/06 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-03 / 09-28-06 | 0609103-21 | | 10/02/06 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-03 / 09-28-06 | 0609103-21 | | 10/02/06 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-03 / 09-28-06 | 0609103-21 | | 10/02/06 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-03 / 09-28-06 | 0609103-21 | | 10/02/06 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-03 / 09-28-06 | 0609103-21 | | 10/02/06 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-03 / 09-28-06 | 0609103-21 | | 10/02/06 | 8260 | VOCs | 67-66-3 | Chloroform | 0.20 | µg/L | U | | 0.20 | 1 | |
| WP-03 / 09-28-06 | 0609103-21 | | 10/02/06 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-03 / 09-28-06 | 0609103-21 | | 10/02/06 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-03 / 09-28-06 | 0609103-21 | | 10/02/06 | 8260 | VOCs | 71-43-2 | Benzene | 0.20 | µg/L | U | | 0.20 | 1 | |
| WP-03 / 09-28-06 | 0609103-21 | | 10/02/06 | 8260 | VOCs | 74-83-9 | Bromomethane | 0.20 | µg/L | UJ | I | 0.20 | 1 | Initial Calibration outside criteria |
| WP-03 / 09-28-06 | 0609103-21 | | 10/02/06 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| WP-03 / 09-28-06 | 0609103-21 | | 10/02/06 | 8260 | VOCs | 79-01-6 | Trichloroethene | 0.20 | µg/L | U | | 0.20 | 1 | |
| WP-03 / 09-28-06 | 0609103-21 | | 10/02/06 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 0.50 | µg/L | U | | 0.50 | 1 | |
| WP-03 / 09-28-06 | 0609103-21 | | 10/02/06 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| WP-03 / 09-28-06 | 0609103-21 | | 10/02/06 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-03 / 09-28-06 | 0609103-21 | | 10/02/06 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-03 / 09-28-06 | 0609103-21 | | 10/02/06 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 0.50 | µg/L | U | | 0.50 | 1 | |
| WP-03 / 09-28-06 | 0609103-21 | | 10/02/06 | 8260 | VOCs | 108-88-3 | Toluene | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-03 / 09-28-06 | 0609103-21 | | 10/02/06 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 0.50 | µg/L | U | | 0.50 | 1 | |
| WP-03 / 09-28-06 | 0609103-21 | | 10/02/06 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| WP-03 / 09-28-06 | 0609103-21 | | 10/02/06 | 8260 | VOCs | 75-00-3 | Chloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-03 / 09-28-06 | 0609103-21 | | 10/02/06 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-03 / 09-28-06 | 0609103-21 | | 10/02/06 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 0.20 | µg/L | U | | 0.20 | 1 | |
| WP-03 / 09-28-06 | 0609103-21 | | 10/02/06 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| WP-03 / 09-28-06 | 0609103-21 | | 10/02/06 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-03 / 09-28-06 | 0609103-21 | | 10/02/06 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-03 / 09-28-06 | 0609103-21 | | 10/02/06 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4.0 | µg/L | U | | 4.0 | 1 | |
| WP-03 / 09-28-06 | 0609103-21 | | 10/02/06 | 8260 | VOCs | 95-47-6 | o-Xylene | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-03 / 09-28-06 | 0609103-21 | | 10/02/06 | 8260 | VOCs | 100-42-5 | Styrene | 2.0 | µg/L | U | | 2.0 | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low, H = High, I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Extr_Date | Anal_Date | Anal_Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WP-03 / 09-28-06 | 0609103-21 | | 10/02/06 | 8260 | VOCs | 75-25-2 | Bromoform | 0.50 | µg/L | U | | 0.50 | 1 | |
| WP-03 / 09-28-06 | 0609103-21 | | 10/02/06 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| WP-03 / 09-28-06 | 0609103-21 | | 10/02/06 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-03 / 09-28-06 | 0609103-21 | | 10/02/06 | 8260 | VOCs | 67-64-1 | Acetone | 5.0 | µg/L | U | | 5.0 | 1 | |
| WP-03 / 09-28-06 | 0609103-21 | | 10/02/06 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-03 / 09-28-06 | 0609103-21 | | 10/02/06 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-03 / 09-28-06 | 0609103-21 | | 10/02/06 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2.0 | µg/L | U | | 2.0 | 1 | |
| WP-03 / 09-28-06 | 0609103-21 | | 10/02/06 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-24S / 09-28-06 | 0609103-22 | | 10/02/06 | 8260 | VOCs | 74-87-3 | Chloromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-24S / 09-28-06 | 0609103-22 | | 10/02/06 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-24S / 09-28-06 | 0609103-22 | | 10/02/06 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-24S / 09-28-06 | 0609103-22 | | 10/02/06 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-24S / 09-28-06 | 0609103-22 | | 10/02/06 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-24S / 09-28-06 | 0609103-22 | | 10/02/06 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-24S / 09-28-06 | 0609103-22 | | 10/02/06 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-24S / 09-28-06 | 0609103-22 | | 10/02/06 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-24S / 09-28-06 | 0609103-22 | | 10/02/06 | 8260 | VOCs | 67-66-3 | Chloroform | 0.33 | µg/L | | | 0.20 | 1 | |
| SH-24S / 09-28-06 | 0609103-22 | | 10/02/06 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-24S / 09-28-06 | 0609103-22 | | 10/02/06 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-24S / 09-28-06 | 0609103-22 | | 10/02/06 | 8260 | VOCs | 71-43-2 | Benzene | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-24S / 09-28-06 | 0609103-22 | | 10/02/06 | 8260 | VOCs | 74-83-9 | Bromomethane | 0.20 | µg/L | UJ | I | 0.20 | 1 | Initial Calibration outside criteria |
| SH-24S / 09-28-06 | 0609103-22 | | 10/02/06 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-24S / 09-28-06 | 0609103-22 | | 10/02/06 | 8260 | VOCs | 79-01-6 | Trichloroethene | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-24S / 09-28-06 | 0609103-22 | | 10/02/06 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-24S / 09-28-06 | 0609103-22 | | 10/02/06 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-24S / 09-28-06 | 0609103-22 | | 10/02/06 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2.0 | µg/L | R | | 2.0 | 1 | Unusable: < 10% MS/MSD recoveries |
| SH-24S / 09-28-06 | 0609103-22 | | 10/02/06 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-24S / 09-28-06 | 0609103-22 | | 10/02/06 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-24S / 09-28-06 | 0609103-22 | | 10/02/06 | 8260 | VOCs | 108-88-3 | Toluene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-24S / 09-28-06 | 0609103-22 | | 10/02/06 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-24S / 09-28-06 | 0609103-22 | | 10/02/06 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-24S / 09-28-06 | 0609103-22 | | 10/02/06 | 8260 | VOCs | 75-00-3 | Chloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-24S / 09-28-06 | 0609103-22 | | 10/02/06 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-24S / 09-28-06 | 0609103-22 | | 10/02/06 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-24S / 09-28-06 | 0609103-22 | | 10/02/06 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-24S / 09-28-06 | 0609103-22 | | 10/02/06 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-24S / 09-28-06 | 0609103-22 | | 10/02/06 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-24S / 09-28-06 | 0609103-22 | | 10/02/06 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4.0 | µg/L | U | | 4.0 | 1 | |
| SH-24S / 09-28-06 | 0609103-22 | | 10/02/06 | 8260 | VOCs | 95-47-6 | o-Xylene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-24S / 09-28-06 | 0609103-22 | | 10/02/06 | 8260 | VOCs | 100-42-5 | Styrene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-24S / 09-28-06 | 0609103-22 | | 10/02/06 | 8260 | VOCs | 75-25-2 | Bromoform | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-24S / 09-28-06 | 0609103-22 | | 10/02/06 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-24S / 09-28-06 | 0609103-22 | | 10/02/06 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-24S / 09-28-06 | 0609103-22 | | 10/02/06 | 8260 | VOCs | 67-64-1 | Acetone | 5.0 | µg/L | U | | 5.0 | 1 | |
| SH-24S / 09-28-06 | 0609103-22 | | 10/02/06 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-24S / 09-28-06 | 0609103-22 | | 10/02/06 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-24S / 09-28-06 | 0609103-22 | | 10/02/06 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-24S / 09-28-06 | 0609103-22 | | 10/02/06 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2.0 | µg/L | U | | 2.0 | 1 | |
| OW-212A / 09-28-06 | 0609103-23 | | 10/02/06 | 8260 | VOCs | 74-87-3 | Chloromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| OW-212A / 09-28-06 | 0609103-23 | | 10/02/06 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 0.50 | µg/L | U | | 0.50 | 1 | |
| OW-212A / 09-28-06 | 0609103-23 | | 10/02/06 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| OW-212A / 09-28-06 | 0609103-23 | | 10/02/06 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |

| Smpl | Lab_ID | Extr_Date | Anal_Date | Anal_Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OW-212A / 09-28-06 | 0609103-23 | | 10/02/06 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2.0 | µg/L | U | | 2.0 | 1 | |
| OW-212A / 09-28-06 | 0609103-23 | | 10/02/06 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2.0 | µg/L | U | | 2.0 | 1 | |
| OW-212A / 09-28-06 | 0609103-23 | | 10/02/06 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| OW-212A / 09-28-06 | 0609103-23 | | 10/02/06 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| OW-212A / 09-28-06 | 0609103-23 | | 10/02/06 | 8260 | VOCs | 67-66-3 | Chloroform | 0.20 | µg/L | U | | 0.20 | 1 | |
| OW-212A / 09-28-06 | 0609103-23 | | 10/02/06 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| OW-212A / 09-28-06 | 0609103-23 | | 10/02/06 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2.0 | µg/L | U | | 2.0 | 1 | |
| OW-212A / 09-28-06 | 0609103-23 | | 10/02/06 | 8260 | VOCs | 71-43-2 | Benzene | 0.20 | µg/L | U | | 0.20 | 1 | |
| OW-212A / 09-28-06 | 0609103-23 | | 10/02/06 | 8260 | VOCs | 74-83-9 | Bromomethane | 0.20 | µg/L | UJ | I | 0.20 | 1 | Initial Calibration outside criteria |
| OW-212A / 09-28-06 | 0609103-23 | | 10/02/06 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| OW-212A / 09-28-06 | 0609103-23 | | 10/02/06 | 8260 | VOCs | 79-01-6 | Trichloroethene | 0.20 | µg/L | U | | 0.20 | 1 | |
| OW-212A / 09-28-06 | 0609103-23 | | 10/02/06 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 0.50 | µg/L | U | | 0.50 | 1 | |
| OW-212A / 09-28-06 | 0609103-23 | | 10/02/06 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| OW-212A / 09-28-06 | 0609103-23 | | 10/02/06 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2.0 | µg/L | U | | 2.0 | 1 | |
| OW-212A / 09-28-06 | 0609103-23 | | 10/02/06 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2.0 | µg/L | U | | 2.0 | 1 | |
| OW-212A / 09-28-06 | 0609103-23 | | 10/02/06 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 0.50 | µg/L | U | | 0.50 | 1 | |
| OW-212A / 09-28-06 | 0609103-23 | | 10/02/06 | 8260 | VOCs | 108-88-3 | Toluene | 2.0 | µg/L | U | | 2.0 | 1 | |
| OW-212A / 09-28-06 | 0609103-23 | | 10/02/06 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 0.50 | µg/L | U | | 0.50 | 1 | |
| OW-212A / 09-28-06 | 0609103-23 | | 10/02/06 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| OW-212A / 09-28-06 | 0609103-23 | | 10/02/06 | 8260 | VOCs | 75-00-3 | Chloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| OW-212A / 09-28-06 | 0609103-23 | | 10/02/06 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2.0 | µg/L | U | | 2.0 | 1 | |
| OW-212A / 09-28-06 | 0609103-23 | | 10/02/06 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 0.20 | µg/L | U | | 0.20 | 1 | |
| OW-212A / 09-28-06 | 0609103-23 | | 10/02/06 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| OW-212A / 09-28-06 | 0609103-23 | | 10/02/06 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2.0 | µg/L | U | | 2.0 | 1 | |
| OW-212A / 09-28-06 | 0609103-23 | | 10/02/06 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2.0 | µg/L | U | | 2.0 | 1 | |
| OW-212A / 09-28-06 | 0609103-23 | | 10/02/06 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4.0 | µg/L | U | | 4.0 | 1 | |
| OW-212A / 09-28-06 | 0609103-23 | | 10/02/06 | 8260 | VOCs | 95-47-6 | o-Xylene | 2.0 | µg/L | U | | 2.0 | 1 | |
| OW-212A / 09-28-06 | 0609103-23 | | 10/02/06 | 8260 | VOCs | 100-42-5 | Styrene | 2.0 | µg/L | U | | 2.0 | 1 | |
| OW-212A / 09-28-06 | 0609103-23 | | 10/02/06 | 8260 | VOCs | 75-25-2 | Bromoform | 0.50 | µg/L | U | | 0.50 | 1 | |
| OW-212A / 09-28-06 | 0609103-23 | | 10/02/06 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| OW-212A / 09-28-06 | 0609103-23 | | 10/02/06 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| OW-212A / 09-28-06 | 0609103-23 | | 10/02/06 | 8260 | VOCs | 67-64-1 | Acetone | 5.0 | µg/L | U | | 5.0 | 1 | |
| OW-212A / 09-28-06 | 0609103-23 | | 10/02/06 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| OW-212A / 09-28-06 | 0609103-23 | | 10/02/06 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2.0 | µg/L | U | | 2.0 | 1 | |
| OW-212A / 09-28-06 | 0609103-23 | | 10/02/06 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2.0 | µg/L | U | | 2.0 | 1 | |
| OW-212A / 09-28-06 | 0609103-23 | | 10/02/06 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-508 / 09-29-06 | 0609103-24 | | 10/02/06 | 8260 | VOCs | 74-87-3 | Chloromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-508 / 09-29-06 | 0609103-24 | | 10/02/06 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 0.50 | µg/L | U | | 0.50 | 1 | |
| TB-508 / 09-29-06 | 0609103-24 | | 10/02/06 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-508 / 09-29-06 | 0609103-24 | | 10/02/06 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-508 / 09-29-06 | 0609103-24 | | 10/02/06 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-508 / 09-29-06 | 0609103-24 | | 10/02/06 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-508 / 09-29-06 | 0609103-24 | | 10/02/06 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-508 / 09-29-06 | 0609103-24 | | 10/02/06 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-508 / 09-29-06 | 0609103-24 | | 10/02/06 | 8260 | VOCs | 67-66-3 | Chloroform | 0.20 | µg/L | U | | 0.20 | 1 | |
| TB-508 / 09-29-06 | 0609103-24 | | 10/02/06 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-508 / 09-29-06 | 0609103-24 | | 10/02/06 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-508 / 09-29-06 | 0609103-24 | | 10/02/06 | 8260 | VOCs | 71-43-2 | Benzene | 0.20 | µg/L | U | | 0.20 | 1 | |
| TB-508 / 09-29-06 | 0609103-24 | | 10/02/06 | 8260 | VOCs | 74-83-9 | Bromomethane | 0.20 | µg/L | UJ | I | 0.20 | 1 | Initial Calibration outside criteria |
| TB-508 / 09-29-06 | 0609103-24 | | 10/02/06 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| TB-508 / 09-29-06 | 0609103-24 | | 10/02/06 | 8260 | VOCs | 79-01-6 | Trichloroethene | 0.20 | µg/L | U | | 0.20 | 1 | |
| TB-508 / 09-29-06 | 0609103-24 | | 10/02/06 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 0.50 | µg/L | U | | 0.50 | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low, H = High, I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Extr_Date | Anal_Date | Anal_Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TB-508 / 09-29-06 | 0609103-24 | | 10/02/06 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| TB-508 / 09-29-06 | 0609103-24 | | 10/02/06 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-508 / 09-29-06 | 0609103-24 | | 10/02/06 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-508 / 09-29-06 | 0609103-24 | | 10/02/06 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 0.50 | µg/L | U | | 0.50 | 1 | |
| TB-508 / 09-29-06 | 0609103-24 | | 10/02/06 | 8260 | VOCs | 108-88-3 | Toluene | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-508 / 09-29-06 | 0609103-24 | | 10/02/06 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 0.50 | µg/L | U | | 0.50 | 1 | |
| TB-508 / 09-29-06 | 0609103-24 | | 10/02/06 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| TB-508 / 09-29-06 | 0609103-24 | | 10/02/06 | 8260 | VOCs | 75-00-3 | Chloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-508 / 09-29-06 | 0609103-24 | | 10/02/06 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-508 / 09-29-06 | 0609103-24 | | 10/02/06 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 0.20 | µg/L | U | | 0.20 | 1 | |
| TB-508 / 09-29-06 | 0609103-24 | | 10/02/06 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| TB-508 / 09-29-06 | 0609103-24 | | 10/02/06 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-508 / 09-29-06 | 0609103-24 | | 10/02/06 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-508 / 09-29-06 | 0609103-24 | | 10/02/06 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4.0 | µg/L | U | | 4.0 | 1 | |
| TB-508 / 09-29-06 | 0609103-24 | | 10/02/06 | 8260 | VOCs | 95-47-6 | o-Xylene | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-508 / 09-29-06 | 0609103-24 | | 10/02/06 | 8260 | VOCs | 100-42-5 | Styrene | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-508 / 09-29-06 | 0609103-24 | | 10/02/06 | 8260 | VOCs | 75-25-2 | Bromoform | 0.50 | µg/L | U | | 0.50 | 1 | |
| TB-508 / 09-29-06 | 0609103-24 | | 10/02/06 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| TB-508 / 09-29-06 | 0609103-24 | | 10/02/06 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-508 / 09-29-06 | 0609103-24 | | 10/02/06 | 8260 | VOCs | 67-64-1 | Acetone | 5.0 | µg/L | U | | 5.0 | 1 | |
| TB-508 / 09-29-06 | 0609103-24 | | 10/02/06 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-508 / 09-29-06 | 0609103-24 | | 10/02/06 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-508 / 09-29-06 | 0609103-24 | | 10/02/06 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2.0 | µg/L | U | | 2.0 | 1 | |
| TB-508 / 09-29-06 | 0609103-24 | | 10/02/06 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-19S / 09-29-06 | 0609103-25 | | 10/02/06 | 8260 | VOCs | 74-87-3 | Chloromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-19S / 09-29-06 | 0609103-25 | | 10/02/06 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-19S / 09-29-06 | 0609103-25 | | 10/02/06 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-19S / 09-29-06 | 0609103-25 | | 10/02/06 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-19S / 09-29-06 | 0609103-25 | | 10/02/06 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-19S / 09-29-06 | 0609103-25 | | 10/02/06 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-19S / 09-29-06 | 0609103-25 | | 10/02/06 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-19S / 09-29-06 | 0609103-25 | | 10/02/06 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-19S / 09-29-06 | 0609103-25 | | 10/02/06 | 8260 | VOCs | 67-66-3 | Chloroform | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-19S / 09-29-06 | 0609103-25 | | 10/02/06 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-19S / 09-29-06 | 0609103-25 | | 10/02/06 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-19S / 09-29-06 | 0609103-25 | | 10/02/06 | 8260 | VOCs | 71-43-2 | Benzene | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-19S / 09-29-06 | 0609103-25 | | 10/02/06 | 8260 | VOCs | 74-83-9 | Bromomethane | 0.20 | µg/L | UJ | I | 0.20 | 1 | Initial Calibration outside criteria |
| SH-19S / 09-29-06 | 0609103-25 | | 10/02/06 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-19S / 09-29-06 | 0609103-25 | | 10/02/06 | 8260 | VOCs | 79-01-6 | Trichloroethene | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-19S / 09-29-06 | 0609103-25 | | 10/02/06 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-19S / 09-29-06 | 0609103-25 | | 10/02/06 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-19S / 09-29-06 | 0609103-25 | | 10/02/06 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-19S / 09-29-06 | 0609103-25 | | 10/02/06 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-19S / 09-29-06 | 0609103-25 | | 10/02/06 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-19S / 09-29-06 | 0609103-25 | | 10/02/06 | 8260 | VOCs | 108-88-3 | Toluene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-19S / 09-29-06 | 0609103-25 | | 10/02/06 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-19S / 09-29-06 | 0609103-25 | | 10/02/06 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-19S / 09-29-06 | 0609103-25 | | 10/02/06 | 8260 | VOCs | 75-00-3 | Chloroethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-19S / 09-29-06 | 0609103-25 | | 10/02/06 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-19S / 09-29-06 | 0609103-25 | | 10/02/06 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-19S / 09-29-06 | 0609103-25 | | 10/02/06 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-19S / 09-29-06 | 0609103-25 | | 10/02/06 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2.0 | µg/L | U | | 2.0 | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low, H = High, I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Extr_Date | Anal_Date | Anal_Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-19S / 09-29-06 | 0609103-25 | | 10/02/06 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-19S / 09-29-06 | 0609103-25 | | 10/02/06 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4.0 | µg/L | U | | 4.0 | 1 | |
| SH-19S / 09-29-06 | 0609103-25 | | 10/02/06 | 8260 | VOCs | 95-47-6 | o-Xylene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-19S / 09-29-06 | 0609103-25 | | 10/02/06 | 8260 | VOCs | 100-42-5 | Styrene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-19S / 09-29-06 | 0609103-25 | | 10/02/06 | 8260 | VOCs | 75-25-2 | Bromoform | 0.50 | µg/L | U | | 0.50 | 1 | |
| SH-19S / 09-29-06 | 0609103-25 | | 10/02/06 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.20 | µg/L | U | | 0.20 | 1 | |
| SH-19S / 09-29-06 | 0609103-25 | | 10/02/06 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-19S / 09-29-06 | 0609103-25 | | 10/02/06 | 8260 | VOCs | 67-64-1 | Acetone | 5.0 | µg/L | U | | 5.0 | 1 | |
| SH-19S / 09-29-06 | 0609103-25 | | 10/02/06 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-19S / 09-29-06 | 0609103-25 | | 10/02/06 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-19S / 09-29-06 | 0609103-25 | | 10/02/06 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-19S / 09-29-06 | 0609103-25 | | 10/02/06 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2.0 | µg/L | U | | 2.0 | 1 | |
| SH-23S / 09-25-06 | 0609103-02 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 91-20-3 | Naphthalene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| SH-23S / 09-25-06 | 0609103-02 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 91-57-6 | 2-Methylnaphthalene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| SH-23S / 09-25-06 | 0609103-02 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 129-00-0 | Pyrene | 1.6 | ng/L | J | I | 11 | 1 | Result uncertain below the calibration range |
| SH-23S / 09-25-06 | 0609103-02 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 56-55-3 | Benz[a]anthracene | 2.0 | ng/L | J | I | 11 | 1 | Result uncertain below the calibration range |
| SH-23S / 09-25-06 | 0609103-02 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 218-01-9 | Chrysene | 2.0 | ng/L | J | I | 11 | 1 | Result uncertain below the calibration range |
| SH-23S / 09-25-06 | 0609103-02 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 117-81-7 | bis(2-Ethylhexyl)phthalate | 1100 | ng/L | U | | 1100 | 1 | Negated due to Blank Action |
| SH-23S / 09-25-06 | 0609103-02 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| SH-23S / 09-25-06 | 0609103-02 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| SH-23S / 09-25-06 | 0609103-02 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 50-32-8 | Benzo[a]pyrene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| SH-23S / 09-25-06 | 0609103-02 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| SH-23S / 09-25-06 | 0609103-02 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| SH-23S / 09-25-06 | 0609103-02 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| SH-23S / 09-25-06 | 0609103-02 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 208-96-8 | Acenaphthylene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| SH-23S / 09-25-06 | 0609103-02 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 83-32-9 | Acenaphthene | 11 | ng/L | U | | 11 | 1 | |
| SH-23S / 09-25-06 | 0609103-02 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 86-73-7 | Fluorene | 11 | ng/L | U | | 11 | 1 | |
| SH-23S / 09-25-06 | 0609103-02 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 85-01-8 | Phenanthrene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| SH-23S / 09-25-06 | 0609103-02 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 120-12-7 | Anthracene | 11 | ng/L | U | | 11 | 1 | |
| SH-23S / 09-25-06 | 0609103-02 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 86-74-8 | Carbazole | 11 | ng/L | U | | 11 | 1 | |
| SH-23S / 09-25-06 | 0609103-02 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 206-44-0 | Fluoranthene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| SH-22S / 09-25-06 | 0609103-03 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 91-20-3 | Naphthalene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-22S / 09-25-06 | 0609103-03 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 91-57-6 | 2-Methylnaphthalene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-22S / 09-25-06 | 0609103-03 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 129-00-0 | Pyrene | 10 | ng/L | U | | 10 | 1 | |
| SH-22S / 09-25-06 | 0609103-03 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 56-55-3 | Benz[a]anthracene | 1.6 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| SH-22S / 09-25-06 | 0609103-03 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 218-01-9 | Chrysene | 1.4 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| SH-22S / 09-25-06 | 0609103-03 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 117-81-7 | bis(2-Ethylhexyl)phthalate | 1000 | ng/L | U | | 1000 | 1 | Negated due to Blank Action |
| SH-22S / 09-25-06 | 0609103-03 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-22S / 09-25-06 | 0609103-03 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-22S / 09-25-06 | 0609103-03 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 50-32-8 | Benzo[a]pyrene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-22S / 09-25-06 | 0609103-03 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-22S / 09-25-06 | 0609103-03 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-22S / 09-25-06 | 0609103-03 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-22S / 09-25-06 | 0609103-03 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 208-96-8 | Acenaphthylene | 10 | ng/L | U | | 10 | 1 | |
| SH-22S / 09-25-06 | 0609103-03 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 83-32-9 | Acenaphthene | 10 | ng/L | U | | 10 | 1 | |
| SH-22S / 09-25-06 | 0609103-03 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 86-73-7 | Fluorene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-22S / 09-25-06 | 0609103-03 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 85-01-8 | Phenanthrene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-22S / 09-25-06 | 0609103-03 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 120-12-7 | Anthracene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-22S / 09-25-06 | 0609103-03 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 86-74-8 | Carbazole | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-22S / 09-25-06 | 0609103-03 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 206-44-0 | Fluoranthene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-19D / 09-25-06 | 0609103-04 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 91-20-3 | Naphthalene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| SH-19D / 09-25-06 | 0609103-04 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 91-57-6 | 2-Methylnaphthalene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low, H = High, I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Extr_Date | Anal_Date | Anal_Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-19D / 09-25-06 | 0609103-04 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 129-00-0 | Pyrene | 11 | ng/L | U | | 11 | 1 | |
| SH-19D / 09-25-06 | 0609103-04 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 56-55-3 | Benz[a]anthracene | 11 | ng/L | U | | 11 | 1 | |
| SH-19D / 09-25-06 | 0609103-04 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 218-01-9 | Chrysene | 11 | ng/L | U | | 11 | 1 | |
| SH-19D / 09-25-06 | 0609103-04 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 117-81-7 | bis(2-Ethylhexyl)phthalate | 1100 | ng/L | U | | 1100 | 1 | Negated due to Blank Action |
| SH-19D / 09-25-06 | 0609103-04 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 11 | ng/L | U | | 11 | 1 | |
| SH-19D / 09-25-06 | 0609103-04 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 11 | ng/L | U | | 11 | 1 | |
| SH-19D / 09-25-06 | 0609103-04 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 50-32-8 | Benzo[a]pyrene | 11 | ng/L | U | | 11 | 1 | |
| SH-19D / 09-25-06 | 0609103-04 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 11 | ng/L | U | | 11 | 1 | |
| SH-19D / 09-25-06 | 0609103-04 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 11 | ng/L | U | | 11 | 1 | |
| SH-19D / 09-25-06 | 0609103-04 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 11 | ng/L | U | | 11 | 1 | |
| SH-19D / 09-25-06 | 0609103-04 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 208-96-8 | Acenaphthylene | 11 | ng/L | U | | 11 | 1 | |
| SH-19D / 09-25-06 | 0609103-04 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 83-32-9 | Acenaphthene | 11 | ng/L | U | | 11 | 1 | |
| SH-19D / 09-25-06 | 0609103-04 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 86-73-7 | Fluorene | 11 | ng/L | U | | 11 | 1 | |
| SH-19D / 09-25-06 | 0609103-04 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 85-01-8 | Phenanthrene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| SH-19D / 09-25-06 | 0609103-04 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 120-12-7 | Anthracene | 11 | ng/L | U | | 11 | 1 | |
| SH-19D / 09-25-06 | 0609103-04 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 86-74-8 | Carbazole | 11 | ng/L | U | | 11 | 1 | |
| SH-19D / 09-25-06 | 0609103-04 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 206-44-0 | Fluoranthene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| SH-17S / 09-25-06 | 0609103-05 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 91-20-3 | Naphthalene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-17S / 09-25-06 | 0609103-05 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 91-57-6 | 2-Methylnaphthalene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-17S / 09-25-06 | 0609103-05 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 129-00-0 | Pyrene | 200 | ng/L | | | 10 | 1 | |
| SH-17S / 09-25-06 | 0609103-05 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 56-55-3 | Benz[a]anthracene | 10 | ng/L | U | | 10 | 1 | |
| SH-17S / 09-25-06 | 0609103-05 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 218-01-9 | Chrysene | 10 | ng/L | U | | 10 | 1 | |
| SH-17S / 09-25-06 | 0609103-05 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 117-81-7 | bis(2-Ethylhexyl)phthalate | 6900 | ng/L | | | 1000 | 1 | |
| SH-17S / 09-25-06 | 0609103-05 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-17S / 09-25-06 | 0609103-05 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 10 | ng/L | U | | 10 | 1 | |
| SH-17S / 09-25-06 | 0609103-05 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 50-32-8 | Benzo[a]pyrene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-17S / 09-25-06 | 0609103-05 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-17S / 09-25-06 | 0609103-05 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 10 | ng/L | U | | 10 | 1 | |
| SH-17S / 09-25-06 | 0609103-05 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-17S / 09-25-06 | 0609103-05 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 208-96-8 | Acenaphthylene | 10 | ng/L | U | | 10 | 1 | |
| SH-17S / 09-25-06 | 0609103-05 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 83-32-9 | Acenaphthene | 10 | ng/L | U | | 10 | 1 | |
| SH-17S / 09-25-06 | 0609103-05 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 86-73-7 | Fluorene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-17S / 09-25-06 | 0609103-05 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 85-01-8 | Phenanthrene | 40 | ng/L | | | 10 | 1 | |
| SH-17S / 09-25-06 | 0609103-05 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 120-12-7 | Anthracene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-17S / 09-25-06 | 0609103-05 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 86-74-8 | Carbazole | 10 | ng/L | U | | 10 | 1 | |
| SH-17S / 09-25-06 | 0609103-05 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 206-44-0 | Fluoranthene | 37 | ng/L | | | 10 | 1 | |
| SH-27S / 09-25-06 | 0609103-06 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 91-20-3 | Naphthalene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| SH-27S / 09-25-06 | 0609103-06 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 91-57-6 | 2-Methylnaphthalene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| SH-27S / 09-25-06 | 0609103-06 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 129-00-0 | Pyrene | 4.9 | ng/L | J | I | 11 | 1 | Result uncertain below the calibration range |
| SH-27S / 09-25-06 | 0609103-06 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 56-55-3 | Benz[a]anthracene | 2.5 | ng/L | J | I | 11 | 1 | Result uncertain below the calibration range |
| SH-27S / 09-25-06 | 0609103-06 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 218-01-9 | Chrysene | 2.7 | ng/L | J | I | 11 | 1 | Result uncertain below the calibration range |
| SH-27S / 09-25-06 | 0609103-06 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 117-81-7 | bis(2-Ethylhexyl)phthalate | 1200 | ng/L | U | | 1100 | 1 | Negated due to Blank Action |
| SH-27S / 09-25-06 | 0609103-06 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| SH-27S / 09-25-06 | 0609103-06 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| SH-27S / 09-25-06 | 0609103-06 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 50-32-8 | Benzo[a]pyrene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| SH-27S / 09-25-06 | 0609103-06 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| SH-27S / 09-25-06 | 0609103-06 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| SH-27S / 09-25-06 | 0609103-06 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| SH-27S / 09-25-06 | 0609103-06 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 208-96-8 | Acenaphthylene | 11 | ng/L | U | | 11 | 1 | |
| SH-27S / 09-25-06 | 0609103-06 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 83-32-9 | Acenaphthene | 11 | ng/L | U | | 11 | 1 | |
| SH-27S / 09-25-06 | 0609103-06 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 86-73-7 | Fluorene | 11 | ng/L | U | | 11 | 1 | |
| SH-27S / 09-25-06 | 0609103-06 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 85-01-8 | Phenanthrene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |

| Smpl | Lab_ID | Extr_Date | Anal_Date | Anal_Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-27S / 09-25-06 | 0609103-06 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 120-12-7 | Anthracene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| SH-27S / 09-25-06 | 0609103-06 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 86-74-8 | Carbazole | 11 | ng/L | U | | 11 | 1 | |
| SH-27S / 09-25-06 | 0609103-06 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 206-44-0 | Fluoranthene | 7.3 | ng/L | J | I | 11 | 1 | Result uncertain below the calibration range |
| WP-01 / 09-26-06 | 0609103-08 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 91-20-3 | Naphthalene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| WP-01 / 09-26-06 | 0609103-08 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 91-57-6 | 2-Methylnaphthalene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| WP-01 / 09-26-06 | 0609103-08 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 129-00-0 | Pyrene | 810 | ng/L | | | 11 | 1 | |
| WP-01 / 09-26-06 | 0609103-08 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 56-55-3 | Benz[a]anthracene | 35 | ng/L | | | 11 | 1 | |
| WP-01 / 09-26-06 | 0609103-08 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 218-01-9 | Chrysene | 23 | ng/L | | | 11 | 1 | |
| WP-01 / 09-26-06 | 0609103-08 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 117-81-7 | bis(2-Ethylhexyl)phthalate | 1100 | ng/L | U | | 1100 | 1 | Negated due to Blank Action |
| WP-01 / 09-26-06 | 0609103-08 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| WP-01 / 09-26-06 | 0609103-08 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| WP-01 / 09-26-06 | 0609103-08 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 50-32-8 | Benzo[a]pyrene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| WP-01 / 09-26-06 | 0609103-08 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| WP-01 / 09-26-06 | 0609103-08 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| WP-01 / 09-26-06 | 0609103-08 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| WP-01 / 09-26-06 | 0609103-08 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 208-96-8 | Acenaphthylene | 16 | ng/L | | | 11 | 1 | |
| WP-01 / 09-26-06 | 0609103-08 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 83-32-9 | Acenaphthene | 170 | ng/L | | | 11 | 1 | |
| WP-01 / 09-26-06 | 0609103-08 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 86-73-7 | Fluorene | 170 | ng/L | | | 11 | 1 | |
| WP-01 / 09-26-06 | 0609103-08 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 85-01-8 | Phenanthrene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| WP-01 / 09-26-06 | 0609103-08 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 120-12-7 | Anthracene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| WP-01 / 09-26-06 | 0609103-08 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 86-74-8 | Carbazole | 11 | ng/L | U | | 11 | 1 | |
| WP-01 / 09-26-06 | 0609103-08 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 206-44-0 | Fluoranthene | 550 | ng/L | | | 11 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 91-20-3 | Naphthalene | 380 | ng/L | | | 10 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 91-57-6 | 2-Methylnaphthalene | 170 | ng/L | | | 10 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 129-00-0 | Pyrene | 2800 | ng/L | | | 10 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 56-55-3 | Benz[a]anthracene | 1600 | ng/L | | | 10 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 218-01-9 | Chrysene | 1600 | ng/L | | | 10 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 117-81-7 | bis(2-Ethylhexyl)phthalate | 1000 | ng/L | U | | 1000 | 1 | Negated due to Blank Action |
| SH-21S / 09-26-06 | 0609103-09 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 1400 | ng/L | | | 10 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 1300 | ng/L | | | 10 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 50-32-8 | Benzo[a]pyrene | 1800 | ng/L | | | 10 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 1100 | ng/L | | | 10 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 400 | ng/L | | | 10 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 1000 | ng/L | | | 10 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 208-96-8 | Acenaphthylene | 420 | ng/L | | | 10 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 83-32-9 | Acenaphthene | 1200 | ng/L | | | 10 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 86-73-7 | Fluorene | 200 | ng/L | | | 10 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 85-01-8 | Phenanthrene | 1500 | ng/L | | | 10 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 120-12-7 | Anthracene | 1000 | ng/L | | | 10 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 86-74-8 | Carbazole | 62 | ng/L | | | 10 | 1 | |
| SH-21S / 09-26-06 | 0609103-09 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 206-44-0 | Fluoranthene | 3100 | ng/L | | | 10 | 1 | |
| SH-18S / 09-26-06 | 0609103-10 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 91-20-3 | Naphthalene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-18S / 09-26-06 | 0609103-10 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 91-57-6 | 2-Methylnaphthalene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-18S / 09-26-06 | 0609103-10 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 129-00-0 | Pyrene | 6.7 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| SH-18S / 09-26-06 | 0609103-10 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 56-55-3 | Benz[a]anthracene | 10 | ng/L | U | | 10 | 1 | |
| SH-18S / 09-26-06 | 0609103-10 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 218-01-9 | Chrysene | 10 | ng/L | U | | 10 | 1 | |
| SH-18S / 09-26-06 | 0609103-10 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 117-81-7 | bis(2-Ethylhexyl)phthalate | 1000 | ng/L | U | | 1000 | 1 | Negated due to Blank Action |
| SH-18S / 09-26-06 | 0609103-10 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-18S / 09-26-06 | 0609103-10 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-18S / 09-26-06 | 0609103-10 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 50-32-8 | Benzo[a]pyrene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-18S / 09-26-06 | 0609103-10 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-18S / 09-26-06 | 0609103-10 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |

| Smpl | Lab_ID | Extr_Date | Anal_Date | Anal_Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-18S / 09-26-06 | 0609103-10 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-18S / 09-26-06 | 0609103-10 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 208-96-8 | Acenaphthylene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-18S / 09-26-06 | 0609103-10 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 83-32-9 | Acenaphthene | 10 | ng/L | U | | 10 | 1 | |
| SH-18S / 09-26-06 | 0609103-10 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 86-73-7 | Fluorene | 10 | ng/L | U | | 10 | 1 | |
| SH-18S / 09-26-06 | 0609103-10 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 85-01-8 | Phenanthrene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-18S / 09-26-06 | 0609103-10 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 120-12-7 | Anthracene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-18S / 09-26-06 | 0609103-10 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 86-74-8 | Carbazole | 10 | ng/L | U | | 10 | 1 | |
| SH-18S / 09-26-06 | 0609103-10 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 206-44-0 | Fluoranthene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-18D / 09-26-06 | 0609103-11 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 91-20-3 | Naphthalene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| SH-18D / 09-26-06 | 0609103-11 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 91-57-6 | 2-Methylnaphthalene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| SH-18D / 09-26-06 | 0609103-11 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 129-00-0 | Pyrene | 1.2 | ng/L | J | I | 11 | 1 | Result uncertain below the calibration range |
| SH-18D / 09-26-06 | 0609103-11 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 56-55-3 | Benz[a]anthracene | 11 | ng/L | U | | 11 | 1 | |
| SH-18D / 09-26-06 | 0609103-11 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 218-01-9 | Chrysene | 1.1 | ng/L | J | I | 11 | 1 | Result uncertain below the calibration range |
| SH-18D / 09-26-06 | 0609103-11 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 117-81-7 | bis(2-Ethylhexyl)phthalate | 1100 | ng/L | U | | 1100 | 1 | Negated due to Blank Action |
| SH-18D / 09-26-06 | 0609103-11 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| SH-18D / 09-26-06 | 0609103-11 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| SH-18D / 09-26-06 | 0609103-11 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 50-32-8 | Benzo[a]pyrene | 11 | ng/L | U | | 11 | 1 | |
| SH-18D / 09-26-06 | 0609103-11 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| SH-18D / 09-26-06 | 0609103-11 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 11 | ng/L | U | | 11 | 1 | |
| SH-18D / 09-26-06 | 0609103-11 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| SH-18D / 09-26-06 | 0609103-11 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 208-96-8 | Acenaphthylene | 11 | ng/L | U | | 11 | 1 | |
| SH-18D / 09-26-06 | 0609103-11 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 83-32-9 | Acenaphthene | 11 | ng/L | U | | 11 | 1 | |
| SH-18D / 09-26-06 | 0609103-11 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 86-73-7 | Fluorene | 11 | ng/L | U | | 11 | 1 | |
| SH-18D / 09-26-06 | 0609103-11 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 85-01-8 | Phenanthrene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| SH-18D / 09-26-06 | 0609103-11 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 120-12-7 | Anthracene | 11 | ng/L | U | | 11 | 1 | |
| SH-18D / 09-26-06 | 0609103-11 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 86-74-8 | Carbazole | 11 | ng/L | U | | 11 | 1 | |
| SH-18D / 09-26-06 | 0609103-11 | 09/28/06 | 10/07/06 | PAH SIM | SVOCs | 206-44-0 | Fluoranthene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| SH-25S / 09-26-06 | 0609103-12 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 91-20-3 | Naphthalene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-25S / 09-26-06 | 0609103-12 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 91-57-6 | 2-Methylnaphthalene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-25S / 09-26-06 | 0609103-12 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 129-00-0 | Pyrene | 12 | ng/L | | | 10 | 1 | |
| SH-25S / 09-26-06 | 0609103-12 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 56-55-3 | Benz[a]anthracene | 1.4 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| SH-25S / 09-26-06 | 0609103-12 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 218-01-9 | Chrysene | 1.5 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| SH-25S / 09-26-06 | 0609103-12 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 117-81-7 | bis(2-Ethylhexyl)phthalate | 1000 | ng/L | U | | 1000 | 1 | Negated due to Blank Action |
| SH-25S / 09-26-06 | 0609103-12 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-25S / 09-26-06 | 0609103-12 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-25S / 09-26-06 | 0609103-12 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 50-32-8 | Benzo[a]pyrene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-25S / 09-26-06 | 0609103-12 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-25S / 09-26-06 | 0609103-12 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-25S / 09-26-06 | 0609103-12 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-25S / 09-26-06 | 0609103-12 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 208-96-8 | Acenaphthylene | 10 | ng/L | U | | 10 | 1 | |
| SH-25S / 09-26-06 | 0609103-12 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 83-32-9 | Acenaphthene | 10 | ng/L | U | | 10 | 1 | |
| SH-25S / 09-26-06 | 0609103-12 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 86-73-7 | Fluorene | 10 | ng/L | U | | 10 | 1 | |
| SH-25S / 09-26-06 | 0609103-12 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 85-01-8 | Phenanthrene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-25S / 09-26-06 | 0609103-12 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 120-12-7 | Anthracene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-25S / 09-26-06 | 0609103-12 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 86-74-8 | Carbazole | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-25S / 09-26-06 | 0609103-12 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 206-44-0 | Fluoranthene | 8.1 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| WP-04 / 09-27-06 | 0609103-14 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 91-20-3 | Naphthalene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| WP-04 / 09-27-06 | 0609103-14 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 91-57-6 | 2-Methylnaphthalene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| WP-04 / 09-27-06 | 0609103-14 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 129-00-0 | Pyrene | 160 | ng/L | | | 11 | 1 | |
| WP-04 / 09-27-06 | 0609103-14 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 56-55-3 | Benz[a]anthracene | 73 | ng/L | | | 11 | 1 | |
| WP-04 / 09-27-06 | 0609103-14 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 218-01-9 | Chrysene | 86 | ng/L | | | 11 | 1 | |
| WP-04 / 09-27-06 | 0609103-14 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 117-81-7 | bis(2-Ethylhexyl)phthalate | 1100 | ng/L | U | | 1100 | 1 | Negated due to Blank Action |

| Smpl | Lab_ID | Extr_Date | Anal_Date | Anal_Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WP-04 / 09-27-06 | 0609103-14 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 61 | ng/L | | | 11 | 1 | |
| WP-04 / 09-27-06 | 0609103-14 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 54 | ng/L | | | 11 | 1 | |
| WP-04 / 09-27-06 | 0609103-14 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 50-32-8 | Benzo[a]pyrene | 69 | ng/L | | | 11 | 1 | |
| WP-04 / 09-27-06 | 0609103-14 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 44 | ng/L | | | 11 | 1 | |
| WP-04 / 09-27-06 | 0609103-14 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 17 | ng/L | | | 11 | 1 | |
| WP-04 / 09-27-06 | 0609103-14 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 51 | ng/L | | | 11 | 1 | |
| WP-04 / 09-27-06 | 0609103-14 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 208-96-8 | Acenaphthylene | 14 | ng/L | | | 11 | 1 | |
| WP-04 / 09-27-06 | 0609103-14 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 83-32-9 | Acenaphthene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| WP-04 / 09-27-06 | 0609103-14 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 86-73-7 | Fluorene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| WP-04 / 09-27-06 | 0609103-14 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 85-01-8 | Phenanthrene | 70 | ng/L | | | 11 | 1 | |
| WP-04 / 09-27-06 | 0609103-14 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 120-12-7 | Anthracene | 14 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| WP-04 / 09-27-06 | 0609103-14 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 86-74-8 | Carbazole | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| WP-04 / 09-27-06 | 0609103-14 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 206-44-0 | Fluoranthene | 140 | ng/L | | | 11 | 1 | |
| WP-05 / 09-27-06 | 0609103-15 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 91-20-3 | Naphthalene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| WP-05 / 09-27-06 | 0609103-15 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 91-57-6 | 2-Methylnaphthalene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| WP-05 / 09-27-06 | 0609103-15 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 129-00-0 | Pyrene | 11 | ng/L | U | | 11 | 1 | |
| WP-05 / 09-27-06 | 0609103-15 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 56-55-3 | Benz[a]anthracene | 11 | ng/L | U | | 11 | 1 | |
| WP-05 / 09-27-06 | 0609103-15 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 218-01-9 | Chrysene | 11 | ng/L | U | | 11 | 1 | |
| WP-05 / 09-27-06 | 0609103-15 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 117-81-7 | bis(2-Ethylhexyl)phthalate | 1100 | ng/L | U | | 1100 | 1 | Negated due to Blank Action |
| WP-05 / 09-27-06 | 0609103-15 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 11 | ng/L | U | | 11 | 1 | |
| WP-05 / 09-27-06 | 0609103-15 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 11 | ng/L | U | | 11 | 1 | |
| WP-05 / 09-27-06 | 0609103-15 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 50-32-8 | Benzo[a]pyrene | 11 | ng/L | U | | 11 | 1 | |
| WP-05 / 09-27-06 | 0609103-15 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| WP-05 / 09-27-06 | 0609103-15 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 11 | ng/L | U | | 11 | 1 | |
| WP-05 / 09-27-06 | 0609103-15 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| WP-05 / 09-27-06 | 0609103-15 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 208-96-8 | Acenaphthylene | 11 | ng/L | U | | 11 | 1 | |
| WP-05 / 09-27-06 | 0609103-15 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 83-32-9 | Acenaphthene | 11 | ng/L | U | | 11 | 1 | |
| WP-05 / 09-27-06 | 0609103-15 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 86-73-7 | Fluorene | 11 | ng/L | U | | 11 | 1 | |
| WP-05 / 09-27-06 | 0609103-15 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 85-01-8 | Phenanthrene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| WP-05 / 09-27-06 | 0609103-15 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 120-12-7 | Anthracene | 11 | ng/L | U | | 11 | 1 | |
| WP-05 / 09-27-06 | 0609103-15 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 86-74-8 | Carbazole | 11 | ng/L | U | | 11 | 1 | |
| WP-05 / 09-27-06 | 0609103-15 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 206-44-0 | Fluoranthene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| SH-15D / 09-27-06 | 0609103-16 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 91-20-3 | Naphthalene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-15D / 09-27-06 | 0609103-16 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 91-57-6 | 2-Methylnaphthalene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-15D / 09-27-06 | 0609103-16 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 129-00-0 | Pyrene | 2.0 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| SH-15D / 09-27-06 | 0609103-16 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 56-55-3 | Benz[a]anthracene | 2.0 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| SH-15D / 09-27-06 | 0609103-16 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 218-01-9 | Chrysene | 2.2 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| SH-15D / 09-27-06 | 0609103-16 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 117-81-7 | bis(2-Ethylhexyl)phthalate | 1000 | ng/L | U | | 1000 | 1 | Negated due to Blank Action |
| SH-15D / 09-27-06 | 0609103-16 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-15D / 09-27-06 | 0609103-16 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-15D / 09-27-06 | 0609103-16 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 50-32-8 | Benzo[a]pyrene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-15D / 09-27-06 | 0609103-16 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-15D / 09-27-06 | 0609103-16 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-15D / 09-27-06 | 0609103-16 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 6.3 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| SH-15D / 09-27-06 | 0609103-16 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 208-96-8 | Acenaphthylene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-15D / 09-27-06 | 0609103-16 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 83-32-9 | Acenaphthene | 10 | ng/L | U | | 10 | 1 | |
| SH-15D / 09-27-06 | 0609103-16 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 86-73-7 | Fluorene | 10 | ng/L | U | | 10 | 1 | |
| SH-15D / 09-27-06 | 0609103-16 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 85-01-8 | Phenanthrene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-15D / 09-27-06 | 0609103-16 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 120-12-7 | Anthracene | 10 | ng/L | U | | 10 | 1 | |
| SH-15D / 09-27-06 | 0609103-16 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 86-74-8 | Carbazole | 10 | ng/L | U | | 10 | 1 | |
| SH-15D / 09-27-06 | 0609103-16 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 206-44-0 | Fluoranthene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-28S / 09-27-06 | 0609103-17 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 91-20-3 | Naphthalene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |

| Smpl | Lab_ID | Extr_Date | Anal_Date | Anal_Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-28S / 09-27-06 | 0609103-17 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 91-57-6 | 2-Methylnaphthalene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| SH-28S / 09-27-06 | 0609103-17 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 129-00-0 | Pyrene | 11 | ng/L | U | | 11 | 1 | |
| SH-28S / 09-27-06 | 0609103-17 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 56-55-3 | Benz[a]anthracene | 11 | ng/L | U | | 11 | 1 | |
| SH-28S / 09-27-06 | 0609103-17 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 218-01-9 | Chrysene | 11 | ng/L | U | | 11 | 1 | |
| SH-28S / 09-27-06 | 0609103-17 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 117-81-7 | bis(2-Ethylhexyl)phthalate | 1100 | ng/L | U | | 1100 | 1 | Negated due to Blank Action |
| SH-28S / 09-27-06 | 0609103-17 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| SH-28S / 09-27-06 | 0609103-17 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| SH-28S / 09-27-06 | 0609103-17 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 50-32-8 | Benzo[a]pyrene | 11 | ng/L | U | | 11 | 1 | |
| SH-28S / 09-27-06 | 0609103-17 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| SH-28S / 09-27-06 | 0609103-17 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 11 | ng/L | U | | 11 | 1 | |
| SH-28S / 09-27-06 | 0609103-17 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| SH-28S / 09-27-06 | 0609103-17 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 208-96-8 | Acenaphthylene | 11 | ng/L | U | | 11 | 1 | |
| SH-28S / 09-27-06 | 0609103-17 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 83-32-9 | Acenaphthene | 11 | ng/L | U | | 11 | 1 | |
| SH-28S / 09-27-06 | 0609103-17 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 86-73-7 | Fluorene | 11 | ng/L | U | | 11 | 1 | |
| SH-28S / 09-27-06 | 0609103-17 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 85-01-8 | Phenanthrene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| SH-28S / 09-27-06 | 0609103-17 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 120-12-7 | Anthracene | 11 | ng/L | U | | 11 | 1 | |
| SH-28S / 09-27-06 | 0609103-17 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 86-74-8 | Carbazole | 11 | ng/L | U | | 11 | 1 | |
| SH-28S / 09-27-06 | 0609103-17 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 206-44-0 | Fluoranthene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| SH-25D / 09-27-06 | 0609103-18 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 91-20-3 | Naphthalene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-25D / 09-27-06 | 0609103-18 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 91-57-6 | 2-Methylnaphthalene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-25D / 09-27-06 | 0609103-18 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 129-00-0 | Pyrene | 1.5 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| SH-25D / 09-27-06 | 0609103-18 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 56-55-3 | Benz[a]anthracene | 10 | ng/L | U | | 10 | 1 | |
| SH-25D / 09-27-06 | 0609103-18 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 218-01-9 | Chrysene | 1.1 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| SH-25D / 09-27-06 | 0609103-18 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 117-81-7 | bis(2-Ethylhexyl)phthalate | 1000 | ng/L | U | | 1000 | 1 | Negated due to Blank Action |
| SH-25D / 09-27-06 | 0609103-18 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-25D / 09-27-06 | 0609103-18 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-25D / 09-27-06 | 0609103-18 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 50-32-8 | Benzo[a]pyrene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-25D / 09-27-06 | 0609103-18 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-25D / 09-27-06 | 0609103-18 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-25D / 09-27-06 | 0609103-18 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 7.6 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| SH-25D / 09-27-06 | 0609103-18 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 208-96-8 | Acenaphthylene | 10 | ng/L | U | | 10 | 1 | |
| SH-25D / 09-27-06 | 0609103-18 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 83-32-9 | Acenaphthene | 10 | ng/L | U | | 10 | 1 | |
| SH-25D / 09-27-06 | 0609103-18 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 86-73-7 | Fluorene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-25D / 09-27-06 | 0609103-18 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 85-01-8 | Phenanthrene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-25D / 09-27-06 | 0609103-18 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 120-12-7 | Anthracene | 10 | ng/L | U | | 10 | 1 | |
| SH-25D / 09-27-06 | 0609103-18 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 86-74-8 | Carbazole | 10 | ng/L | U | | 10 | 1 | |
| SH-25D / 09-27-06 | 0609103-18 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 206-44-0 | Fluoranthene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| OW-212 / 09-27-06 | 0609103-19 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 91-20-3 | Naphthalene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| OW-212 / 09-27-06 | 0609103-19 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 91-57-6 | 2-Methylnaphthalene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| OW-212 / 09-27-06 | 0609103-19 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 129-00-0 | Pyrene | 11 | ng/L | U | | 11 | 1 | |
| OW-212 / 09-27-06 | 0609103-19 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 56-55-3 | Benz[a]anthracene | 11 | ng/L | U | | 11 | 1 | |
| OW-212 / 09-27-06 | 0609103-19 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 218-01-9 | Chrysene | 11 | ng/L | U | | 11 | 1 | |
| OW-212 / 09-27-06 | 0609103-19 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 117-81-7 | bis(2-Ethylhexyl)phthalate | 1100 | ng/L | U | | 1100 | 1 | Negated due to Blank Action |
| OW-212 / 09-27-06 | 0609103-19 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 11 | ng/L | U | | 11 | 1 | |
| OW-212 / 09-27-06 | 0609103-19 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 11 | ng/L | U | | 11 | 1 | |
| OW-212 / 09-27-06 | 0609103-19 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 50-32-8 | Benzo[a]pyrene | 11 | ng/L | U | | 11 | 1 | |
| OW-212 / 09-27-06 | 0609103-19 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| OW-212 / 09-27-06 | 0609103-19 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 11 | ng/L | U | | 11 | 1 | |
| OW-212 / 09-27-06 | 0609103-19 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| OW-212 / 09-27-06 | 0609103-19 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 208-96-8 | Acenaphthylene | 11 | ng/L | U | | 11 | 1 | |
| OW-212 / 09-27-06 | 0609103-19 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 83-32-9 | Acenaphthene | 11 | ng/L | U | | 11 | 1 | |
| OW-212 / 09-27-06 | 0609103-19 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 86-73-7 | Fluorene | 11 | ng/L | U | | 11 | 1 | |

| Smpl | Lab_ID | Extr_Date | Anal_Date | Anal_Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OW-212 / 09-27-06 | 0609103-19 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 85-01-8 | Phenanthrene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| OW-212 / 09-27-06 | 0609103-19 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 120-12-7 | Anthracene | 11 | ng/L | U | | 11 | 1 | |
| OW-212 / 09-27-06 | 0609103-19 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 86-74-8 | Carbazole | 11 | ng/L | U | | 11 | 1 | |
| OW-212 / 09-27-06 | 0609103-19 | 09/28/06 | 10/08/06 | PAH SIM | SVOCs | 206-44-0 | Fluoranthene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| WP-03 / 09-28-06 | 0609103-21 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 91-20-3 | Naphthalene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| WP-03 / 09-28-06 | 0609103-21 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 91-57-6 | 2-Methylnaphthalene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| WP-03 / 09-28-06 | 0609103-21 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 129-00-0 | Pyrene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| WP-03 / 09-28-06 | 0609103-21 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 56-55-3 | Benz[a]anthracene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| WP-03 / 09-28-06 | 0609103-21 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 218-01-9 | Chrysene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| WP-03 / 09-28-06 | 0609103-21 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 117-81-7 | bis(2-Ethylhexyl)phthalate | 5400 | ng/L | | | 1100 | 1 | |
| WP-03 / 09-28-06 | 0609103-21 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| WP-03 / 09-28-06 | 0609103-21 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| WP-03 / 09-28-06 | 0609103-21 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 50-32-8 | Benzo[a]pyrene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| WP-03 / 09-28-06 | 0609103-21 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| WP-03 / 09-28-06 | 0609103-21 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| WP-03 / 09-28-06 | 0609103-21 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 11 | ng/L | UJ | I | 11 | 1 | Negated due to Blank Action + Low Calibration ve |
| WP-03 / 09-28-06 | 0609103-21 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 208-96-8 | Acenaphthylene | 11 | ng/L | U | | 11 | 1 | |
| WP-03 / 09-28-06 | 0609103-21 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 83-32-9 | Acenaphthene | 11 | ng/L | U | | 11 | 1 | |
| WP-03 / 09-28-06 | 0609103-21 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 86-73-7 | Fluorene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| WP-03 / 09-28-06 | 0609103-21 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 85-01-8 | Phenanthrene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| WP-03 / 09-28-06 | 0609103-21 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 120-12-7 | Anthracene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| WP-03 / 09-28-06 | 0609103-21 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 86-74-8 | Carbazole | 11 | ng/L | U | | 11 | 1 | |
| WP-03 / 09-28-06 | 0609103-21 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 206-44-0 | Fluoranthene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| SH-24S / 09-28-06 | 0609103-22 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 91-20-3 | Naphthalene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| SH-24S / 09-28-06 | 0609103-22 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 91-57-6 | 2-Methylnaphthalene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| SH-24S / 09-28-06 | 0609103-22 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 129-00-0 | Pyrene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| SH-24S / 09-28-06 | 0609103-22 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 56-55-3 | Benz[a]anthracene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| SH-24S / 09-28-06 | 0609103-22 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 218-01-9 | Chrysene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| SH-24S / 09-28-06 | 0609103-22 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 117-81-7 | bis(2-Ethylhexyl)phthalate | 1100 | ng/L | U | | 1100 | 1 | Negated due to Blank Action |
| SH-24S / 09-28-06 | 0609103-22 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| SH-24S / 09-28-06 | 0609103-22 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| SH-24S / 09-28-06 | 0609103-22 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 50-32-8 | Benzo[a]pyrene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| SH-24S / 09-28-06 | 0609103-22 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| SH-24S / 09-28-06 | 0609103-22 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| SH-24S / 09-28-06 | 0609103-22 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 11 | ng/L | UJ | I | 11 | 1 | Negated due to Blank Action + Low Calibration ve |
| SH-24S / 09-28-06 | 0609103-22 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 208-96-8 | Acenaphthylene | 11 | ng/L | U | | 11 | 1 | |
| SH-24S / 09-28-06 | 0609103-22 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 83-32-9 | Acenaphthene | 11 | ng/L | U | | 11 | 1 | |
| SH-24S / 09-28-06 | 0609103-22 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 86-73-7 | Fluorene | 11 | ng/L | U | | 11 | 1 | |
| SH-24S / 09-28-06 | 0609103-22 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 85-01-8 | Phenanthrene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| SH-24S / 09-28-06 | 0609103-22 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 120-12-7 | Anthracene | 11 | ng/L | U | | 11 | 1 | |
| SH-24S / 09-28-06 | 0609103-22 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 86-74-8 | Carbazole | 11 | ng/L | U | | 11 | 1 | |
| SH-24S / 09-28-06 | 0609103-22 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 206-44-0 | Fluoranthene | 11 | ng/L | U | | 11 | 1 | Negated due to Blank Action |
| OW-212A / 09-28-06 | 0609103-23 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 91-20-3 | Naphthalene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| OW-212A / 09-28-06 | 0609103-23 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 91-57-6 | 2-Methylnaphthalene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| OW-212A / 09-28-06 | 0609103-23 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 129-00-0 | Pyrene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| OW-212A / 09-28-06 | 0609103-23 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 56-55-3 | Benz[a]anthracene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| OW-212A / 09-28-06 | 0609103-23 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 218-01-9 | Chrysene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| OW-212A / 09-28-06 | 0609103-23 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 117-81-7 | bis(2-Ethylhexyl)phthalate | 1000 | ng/L | U | | 1000 | 1 | Negated due to Blank Action |
| OW-212A / 09-28-06 | 0609103-23 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 4.2 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| OW-212A / 09-28-06 | 0609103-23 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 3.7 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| OW-212A / 09-28-06 | 0609103-23 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 50-32-8 | Benzo[a]pyrene | 3.1 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| OW-212A / 09-28-06 | 0609103-23 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 3.2 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low, H = High, I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Extr_Date | Anal_Date | Anal_Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OW-212A / 09-28-06 | 0609103-23 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 2.6 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| OW-212A / 09-28-06 | 0609103-23 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 10 | ng/L | UJ | I | 10 | 1 | Negated due to Blank Action + Low Calibration ve |
| OW-212A / 09-28-06 | 0609103-23 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 208-96-8 | Acenaphthylene | 1.1 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| OW-212A / 09-28-06 | 0609103-23 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 83-32-9 | Acenaphthene | 1.1 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| OW-212A / 09-28-06 | 0609103-23 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 86-73-7 | Fluorene | 3.0 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| OW-212A / 09-28-06 | 0609103-23 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 85-01-8 | Phenanthrene | 11 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| OW-212A / 09-28-06 | 0609103-23 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 120-12-7 | Anthracene | 6.2 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| OW-212A / 09-28-06 | 0609103-23 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 86-74-8 | Carbazole | 3.8 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| OW-212A / 09-28-06 | 0609103-23 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 206-44-0 | Fluoranthene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-19S / 09-29-06 | 0609103-25 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 91-20-3 | Naphthalene | 13 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-19S / 09-29-06 | 0609103-25 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 91-57-6 | 2-Methylnaphthalene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-19S / 09-29-06 | 0609103-25 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 129-00-0 | Pyrene | 13 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-19S / 09-29-06 | 0609103-25 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 56-55-3 | Benz[a]anthracene | 10 | ng/L | U | | 10 | 1 | |
| SH-19S / 09-29-06 | 0609103-25 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 218-01-9 | Chrysene | 10 | ng/L | U | | 10 | 1 | |
| SH-19S / 09-29-06 | 0609103-25 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 117-81-7 | bis(2-Ethylhexyl)phthalate | 1000 | ng/L | U | | 1000 | 1 | Negated due to Blank Action |
| SH-19S / 09-29-06 | 0609103-25 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 10 | ng/L | U | | 10 | 1 | |
| SH-19S / 09-29-06 | 0609103-25 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-19S / 09-29-06 | 0609103-25 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 50-32-8 | Benzo[a]pyrene | 10 | ng/L | U | | 10 | 1 | |
| SH-19S / 09-29-06 | 0609103-25 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-19S / 09-29-06 | 0609103-25 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 10 | ng/L | U | | 10 | 1 | |
| SH-19S / 09-29-06 | 0609103-25 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 10 | ng/L | UJ | I | 10 | 1 | Negated due to Blank Action + Low Calibration ve |
| SH-19S / 09-29-06 | 0609103-25 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 208-96-8 | Acenaphthylene | 18 | ng/L | | | 10 | 1 | |
| SH-19S / 09-29-06 | 0609103-25 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 83-32-9 | Acenaphthene | 150 | ng/L | | | 10 | 1 | |
| SH-19S / 09-29-06 | 0609103-25 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 86-73-7 | Fluorene | 120 | ng/L | | | 10 | 1 | |
| SH-19S / 09-29-06 | 0609103-25 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 85-01-8 | Phenanthrene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-19S / 09-29-06 | 0609103-25 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 120-12-7 | Anthracene | 29 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SH-19S / 09-29-06 | 0609103-25 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 86-74-8 | Carbazole | 55 | ng/L | | | 10 | 1 | |
| SH-19S / 09-29-06 | 0609103-25 | 10/02/06 | 10/08/06 | PAH SIM | SVOCs | 206-44-0 | Fluoranthene | 11 | ng/L | U | | 10 | 1 | Negated due to Blank Action |

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase IB-5 2006
8260B Data Review Checklist

Lab: AnHL
Date Sampled: 9/25 - 9/29/06
Method of Analysis: 8260B

Lab Project #: BLU212
No. Samples: 18 + 1 FD + 1 EB + 5 TBs
Matrix: groundwater
ETR : 0609103

| | Preservation & HT | Surrogate | LCS | MS | FD W:RPD≤30% Other:RPD≤50% | Tunes ICALs CCALs | IS' | RL & Quant. Correct | Other Issues |
|---|---|---|---|---|---|---|---|---|---|
| All Samples in Project | ✓ | ✓ | ✓ | ✓ | ✓ | UJ Bromo-methane | ✓ | Accept 1 "J" | None |
| **Except:** | | | | | | | | ✓ | |
| SH-24S/09-28-06 | | | | (R) 2-chloro ethyl vinyl ether | | | | | |
| | | | | | | | | | |
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| | | | | | | | | | |

Comments: All Samples were received intact at 4±2°C. All Native samples had pH < 9 ⇒ All were preserved for VOCs with HCl + raw data verified that pH < 2 for all VOCs.
Sample on COC listed as "SH-19/09-29-06" was changed by SHHA after receipt at AnHL to Sample ID "SH-19S/09-29-06".
Samples were all analyzed within HT ⇒ No Action Required.

Lab used in-house limits (slightly revised from original Blackburn ~~QAPP~~ Nov 11/30/06 QAPP + also used a 4th VOC surrogate (1,2-Dichloroethane-d4) in addition to 3 surrogates listed in original QAPP - All 4 surrogates were recovered within criteria in all samples + QC ⇒ No Action

Date 11/30/06

Data Reviewer [signature]

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase IB-5 2006
8260B Data Review Checklist

Lab: AWHL
Date Sampled: 9/25-9/29/06

Lab Project #: BU212
No. Samples: 18+1FD+1EB+5TBs

Method of Analysis: 8260B
Associated Blanks:

Matrix: gw

MBs: VW092806B11, VW092906B02 + VW100206B02
TBs: TB-501, TB-502, TB-503, TB-505 + TB-508
EB: AW-212A

| Blank ID | Contaminant / Level | Matrix Related ? | Action Level / Action | | Corrected Result |
|---|---|---|---|---|---|
| VW092806B11 | None | | | No Blank Action | |
| VW092906B02 | None | | | No Blank Action | |
| VW100206B02 | Acetone 2.1J mg/L | Y | 21 mg/L | All Associated Samples were non-detect ⇒ | No Action |
| | Methylene chloride 1.1J | Y | 11 mg/L | All Assoc. data ND ⇒ No Action. | |
| TB-501 | None | | | No Blank Action | |
| TB-502 | None | | | No Blank Action | |
| TB-503 | None | | | No Blank Action | |

**8260B Action Summary: see Worksheet #24b**

HT Actions: waters pH >2 or no HCl: 7d<HT≤14 d, J Aromatic det/R Aromatic NDs; Accept all Non-aromatics;
pH < 2, 14d <HT< 28 d; J Aromatic det/R Aromatic NDs; J Non-aromatic det/J Non-aromatic ND
soil/sediment - 14d <HT< 28 d; J Aromatic det/R Aromatic NDs; J Non-aromatic det/J Non-aromatic ND

Surrogate Actions: Recovery > Criteria, J det/Accept ND; 10%≤ Recovery <Criteria, J det/J NDs; Recovery <10%, J det/R NDs

Blank Actions: Surrogates outside criteria - Use Judgment if isolated or analysis related
Non-Matrix related Blank contamination, BB or EB contaminant in all samples associated with Blank
If contamination in blank(s) exist, if Result < RL, U result at RL; RL<Result<Blank Action, U result at level reported

MS Actions: %Rec<10%, J det/ R NDs; 10% <%Rec<Criteria, J det/ J NDs; %Rec >Criteria, J det/Accept NDs- Unspiked Sample only

LCS Actions: %Rec<10%, J det/ R NDs; 10% <%Rec<Criteria, J det/ J NDs; %Rec >Criteria, J det/Accept NDs for all Batch by Compound

FD Action: Both Conc. ≥ 2xRL, RPD >30%, J det; One result ND, other ≥2 x RL, J det/J NDs; Both Conc. < 2xRL; RPD >30%, LCS OK, Accept data

Date 11/30/06

Data Reviewer M. C. R/L

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase IB-5 2006
8260B Data Review Checklist

Lab: AWHL
Date Sampled: 9/25-9/29/06
Method of Analysis: 8260B

Lab Project #: BU212
No. Samples: 18+1FD+1EB+5TBs
Matrix: gw

Blank Action Continued

| Blank ID | Contaminant / Level | Matrix Related ? | | Action Level / Action | | | Corrected Result |
|---|---|---|---|---|---|---|---|
| TB-505 | None | | | | | No Blank Action | |
| TB-508 | None | | | | | No Blank Action | |
| | | | | | | | |
| OW-212A/09-28-06 | None | | | | | No Blank Action | |

No Blank Action Required
NUR 11/30/06

Date 11/30/06

Data Reviewer [signature]



New Environmental Horizons, Inc.

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase IB-5 2006
8260B Data Review Checklist

Lab: Anth
Date Sampled: 9/25-9/29/06
Method of Analysis: 8260B

Lab Project #: BU212
No. Samples 18+1FD+1EB+5TB
Matrix: gw

Additional Notes:

LCS/LCSD : VW092806LCS07/VW092806LCSD07 ; VW092906LCS01 / VW092906LCSD01 ; and VW100206LCS01 / VW100206LCSD01 - Lab used in-house limits + in general trichlorofluoromethane %Rec low relative to 112-166% lab limits - Using QAPP limits of 70-130% - All Targets in all LCS were recovered within 70-130% + RPD between LCS & LCSD was acceptable (< 30%).

LFB (Undetected fortified Blk at ~RL) was not required for Phase IB-5 since LCS/LCSD + low-level ICAL standards analyzed (i.e. low calibration acceptable as compared to LFB).

MS/MSD done on SH-24S/09-28-06 - Lab used in-house limits. For this assessment 70-130% recovery per Worksheet #24b used to evaluate acceptability -
All Results (Recovery) were within 70-130% except:

| Compound | MS %Rec | MSD %Rec | Action? |
|---|---|---|---|
| chloromethane | 135% | 131% | None since unspiked sample ND |
| 2-chloroethyl vinyl ether | 1% | 1% | Reject (R) Non-detect in unspiked sample |

Narrative indicates that 2-chloroethyl vinyl ether degrades in the presence of HCl ⇒ preserved VOCs would not detect in presence of this compound; however, only proof here is for unspiked sample.

* 2-chloroethyl vinyl ether in SH-24S/09-28-06 rejected (R) due to <10% recovery in the MS/MSD analysis.

FD pair : SH-28S/09-27-06 + OW-212/09-27-06

| Compound | SH-28S (ug/L) | OW-212 (ug/L) | RPD | ACTION |
|---|---|---|---|---|
| Chloroform | 0.67 | 0.67 | 0 | None |

FD precision acceptable for 1 detected VOC in these samples - No Action.

Date 11/30/06

Data Reviewer

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase IB-5 2006
8260B Data Review Checklist

Lab: AWAL
Date Sampled: 9/25-9/29/06
Method of Analysis: 8260B

Lab Project #: BU212
No. Samples 18+1FD+1EBr5TB
Matrix: GW

Additional Notes:

Tunes: T1092801 (ICAL), T1092802, T1092901, + T100201 - All Tunes acquired properly, All Abundances met 8260B criteria - all Samples were analyzed within 12 hrs. of BFB injection - No Action required

ICAL - 9/28/06 5- to 6- level ICAL from 0.2 to 50 mg/L analyzed - All %RSDs ≤ 30% except Bromomethane with 35.8% RSD - both 0.2 mg/L + 20 mg/L (highest) outliers -

* Action: Bromomethane estimated (UJ) in all Samples due to Initial Calibration being out of criteria

CCVs: C1092801, C1092901 + C100201 - %D ≤ ±25% for all ⇒ No Action Required.

All 3 IS Areas + RTs were in criteria for all Samples + QC ⇒ No Action.

RLs achieved were 0.2 → 2 mg/L (QAPP PQL IB-5 9/2/06 Revised Worksheet #96) - As a consequence of analysis over three separate Calibration Curves + as a consequence of updated MDLs, the non-detects of 0.2 mg/L for Benzene, Bromomethane + 1,1,2-Trichloroethane met PALs (expected that RLs would be > PALs - Bromodichloromethane, Bromoform, Carbon Tetrachloride, Chloroform, Dibromochloromethane, 1,2-Dichloroethane, 1,2-Dichloropropane, cis- + trans-1,3-Dichloropropene, 1,1,2,2-Tetrachloroethane, Tetrachloroethene, trichloroethene + vinyl chloride non-detects were at a level > PALs, as expected, due to method limitations.

1,1,1-Trichloroethane in SH-275/09-25-06 was reported as a "J" value since result detected < RL - this J was accepted with I Bias due to uncertainty in quantitation at a level below RL.

Lab reported results for all Compds listed in Worksheet #96 except Xylenes (total). To be determined in Database. There were no issues raised in narrative not addressed herein.

Date 11/30/06

Data Reviewer MJC. Rk

| Sample ID | ETR 0609103 | Date Sampled | Field Blank | Trip Blank | Method Blank | LCS | Date Analyzed |
|---|---|---|---|---|---|---|---|
| TB-501/09-25-06 | -01 | 9/25/06 | NA | NA | VW092806B11 | LCS07/LCSD07 | 9/28/06 |
| SH-23S/09-25-06 | -02 | | OW-212A | TB-501 | | | |
| SH-22S/09-25-06 | -03 | | | | | | |
| SH-19D/09-25-06 | -04 | | | | | | |
| SH-17S/09-25-06 | -05 | | | | | | |
| SH-27S/09-25-06 | -06 | | | | | | |
| TB-502/09-26-06 | -07 | 9/26/06 | NA | NA | | | |
| WP-01/09-26-06 | -08 | | OW-212A | TB-502 | VW092906B02 | LCS01/LCSD01 | 9/29/06 |
| SH-21S/09-26-06 | -09 | | | | VW092806B11 | LCS07/LCSD07 | 9/28/06 |
| SH-18S/09-26-06 | -10 | | | | | | |
| SH-18D/09-26-06 | -11 | | | | | | |
| SH-25S/09-26-06 | -12 | | | | VW092906B02 | LCS01/LCSD01 | 9/29/06 |
| TB-503/09-27-06 | -13 | 9/27/06 | NA | NA | VW092806B11 | LCS07/LCSD07 | 9/28/06 |
| WP-04/09-27-06 | -14 | | OW-212A | TB-503 | VW092906B02 | LCS01/LCSD01 | 9/29/06 |
| WP-05/09-27-06 | -15 | | | | | | |
| SH-15D/09-27-06 | -16 | | | | VW092806B11 | LCS07/LCSD07 | 9/28/06 |
| SH-28S/09-27-06 | -17 | | | | VW0929B02 | LCS01/LCSD01 | 9/29/06 |
| SH-25D/09-27-06 | -18 | | | | | | |
| OW-212/09-27-06 | -19 | | | | | | |
| TB-505/09-28-06 | -20 | 9/28/06 | NA | NA | VW100206B02 | LCS01/LCSD01 | 10/2/06 |
| WP-03/09-28-06 | -21 | | OW-212A | TB-505 | | | |
| SH-24S/09-28-06 | -22 | | | | | | |
| OW-212A/09-28-06 | -23 | | | | | | |
| TB-508/09-29-06 | -24 | 9/29/06 | NA | NA | | | |
| SH-19S/09-29-06 | -25 | | OW-212A | TB-508 | | | |

Date 11/30/06

Data Reviewer [signature]

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase 1B-5 2006
8270C-SIM Data Review Checklist

ETR# 0609103

Lab: AWHL
Date Sampled: 9/25 - 9/29/06
Method of Analysis: 8270C-SIM

Lab Project #: BU212
No. Samples: 18 + 1 FD + 1 EB
Matrix: Groundwater

| | HT w: 7d other: 14d | Surrogate | LCS | MS | FD w: RPD ≤ 30% other: RPD≤50% | Tunes ICALs CCALs | IS' | RL & Quant. Correct | Other Issues |
|---|---|---|---|---|---|---|---|---|---|
| All Samples in Project | ✓ | ✓ | ✓ | ✓ | Unable to Assess - All Samples ND | UJ'd Results see pg 4 | ✓ | ✓ | None |
| **Except:** | | | | | | | | Accept 32 "J" | |

Comments: All Samples were received intact at 4 ± 2°C. After receipt, the COC ID of SH-19/09-29-06 changed to SH-195/09-29-06 by SHA.

Samples were all analyzed within HT (extracted + analyzed) => No Acts

SIM analysis done for 17 PAHs + Bis(2-Ethylhexyl) phthalate + Carbazole (+ 25 VOCs) per 18-5 WAP Draft 2, September 21, 2006.

Date 12/4/06

Data Reviewer _____

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase 1B-5 2006
8270C-SIM Data Review Checklist

Lab: AnJHL
Date Sampled: 9/25-9/26/06

Lab Project #: BU212
No. Samples: 18+1FD+1EB

Method of Analysis: 8270C-SIM
Matrix: gw

Associated Blanks: MBs: SW092806B14 – SW100206B17
EB: GW-212A / 09-28-06

| Blank ID | Contaminant / Level | Matrix Related ? | Action Level / Action | Sample ID and result reported | Corrected Result |
|---|---|---|---|---|---|
| SW092806B14 | Naphthalene 3.6J ng/L | Y | 18 ng/L | SH-215/09-26-06 380 B ng/L | No Action - Remove B |
| | | | | 15 other Sample assoc. w/ MB | U at RL |
| | | | | 2.2 → 7.0 JB ng/L | |
| | 2-Methylnaphthalene 1.2J | Y | 6 ng/L | SH-215/09-26-06 170 B ng/L | No Action - Remove B |
| | | | | 15 other Sample assoc. w/ MB | U at RL |
| | | | | 1.1 → 3.6 JB ng/L | |
| | | | | | |

**8270C Action Summary: see Worksheet #24b**

| | | |
|---|---|---|
| HT Actions: | Waters | 7d <HT≤ 14 d; J det/ J NDs; HT >14 d, J det/R ND |
| | other Matrices | 14d <HT≤ 28 d, J det/ J NDs; HT >28 d, J det/R ND |
| | Analysis | 40d < Extract HT ≤ 60d, J det/ J NDs; Extract HT > 60d; J det/ R NDs |
| Surrogate Actions: | | 2 BN Recovery > Criteria, J det/Accept ND; 10% ≤ 2-All Surrogates < Criteria, J det/J NDs; Recovery < 10%, J det/R NDs. |
| Blank Actions: | | Surrogates outside criteria - Use Judgment if isolated or analysis related<br>Non-Matrix related Blank contamination, BB or EB contaminant in all samples associated with Blank<br>Matrix related Blank contamination: Result < RL, U result at RL; RL<Result<Blank Action, U result at level reported |
| MS Actions: | | %Rec<10%, J det/ R NDs; 10% ≤%Rec<Criteria, J det/ J NDs; %Rec >Criteria, J det/Accept NDs for Unspiked Sample |
| LCS Actions: | | %Rec<10%, J det/ R NDs; 10% ≤%Rec<Criteria, J det/ J NDs; %Rec >Criteria, J det/Accept NDs for all Batch by |
| FD Action: | | Both Conc. ≥ 2xRL, %RPD outside, J det; One result ND, other ≥2 x RL, J det/J NDs; Both Conc. < 2xRL; %RPD out, LCS OK, Accept data |
| ICAL or CCAL Actions: | | ICAL %RSD > Criteria, J/UJ compound in all samples; CCAL %D > criteria due to loss in instrument sensitivity, J/UJ compound in all associated samples; %D out due to enhanced sensitivity, J only associated detects. |
| IS Actions: | | IS Area < criteria, J/UJ all assocaited compounds |
| %Solids Action: | | 10% ≤ % soilds ≤ 30%; J det/R ND; %solids < 10% R det/ R NDs |

Date 12/4/06

Data Reviewer

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase 1B-5 2006
8270C-SIM Data Review Checklist

Lab: AWHL
Date Sampled: 9/25 - 9/29/06
Method of Analysis: 8270C-SIM

Lab Project #: BU212
No. Samples 18 + 1FD + 1EB
Matrix: gw

Blank Action Continued

| Blank ID | Contaminant / Level | Matrix Related ? | Action Level / Action | Sample ID and result reported | Corrected Result |
|---|---|---|---|---|---|
| SW092806B14 | Phenanthrene 2.0J ng/L | Y | 10 ng/L | SH-17S/09-25-06 40 B ng/L | No Action - Remove B |
| cont'd | | | | SH-21S/09-26-06 1500 B | No Action - Remove B |
| | | | | WP-04/09-27-06 70 B | No Action - Remove B |
| | | | | 13 other Samples associated with this MB | |
| | | | | 1.9 → 7.8 JB ng/L | U at RL |
| | Fluoranthene 1.3J ng/L | Y | 6.5 ng/L | SH-17S/09-25-06 37 B ng/L | No Action - Remove B |
| | | | | WP-01/09-26-06 550 B | No Action - Remove B |
| | | | | SH-21S/09-26-06 3100 B | No Action - Remove B |
| | | | | WP-04/09-27-06 140 B | No Action - Remove B |
| | | | | SH-27S/09-25-06 7.3JB (7.1) | 7.3J - Remove B |
| | | | | SH-25S/09-26-06 8.1JB | 8.1J - Remove B |
| | | | | 10 other Samples assoc. w/ MB | U at RL |
| | | | | 1.5 → 4.5 JB ng/L | |
| | Bis(2-ethylhexyl)phthalate | Y | 2200 ng/L | SH-17S/09-25-06 6900 ng/L | No Action - Remove B |
| | 220J ng/L | | | SH-27S/09-25-06 1200 B | 1200U |
| | | | | 14 other Samples assoc. w/ MB | U at RL |
| | | | | 160 → 810 JB ng/L | |
| | Indeno(1,2,3-cd)pyrene | Y | 6 ng/L | SH-21S/09-26-06 1100 B | No Action - Remove B |
| | 1.2 J ng/L | | | WP-04/09-27-06 44 B | No Action - Remove B |
| | | | | SH-19D was non-detect ⇒ No Action | |
| | | | | 13 other samples assoc. w/ MB | U at RL |
| | | | | 1.3 → 5.5 JB ng/L | |
| | Benzo(ghi)perylene | Y | 6 ng/L | SH-21S/09-26-06 1000 B ng/L | No Action - Remove B |
| | 1.2 J ng/L | | | WP-04/09-27-06 51 B | No Action - Remove B |
| | | | | SH-19D was non-detect ⇒ No Action | |
| | | | | SH-15D/09-27-06 6.3JB | 6.3J - Remove B |
| | | | | SH-25D/09-27-06 7.6JB | 7.6J - Remove B |
| | | | | 11 other Samples assoc. w/ MB | U at RL |
| | | | | 1.2 → 5.2 JB ng/L | |

Date 12/4/06

Data Reviewer [signature]

Continued on 3A



New Environmental Horizons, Inc.

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase 1B-5 2006
8270C-SIM Data Review Checklist

Lab: AWHL
Date Sampled: 9/25-9/29/06
Method of Analysis: 8270C-SIM

Lab Project #: BUZ12
No. Samples: 18 + 1FD + 1EB
Matrix: GW

Blank Action Continued

| Blank ID | Contaminant / Level | Matrix Related ? | Action Level / Action | Sample ID and result reported | Corrected Result |
|---|---|---|---|---|---|
| SW100206B17 | Naphthalene 4.0J ng/L | Y | 20 ng/L | SH-19S 09-29-06 13 B ng/L | 13 U |
| | | | | Other 3 Sample Assoc. w/ MB 3.2 → 6.8 JB ng/L | U at RL |
| | 2-methylnaphthalene 1.4J | Y | 7 ng/L | All 4 samples associated w/ MB 1.6 → 4.2 JB | U at RL |
| | Phenanthrene 2.6J | Y | 13 ng/L | OW-212A 11 B ng/L | 11 U |
| | | | | Other 3 Sample assoc. w/ MB 3.1 → 9.0 JB ng/L | U at RL |
| | Fluoranthene 3.0J | Y | 15 ng/L | SH-19S 11 B ng/L | 11 U |
| | | | | Other 3 Sample assoc. w/ MB 4.4 → 9.4 JB ng/L | U at RL |
| | Pyrene 1.5J | Y | 7.5 ng/L | SH-19S 13 B | 13 U |
| | | | | Other 3 Sample assoc. w/ MB 1.9 → 6.4 JB ng/L | U at RL |
| | Benzo(a)anthracene 1.2J | Y | 6 ng/L | SH-19S Non-Detect — | No Action |
| | | | | Other 3 Sample assoc. w/ MB 1.7 → 5.0 JB ng/L | U at RL |
| | Chrysene 1.1J | Y | 5.5 ng/L | SH-19S Non-Detect → | No Action |
| | | | | Other 3 Sample assoc. w/ MB 1.8 → 3.9 JB ng/L | U at RL |
| | Bis(2-ethylhexyl)phthalate 320 J | Y | 3200 ng/L | WP-03 5400 B ng/L | No Action - Removed B |
| | | | | Other 3 Sample assoc. w/ MB 320 → 590 JB ng/L | U at RL |
| | Benzo(g,h,i)perylene 1.1J | Y | 5.5 ng/L | All 4 Sample assoc. w/ MB 1.1 → 3.5 JB ng/L | U at RL |
| OW-212A | Benzo(b)fluoranthene 4.2J | Y | 21 ng/L | SH-19D Non-detect → | No Action |
| | | | | WP-05 Non-Detect → | No Action |
| | | | | ~~BB~~ NWE 12/1/06 OW-212 ND → | No Action |
| | | | | SH-19S Non-Detect → | No Action |
| | | | | SH-21S 1400 ng/L | No Action |
| | | | | WP-04 61 ng/L | No Action |
| | | | | continued on 3B | |

Date 12/4/06

Data Reviewer MJC. RJL



New Environmental Horizons, Inc.

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase 1B-5 2006
8270C-SIM Data Review Checklist

Lab: ANHL
Date Sampled: 9/25 - 9/26/06
Method of Analysis: 8270C-SIM

Lab Project #: BU212
No. Samples: 18 + 1FD + 1EB
Matrix: gw

Blank Action Continued

| Blank ID | Contaminant / Level | Matrix Related ? | Action Level / Action | Sample ID and result reported | Corrected Result |
|---|---|---|---|---|---|
| OW-212A Cont'd | Benzo(b)fluoranthene 4.2J ng/L | Y | 21 ng/L | Other 13 Samples 1.1 → 4.0J ng/L | U at RL |
| | Benzo(k)fluoranthene 3.7J | Y | 18.5 ng/L | SH-19D, SH-17S, WP-05, OW-212 — Non-Detect ⇒ | No Action |
| | | | | SH-21S 1300 ng/L | No Action |
| | | | | WP-04 54 ng/L | No Action |
| | | | | Other 13 Samples 1.1 → 4.1 J ng/L | U at RL |
| | Benzo(a)pyrene 3.1J ng/L | Y | 15.5 ng/L | SH-19D, SH-18D, WP-05, SH-28S, OW-212, SH-19S — Non-Detect ⇒ | No Action |
| | | | | SH-21S 1800 ng/L | No Action |
| | | | | WP-04 69 ng/L | No Action |
| | | | | Other 11 Samples 1.5 → 3.1 J ng/L | U at RL |
| | Indeno(1,2,3-cd)pyrene 3.2J | Y | 16 ng/L | SH-21S 1100 ng/L | No Action |
| | | | | WP-04 44 ng/L | No Action |
| | | | | WP-03 1.9J | 11 U |
| | | | | SH-24S 3.3J | 11 U |
| | | | | SH-19S 1.1J | 10 U |
| | Dibenz(a,h)anthracene 2.6J | Y | 13 ng/L | SH-19D, SH-17S, SH-18D, WP-05, SH-28S, OW-212, SH-19S — Non-Detect ⇒ | No Action |

Continued ~ 3C

Date 12/14/06
Data Reviewer MJC, PM



New Environmental Horizons, Inc.

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase 1B-5 2006
8270C-SIM Data Review Checklist

Lab: AWHL
Date Sampled: 9/25-9/26/06
Method of Analysis: 8270C-SIM

Lab Project #: BU212
No. Samples: 18+1FD+1EB
Matrix: gw

Blank Action Continued

| Blank ID | Contaminant / Level | Matrix Related ? | Action Level / Action | Sample ID and result reported | Corrected Result |
|---|---|---|---|---|---|
| OW-212A continued | Dibenz(a,h)anthracene 2.6J ng/L | Y | 13 ng/L | SH-21S 400 ng/L | No Action |
| | | | | WP-04 17 ng/L | No Action |
| | | | | Other 10 Samples 1.1 → 5.0J ng/L | Used at EL |
| | Acenaphthylene 1.1J ng/L | Y | 5.5 ng/L | SH-22S | |
| | | | | SH-19D | |
| | | | | SH-17S | |
| | | | | SH-27S | |
| | | | | SH-18D | |
| | | | | SH-25S Non-Detect ⇒ | No Action |
| | | | | WP-05 | |
| | | | | SH-28S | |
| | | | | SH-25D | |
| | | | | OW-217 | |
| | | | | WP-03 | |
| | | | | SH-24S | |
| | | | | SH-23S 1.2J | 11U |
| | | | | WP-01 16 ng/L | No Action |
| | | | | SH-21S 420 | No Action |
| | | | | SH-18S 2.0J | 10U |
| | | | | WP-04 14 | No Action |
| | | | | SH-15D 1.3J | 10U |
| | | | | SH-19S 18 | No Action |
| | Acenaphthene 1.1J ng/L | Y | 5.5 ng/L | WP-01 170 ng/L | No Action |
| | | | | SH-21S 1200 ng/L | No Action |
| | | | | WP-04 2.6J | 11U |
| | | | | SH-19S 150 | No Action |
| | | | | All other 15 Samples ND ⇒ | No Action |

Continued on 3D

Date 12/4/06

Data Reviewer

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase 1B-5 2006
8270C-SIM Data Review Checklist

Lab: AWTL
Date Sampled: 9/25 - 9/29/06
Method of Analysis: 8270C-SIM

Lab Project #: BU212
No. Samples: 18+1FD+1EB
Matrix: gw

Blank Action Continued

| Blank ID | Contaminant / Level | Matrix Related ? | Action Level / Action | Sample ID and result reported | Corrected Result |
|---|---|---|---|---|---|
| GW-212A cont'd | Fluorene 3.0J ng/L | Y | 15 ng/L | SH-22S 1.1J ng/L | 10U |
| | | | | SH-17S 9.1J | 10U |
| | | | | WP-01 170 | No Action |
| | | | | SH-21S 200 | No Action |
| | | | | WP-04 5.2J | 11U |
| | | | | SH-25D 1.3J | 10U |
| | | | | SH-19S 120 | No Action |
| | | | | 10 other Samples ND => | No Action |
| | | | | WP-03 1.3J | 11U |
| | Anthracene 6.2J | Y | 31 ng/L | SH-22S 1.4J | 10U |
| | | | | SH-17S 2.8J | 20U |
| | | | | SH-27S 2.6J | 11U |
| | | | | WP-01 8.1J | 11U |
| | | | | SH-21S 1000 | No Action |
| | | | | SH-18S 3.3J | 10U |
| | | | | SH-25S 1.2J | 10U |
| | | | | WP-04 14 | 14U |
| | | | | WP-03 1.3J | 11U |
| | | | | SH-19S 29 | 29U |
| | | | | 9 other Samples ND => No Action | |
| | Carbazole 3.8J | Y | 19 ng/L | SH-22S 1.1J | 10U |
| | | | | SH-21S 67 | No Action |
| | | | | SH-25S 1.0J | 10U |
| | | | | WP-04 2.9J | 11U |
| | | | | SH-19S 55 | No Action |

Date 12/4/06
Data Reviewer

Lab: AWHL
Date Sampled: 9/25-9/29/06
Method of Analysis: 8270C-SIM

Lab Project #: BU212
No. Samples 18+1FD+1EB
Matrix: gw

Additional Notes:

Surrogates - 3 PAH Surrogates used (2-methylnaphthalene-d10, pyrene-d10 + benzo(b)fluoranthene-d12) rather than 8270C full scan BNA surrogates + those given in worksheet #24b => Surrogates used deemed more appropriate for analyses performed => No Action. Lab used 50-125% limits => OK. All 3 Surrogates were recovered within criteria in all Samples + QC => No Action required.

LCS : LCS/LCSD SW092806LCS09 / SW092806LCSD09 - %Rec all OK + RPD OK => No Action
SW100206L03 - %Rec all OK => No Action

MS/MSD done on SH-24S/09-28-06 %Rec + RPD all OK for MS + MSD => Acceptable accuracy + precision for samples for method of analysis.

Field Duplicates SH-28S/09-27-06 + OW-212/09-27-06 - Both samples are non-detect for all targets, after Blank Action; therefore, precision from the field collection through analysis

Tuns: T4100701 (10/7 ICAL), T4100702, T4100703 - All Abundances were within 8270C criteria + all Samples were analyzed within 12 hrs. of tune

ICAL: 10, 25, 100, 500, 1250, 5000 + 10,000 ~~ug/L~~ NOC ug/L leads - 10/7/06 ICAL
All Targets had %RSD < 30% + adequate sensitivity (RRF > 0.05) => Valid
ICAL - No Action

CCVs: C4100701 + C4100702 - All %D ≤ ±25% except Benzo(g,h,i)perylene in C4100702 with 27.3% D due to decreased sensitivity to detection on day of analysis as compared to ICAL.

*Action: WP-03, SH-24S, OW-212A + SH-19S Benzo(g,h,i)perylene result estimated (UJ) ~~may be biased low~~ NOC 12/1/06 with indeterminate bias due to other QC issues.

Date 12/4/06

Data Reviewer [signature]

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase 1B-5 2006
8270C-SIM Data Review Checklist

Lab: AWAL
Date Sampled: 9/25-9/29/06
Method of Analysis: 8270C-SIM

Lab Project #: BU212
No. Samples: 18+1FD+1EB
Matrix: gw

Additional Notes:

IS's - 5 IS's monitored (1,4-Dichlorobenzene-d4 used for other BNA analyses not needed since all Targets were associated with 5 higher molecular weight 'PAH IS's). IS Areas & RTs were all in criteria for all samples + QC ⇒ No Action.

All RLs were ≥ PQL given in Worksheet #9b except for samples SH-23S, SH-19D, SH-27S, WP-01, SH-18D WP-04, WP-05, SH-28S, OW-212, WP-03 & SH-24S (11 samples) had RLs for 17 Targets + Carbazole at 11 ng/L (= 0.011 mg/L) as compared to PQL of 10 ng/L due to limited sample volume for extraction of the sample. In addition, many results exceeded PQLs due to Blank Action taken. Bis(2-ethylhexyl) phthalate RL was 1000 ng/L (as reported) except for 11 samples listed above such that PQL = 1100 ng/L.

All non-detects were ≤ PQLs given in Worksheet #9b except Benzo(a)pyrene & Dibenz(a,h)anthracene as expected due to method limitations.

Lab reported ~~results for~~ 32 results as "J" data at a level < RL - These J data were accepted as estimated data with Indeterminate bias due to uncertainty in quantitation at a level below the calibration range. Nam 12/4/06

The narrative did not raise any issues not already addressed in the checklist ⇒ No additional action required.

Date 12/4/06

Data Reviewer

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase 1B-5 2006
8270C-SIM Data Review Checklist

| Sample ID | ETR 0609103- | Date Sampled | Field Blank | Method Blank | LCS | Date Extracted | Date Analyzed |
|---|---|---|---|---|---|---|---|
| SH-23S/09-25-06 | -02 | 9/25/06 | OW-212A | SW092806 B14 | LCS09/LCSD09 | 9/28/06 | 10/7/06 |
| SH-22S/09-25-06 | -03 | | | | | | |
| SH-19D/09-25-06 | -04 | | | | | | |
| SH-17S/09-25-06 | -05 | | | | | | |
| SH-27S/09-25-06 | -06 | | | | | | |
| WP-01/09-26-06 | -08 | 9/26/06 | | | | | |
| SH-21S/09-26-06 | -09 | | | | | | |
| SH-18S/09-26-06 | -10 | | | | | | |
| SH-18D/09-26-06 | -11 | | | | | | |
| SH-25S/09-26-06 | -12 | | | | | | 10/8/06 |
| WP-04/09-27-06 | -14 | 9/27/06 | | | | | |
| WP-05/09-27-06 | -15 | | | | | | |
| SH-15D/09-27-06 | -16 | | | | | | |
| SH-28S/09-27-06 | -17 | | | | | | |
| SH-25D/09-27-06 | -18 | | | | | | |
| OW-212/09-27-06 | -19 | | | | | | |
| WP-03/09-28-06 | -21 | 9/28/06 | | SW092806 B17 | LCS | 10/02/06 | 10/8/06 |
| SH-24S/09-28-06 | -22 | | | | | | |
| OW-212A/09-28-06 | -23 | | NA | | | | |
| SH-19S/09-29-06 | -25 | 9/29/06 | OW-212A | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Date 12/4/06

Data Reviewer

2032.00A

*New Environmental Horizons, Inc.*

# DATA USABILITY ASSESSMENT

DEC 1 9 2006

**TAL Metals Analysis by Methods 6020 & 7470A**
**EPA Region I Tier II – type review**
**Natural Attenuation and Miscellaneous Wet Chemistry Parameters**
**EPA Region I Tier I – type review**

**Client:** Sanborn, Head & Associates, Inc., Concord, New Hampshire

**Site:** Blackburn & Union Privileges Superfund Site, Walpole, Massachusetts
Phase 1B-5 Remedial Investigation

**Laboratories:** Alpha Woods Hole Labs (AWHL), Raynham, Massachusetts
Groundwater Analytical, Inc., Buzzards Bay, Massachusetts
Katahdin Analytical Services, Inc., Westbrook, Maine
Microseeps, Pittsburgh, Pennsylvania

**SDG:** BU213

**Lab ETR:** 0609122

**# Samples/Analyses:** 18 groundwaters and 1 equipment rinseate blank (EB) for Total TAL Metals, Alkalinity, Chloride, Nitrate, Sulfate, Sulfide, Total Dissolved Solids (TDS), Total Kjeldahl Nitrogen (TKN), Total Organic Carbon (TOC), and Ferrous Iron ($Fe^{+2}$)
18 groundwaters, 1 EB, and 5 trip blanks for Gases (ethane, ethene, methane)

**Initial Reviewer:** Susan D. Chapnick, New Environmental Horizons, Inc. SDC

**Senior Reviewer:** Dr. Nancy C. Rothman, New Environmental Horizons, Inc.

**Date Completed:** December 7, 2006; *Revised December 14, 2006* SDC revised for $Fe^{+2}$ results

An EPA Tier II-type Data Validation/Usability Checklist Review was performed on the TAL Metals data and an EPA Tier I-type review was performed on the remainder of the parameters included in this SDG with the following intentions: 1) to determine if the data were generated and reported in accordance with the *Phase 1B-5 Remedial Investigation Work Plan, Blackburn & Union Privileges Superfund Site, Walpole, MA*, prepared by Sanborn, Head & Associates, Inc., Rev. 02, September 21, 2006 (Phase IB-5 Work Plan); USEPA *Test Methods for Evaluating Solid Waste, Physical Chemical Methods, SW-846, Third*

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*Edition, Final Update, December 1996.* Methods 6020 (ICP-MS metals) and 7470A (CVAA mercury); EPA wet chemistry test methods 310.1 (alkalinity), 300.0 (anions: chloride, nitrate, sulfate), 376.2 (sulfide), 160.1 (TDS), 351.2 (TKN), 415.1 (TOC), 7199 modified ($Fe^{+2}$), and Microseeps SOP AM20GAX (gases: ethane, ethene, methane); Region I, *EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses*, December 1996; *Region I Laboratory Data Validation Functional Guidelines for Evaluating Inorganics Analyses*, February 1989; and *Guidance for Data Useability in Risk Assessment* (Part A), Publication 9285.7-09A, USEPA 1992; 2) to determine if the data met the project data quality objectives for acceptable accuracy, precision, sensitivity; and technical usability; and 3) to update the project database with appropriate data quality qualifiers.

The Data Review Checklist, attached, was completed during this assessment to document the review.

All results for total TAL Metals, Alkalinity, Anions (Chloride, Nitrate, and Sulfate), Sulfide, Total Dissolved Solids (TDS), Total Kjeldahl Nitrogen (TKN), Total Organic Carbon (TOC), Ferrous Iron ($Fe^{+2}$), and Gases (Ethane, Ethene, and Methane) in the samples included in this SDG BU213 are usable for project objectives. Several results have been negated (U) due to blank actions or qualified as estimated (J or UJ) due to quality control criteria exceedance(s). Data users should note the uncertainties in the qualified results as summarized below in Table 1. The qualified (U, J, UJ) and unqualified results are usable for project objectives.

All non-detected results in the groundwater samples included in this SDG met either the project-required quantitation limits (PQLs), or, if those were exceeded, met all applicable project action limits (PALs) as listed in QAPP Worksheet #9b (Phase 1B-5 Work Plan, September 2006) with the following exceptions: Arsenic in samples SH-27R/09-29-06 and SH-28D/09-27-06. These non-detects did not meet PALs due to equipment blank actions. The data user will have to evaluate the usability of these elevated non-detected data on a case-by-case basis to determine if these data can be used for project objectives.

Note that many of the wet chemistry parameters did not have PALs. In addition, the Worksheet #9b had incorrect values and units for PQLs for the Gases. The laboratory reporting limits (RLs) achieved for Ethane (0.025 µg/L), Ethene (0.025 µg/L), and Methane (0.100 µg/L) in these groundwater samples were considered acceptable based on method calibration information.

A low-level standard was not analyzed with the TAL Metals, as required by the original QAPP (2000). However, the laboratory included a low-level standard in the calibration curve for TAL Metals that was equivalent to the RL for each metal. This was considered acceptable to support the RL; therefore, no action was taken other than to note this deviation.

Professional judgment was used to take blank actions for Ethane, Ethene, and Methane due to the observation of low-level contamination of these gases in the equipment blank (EB) and the trip blanks (TB) associated with these groundwater samples. Table 1 summarizes the actions taken to negate (U) or qualify as estimated (J) the affected results. Data users are directed to pages 5 through 7 of the attached Data Usability Checklist Review for further details.

The laboratory reported the Ferrous Iron results for samples SH-02R/09-29-06, SH-03S/09-29-06, SH-27R/09-29-06, and SH-28R/09-29-06 from a secondary analysis, run outside of the method holding time, but using the QAPP-specified analytical method (7199 Mod). The initial analysis of these samples was within holding time, but analyzed using Standard Method (SM) 3500 Fe D. The raw data for the initial

analysis was requested from the laboratory and was received on 12/13/06. After review of the raw data, professional judgment was used to accept for reporting the Ferrous Iron results for samples SH-02R/09-29-06, SH-03S/09-29-06, SH-27R/09-29-06, and SH-28R/09-29-06 from the initial analysis (9/30/06) because the two methods of analysis are considered to be technically comparable and the initial analysis was within method holding time. The validated project database was modified to reflect this decision in reporting. Data users are directed to pages 2 through 2c of the attached Data Usability Checklist for further details.

The Chain-of-Custody (COC) listed samples "SH-2R/09-29-06"and "SH-3S/09-29-06", which were changed to "SH-02R/09-29-06" and "SH-03S/09-29-06", respectively, based on client communication with the laboratory. In addition, the trip blank identified on the COC as "TB-504/09-04-06" was changed to "TB-504/09-27-06" by the client after receipt. The corrected sample identifications are included in the validated database file.

All other quality control information associated with accuracy, precision, representativeness, and sensitivity for the Total TAL Metals and the project-specific list of natural attenuation and other wet chemistry parameters reported met project criteria for the samples in this SDG with the exceptions in the following table.

**Table 1. Summary of Data Validation/Usability Actions**

| Sample ID | Analyte | Qualifier | Bias | Comment |
|---|---|---|---|---|
| SH-27R / 09-29-06 & SH-28D / 09-27-06 | Arsenic | U | | Blank action |
| OW-213A / 10-03-06 | Arsenic | J | I | Uncertain < calibration range |
| SH-02R / 09-29-06, SH-03D / 10-03-06, SH-05D / 10-02-06, SH-05R-A / 10-03-06, SH-05R-B / 10-03-06, SH-06R-A / 10-02-06, SH-06R-B / 10-02-06, & SH-19R / 09-28-06 | Zinc | U | | Blank action |
| SH-13S / 09-28-06 | Ferrous Iron | J | I | Uncertain < calibration range + MS/MSD high |
| SH-28D / 09-27-06 | Ferrous Iron | J | I | Uncertain < calibration range |
| All 18 Groundwaters | Sulfide | UJ | L | MS low |
| OW-213 / 10-02-06, SH-05D / 10-02-06, SH-05R-A / 10-03-06, SH-05R-B / 10-03-06, SH-06R-B / 10-02-06, SH-14S / 10-02-06, SH-24R / 09-28-06, SH-27D / 10-02-06, & SH-28R / 09-29-06 | Ethane | U | | Blank action |

**Table 1. Summary of Data Validation/Usability Actions** - *continued*

| Sample ID | Analyte | Qualifier | Bias | Comment |
|---|---|---|---|---|
| OW-213A / 10-03-06, TB-504 / 09-27-06, TB-506 / 09-28-06, TB-509 / 09-29-06, TB-510 / 10-02-06, & TB-511 / 10-03-06 | Ethane | J | I | Uncertain < calibration range |
| SH-03S / 09-29-06, SH-13S / 09-28-06, SH-19R / 09-28-06, SH-24R / 09-28-06, SH-27R / 09-29-06, & SH-28D / 09-27-06 | Ethene | J | H | Detected in EB & TB |
| OW-213 / 10-02-06 & SH-14S / 10-02-06 | Ethene | J | I | FD imprecision |
| TB-506 / 09-28-06, TB-509 / 09-29-06, TB-510 / 10-02-06, & TB-511 / 10-03-06 | Ethene | J | I | Uncertain < calibration range |
| SH-03D / 10-03-06, SH-05R-A / 10-03-06, SH-05R-B / 10-03-06, SH-06R-A / 10-02-06, SH-06R-B / 10-02-06, SH-14D / 10-02-06, SH-19R / 09-28-06, SH-24R / 09-28-06, SH-27D / 10-02-06, SH-27R / 09-29-06, & SH-28R / 09-29-06 | Methane | J | H | Detected in EB & TB |
| TB-506 / 09-28-06, TB-509 / 09-29-06, TB-510 / 10-02-06, & TB-511 / 10-03-06 | Methane | J | I | Uncertain < calibration range |

*Qualifiers: U = Analyte is not detected; UJ = Non-detect is estimated; J = Result is estimated; R = Result is rejected and is unusable for project decisions.*

*Bias: L = Low; H = High; I = Indeterminate*

*Acronyms used in Table:*

*EB = Equipment Rinseate Blank*
*FD = Field Duplicate sample(s)*
*HT = Holding Time*
*MDL = Method Detection Limit*
*MS = Matrix Spike sample*
*TB = Trip Blank*
*< "Less Than"*
*> "Greater Than"*

The qualified (J, UJ, and U) and unqualified results presented in the validated database, submitted electronically to Sanborn, Head & Associates, Inc. are considered usable for project objectives.

| Smpl | Lab_ID | Anal_Date | Method | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OW-213 / 10-02-06 | 0609122-19 | 10/12/2006 | 6020A | 7429-90-5 | Aluminum | 50 | µg/L | U | | 50 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/12/2006 | 6020A | 7429-90-5 | Aluminum | 50 | µg/L | U | | 50 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/12/2006 | 6020A | 7429-90-5 | Aluminum | 50 | µg/L | U | | 50 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/12/2006 | 6020A | 7429-90-5 | Aluminum | 850 | µg/L | | | 50 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/12/2006 | 6020A | 7429-90-5 | Aluminum | 50 | µg/L | U | | 50 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/12/2006 | 6020A | 7429-90-5 | Aluminum | 50 | µg/L | U | | 50 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/12/2006 | 6020A | 7429-90-5 | Aluminum | 100 | µg/L | | | 50 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/12/2006 | 6020A | 7429-90-5 | Aluminum | 50 | µg/L | U | | 50 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/12/2006 | 6020A | 7429-90-5 | Aluminum | 50 | µg/L | U | | 50 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/12/2006 | 6020A | 7429-90-5 | Aluminum | 50 | µg/L | U | | 50 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/12/2006 | 6020A | 7429-90-5 | Aluminum | 67 | µg/L | | | 50 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/12/2006 | 6020A | 7429-90-5 | Aluminum | 50 | µg/L | U | | 50 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/12/2006 | 6020A | 7429-90-5 | Aluminum | 50 | µg/L | U | | 50 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/12/2006 | 6020A | 7429-90-5 | Aluminum | 66 | µg/L | | | 50 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/12/2006 | 6020A | 7429-90-5 | Aluminum | 50 | µg/L | U | | 50 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/12/2006 | 6020A | 7429-90-5 | Aluminum | 250 | µg/L | | | 50 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/12/2006 | 6020A | 7429-90-5 | Aluminum | 50 | µg/L | U | | 50 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/12/2006 | 6020A | 7429-90-5 | Aluminum | 240 | µg/L | | | 50 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/12/2006 | 6020A | 7429-90-5 | Aluminum | 73 | µg/L | | | 50 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/12/2006 | 6020A | 7440-36-0 | Antimony | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/12/2006 | 6020A | 7440-36-0 | Antimony | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/12/2006 | 6020A | 7440-36-0 | Antimony | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/12/2006 | 6020A | 7440-36-0 | Antimony | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/12/2006 | 6020A | 7440-36-0 | Antimony | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/12/2006 | 6020A | 7440-36-0 | Antimony | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/12/2006 | 6020A | 7440-36-0 | Antimony | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/12/2006 | 6020A | 7440-36-0 | Antimony | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/12/2006 | 6020A | 7440-36-0 | Antimony | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/12/2006 | 6020A | 7440-36-0 | Antimony | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/12/2006 | 6020A | 7440-36-0 | Antimony | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/12/2006 | 6020A | 7440-36-0 | Antimony | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/12/2006 | 6020A | 7440-36-0 | Antimony | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/12/2006 | 6020A | 7440-36-0 | Antimony | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/12/2006 | 6020A | 7440-36-0 | Antimony | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/12/2006 | 6020A | 7440-36-0 | Antimony | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/12/2006 | 6020A | 7440-36-0 | Antimony | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/12/2006 | 6020A | 7440-36-0 | Antimony | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/12/2006 | 6020A | 7440-36-0 | Antimony | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/13/2006 | 6020A | 7440-38-2 | Arsenic | 2.2 | µg/L | | | 0.092 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/13/2006 | 6020A | 7440-38-2 | Arsenic | 0.13 | µg/L | J | I | 0.092 | µg/L | 1 | Uncertain < calibration range |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low; H = High; I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Anal_Date | Method | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-02R / 09-29-06 | 0609122-08 | 10/13/2006 | 6020A | 7440-38-2 | Arsenic | 2.2 | µg/L | | | 0.092 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/13/2006 | 6020A | 7440-38-2 | Arsenic | 0.89 | µg/L | | | 0.092 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/13/2006 | 6020A | 7440-38-2 | Arsenic | 10 | µg/L | | | 0.092 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/13/2006 | 6020A | 7440-38-2 | Arsenic | 0.74 | µg/L | | | 0.092 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/13/2006 | 6020A | 7440-38-2 | Arsenic | 24 | µg/L | | | 0.092 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/13/2006 | 6020A | 7440-38-2 | Arsenic | 24 | µg/L | | | 0.092 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/13/2006 | 6020A | 7440-38-2 | Arsenic | 2 | µg/L | | | 0.092 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/13/2006 | 6020A | 7440-38-2 | Arsenic | 1.2 | µg/L | | | 0.092 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/13/2006 | 6020A | 7440-38-2 | Arsenic | 11 | µg/L | | | 0.092 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/13/2006 | 6020A | 7440-38-2 | Arsenic | 0.99 | µg/L | | | 0.092 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/13/2006 | 6020A | 7440-38-2 | Arsenic | 2.1 | µg/L | | | 0.092 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/13/2006 | 6020A | 7440-38-2 | Arsenic | 13 | µg/L | | | 0.092 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/13/2006 | 6020A | 7440-38-2 | Arsenic | 0.75 | µg/L | | | 0.092 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/13/2006 | 6020A | 7440-38-2 | Arsenic | 1.7 | µg/L | | | 0.092 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/13/2006 | 6020A | 7440-38-2 | Arsenic | 0.4 | µg/L | U | | 0.092 | µg/L | 1 | Blank action |
| SH-28D / 09-27-06 | 0609122-02 | 10/13/2006 | 6020A | 7440-38-2 | Arsenic | 0.46 | µg/L | U | | 0.092 | µg/L | 1 | Blank action |
| SH-28R / 09-29-06 | 0609122-11 | 10/13/2006 | 6020A | 7440-38-2 | Arsenic | 1.1 | µg/L | | | 0.092 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/12/2006 | 6020A | 7440-39-3 | Barium | 22 | µg/L | | | 0.5 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/12/2006 | 6020A | 7440-39-3 | Barium | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/12/2006 | 6020A | 7440-39-3 | Barium | 6.3 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/12/2006 | 6020A | 7440-39-3 | Barium | 18 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/12/2006 | 6020A | 7440-39-3 | Barium | 160 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/12/2006 | 6020A | 7440-39-3 | Barium | 10 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/12/2006 | 6020A | 7440-39-3 | Barium | 8 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/12/2006 | 6020A | 7440-39-3 | Barium | 6.8 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/12/2006 | 6020A | 7440-39-3 | Barium | 13 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/12/2006 | 6020A | 7440-39-3 | Barium | 54 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/12/2006 | 6020A | 7440-39-3 | Barium | 190 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/12/2006 | 6020A | 7440-39-3 | Barium | 4.3 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/12/2006 | 6020A | 7440-39-3 | Barium | 22 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/12/2006 | 6020A | 7440-39-3 | Barium | 4.1 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/12/2006 | 6020A | 7440-39-3 | Barium | 0.72 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/12/2006 | 6020A | 7440-39-3 | Barium | 7 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/12/2006 | 6020A | 7440-39-3 | Barium | 21 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/12/2006 | 6020A | 7440-39-3 | Barium | 9.3 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/12/2006 | 6020A | 7440-39-3 | Barium | 3.8 | µg/L | | | 0.5 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/12/2006 | 6020A | 7440-41-7 | Beryllium | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/12/2006 | 6020A | 7440-41-7 | Beryllium | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/12/2006 | 6020A | 7440-41-7 | Beryllium | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/12/2006 | 6020A | 7440-41-7 | Beryllium | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low; H = High; I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Anal_Date | Method | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-03S / 09-29-06 | 0609122-09 | 10/12/2006 | 6020A | 7440-41-7 | Beryllium | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/12/2006 | 6020A | 7440-41-7 | Beryllium | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/12/2006 | 6020A | 7440-41-7 | Beryllium | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/12/2006 | 6020A | 7440-41-7 | Beryllium | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/12/2006 | 6020A | 7440-41-7 | Beryllium | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/12/2006 | 6020A | 7440-41-7 | Beryllium | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/12/2006 | 6020A | 7440-41-7 | Beryllium | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/12/2006 | 6020A | 7440-41-7 | Beryllium | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/12/2006 | 6020A | 7440-41-7 | Beryllium | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/12/2006 | 6020A | 7440-41-7 | Beryllium | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/12/2006 | 6020A | 7440-41-7 | Beryllium | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/12/2006 | 6020A | 7440-41-7 | Beryllium | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/12/2006 | 6020A | 7440-41-7 | Beryllium | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/12/2006 | 6020A | 7440-41-7 | Beryllium | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/12/2006 | 6020A | 7440-41-7 | Beryllium | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/12/2006 | 6020A | 7440-43-9 | Cadmium | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/12/2006 | 6020A | 7440-43-9 | Cadmium | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/12/2006 | 6020A | 7440-43-9 | Cadmium | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/12/2006 | 6020A | 7440-43-9 | Cadmium | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/12/2006 | 6020A | 7440-43-9 | Cadmium | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/12/2006 | 6020A | 7440-43-9 | Cadmium | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/12/2006 | 6020A | 7440-43-9 | Cadmium | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/12/2006 | 6020A | 7440-43-9 | Cadmium | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/12/2006 | 6020A | 7440-43-9 | Cadmium | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/12/2006 | 6020A | 7440-43-9 | Cadmium | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/12/2006 | 6020A | 7440-43-9 | Cadmium | 0.41 | µg/L | | | 0.1 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/12/2006 | 6020A | 7440-43-9 | Cadmium | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/12/2006 | 6020A | 7440-43-9 | Cadmium | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/12/2006 | 6020A | 7440-43-9 | Cadmium | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/12/2006 | 6020A | 7440-43-9 | Cadmium | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/12/2006 | 6020A | 7440-43-9 | Cadmium | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/12/2006 | 6020A | 7440-43-9 | Cadmium | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/12/2006 | 6020A | 7440-43-9 | Cadmium | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/12/2006 | 6020A | 7440-43-9 | Cadmium | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/12/2006 | 6020A | 7440-70-2 | Calcium | 50000 | µg/L | | | 200 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/12/2006 | 6020A | 7440-70-2 | Calcium | 200 | µg/L | U | | 200 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/13/2006 | 6020A | 7440-70-2 | Calcium | 80000 | µg/L | | | 1000 | µg/L | 5 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/12/2006 | 6020A | 7440-70-2 | Calcium | 23000 | µg/L | | | 200 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/13/2006 | 6020A | 7440-70-2 | Calcium | 96000 | µg/L | | | 1000 | µg/L | 5 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/12/2006 | 6020A | 7440-70-2 | Calcium | 41000 | µg/L | | | 200 | µg/L | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low; H = High; I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Anal_Date | Method | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-05R-A / 10-03-06 | 0609122-22 | 10/12/2006 | 6020A | 7440-70-2 | Calcium | 12000 | µg/L | | | 200 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/12/2006 | 6020A | 7440-70-2 | Calcium | 12000 | µg/L | | | 200 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/13/2006 | 6020A | 7440-70-2 | Calcium | 130000 | µg/L | | | 1000 | µg/L | 5 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/13/2006 | 6020A | 7440-70-2 | Calcium | 79000 | µg/L | | | 1000 | µg/L | 5 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/13/2006 | 6020A | 7440-70-2 | Calcium | 100000 | µg/L | | | 1000 | µg/L | 5 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/12/2006 | 6020A | 7440-70-2 | Calcium | 12000 | µg/L | | | 200 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/12/2006 | 6020A | 7440-70-2 | Calcium | 50000 | µg/L | | | 200 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/12/2006 | 6020A | 7440-70-2 | Calcium | 12000 | µg/L | | | 200 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/12/2006 | 6020A | 7440-70-2 | Calcium | 8700 | µg/L | | | 200 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/12/2006 | 6020A | 7440-70-2 | Calcium | 32000 | µg/L | | | 200 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/12/2006 | 6020A | 7440-70-2 | Calcium | 48000 | µg/L | | | 200 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/12/2006 | 6020A | 7440-70-2 | Calcium | 21000 | µg/L | | | 200 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/12/2006 | 6020A | 7440-70-2 | Calcium | 15000 | µg/L | | | 200 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/12/2006 | 6020A | 7440-47-3 | Chromium | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/12/2006 | 6020A | 7440-47-3 | Chromium | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/12/2006 | 6020A | 7440-47-3 | Chromium | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/12/2006 | 6020A | 7440-47-3 | Chromium | 2.2 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/12/2006 | 6020A | 7440-47-3 | Chromium | 2.3 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/12/2006 | 6020A | 7440-47-3 | Chromium | 0.66 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/12/2006 | 6020A | 7440-47-3 | Chromium | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/12/2006 | 6020A | 7440-47-3 | Chromium | 0.6 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/12/2006 | 6020A | 7440-47-3 | Chromium | 0.79 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/12/2006 | 6020A | 7440-47-3 | Chromium | 0.61 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/12/2006 | 6020A | 7440-47-3 | Chromium | 0.64 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/12/2006 | 6020A | 7440-47-3 | Chromium | 0.55 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/12/2006 | 6020A | 7440-47-3 | Chromium | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/12/2006 | 6020A | 7440-47-3 | Chromium | 0.56 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/12/2006 | 6020A | 7440-47-3 | Chromium | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/12/2006 | 6020A | 7440-47-3 | Chromium | 0.71 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/12/2006 | 6020A | 7440-47-3 | Chromium | 0.56 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/12/2006 | 6020A | 7440-47-3 | Chromium | 0.63 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/12/2006 | 6020A | 7440-47-3 | Chromium | 0.59 | µg/L | | | 0.5 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/12/2006 | 6020A | 7440-48-4 | Cobalt | 1.1 | µg/L | | | 0.2 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/12/2006 | 6020A | 7440-48-4 | Cobalt | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/12/2006 | 6020A | 7440-48-4 | Cobalt | 1.4 | µg/L | | | 0.2 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/12/2006 | 6020A | 7440-48-4 | Cobalt | 1.8 | µg/L | | | 0.2 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/12/2006 | 6020A | 7440-48-4 | Cobalt | 0.79 | µg/L | | | 0.2 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/12/2006 | 6020A | 7440-48-4 | Cobalt | 0.79 | µg/L | | | 0.2 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/12/2006 | 6020A | 7440-48-4 | Cobalt | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/12/2006 | 6020A | 7440-48-4 | Cobalt | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low; H = High; I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Anal_Date | Method | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-06R-A / 10-02-06 | 0609122-14 | 10/12/2006 | 6020A | 7440-48-4 | Cobalt | 17 | µg/L | | | 0.2 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/12/2006 | 6020A | 7440-48-4 | Cobalt | 5.9 | µg/L | | | 0.2 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/12/2006 | 6020A | 7440-48-4 | Cobalt | 1.8 | µg/L | | | 0.2 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/12/2006 | 6020A | 7440-48-4 | Cobalt | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/12/2006 | 6020A | 7440-48-4 | Cobalt | 1 | µg/L | | | 0.2 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/12/2006 | 6020A | 7440-48-4 | Cobalt | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/12/2006 | 6020A | 7440-48-4 | Cobalt | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/12/2006 | 6020A | 7440-48-4 | Cobalt | 0.99 | µg/L | | | 0.2 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/12/2006 | 6020A | 7440-48-4 | Cobalt | 0.88 | µg/L | | | 0.2 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/12/2006 | 6020A | 7440-48-4 | Cobalt | 0.36 | µg/L | | | 0.2 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/12/2006 | 6020A | 7440-48-4 | Cobalt | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/13/2006 | 6020A | 7440-50-8 | Copper | 2 | µg/L | | | 1 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/13/2006 | 6020A | 7440-50-8 | Copper | 1 | µg/L | U | | 1 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/13/2006 | 6020A | 7440-50-8 | Copper | 2.5 | µg/L | | | 1 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/13/2006 | 6020A | 7440-50-8 | Copper | 4.7 | µg/L | | | 1 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/13/2006 | 6020A | 7440-50-8 | Copper | 1 | µg/L | | | 1 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/13/2006 | 6020A | 7440-50-8 | Copper | 1 | µg/L | U | | 1 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/13/2006 | 6020A | 7440-50-8 | Copper | 1 | µg/L | U | | 1 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/13/2006 | 6020A | 7440-50-8 | Copper | 1 | µg/L | U | | 1 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/13/2006 | 6020A | 7440-50-8 | Copper | 11 | µg/L | | | 1 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/13/2006 | 6020A | 7440-50-8 | Copper | 5.7 | µg/L | | | 1 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/13/2006 | 6020A | 7440-50-8 | Copper | 6.1 | µg/L | | | 1 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/13/2006 | 6020A | 7440-50-8 | Copper | 1 | µg/L | U | | 1 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/13/2006 | 6020A | 7440-50-8 | Copper | 2.1 | µg/L | | | 1 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/13/2006 | 6020A | 7440-50-8 | Copper | 1 | µg/L | U | | 1 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/13/2006 | 6020A | 7440-50-8 | Copper | 1 | µg/L | U | | 1 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/13/2006 | 6020A | 7440-50-8 | Copper | 1.5 | µg/L | | | 1 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/13/2006 | 6020A | 7440-50-8 | Copper | 2.7 | µg/L | | | 1 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/13/2006 | 6020A | 7440-50-8 | Copper | 1 | µg/L | U | | 1 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/13/2006 | 6020A | 7440-50-8 | Copper | 1 | µg/L | U | | 1 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/12/2006 | 6020A | 7439-89-6 | Iron | 2400 | µg/L | | | 50 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/12/2006 | 6020A | 7439-89-6 | Iron | 50 | µg/L | U | | 50 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/12/2006 | 6020A | 7439-89-6 | Iron | 650 | µg/L | | | 50 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/12/2006 | 6020A | 7439-89-6 | Iron | 1900 | µg/L | | | 50 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/12/2006 | 6020A | 7439-89-6 | Iron | 49000 | µg/L | | | 50 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/12/2006 | 6020A | 7439-89-6 | Iron | 410 | µg/L | | | 50 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/12/2006 | 6020A | 7439-89-6 | Iron | 170 | µg/L | | | 50 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/12/2006 | 6020A | 7439-89-6 | Iron | 240 | µg/L | | | 50 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/12/2006 | 6020A | 7439-89-6 | Iron | 850 | µg/L | | | 50 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/12/2006 | 6020A | 7439-89-6 | Iron | 500 | µg/L | | | 50 | µg/L | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low; H = High; I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Anal_Date | Method | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-13S / 09-28-06 | 0609122-04 | 10/12/2006 | 6020A | 7439-89-6 | Iron | 23000 | µg/L | | | 50 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/12/2006 | 6020A | 7439-89-6 | Iron | 120 | µg/L | | | 50 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/12/2006 | 6020A | 7439-89-6 | Iron | 2800 | µg/L | | | 50 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/12/2006 | 6020A | 7439-89-6 | Iron | 260 | µg/L | | | 50 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/12/2006 | 6020A | 7439-89-6 | Iron | 79 | µg/L | | | 50 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/12/2006 | 6020A | 7439-89-6 | Iron | 480 | µg/L | | | 50 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/12/2006 | 6020A | 7439-89-6 | Iron | 340 | µg/L | | | 50 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/12/2006 | 6020A | 7439-89-6 | Iron | 430 | µg/L | | | 50 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/12/2006 | 6020A | 7439-89-6 | Iron | 230 | µg/L | | | 50 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/12/2006 | 6020A | 7439-92-1 | Lead | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/12/2006 | 6020A | 7439-92-1 | Lead | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/12/2006 | 6020A | 7439-92-1 | Lead | 0.57 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/12/2006 | 6020A | 7439-92-1 | Lead | 2.7 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/12/2006 | 6020A | 7439-92-1 | Lead | 0.62 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/12/2006 | 6020A | 7439-92-1 | Lead | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/12/2006 | 6020A | 7439-92-1 | Lead | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/12/2006 | 6020A | 7439-92-1 | Lead | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/12/2006 | 6020A | 7439-92-1 | Lead | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/12/2006 | 6020A | 7439-92-1 | Lead | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/12/2006 | 6020A | 7439-92-1 | Lead | 53 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/12/2006 | 6020A | 7439-92-1 | Lead | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/12/2006 | 6020A | 7439-92-1 | Lead | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/12/2006 | 6020A | 7439-92-1 | Lead | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/12/2006 | 6020A | 7439-92-1 | Lead | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/12/2006 | 6020A | 7439-92-1 | Lead | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/12/2006 | 6020A | 7439-92-1 | Lead | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/12/2006 | 6020A | 7439-92-1 | Lead | 0.57 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/12/2006 | 6020A | 7439-92-1 | Lead | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/12/2006 | 6020A | 7439-95-4 | Magnesium | 24000 | µg/L | | | 10 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/12/2006 | 6020A | 7439-95-4 | Magnesium | 10 | µg/L | U | | 10 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/12/2006 | 6020A | 7439-95-4 | Magnesium | 22000 | µg/L | | | 10 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/12/2006 | 6020A | 7439-95-4 | Magnesium | 8800 | µg/L | | | 10 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/12/2006 | 6020A | 7439-95-4 | Magnesium | 30000 | µg/L | | | 10 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/12/2006 | 6020A | 7439-95-4 | Magnesium | 21000 | µg/L | | | 10 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/12/2006 | 6020A | 7439-95-4 | Magnesium | 2700 | µg/L | | | 10 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/12/2006 | 6020A | 7439-95-4 | Magnesium | 2600 | µg/L | | | 10 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/12/2006 | 6020A | 7439-95-4 | Magnesium | 39000 | µg/L | | | 10 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/12/2006 | 6020A | 7439-95-4 | Magnesium | 21000 | µg/L | | | 10 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/12/2006 | 6020A | 7439-95-4 | Magnesium | 15000 | µg/L | | | 10 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/12/2006 | 6020A | 7439-95-4 | Magnesium | 5400 | µg/L | | | 10 | µg/L | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low; H = High; I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Anal_Date | Method | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-14S / 10-02-06 | 0609122-16 | 10/12/2006 | 6020A | 7439-95-4 | Magnesium | 24000 | µg/L | | | 10 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/12/2006 | 6020A | 7439-95-4 | Magnesium | 2700 | µg/L | | | 10 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/12/2006 | 6020A | 7439-95-4 | Magnesium | 3000 | µg/L | | | 10 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/12/2006 | 6020A | 7439-95-4 | Magnesium | 16000 | µg/L | | | 10 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/12/2006 | 6020A | 7439-95-4 | Magnesium | 21000 | µg/L | | | 10 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/12/2006 | 6020A | 7439-95-4 | Magnesium | 11000 | µg/L | | | 10 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/12/2006 | 6020A | 7439-95-4 | Magnesium | 4400 | µg/L | | | 10 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/13/2006 | 6020A | 7439-96-5 | Manganese | 2100 | µg/L | | | 25 | µg/L | 5 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/12/2006 | 6020A | 7439-96-5 | Manganese | 5 | µg/L | U | | 5 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/12/2006 | 6020A | 7439-96-5 | Manganese | 280 | µg/L | | | 5 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/12/2006 | 6020A | 7439-96-5 | Manganese | 500 | µg/L | | | 5 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/13/2006 | 6020A | 7439-96-5 | Manganese | 3300 | µg/L | | | 25 | µg/L | 5 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/12/2006 | 6020A | 7439-96-5 | Manganese | 66 | µg/L | | | 5 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/12/2006 | 6020A | 7439-96-5 | Manganese | 12 | µg/L | | | 5 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/12/2006 | 6020A | 7439-96-5 | Manganese | 28 | µg/L | | | 5 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/12/2006 | 6020A | 7439-96-5 | Manganese | 220 | µg/L | | | 5 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/12/2006 | 6020A | 7439-96-5 | Manganese | 35 | µg/L | | | 5 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/12/2006 | 6020A | 7439-96-5 | Manganese | 820 | µg/L | | | 5 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/12/2006 | 6020A | 7439-96-5 | Manganese | 5 | µg/L | U | | 5 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/13/2006 | 6020A | 7439-96-5 | Manganese | 2300 | µg/L | | | 25 | µg/L | 5 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/12/2006 | 6020A | 7439-96-5 | Manganese | 15 | µg/L | | | 5 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/12/2006 | 6020A | 7439-96-5 | Manganese | 5 | µg/L | U | | 5 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/12/2006 | 6020A | 7439-96-5 | Manganese | 120 | µg/L | | | 5 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/12/2006 | 6020A | 7439-96-5 | Manganese | 230 | µg/L | | | 5 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/12/2006 | 6020A | 7439-96-5 | Manganese | 29 | µg/L | | | 5 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/12/2006 | 6020A | 7439-96-5 | Manganese | 5.8 | µg/L | | | 5 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/10/2006 | 7470A | 7439-97-6 | Mercury | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/10/2006 | 7470A | 7439-97-6 | Mercury | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/10/2006 | 7470A | 7439-97-6 | Mercury | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/10/2006 | 7470A | 7439-97-6 | Mercury | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/10/2006 | 7470A | 7439-97-6 | Mercury | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/10/2006 | 7470A | 7439-97-6 | Mercury | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/10/2006 | 7470A | 7439-97-6 | Mercury | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/10/2006 | 7470A | 7439-97-6 | Mercury | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/10/2006 | 7470A | 7439-97-6 | Mercury | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/10/2006 | 7470A | 7439-97-6 | Mercury | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/10/2006 | 7470A | 7439-97-6 | Mercury | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/10/2006 | 7470A | 7439-97-6 | Mercury | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/10/2006 | 7470A | 7439-97-6 | Mercury | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/10/2006 | 7470A | 7439-97-6 | Mercury | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low; H = High; I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Anal_Date | Method | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-24R / 09-28-06 | 0609122-06 | 10/10/2006 | 7470A | 7439-97-6 | Mercury | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/10/2006 | 7470A | 7439-97-6 | Mercury | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/10/2006 | 7470A | 7439-97-6 | Mercury | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/10/2006 | 7470A | 7439-97-6 | Mercury | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/10/2006 | 7470A | 7439-97-6 | Mercury | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/13/2006 | 6020A | 7440-02-0 | Nickel | 6.3 | µg/L | | | 0.5 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/13/2006 | 6020A | 7440-02-0 | Nickel | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/13/2006 | 6020A | 7440-02-0 | Nickel | 31 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/13/2006 | 6020A | 7440-02-0 | Nickel | 3.7 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/13/2006 | 6020A | 7440-02-0 | Nickel | 5 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/13/2006 | 6020A | 7440-02-0 | Nickel | 5.8 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/13/2006 | 6020A | 7440-02-0 | Nickel | 0.73 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/13/2006 | 6020A | 7440-02-0 | Nickel | 0.79 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/13/2006 | 6020A | 7440-02-0 | Nickel | 68 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/13/2006 | 6020A | 7440-02-0 | Nickel | 45 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/13/2006 | 6020A | 7440-02-0 | Nickel | 12 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/13/2006 | 6020A | 7440-02-0 | Nickel | 0.93 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/13/2006 | 6020A | 7440-02-0 | Nickel | 6 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/13/2006 | 6020A | 7440-02-0 | Nickel | 0.72 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/13/2006 | 6020A | 7440-02-0 | Nickel | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/13/2006 | 6020A | 7440-02-0 | Nickel | 2.6 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/13/2006 | 6020A | 7440-02-0 | Nickel | 4.9 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/13/2006 | 6020A | 7440-02-0 | Nickel | 1.3 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/13/2006 | 6020A | 7440-02-0 | Nickel | 1.5 | µg/L | | | 0.5 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/12/2006 | 6020A | 7440-09-7 | Potassium | 1800 | µg/L | | | 100 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/12/2006 | 6020A | 7440-09-7 | Potassium | 100 | µg/L | U | | 100 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/12/2006 | 6020A | 7440-09-7 | Potassium | 880 | µg/L | | | 100 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/12/2006 | 6020A | 7440-09-7 | Potassium | 1200 | µg/L | | | 100 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/12/2006 | 6020A | 7440-09-7 | Potassium | 8000 | µg/L | | | 100 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/12/2006 | 6020A | 7440-09-7 | Potassium | 900 | µg/L | | | 100 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/12/2006 | 6020A | 7440-09-7 | Potassium | 590 | µg/L | | | 100 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/12/2006 | 6020A | 7440-09-7 | Potassium | 400 | µg/L | | | 100 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/12/2006 | 6020A | 7440-09-7 | Potassium | 1800 | µg/L | | | 100 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/12/2006 | 6020A | 7440-09-7 | Potassium | 3600 | µg/L | | | 100 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/12/2006 | 6020A | 7440-09-7 | Potassium | 4800 | µg/L | | | 100 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/12/2006 | 6020A | 7440-09-7 | Potassium | 660 | µg/L | | | 100 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/12/2006 | 6020A | 7440-09-7 | Potassium | 1900 | µg/L | | | 100 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/12/2006 | 6020A | 7440-09-7 | Potassium | 440 | µg/L | | | 100 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/12/2006 | 6020A | 7440-09-7 | Potassium | 560 | µg/L | | | 100 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/12/2006 | 6020A | 7440-09-7 | Potassium | 1500 | µg/L | | | 100 | µg/L | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low; H = High; I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Anal_Date | Method | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-27R / 09-29-06 | 0609122-10 | 10/12/2006 | 6020A | 7440-09-7 | Potassium | 1900 | µg/L | | | 100 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/12/2006 | 6020A | 7440-09-7 | Potassium | 860 | µg/L | | | 100 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/12/2006 | 6020A | 7440-09-7 | Potassium | 600 | µg/L | | | 100 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/12/2006 | 6020A | 7782-49-2 | Selenium | 1 | µg/L | U | | 1 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/12/2006 | 6020A | 7782-49-2 | Selenium | 1 | µg/L | U | | 1 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/12/2006 | 6020A | 7782-49-2 | Selenium | 3 | µg/L | | | 1 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/12/2006 | 6020A | 7782-49-2 | Selenium | 1 | µg/L | U | | 1 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/12/2006 | 6020A | 7782-49-2 | Selenium | 1.3 | µg/L | | | 1 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/12/2006 | 6020A | 7782-49-2 | Selenium | 2.8 | µg/L | | | 1 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/12/2006 | 6020A | 7782-49-2 | Selenium | 1 | µg/L | U | | 1 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/12/2006 | 6020A | 7782-49-2 | Selenium | 1 | µg/L | U | | 1 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/12/2006 | 6020A | 7782-49-2 | Selenium | 8.1 | µg/L | | | 1 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/12/2006 | 6020A | 7782-49-2 | Selenium | 5 | µg/L | | | 1 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/12/2006 | 6020A | 7782-49-2 | Selenium | 1.1 | µg/L | | | 1 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/12/2006 | 6020A | 7782-49-2 | Selenium | 1 | µg/L | U | | 1 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/12/2006 | 6020A | 7782-49-2 | Selenium | 1 | µg/L | U | | 1 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/12/2006 | 6020A | 7782-49-2 | Selenium | 1 | µg/L | U | | 1 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/12/2006 | 6020A | 7782-49-2 | Selenium | 1 | µg/L | U | | 1 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/12/2006 | 6020A | 7782-49-2 | Selenium | 1.2 | µg/L | | | 1 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/12/2006 | 6020A | 7782-49-2 | Selenium | 1 | µg/L | U | | 1 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/12/2006 | 6020A | 7782-49-2 | Selenium | 1.1 | µg/L | | | 1 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/12/2006 | 6020A | 7782-49-2 | Selenium | 1 | µg/L | U | | 1 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/12/2006 | 6020A | 7440-22-4 | Silver | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/12/2006 | 6020A | 7440-22-4 | Silver | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/12/2006 | 6020A | 7440-22-4 | Silver | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/12/2006 | 6020A | 7440-22-4 | Silver | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/12/2006 | 6020A | 7440-22-4 | Silver | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/12/2006 | 6020A | 7440-22-4 | Silver | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/12/2006 | 6020A | 7440-22-4 | Silver | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/12/2006 | 6020A | 7440-22-4 | Silver | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/12/2006 | 6020A | 7440-22-4 | Silver | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/12/2006 | 6020A | 7440-22-4 | Silver | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/12/2006 | 6020A | 7440-22-4 | Silver | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/12/2006 | 6020A | 7440-22-4 | Silver | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/12/2006 | 6020A | 7440-22-4 | Silver | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/12/2006 | 6020A | 7440-22-4 | Silver | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/12/2006 | 6020A | 7440-22-4 | Silver | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/12/2006 | 6020A | 7440-22-4 | Silver | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/12/2006 | 6020A | 7440-22-4 | Silver | 0.58 | µg/L | | | 0.1 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/12/2006 | 6020A | 7440-22-4 | Silver | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low; H = High; I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Anal_Date | Method | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-28R / 09-29-06 | 0609122-11 | 10/12/2006 | 6020A | 7440-22-4 | Silver | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/12/2006 | 6020A | 7440-23-5 | Sodium | 32000 | µg/L | | | 50 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/12/2006 | 6020A | 7440-23-5 | Sodium | 62 | µg/L | | | 50 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/13/2006 | 6020A | 7440-23-5 | Sodium | 90000 | µg/L | | | 250 | µg/L | 5 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/12/2006 | 6020A | 7440-23-5 | Sodium | 12000 | µg/L | | | 50 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/12/2006 | 6020A | 7440-23-5 | Sodium | 46000 | µg/L | | | 50 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/12/2006 | 6020A | 7440-23-5 | Sodium | 16000 | µg/L | | | 50 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/12/2006 | 6020A | 7440-23-5 | Sodium | 6800 | µg/L | | | 50 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/12/2006 | 6020A | 7440-23-5 | Sodium | 6000 | µg/L | | | 50 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/12/2006 | 6020A | 7440-23-5 | Sodium | 34000 | µg/L | | | 50 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/12/2006 | 6020A | 7440-23-5 | Sodium | 43000 | µg/L | | | 50 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/12/2006 | 6020A | 7440-23-5 | Sodium | 13000 | µg/L | | | 50 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/12/2006 | 6020A | 7440-23-5 | Sodium | 15000 | µg/L | | | 50 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/12/2006 | 6020A | 7440-23-5 | Sodium | 31000 | µg/L | | | 50 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/12/2006 | 6020A | 7440-23-5 | Sodium | 6000 | µg/L | | | 50 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/12/2006 | 6020A | 7440-23-5 | Sodium | 6000 | µg/L | | | 50 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/13/2006 | 6020A | 7440-23-5 | Sodium | 53000 | µg/L | | | 250 | µg/L | 5 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/12/2006 | 6020A | 7440-23-5 | Sodium | 21000 | µg/L | | | 50 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/12/2006 | 6020A | 7440-23-5 | Sodium | 10000 | µg/L | | | 50 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/12/2006 | 6020A | 7440-23-5 | Sodium | 8000 | µg/L | | | 50 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/12/2006 | 6020A | 7440-28-0 | Thallium | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/12/2006 | 6020A | 7440-28-0 | Thallium | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/12/2006 | 6020A | 7440-28-0 | Thallium | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/12/2006 | 6020A | 7440-28-0 | Thallium | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/12/2006 | 6020A | 7440-28-0 | Thallium | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/12/2006 | 6020A | 7440-28-0 | Thallium | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/12/2006 | 6020A | 7440-28-0 | Thallium | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/12/2006 | 6020A | 7440-28-0 | Thallium | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/12/2006 | 6020A | 7440-28-0 | Thallium | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/12/2006 | 6020A | 7440-28-0 | Thallium | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/12/2006 | 6020A | 7440-28-0 | Thallium | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/12/2006 | 6020A | 7440-28-0 | Thallium | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/12/2006 | 6020A | 7440-28-0 | Thallium | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/12/2006 | 6020A | 7440-28-0 | Thallium | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/12/2006 | 6020A | 7440-28-0 | Thallium | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/12/2006 | 6020A | 7440-28-0 | Thallium | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/12/2006 | 6020A | 7440-28-0 | Thallium | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/12/2006 | 6020A | 7440-28-0 | Thallium | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/12/2006 | 6020A | 7440-28-0 | Thallium | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/12/2006 | 6020A | 7440-62-2 | Vanadium | 2.8 | µg/L | | | 1 | µg/L | 1 | |

| Smpl | Lab_ID | Anal_Date | Method | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OW-213A / 10-03-06 | 0609122-24 | 10/12/2006 | 6020A | 7440-62-2 | Vanadium | 1 | µg/L | U | | 1 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/12/2006 | 6020A | 7440-62-2 | Vanadium | 1.6 | µg/L | | | 1 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/12/2006 | 6020A | 7440-62-2 | Vanadium | 1.2 | µg/L | | | 1 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/12/2006 | 6020A | 7440-62-2 | Vanadium | 1.1 | µg/L | | | 1 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/12/2006 | 6020A | 7440-62-2 | Vanadium | 1 | µg/L | U | | 1 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/12/2006 | 6020A | 7440-62-2 | Vanadium | 1 | µg/L | U | | 1 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/12/2006 | 6020A | 7440-62-2 | Vanadium | 1 | µg/L | U | | 1 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/12/2006 | 6020A | 7440-62-2 | Vanadium | 2.2 | µg/L | | | 1 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/12/2006 | 6020A | 7440-62-2 | Vanadium | 1.2 | µg/L | | | 1 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/12/2006 | 6020A | 7440-62-2 | Vanadium | 3.4 | µg/L | | | 1 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/12/2006 | 6020A | 7440-62-2 | Vanadium | 2.3 | µg/L | | | 1 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/12/2006 | 6020A | 7440-62-2 | Vanadium | 3 | µg/L | | | 1 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/12/2006 | 6020A | 7440-62-2 | Vanadium | 1 | µg/L | U | | 1 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/12/2006 | 6020A | 7440-62-2 | Vanadium | 1 | µg/L | U | | 1 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/12/2006 | 6020A | 7440-62-2 | Vanadium | 3.5 | µg/L | | | 1 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/12/2006 | 6020A | 7440-62-2 | Vanadium | 1 | µg/L | U | | 1 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/12/2006 | 6020A | 7440-62-2 | Vanadium | 2 | µg/L | | | 1 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/12/2006 | 6020A | 7440-62-2 | Vanadium | 1 | µg/L | U | | 1 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/12/2006 | 6020A | 7440-66-6 | Zinc | 5 | µg/L | U | | 5 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/12/2006 | 6020A | 7440-66-6 | Zinc | 6.6 | µg/L | | | 5 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/12/2006 | 6020A | 7440-66-6 | Zinc | 5.1 | µg/L | U | | 5 | µg/L | 1 | Blank action |
| SH-03D / 10-03-06 | 0609122-21 | 10/12/2006 | 6020A | 7440-66-6 | Zinc | 12 | µg/L | U | | 5 | µg/L | 1 | Blank action |
| SH-03S / 09-29-06 | 0609122-09 | 10/12/2006 | 6020A | 7440-66-6 | Zinc | 140 | µg/L | | | 5 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/12/2006 | 6020A | 7440-66-6 | Zinc | 5.8 | µg/L | U | | 5 | µg/L | 1 | Blank action |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/12/2006 | 6020A | 7440-66-6 | Zinc | 7.3 | µg/L | U | | 5 | µg/L | 1 | Blank action |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/12/2006 | 6020A | 7440-66-6 | Zinc | 10 | µg/L | U | | 5 | µg/L | 1 | Blank action |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/12/2006 | 6020A | 7440-66-6 | Zinc | 5.8 | µg/L | U | | 5 | µg/L | 1 | Blank action |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/12/2006 | 6020A | 7440-66-6 | Zinc | 6.7 | µg/L | U | | 5 | µg/L | 1 | Blank action |
| SH-13S / 09-28-06 | 0609122-04 | 10/13/2006 | 6020A | 7440-66-6 | Zinc | 5300 | µg/L | | | 25 | µg/L | 5 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/12/2006 | 6020A | 7440-66-6 | Zinc | 5 | µg/L | U | | 5 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/12/2006 | 6020A | 7440-66-6 | Zinc | 5 | µg/L | U | | 5 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/12/2006 | 6020A | 7440-66-6 | Zinc | 15 | µg/L | U | | 5 | µg/L | 1 | Blank action |
| SH-24R / 09-28-06 | 0609122-06 | 10/12/2006 | 6020A | 7440-66-6 | Zinc | 5 | µg/L | U | | 5 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/12/2006 | 6020A | 7440-66-6 | Zinc | 72 | µg/L | | | 5 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/12/2006 | 6020A | 7440-66-6 | Zinc | 5 | µg/L | U | | 5 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/12/2006 | 6020A | 7440-66-6 | Zinc | 5 | µg/L | U | | 5 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/12/2006 | 6020A | 7440-66-6 | Zinc | 5 | µg/L | U | | 5 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/12/2006 | 310.1 | | Alkalinity | 250 | mg/L | | | 5 | mg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/17/2006 | 310.1 | | Alkalinity | 5 | mg/L | U | | 5 | mg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/12/2006 | 310.1 | | Alkalinity | 180 | mg/L | | | 5 | mg/L | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low; H = High; I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Anal_Date | Method | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-03D / 10-03-06 | 0609122-21 | 10/17/2006 | 310.1 | | Alkalinity | 48 | mg/L | | | 5 | mg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/13/2006 | 310.1 | | Alkalinity | 480 | mg/L | | | 5 | mg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/12/2006 | 310.1 | | Alkalinity | 85 | mg/L | | | 5 | mg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/17/2006 | 310.1 | | Alkalinity | 43 | mg/L | | | 5 | mg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/17/2006 | 310.1 | | Alkalinity | 44 | mg/L | | | 5 | mg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/12/2006 | 310.1 | | Alkalinity | 160 | mg/L | | | 5 | mg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/12/2006 | 310.1 | | Alkalinity | 130 | mg/L | | | 5 | mg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/11/2006 | 310.1 | | Alkalinity | 320 | mg/L | | | 5 | mg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/12/2006 | 310.1 | | Alkalinity | 40 | mg/L | | | 5 | mg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/12/2006 | 310.1 | | Alkalinity | 250 | mg/L | | | 5 | mg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/11/2006 | 310.1 | | Alkalinity | 42 | mg/L | | | 5 | mg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/11/2006 | 310.1 | | Alkalinity | 40 | mg/L | | | 5 | mg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/12/2006 | 310.1 | | Alkalinity | 100 | mg/L | | | 5 | mg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/12/2006 | 310.1 | | Alkalinity | 88 | mg/L | | | 5 | mg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/11/2006 | 310.1 | | Alkalinity | 56 | mg/L | | | 5 | mg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/12/2006 | 310.1 | | Alkalinity | 47 | mg/L | | | 5 | mg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/2/2006 | 300.0 | 16887-00-6 | Chloride | 41 | mg/L | | | 1 | mg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/4/2006 | 300.0 | 16887-00-6 | Chloride | 1 | mg/L | U | | 1 | mg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/2/2006 | 300.0 | 16887-00-6 | Chloride | 100 | mg/L | | | 5 | mg/L | 5 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/4/2006 | 300.0 | 16887-00-6 | Chloride | 34 | mg/L | | | 1 | mg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 9/29/2006 | 300.0 | 16887-00-6 | Chloride | 13 | mg/L | | | 1 | mg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/3/2006 | 300.0 | 16887-00-6 | Chloride | 53 | mg/L | | | 5 | mg/L | 5 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/4/2006 | 300.0 | 16887-00-6 | Chloride | 2.9 | mg/L | | | 1 | mg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/4/2006 | 300.0 | 16887-00-6 | Chloride | 3 | mg/L | | | 1 | mg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/3/2006 | 300.0 | 16887-00-6 | Chloride | 150 | mg/L | | | 5 | mg/L | 5 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/3/2006 | 300.0 | 16887-00-6 | Chloride | 99 | mg/L | | | 5 | mg/L | 5 | |
| SH-13S / 09-28-06 | 0609122-04 | 9/28/2006 | 300.0 | 16887-00-6 | Chloride | 29 | mg/L | | | 1 | mg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/2/2006 | 300.0 | 16887-00-6 | Chloride | 32 | mg/L | | | 1 | mg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/2/2006 | 300.0 | 16887-00-6 | Chloride | 41 | mg/L | | | 1 | mg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 9/28/2006 | 300.0 | 16887-00-6 | Chloride | 2.2 | mg/L | | | 1 | mg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 9/28/2006 | 300.0 | 16887-00-6 | Chloride | 4 | mg/L | | | 1 | mg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/3/2006 | 300.0 | 16887-00-6 | Chloride | 89 | mg/L | | | 5 | mg/L | 5 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/2/2006 | 300.0 | 16887-00-6 | Chloride | 84 | mg/L | | | 5 | mg/L | 5 | |
| SH-28D / 09-27-06 | 0609122-02 | 9/27/2006 | 300.0 | 16887-00-6 | Chloride | 28 | mg/L | | | 1 | mg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 9/29/2006 | 300.0 | 16887-00-6 | Chloride | 9.6 | mg/L | | | 1 | mg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/2/2006 | 300.0 | | Nitrate | 0.4 | mg/L | | | 0.1 | mg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/4/2006 | 300.0 | | Nitrate | 0.1 | mg/L | U | | 0.1 | mg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 9/29/2006 | 300.0 | | Nitrate | 0.1 | mg/L | U | | 0.1 | mg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/4/2006 | 300.0 | | Nitrate | 0.58 | mg/L | | | 0.1 | mg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 9/29/2006 | 300.0 | | Nitrate | 0.1 | mg/L | U | | 0.1 | mg/L | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low; H = High; I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Anal_Date | Method | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-05D / 10-02-06 | 0609122-13 | 10/2/2006 | 300.0 | | Nitrate | 0.75 | mg/L | | | 0.1 | mg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/4/2006 | 300.0 | | Nitrate | 0.3 | mg/L | | | 0.1 | mg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/4/2006 | 300.0 | | Nitrate | 0.31 | mg/L | | | 0.1 | mg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/2/2006 | 300.0 | | Nitrate | 0.49 | mg/L | | | 0.1 | mg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/2/2006 | 300.0 | | Nitrate | 0.87 | mg/L | | | 0.1 | mg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 9/28/2006 | 300.0 | | Nitrate | 0.1 | mg/L | U | | 0.1 | mg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/2/2006 | 300.0 | | Nitrate | 0.44 | mg/L | | | 0.1 | mg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/2/2006 | 300.0 | | Nitrate | 0.4 | mg/L | | | 0.1 | mg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 9/28/2006 | 300.0 | | Nitrate | 0.28 | mg/L | | | 0.1 | mg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 9/28/2006 | 300.0 | | Nitrate | 0.46 | mg/L | | | 0.1 | mg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/2/2006 | 300.0 | | Nitrate | 0.6 | mg/L | | | 0.1 | mg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 9/29/2006 | 300.0 | | Nitrate | 0.56 | mg/L | | | 0.1 | mg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 9/27/2006 | 300.0 | | Nitrate | 3.1 | mg/L | | | 0.1 | mg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 9/29/2006 | 300.0 | | Nitrate | 1 | mg/L | | | 0.1 | mg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/2/2006 | 300.0 | | Sulfate | 25 | mg/L | | | 1 | mg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/4/2006 | 300.0 | | Sulfate | 1 | mg/L | U | | 1 | mg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/2/2006 | 300.0 | | Sulfate | 160 | mg/L | | | 5 | mg/L | 5 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/4/2006 | 300.0 | | Sulfate | 26 | mg/L | | | 1 | mg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 9/29/2006 | 300.0 | | Sulfate | 1 | mg/L | U | | 1 | mg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/3/2006 | 300.0 | | Sulfate | 71 | mg/L | | | 5 | mg/L | 5 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/4/2006 | 300.0 | | Sulfate | 7.8 | mg/L | | | 1 | mg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/4/2006 | 300.0 | | Sulfate | 7.8 | mg/L | | | 1 | mg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/3/2006 | 300.0 | | Sulfate | 200 | mg/L | | | 5 | mg/L | 5 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/3/2006 | 300.0 | | Sulfate | 140 | mg/L | | | 5 | mg/L | 5 | |
| SH-13S / 09-28-06 | 0609122-04 | 9/28/2006 | 300.0 | | Sulfate | 5.8 | mg/L | | | 1 | mg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/2/2006 | 300.0 | | Sulfate | 7.3 | mg/L | | | 1 | mg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/2/2006 | 300.0 | | Sulfate | 25 | mg/L | | | 1 | mg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 9/28/2006 | 300.0 | | Sulfate | 7.7 | mg/L | | | 1 | mg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 9/28/2006 | 300.0 | | Sulfate | 4.1 | mg/L | | | 1 | mg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/2/2006 | 300.0 | | Sulfate | 38 | mg/L | | | 1 | mg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/2/2006 | 300.0 | | Sulfate | 57 | mg/L | | | 5 | mg/L | 5 | |
| SH-28D / 09-27-06 | 0609122-02 | 9/27/2006 | 300.0 | | Sulfate | 17 | mg/L | | | 1 | mg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 9/29/2006 | 300.0 | | Sulfate | 11 | mg/L | | | 1 | mg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/9/2006 | 376.2 | 18496-25-8 | Sulfide | 0.2 | mg/L | UJ | L | 0.2 | mg/L | 1 | MS low |
| OW-213A / 10-03-06 | 0609122-24 | 10/9/2006 | 376.2 | 18496-25-8 | Sulfide | 0.2 | mg/L | U | | 0.2 | mg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/5/2006 | 376.2 | 18496-25-8 | Sulfide | 0.2 | mg/L | UJ | L | 0.2 | mg/L | 1 | MS low |
| SH-03D / 10-03-06 | 0609122-21 | 10/9/2006 | 376.2 | 18496-25-8 | Sulfide | 0.2 | mg/L | UJ | L | 0.2 | mg/L | 1 | MS low |
| SH-03S / 09-29-06 | 0609122-09 | 10/5/2006 | 376.2 | 18496-25-8 | Sulfide | 0.2 | mg/L | UJ | L | 0.2 | mg/L | 1 | MS low |
| SH-05D / 10-02-06 | 0609122-13 | 10/9/2006 | 376.2 | 18496-25-8 | Sulfide | 0.2 | mg/L | UJ | L | 0.2 | mg/L | 1 | MS low |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/9/2006 | 376.2 | 18496-25-8 | Sulfide | 0.2 | mg/L | UJ | L | 0.2 | mg/L | 1 | MS low |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low; H = High; I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Anal_Date | Method | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-05R-B / 10-03-06 | 0609122-23 | 10/9/2006 | 376.2 | 18496-25-8 | Sulfide | 0.2 | mg/L | UJ | L | 0.2 | mg/L | 1 | MS low |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/9/2006 | 376.2 | 18496-25-8 | Sulfide | 0.2 | mg/L | UJ | L | 0.2 | mg/L | 1 | MS low |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/9/2006 | 376.2 | 18496-25-8 | Sulfide | 0.2 | mg/L | UJ | L | 0.2 | mg/L | 1 | MS low |
| SH-13S / 09-28-06 | 0609122-04 | 10/5/2006 | 376.2 | 18496-25-8 | Sulfide | 0.2 | mg/L | UJ | L | 0.2 | mg/L | 1 | MS low |
| SH-14D / 10-02-06 | 0609122-17 | 10/9/2006 | 376.2 | 18496-25-8 | Sulfide | 0.2 | mg/L | UJ | L | 0.2 | mg/L | 1 | MS low |
| SH-14S / 10-02-06 | 0609122-16 | 10/9/2006 | 376.2 | 18496-25-8 | Sulfide | 0.2 | mg/L | UJ | L | 0.2 | mg/L | 1 | MS low |
| SH-19R / 09-28-06 | 0609122-05 | 10/5/2006 | 376.2 | 18496-25-8 | Sulfide | 0.2 | mg/L | UJ | L | 0.2 | mg/L | 1 | MS low |
| SH-24R / 09-28-06 | 0609122-06 | 10/5/2006 | 376.2 | 18496-25-8 | Sulfide | 0.2 | mg/L | UJ | L | 0.2 | mg/L | 1 | MS low |
| SH-27D / 10-02-06 | 0609122-18 | 10/9/2006 | 376.2 | 18496-25-8 | Sulfide | 0.2 | mg/L | UJ | L | 0.2 | mg/L | 1 | MS low |
| SH-27R / 09-29-06 | 0609122-10 | 10/5/2006 | 376.2 | 18496-25-8 | Sulfide | 0.2 | mg/L | UJ | L | 0.2 | mg/L | 1 | MS low |
| SH-28D / 09-27-06 | 0609122-02 | 10/3/2006 | 376.2 | 18496-25-8 | Sulfide | 0.2 | mg/L | UJ | L | 0.2 | mg/L | 1 | MS low |
| SH-28R / 09-29-06 | 0609122-11 | 10/5/2006 | 376.2 | 18496-25-8 | Sulfide | 0.2 | mg/L | UJ | L | 0.2 | mg/L | 1 | MS low |
| OW-213 / 10-02-06 | 0609122-19 | 10/6/2006 | 160.1 | | Total Dissolved Solids | 410 | mg/L | | | 6 | mg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/6/2006 | 160.1 | | Total Dissolved Solids | 24 | mg/L | | | 6 | mg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/5/2006 | 160.1 | | Total Dissolved Solids | 650 | mg/L | | | 6 | mg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/6/2006 | 160.1 | | Total Dissolved Solids | 200 | mg/L | | | 6 | mg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/5/2006 | 160.1 | | Total Dissolved Solids | 540 | mg/L | | | 6 | mg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/6/2006 | 160.1 | | Total Dissolved Solids | 330 | mg/L | | | 6 | mg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/6/2006 | 160.1 | | Total Dissolved Solids | 110 | mg/L | | | 6 | mg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/6/2006 | 160.1 | | Total Dissolved Solids | 110 | mg/L | | | 6 | mg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/6/2006 | 160.1 | | Total Dissolved Solids | 790 | mg/L | | | 6 | mg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/6/2006 | 160.1 | | Total Dissolved Solids | 540 | mg/L | | | 6 | mg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/5/2006 | 160.1 | | Total Dissolved Solids | 390 | mg/L | | | 6 | mg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/6/2006 | 160.1 | | Total Dissolved Solids | 150 | mg/L | | | 6 | mg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/6/2006 | 160.1 | | Total Dissolved Solids | 400 | mg/L | | | 6 | mg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/5/2006 | 160.1 | | Total Dissolved Solids | 78 | mg/L | | | 6 | mg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/5/2006 | 160.1 | | Total Dissolved Solids | 69 | mg/L | | | 6 | mg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/6/2006 | 160.1 | | Total Dissolved Solids | 330 | mg/L | | | 6 | mg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/5/2006 | 160.1 | | Total Dissolved Solids | 350 | mg/L | | | 6 | mg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/3/2006 | 160.1 | | Total Dissolved Solids | 180 | mg/L | | | 6 | mg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/5/2006 | 160.1 | | Total Dissolved Solids | 110 | mg/L | | | 6 | mg/L | 1 | |

| Smpl | Lab_ID | Anal_Date | Anal_Method | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-28D / 09-27-06 | 99722-01 | 10/13/2006 | 351.2 | TKN | Total Kjeldahl Nitrogen | 0.5 | mg/L | U | | 0.5 | mg/L | 1 | |
| SH-13S / 09-28-06 | 99722-02 | 10/13/2006 | 351.2 | TKN | Total Kjeldahl Nitrogen | 1.1 | mg/L | | | 0.5 | mg/L | 1 | |
| SH-19R / 09-28-06 | 99722-03 | 10/13/2006 | 351.2 | TKN | Total Kjeldahl Nitrogen | 0.5 | mg/L | U | | 0.5 | mg/L | 1 | |
| SH-24R / 09-28-06 | 99722-04 | 10/13/2006 | 351.2 | TKN | Total Kjeldahl Nitrogen | 0.5 | mg/L | U | | 0.5 | mg/L | 1 | |
| SH-02R / 09-29-06 | 99722-05 | 10/13/2006 | 351.2 | TKN | Total Kjeldahl Nitrogen | 0.5 | mg/L | U | | 0.5 | mg/L | 1 | |
| SH-03S / 09-29-06 | 99722-06 | 10/13/2006 | 351.2 | TKN | Total Kjeldahl Nitrogen | 5.6 | mg/L | | | 0.5 | mg/L | 1 | |
| SH-27R / 09-29-06 | 99722-07 | 10/13/2006 | 351.2 | TKN | Total Kjeldahl Nitrogen | 0.5 | mg/L | U | | 0.5 | mg/L | 1 | |
| SH-28R / 09-29-06 | 99722-08 | 10/13/2006 | 351.2 | TKN | Total Kjeldahl Nitrogen | 0.5 | mg/L | U | | 0.5 | mg/L | 1 | |
| SH-05D / 10-02-06 | 99722-09 | 10/13/2006 | 351.2 | TKN | Total Kjeldahl Nitrogen | 0.5 | mg/L | U | | 0.5 | mg/L | 1 | |
| SH-06R-A / 10-02-06 | 99722-10 | 10/13/2006 | 351.2 | TKN | Total Kjeldahl Nitrogen | 0.5 | mg/L | U | | 0.5 | mg/L | 1 | |
| SH-06R-B / 10-02-06 | 99722-11 | 10/13/2006 | 351.2 | TKN | Total Kjeldahl Nitrogen | 0.5 | mg/L | U | | 0.5 | mg/L | 1 | |
| SH-14S / 10-02-06 | 99722-12 | 10/13/2006 | 351.2 | TKN | Total Kjeldahl Nitrogen | 0.5 | mg/L | U | | 0.5 | mg/L | 1 | |
| SH-14D / 10-02-06 | 99722-13 | 10/13/2006 | 351.2 | TKN | Total Kjeldahl Nitrogen | 0.5 | mg/L | U | | 0.5 | mg/L | 1 | |
| SH-27D / 10-02-06 | 99722-14 | 10/13/2006 | 351.2 | TKN | Total Kjeldahl Nitrogen | 0.5 | mg/L | U | | 0.5 | mg/L | 1 | |
| OW-213 / 10-02-06 | 99722-15 | 10/13/2006 | 351.2 | TKN | Total Kjeldahl Nitrogen | 0.5 | mg/L | U | | 0.5 | mg/L | 1 | |
| SH-03D / 10-03-06 | 99722-16 | 10/13/2006 | 351.2 | TKN | Total Kjeldahl Nitrogen | 0.5 | mg/L | U | | 0.5 | mg/L | 1 | |
| SH-05R-A / 10-03-06 | 99722-17 | 10/13/2006 | 351.2 | TKN | Total Kjeldahl Nitrogen | 0.5 | mg/L | U | | 0.5 | mg/L | 1 | |
| SH-05R-B / 10-03-06 | 99722-18 | 10/13/2006 | 351.2 | TKN | Total Kjeldahl Nitrogen | 0.5 | mg/L | U | | 0.5 | mg/L | 1 | |
| OW-213A / 10-03-06 | 99722-19 | 10/13/2006 | 351.2 | TKN | Total Kjeldahl Nitrogen | 0.5 | mg/L | U | | 0.5 | mg/L | 1 | |
| SH-28D / 09-27-06 | WW5286-10 | 10/10/2006 | 415.1 | TOC | Total Organic Carbon | 1 | mg/L | U | | 1 | mg/L | 1 | |
| SH-13S / 09-28-06 | WW5286-11 | 10/10/2006 | 415.1 | TOC | Total Organic Carbon | 5.3 | mg/L | | | 1 | mg/L | 1 | |
| SH-19R / 09-28-06 | WW5286-12 | 10/10/2006 | 415.1 | TOC | Total Organic Carbon | 1 | mg/L | U | | 1 | mg/L | 1 | |
| SH-24R / 09-28-06 | WW5286-13 | 10/10/2006 | 415.1 | TOC | Total Organic Carbon | 1 | mg/L | U | | 1 | mg/L | 1 | |
| SH-02R / 09-29-06 | WW5286-14 | 10/10/2006 | 415.1 | TOC | Total Organic Carbon | 3.2 | mg/L | | | 1 | mg/L | 1 | |
| SH-03S / 09-29-06 | WW5286-15 | 10/10/2006 | 415.1 | TOC | Total Organic Carbon | 25 | mg/L | | | 1 | mg/L | 1 | |
| SH-27R / 09-29-06 | WW5286-16 | 10/10/2006 | 415.1 | TOC | Total Organic Carbon | 1.3 | mg/L | | | 1 | mg/L | 1 | |
| SH-28R / 09-29-06 | WW5286-17 | 10/10/2006 | 415.1 | TOC | Total Organic Carbon | 1 | mg/L | U | | 1 | mg/L | 1 | |
| SH-05D / 10-02-06 | WW5286-18 | 10/10/2006 | 415.1 | TOC | Total Organic Carbon | 1 | mg/L | U | | 1 | mg/L | 1 | |
| SH-06R-A / 10-02-06 | WW5286-19 | 10/10/2006 | 415.1 | TOC | Total Organic Carbon | 3.3 | mg/L | | | 1 | mg/L | 1 | |
| SH-06R-B / 10-02-06 | WW5286-1 | 10/10/2006 | 415.1 | TOC | Total Organic Carbon | 2.5 | mg/L | | | 1 | mg/L | 1 | |
| SH-14S / 10-02-06 | WW5286-2 | 10/10/2006 | 415.1 | TOC | Total Organic Carbon | 3.9 | mg/L | | | 1 | mg/L | 1 | |
| SH-14D / 10-02-06 | WW5286-3 | 10/10/2006 | 415.1 | TOC | Total Organic Carbon | 1 | mg/L | U | | 1 | mg/L | 1 | |
| SH-27D / 10-02-06 | WW5286-4 | 10/10/2006 | 415.1 | TOC | Total Organic Carbon | 1.2 | mg/L | | | 1 | mg/L | 1 | |
| OW-213 / 10-02-06 | WW5286-5 | 10/10/2006 | 415.1 | TOC | Total Organic Carbon | 4.2 | mg/L | | | 1 | mg/L | 1 | |
| SH-03D / 10-03-06 | WW5286-6 | 10/10/2006 | 415.1 | TOC | Total Organic Carbon | 1 | mg/L | U | | 1 | mg/L | 1 | |
| SH-05R-A / 10-03-06 | WW5286-7 | 10/10/2006 | 415.1 | TOC | Total Organic Carbon | 1 | mg/L | U | | 1 | mg/L | 1 | |
| SH-05R-B / 10-03-06 | WW5286-8 | 10/10/2006 | 415.1 | TOC | Total Organic Carbon | 1 | mg/L | U | | 1 | mg/L | 1 | |
| OW-213A / 10-03-06 | WW5286-9 | 10/10/2006 | 415.1 | TOC | Total Organic Carbon | 1 | mg/L | U | | 1 | mg/L | 1 | |
| OW-213 / 10-02-06 | P0610027-08 | 10/4/2006 | AM20GAX | 74-84-0 | Ethane | 0.025 | µg/L | U | | 0.025 | µg/L | | Blank action |
| OW-213A / 10-03-06 | P0610048-05 | 10/6/2006 | AM20GAX | 74-84-0 | Ethane | 0.015 | µg/L | J | I | 0.025 | µg/L | | Uncertain < calibration range |
| SH-02R / 09-29-06 | P0609550-02 | 10/4/2006 | AM20GAX | 74-84-0 | Ethane | 0.100 | µg/L | | | 0.025 | µg/L | | |
| SH-03D / 10-03-06 | P0610048-02 | 10/6/2006 | AM20GAX | 74-84-0 | Ethane | 0.076 | µg/L | | | 0.025 | µg/L | | |
| SH-03S / 09-29-06 | P0609550-03 | 10/4/2006 | AM20GAX | 74-84-0 | Ethane | 0.180 | µg/L | | | 0.025 | µg/L | | |
| SH-05D / 10-02-06 | P0610027-02 | 10/4/2006 | AM20GAX | 74-84-0 | Ethane | 0.025 | µg/L | U | | 0.025 | µg/L | | Blank action |
| SH-05R-A / 10-03-06 | P0610048-03 | 10/6/2006 | AM20GAX | 74-84-0 | Ethane | 0.025 | µg/L | U | | 0.025 | µg/L | | Blank action |
| SH-05R-B / 10-03-06 | P0610048-04 | 10/6/2006 | AM20GAX | 74-84-0 | Ethane | 0.025 | µg/L | U | | 0.025 | µg/L | | Blank action |
| SH-06R-A / 10-02-06 | P0610027-03 | 10/4/2006 | AM20GAX | 74-84-0 | Ethane | 0.025 | µg/L | U | | 0.025 | µg/L | | |
| SH-06R-B / 10-02-06 | P0610027-04 | 10/4/2006 | AM20GAX | 74-84-0 | Ethane | 0.025 | µg/L | U | | 0.025 | µg/L | | Blank action |
| SH-13S / 09-28-06 | P0609514-02 | 9/30/2006 | AM20GAX | 74-84-0 | Ethane | 0.043 | µg/L | | | 0.025 | µg/L | | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low; H = High; I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Anal_Date | Anal_Method | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-14D / 10-02-06 | P0610027-06 | 10/4/2006 | AM20GAX | 74-84-0 | Ethane | 0.025 | µg/L | U | | 0.025 | µg/L | | |
| SH-14S / 10-02-06 | P0610027-05 | 10/4/2006 | AM20GAX | 74-84-0 | Ethane | 0.025 | µg/L | U | | 0.025 | µg/L | | Blank action |
| SH-19R / 09-28-06 | P0609514-05 | 9/30/2006 | AM20GAX | 74-84-0 | Ethane | 0.042 | µg/L | | | 0.025 | µg/L | | |
| SH-24R / 09-28-06 | P0609514-06 | 9/30/2006 | AM20GAX | 74-84-0 | Ethane | 0.025 | µg/L | U | | 0.025 | µg/L | | Blank action |
| SH-27D / 10-02-06 | P0610027-07 | 10/4/2006 | AM20GAX | 74-84-0 | Ethane | 0.025 | µg/L | U | | 0.025 | µg/L | | Blank action |
| SH-27R / 09-29-06 | P0609550-04 | 10/4/2006 | AM20GAX | 74-84-0 | Ethane | 0.038 | µg/L | | | 0.025 | µg/L | | |
| SH-28D / 09-27-06 | P0609471-02 | 9/29/2006 | AM20GAX | 74-84-0 | Ethane | 0.029 | µg/L | | | 0.025 | µg/L | | |
| SH-28R / 09-29-06 | P0609550-05 | 10/4/2006 | AM20GAX | 74-84-0 | Ethane | 0.025 | µg/L | U | | 0.025 | µg/L | | Blank action |
| TB-504 / 09-27-06 | P0609471-01 | 9/29/2006 | AM20GAX | 74-84-0 | Ethane | 0.01 | µg/L | J | I | 0.025 | µg/L | | Uncertain < calibration range |
| TB-506 / 09-28-06 | P0609514-01 | 9/30/2006 | AM20GAX | 74-84-0 | Ethane | 0.007 | µg/L | J | I | 0.025 | µg/L | | Uncertain < calibration range |
| TB-509 / 09-29-06 | P0609550-01 | 10/4/2006 | AM20GAX | 74-84-0 | Ethane | 0.006 | µg/L | J | I | 0.025 | µg/L | | Uncertain < calibration range |
| TB-510 / 10-02-06 | P0610027-01 | 10/4/2006 | AM20GAX | 74-84-0 | Ethane | 0.007 | µg/L | J | I | 0.025 | µg/L | | Uncertain < calibration range |
| TB-511 / 10-03-06 | P0610048-01 | 10/6/2006 | AM20GAX | 74-84-0 | Ethane | 0.006 | µg/L | J | I | 0.025 | µg/L | | Uncertain < calibration range |
| OW-213 / 10-02-06 | P0610027-08 | 10/4/2006 | AM20GAX | 74-85-1 | Ethene | 0.830 | µg/L | J | I | 0.025 | µg/L | | FD imprecision |
| OW-213A / 10-03-06 | P0610048-05 | 10/6/2006 | AM20GAX | 74-85-1 | Ethene | 0.270 | µg/L | | | 0.025 | µg/L | | |
| SH-02R / 09-29-06 | P0609550-02 | 10/4/2006 | AM20GAX | 74-85-1 | Ethene | 0.160 | µg/L | | | 0.025 | µg/L | | |
| SH-03D / 10-03-06 | P0610048-02 | 10/6/2006 | AM20GAX | 74-85-1 | Ethene | 0.370 | µg/L | | | 0.025 | µg/L | | |
| SH-03S / 09-29-06 | P0609550-03 | 10/4/2006 | AM20GAX | 74-85-1 | Ethene | 0.130 | µg/L | J | H | 0.025 | µg/L | | Detected in EB & TB |
| SH-05D / 10-02-06 | P0610027-02 | 10/4/2006 | AM20GAX | 74-85-1 | Ethene | 1.000 | µg/L | | | 0.025 | µg/L | | |
| SH-05R-A / 10-03-06 | P0610048-03 | 10/6/2006 | AM20GAX | 74-85-1 | Ethene | 0.450 | µg/L | | | 0.025 | µg/L | | |
| SH-05R-B / 10-03-06 | P0610048-04 | 10/6/2006 | AM20GAX | 74-85-1 | Ethene | 0.280 | µg/L | | | 0.025 | µg/L | | |
| SH-06R-A / 10-02-06 | P0610027-03 | 10/4/2006 | AM20GAX | 74-85-1 | Ethene | 3.700 | µg/L | | | 0.025 | µg/L | | |
| SH-06R-B / 10-02-06 | P0610027-04 | 10/4/2006 | AM20GAX | 74-85-1 | Ethene | 2.800 | µg/L | | | 0.025 | µg/L | | |
| SH-13S / 09-28-06 | P0609514-02 | 9/30/2006 | AM20GAX | 74-85-1 | Ethene | 0.029 | µg/L | J | H | 0.025 | µg/L | | Detected in EB & TB |
| SH-14D / 10-02-06 | P0610027-06 | 10/4/2006 | AM20GAX | 74-85-1 | Ethene | 1.200 | µg/L | | | 0.025 | µg/L | | |
| SH-14S / 10-02-06 | P0610027-05 | 10/4/2006 | AM20GAX | 74-85-1 | Ethene | 1.700 | µg/L | J | I | 0.025 | µg/L | | FD imprecision |
| SH-19R / 09-28-06 | P0609514-05 | 9/30/2006 | AM20GAX | 74-85-1 | Ethene | 0.043 | µg/L | J | H | 0.025 | µg/L | | Detected in EB & TB |
| SH-24R / 09-28-06 | P0609514-06 | 9/30/2006 | AM20GAX | 74-85-1 | Ethene | 0.028 | µg/L | J | H | 0.025 | µg/L | | Detected in EB & TB |
| SH-27D / 10-02-06 | P0610027-07 | 10/4/2006 | AM20GAX | 74-85-1 | Ethene | 1.000 | µg/L | | | 0.025 | µg/L | | |
| SH-27R / 09-29-06 | P0609550-04 | 10/4/2006 | AM20GAX | 74-85-1 | Ethene | 0.130 | µg/L | J | H | 0.025 | µg/L | | Detected in EB & TB |
| SH-28D / 09-27-06 | P0609471-02 | 9/29/2006 | AM20GAX | 74-85-1 | Ethene | 0.068 | µg/L | J | H | 0.025 | µg/L | | Detected in EB & TB |
| SH-28R / 09-29-06 | P0609550-05 | 10/4/2006 | AM20GAX | 74-85-1 | Ethene | 0.140 | µg/L | | | 0.025 | µg/L | | |
| TB-504 / 09-27-06 | P0609471-01 | 9/29/2006 | AM20GAX | 74-85-1 | Ethene | 0.047 | µg/L | | | 0.025 | µg/L | | |
| TB-506 / 09-28-06 | P0609514-01 | 9/30/2006 | AM20GAX | 74-85-1 | Ethene | 0.006 | µg/L | J | I | 0.025 | µg/L | | Uncertain < calibration range |
| TB-509 / 09-29-06 | P0609550-01 | 10/4/2006 | AM20GAX | 74-85-1 | Ethene | 0.006 | µg/L | J | I | 0.025 | µg/L | | Uncertain < calibration range |
| TB-510 / 10-02-06 | P0610027-01 | 10/4/2006 | AM20GAX | 74-85-1 | Ethene | 0.010 | µg/L | J | I | 0.025 | µg/L | | Uncertain < calibration range |
| TB-511 / 10-03-06 | P0610048-01 | 10/6/2006 | AM20GAX | 74-85-1 | Ethene | 0.011 | µg/L | J | I | 0.025 | µg/L | | Uncertain < calibration range |
| OW-213 / 10-02-06 | P0610027-08 | 10/4/2006 | AM20GAX | 74-82-8 | Methane | 44.000 | µg/L | | | 0.100 | µg/L | | |
| OW-213A / 10-03-06 | P0610048-05 | 10/6/2006 | AM20GAX | 74-82-8 | Methane | 2.000 | µg/L | | | 0.100 | µg/L | | |
| SH-02R / 09-29-06 | P0609550-02 | 10/4/2006 | AM20GAX | 74-82-8 | Methane | 120.000 | µg/L | | | 0.100 | µg/L | | |
| SH-03D / 10-03-06 | P0610048-02 | 10/6/2006 | AM20GAX | 74-82-8 | Methane | 3.500 | µg/L | J | H | 0.100 | µg/L | | Detected in EB & TB |
| SH-03S / 09-29-06 | P0609550-03 | 10/4/2006 | AM20GAX | 74-82-8 | Methane | 7800.000 | µg/L | | | 0.100 | µg/L | | |
| SH-05D / 10-02-06 | P0610027-02 | 10/4/2006 | AM20GAX | 74-82-8 | Methane | 20.000 | µg/L | | | 0.100 | µg/L | | |
| SH-05R-A / 10-03-06 | P0610048-03 | 10/6/2006 | AM20GAX | 74-82-8 | Methane | 3.300 | µg/L | J | H | 0.100 | µg/L | | Detected in EB & TB |
| SH-05R-B / 10-03-06 | P0610048-04 | 10/6/2006 | AM20GAX | 74-82-8 | Methane | 2.800 | µg/L | J | H | 0.100 | µg/L | | Detected in EB & TB |
| SH-06R-A / 10-02-06 | P0610027-03 | 10/4/2006 | AM20GAX | 74-82-8 | Methane | 2.700 | µg/L | J | H | 0.100 | µg/L | | Detected in EB & TB |
| SH-06R-B / 10-02-06 | P0610027-04 | 10/4/2006 | AM20GAX | 74-82-8 | Methane | 2.100 | µg/L | J | H | 0.100 | µg/L | | Detected in EB & TB |
| SH-13S / 09-28-06 | P0609514-02 | 9/30/2006 | AM20GAX | 74-82-8 | Methane | 2000.000 | µg/L | | | 0.100 | µg/L | | |
| SH-14D / 10-02-06 | P0610027-06 | 10/4/2006 | AM20GAX | 74-82-8 | Methane | 1.100 | µg/L | J | H | 0.100 | µg/L | | Detected in EB & TB |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low; H = High; I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Anal_Date | Anal_Method | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-14S / 10-02-06 | P0610027-05 | 10/4/2006 | AM20GAX | 74-82-8 | Methane | 58.000 | µg/L | | | 0.100 | µg/L | | |
| SH-19R / 09-28-06 | P0609514-05 | 9/30/2006 | AM20GAX | 74-82-8 | Methane | 2.900 | µg/L | J | H | 0.100 | µg/L | | Detected in EB & TB |
| SH-24R / 09-28-06 | P0609514-06 | 9/30/2006 | AM20GAX | 74-82-8 | Methane | 1.400 | µg/L | J | H | 0.100 | µg/L | | Detected in EB & TB |
| SH-27D / 10-02-06 | P0610027-07 | 10/4/2006 | AM20GAX | 74-82-8 | Methane | 3.400 | µg/L | J | H | 0.100 | µg/L | | Detected in EB & TB |
| SH-27R / 09-29-06 | P0609550-04 | 10/4/2006 | AM20GAX | 74-82-8 | Methane | 8.400 | µg/L | J | H | 0.100 | µg/L | | Detected in EB & TB |
| SH-28D / 09-27-06 | P0609471-02 | 9/29/2006 | AM20GAX | 74-82-8 | Methane | 86.000 | µg/L | | | 0.100 | µg/L | | |
| SH-28R / 09-29-06 | P0609550-05 | 10/4/2006 | AM20GAX | 74-82-8 | Methane | 2.300 | µg/L | J | H | 0.100 | µg/L | | Detected in EB & TB |
| TB-504 / 09-27-06 | P0609471-01 | 9/29/2006 | AM20GAX | 74-82-8 | Methane | 1.100 | µg/L | | | 0.100 | µg/L | | |
| TB-506 / 09-28-06 | P0609514-01 | 9/30/2006 | AM20GAX | 74-82-8 | Methane | 0.094 | µg/L | J | I | 0.100 | µg/L | | Uncertain < calibration range |
| TB-509 / 09-29-06 | P0609550-01 | 10/4/2006 | AM20GAX | 74-82-8 | Methane | 0.098 | µg/L | J | I | 0.100 | µg/L | | Uncertain < calibration range |
| TB-510 / 10-02-06 | P0610027-01 | 10/4/2006 | AM20GAX | 74-82-8 | Methane | 0.081 | µg/L | J | I | 0.100 | µg/L | | Uncertain < calibration range |
| TB-511 / 10-03-06 | P0610048-01 | 10/6/2006 | AM20GAX | 74-82-8 | Methane | 0.100 | µg/L | J | I | 0.100 | µg/L | | Uncertain < calibration range |
| OW-213 / 10-02-06 | P0610026-07 | 10/3/2006 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1.0 | mg/L | | |
| OW-213A / 10-03-06 | P0610049-04 | 10/4/2006 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1.0 | mg/L | | |
| SH-02R / 09-29-06 | P0609550-02 | 10/3/2006 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | R | | 1 | mg/L | | Unusable: >2x holding time exceedance |
| SH-03D / 10-03-06 | P0610049-01 | 10/4/2006 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1.0 | mg/L | | |
| SH-03S / 09-29-06 | P0609550-03 | 10/3/2006 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | R | | 1 | mg/L | | Unusable: >2x holding time exceedance |
| SH-05D / 10-02-06 | P0610026-01 | 10/3/2006 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1.0 | mg/L | | |
| SH-05R-A / 10-03-06 | P0610049-02 | 10/4/2006 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1.0 | mg/L | | |
| SH-05R-B / 10-03-06 | P0610049-03 | 10/4/2006 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1.0 | mg/L | | |
| SH-06R-A / 10-02-06 | P0610026-02 | 10/3/2006 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1.0 | mg/L | | |
| SH-06R-B / 10-02-06 | P0610026-03 | 10/3/2006 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1.0 | mg/L | | |
| SH-13S / 09-28-06 | P0609515-01 | 9/29/2006 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 0.4 | mg/L | J | I | 1.0 | mg/L | | Uncertain < calibration range + MS/MSD high |
| SH-14D / 10-02-06 | P0610026-05 | 10/3/2006 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1.0 | mg/L | | |
| SH-14S / 10-02-06 | P0610026-04 | 10/3/2006 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1.0 | mg/L | | |
| SH-19R / 09-28-06 | P0609515-04 | 9/29/2006 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1.0 | mg/L | | |
| SH-24R / 09-28-06 | P0609515-05 | 9/29/2006 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1.0 | mg/L | | |
| SH-27D / 10-02-06 | P0610026-06 | 10/3/2006 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1.0 | mg/L | | |
| SH-27R / 09-29-06 | P0609550-04 | 10/3/2006 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | R | | 1 | mg/L | | Unusable: >2x holding time exceedance |
| SH-28D / 09-27-06 | P0609470-01 | 9/28/2006 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 0.2 | mg/L | J | I | 1.0 | mg/L | | Uncertain < calibration range |
| SH-28R / 09-29-06 | P0609550-05 | 10/3/2006 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | R | | 1 | mg/L | | Unusable: >2x holding time exceedance |

| Smpl | Lab_ID | Anal_Date | Anal_Method | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | Report_Date | DF | %Solid | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OW-213 / 10-02-06 | P0610026-07 | 10/3/2006 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1.0 | mg/L | 10/30/2006 | | | |
| OW-213A / 10-03-06 | P0610049-04 | 10/4/2006 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1.0 | mg/L | 10/30/2006 | | | |
| SH-02R / 09-29-06 | P0609550-02 | 9/30/2006 | SM3500Fe D | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1 | mg/L | 12/13/2006 | | | |
| SH-03D / 10-03-06 | P0610049-01 | 10/4/2006 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1.0 | mg/L | 10/30/2006 | | | |
| SH-03S / 09-29-06 | P0609550-03 | 9/30/2006 | SM3500Fe D | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1 | mg/L | 12/13/2006 | | | |
| SH-05D / 10-02-06 | P0610026-01 | 10/3/2006 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1.0 | mg/L | 10/30/2006 | | | |
| SH-05R-A / 10-03-06 | P0610049-02 | 10/4/2006 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1.0 | mg/L | 10/30/2006 | | | |
| SH-05R-B / 10-03-06 | P0610049-03 | 10/4/2006 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1.0 | mg/L | 10/30/2006 | | | |
| SH-06R-A / 10-02-06 | P0610026-02 | 10/3/2006 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1.0 | mg/L | 10/30/2006 | | | |
| SH-06R-B / 10-02-06 | P0610026-03 | 10/3/2006 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1.0 | mg/L | 10/30/2006 | | | |
| SH-13S / 09-28-06 | P0609515-01 | 9/29/2006 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 0.4 | mg/L | J | I | 1.0 | mg/L | 10/30/2006 | | | Uncertain < calibration range + MS/MSD high |
| SH-14D / 10-02-06 | P0610026-05 | 10/3/2006 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1.0 | mg/L | 10/30/2006 | | | |
| SH-14S / 10-02-06 | P0610026-04 | 10/3/2006 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1.0 | mg/L | 10/30/2006 | | | |
| SH-19R / 09-28-06 | P0609515-04 | 9/29/2006 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1.0 | mg/L | 10/30/2006 | | | |
| SH-24R / 09-28-06 | P0609515-05 | 9/29/2006 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1.0 | mg/L | 10/30/2006 | | | |
| SH-27D / 10-02-06 | P0610026-06 | 10/3/2006 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1.0 | mg/L | 10/30/2006 | | | |
| SH-27R / 09-29-06 | P0609550-04 | 9/30/2006 | SM3500Fe D | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1 | mg/L | 12/13/2006 | | | |
| SH-28D / 09-27-06 | P0609470-01 | 9/28/2006 | 7199 (Mod) | Fe+2 | Iron, Ferrous | 0.2 | mg/L | J | I | 1.0 | mg/L | 10/30/2006 | | | Uncertain < calibration range |
| SH-28R / 09-29-06 | P0609550-05 | 9/30/2006 | SM3500Fe D | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1 | mg/L | 12/13/2006 | | | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low; H = High; I = Indeterminate. See Data Usability Report for details.

## I. Data Package Completeness

***Phase 1B-5 Work Plan Remedial Investigation Work Plan*, Blackburn & Union Privileges Superfund Site, Walpole Massachusetts, Rev 02, September 21, 2006**

Laboratories: *Alpha Woods Hole Labs (AWHL), Raynham, MA* SDG: BU213
*Katahdin Lab, Groundwater Analytical Lab, Microseeps*

AWHL ETR #: 060922

Review the data package for completeness based on EPA Region I and Site QAPP requirements.

- Were all required reporting forms and associated raw data for field samples and QC included in the data package? **Yes / No.**
- Were all sample analyses requested on the Chain-of-Custody performed by the laboratory? **Yes / No.**

If "No" to any of the above questions, document missing information and resubmittal requests in the comment section below.

Tabulate the number and types of samples in this SDG and the QAPP-required data validation level.

| Number and Type of Samples<br>EB = Equipment Blanks<br>TB = Trip Blanks | Parameter(s)<br>Groundwaters | Data Validation Level (EPA Region I Tier) |
|---|---|---|
| 18 + 1 EB | *TAL Metals (Methods 6020 + 7470A)* | Tier II-Type |
| | *Alkalinity (Method 310.1)* | Tier I-type enhanced |
| | *Chloride, Nitrate, Sulfate (Method 300.0)* | |
| | *Sulfide (Method 376.2)* | |
| | *Total Dissolved Solids (TDS Method 160.1)* | |
| | *Total Kjeldahl Nitrogen (TKN Method 351.2)* | |
| | *Total Organic Carbon (TOC Method 415.1)* | |
| + 5 TB | *Gases: Ethane, Ethene, Methane (Microseeps Method AM20GAX)* | |
| | *Ferrous Iron ($Fe^{+2}$ Method 7199 mod)* | |

Comments:
*Note: Site QAPP DQOs do not require a formal data validation report for natural attenuation parameters in groundwater (alkalinity, nitrate, chloride, sulfate, TKN), sulfide, TDS, TOC, gases, or ferrous iron [see QAPP Worksheet #29b and #29c]. These parameters are reviewed herein, if present in this SDG, based on an enhanced Tier I-type review, for completeness, holding time and preservation QC, LCS, MD, FD, and blank contamination, as applicable [see QAPP Worksheets #11b, #23a, #23b, and 24a for applicable QC measures].*
***Density & Viscosity reported in this SDG but not required for validation based on project DQOs.***

Data Reviewer: Susan D. Chapnick Date: 12/6/06

Susan D. Chapnick, Principal Scientist
New Environmental Horizons, Inc.

Revised for Ferrous Iron
12/14/06 SDC.

## II. Review of QC Summary (CLP-like) Forms and Additional QA/QC Parameters

### A. Holding Times/Preservation Criteria *[QAPP Worksheet #11b and #12b]*

- Were holding time criteria met for all samples/analyses as indicated below? Yes / No. → see below changed to "Yes" 12/14/06
- Were preservation criteria met for all samples/analyses as indicated below? Yes/No.

Aqueous (Groundwater/Surface Water, as applicable):

| | |
|---|---|
| Metals (except Hg) | 180 days from date of collection, preserved to pH ≤ 2 and 4°± 2° C |
| Mercury | 28 days from date of collection, preserved to pH ≤ 2 and 4°± 2° C |
| Alkalinity | 14 days from date of collection, maintained at 4°± 2° C |
| Chloride | 28 days from date of collection, maintained at 4°± 2° C |
| Nitrate | 48 hours from time of collection, maintained at 4°± 2° C |
| Sulfate | 28 days from date of collection, maintained at 4°± 2° C |
| Sulfide | 7 days from date of collection, preserved to pH ≥ 12 and 4°± 2° C |
| TDS | 7 days from date of collection, maintained at 4°± 2° C |
| TKN | 28 days from date of collection, preserved to pH ≤ 2 and 4°± 2° C |
| TOC | 28 days from date of collection, preserved to pH ≤ 2 and 4°± 2° C |
| Gases | 7 days from date of collection, maintained at 4°± 2° C |
| Ferrous Iron | 48 hours from date of collection, maintained at 4°± 2° C |

see pages 2a through 2c. for details.

Soils/Sediments[1]: N/A

| | |
|---|---|
| Metals (except Hg) | 180 days from date of collection, maintained at 4°± 2° C |
| Mercury | 28 days from date of collection, maintained at 4°± 2° C |
| TOC | 28 days from date of collection, maintained at 4°± 2° C |

[1] Sediments will be freeze-dried prior to preparation/analysis for total metals if % solids < 75% in "native" sample. Soils and Sediments can be maintained frozen to arrest holding times. If frozen, holding time starts when thawed.

**Actions:** If the holding times were exceeded, estimate (J and UJ) positive and nondetect results. If the holding times were grossly exceeded, estimate (J) positive results and reject (R) nondetect results. If samples were improperly preserved, use professional judgment – may estimate (J and UJ) associated results.

**Holding Time / Preservation Actions**

| Analyte | Holding Time Exceedance | Preservation Issue | Action / Bias | Affected Sample(s) / Comments Sample ID | Lab ID |
|---|---|---|---|---|---|
| Fe+2 | >48h outside HT | | R | SH-02R/09-29-06 | P0609550-02 |
| | | | | SH-03S/09-29-06 | P0609550-03 |
| | | | | SH-27R/09-29-06 | P0609550-04 |
| | | | | SH-28R/09-29-06 | P0609550-05 |

Accept 1st analysis – No Action needed within HT – see below

12/14/06 REVISED.

Comments: sampled 9/29/06; analyzed 9/30/06 SM 3500 Fe D (within HT) analyzed 10/3/06 IC Method (outside of HT) - See Below.

Revised 12/14/06: Lab initially ran $Fe^{+2}$ within HT on 9/30/06 by an alternate method, Standard Method 3500FeD, and then re ran them by the method documented in the QAPP (IC method) for confirmation. Both sets of analyses for $Fe^{+2}$ methods these samples were non-detect for $Fe^{+2}$. considered technically comparable. Therefore, 1st set of analyses were accepted for reporting within HT – no action to qualify.

SDG B0213

**Debbie Hallo**

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**From:** s chapnick [s.chapnick@comcast net]
**Sent:** Friday, December 08, 2006 1:20 PM
**To:** Debbie Hallo
**Cc:** Brad Green; Kelly Dubois; Elizabeth Porta
**Subject:** Ferrous Iron data Lab Prj # P0609550 & P0609549

Debbie,

I will need pdf files of the original data for ferrous iron that your lab ran for the samples in these two projects. I understand from previous communications that since your lab water was shut off, you initially ran these samples (received on Sat, 9/30/06) by Standard Method 3500FeD to meet the hold times and then re-ran by the IC method (as approved in the QAPP). I will need the data that were produced within holding times so that I can accept these results.

Thank you.
Susan
**********

Susan D. Chapnick
President and Principal Scientist
New Environmental Horizons, Inc
2 Farmers Circle
Arlington, MA 02474
phone: 781-643-4294
email: s.chapnick@comcast.net

12/13/2006

2a

12/14/06

SDG 60213



Case Narrative

Batch number: M061005026 Original Run Date: 10/3/06

1. Sample numbers: P0610026-1→7, P0610035-1→4, P0609549-2 P0609550-2→5

Out of Control Event: Samples were received out of holdtime or in jeopardy of missing holdtime.

Corrective Action Taken: Analyzed samples by standard methods + re-analyze samples by IC method M7199.

Result: Results are comparable.

Observations to support use of data:

2. Sample numbers:

Out of Control Event:

Corrective Action Taken:

Result:

Observations to support use of data:

Manual Integration Checklist and Approval

- Manual Integration approved?: Yes No
- Satisfactorily documented on this narrative?
- Manually integrated chromatogram initialed and dated by analyst?

Signature Lead Analyst or Lab. Mgr. Date

Reviewed by: MD Date: 10/5/06

Manual Integration Conducted YES NO

(Circle One)

Reviewed by: _____ Date: _____

Reviewed & Entered by: RD Date: 10/5/06

Reviewed by: _____ Date: _____

Corrected by: _____ Date: _____



DWC 12/14/06

SDG BU213

# Ferrous Iron

EPA Method No.: SM 3500 Fe D

Analyst's Name : Maureen Donlin

Instrument : Spec. 20 G @ 510 nm

Date of Initial Calibration : 9-30-06 within HT.

LIMS Batch No. :

Date of Analysis : 9-30-06

NOTE : Absorbance values from the calibration MUST be entered on this data sheet.

| Sample Identification | Std. Conc. (mg / L ) | Measured Absorbance | Dilution Factor | Ferrous Iron ( mg / L) |
|---|---|---|---|---|
| Blank - Initial Calibration | 0.0 | 0.003 | 1 | |
| Standard - Initial Calibration | 1.0 | 0.105 | 1 | |
| Standard - Initial Calibration | 4.0 | 0.395 | 1 | |
| Standard - Initial Calibration | 6.0 | 0.583 | 1 | |
| Standard - Initial Calibration | 8.0 | 0.790 | 1 | |
| Standard - Initial Calibration | 10.0 | 0.976 | 1 | |
| Slope = 10.27 | | | | |
| Y Intercept = -0.6497 | | | | |
| $R^2$ = 0.9994 | | | | |
| ICV % Drift = 4.8% | | 0.475 | 1 | 4.83 |
| ICB | | 0.000 | 1 | 0.0 |
| PBW | | 0.000 | 1 | 0.0 |
| Analysis Time / Sample Number | | | | |
| 1200 P060954A-2 | | 0.000 | | 0.0 |
| 1205 9550-2 | | 0.000 | | 0.0 |
| 1209 3 | | 0.000 | | 0.0 |
| 1210 4 | | 0.000 | | 0.0 |
| 1212 5 | | 0.000 | | 0.0 |
| 1230 9552-1 | | 0.000 | | 0.00 |
| 1235 2 | | 0.000 | | 0.0 |
| 1240 3 | | 0.000 | | 0.0 |
| 1245 4 | | 0.006 | | 0.0 |
| 1250 5 | | 0.000 | | 0.0 |
| 1300 CCB 6 | | 0.000 | | 0.0 |
| 1305 CCV 91.8% | | 0.481 | | 4.9 |
| 1310 9552-6 | | 0.000 | | 0.0 |
| 1315 7 | | 0.00 | | 0.0 |
| 1320 8 | | 0.06 | | 0.0 |
| 1325 9 | | 0.06 | | 0.0 |
| 1330 10 | | 0.00 | | 0.0 |
| 1335 11 | | 0.00 | | 0.0 |
| 1340 9553-1 | | 0.975 | | 9.96 |
| 1345 2 | | 0.000 | | 0.0 |
| CCB | | 0.000 | | 0.0 |
| CCV 5 | | 0.479 | | 4.88% 97.4% |
| Sample/Dup RPD Calculated: | | | | |

non-detect

Accepted for Reporting

MC 12/14/06

**Required QC:**

PBW: < lowest standard
Sample/Dup RPD: </= 20%
MS % Rec.: +/- 30%
ICV/CCV: % Drift +/- 10%
ICAL $R^2$: > or = 0.9950

*(Record all calculation results on this data sheet)*

Ferrous Iron is determined from a "Least Squares Fit" line derived from the 6-Point (Blk.& 5 Stds.) calibration.

Your signature indicates all data is within acceptance criteria or justified in a narrative form.

Data entered by : Maureen Donlin Date : 9-30-06

Data reviewed & approved by : Date :

MC 12/14/06

**B. Calibration** *[QAPP Worksheet #21 and #24a]*

1. Instrument Calibration

Instrument calibrations were reviewed to ensure that the laboratory followed the correct method procedures.

- Were instrument calibrations performed daily for all methods/instruments used for analysis? **Yes / No.**
- Were the proper number of standards used for each calibration as compliant with SW846 Method requirements? **Yes / No.**
- Were the calibration curves compliant with linearity requirements of the SW846 Method if a linear curve was used ($r \geq 0.995$)? **Yes / No.**

If no to any of the above, list affected samples/analytes and actions in the comment section, below.

2. Initial Calibration Verification (ICV) and Continuing Calibration Verification (CCV) Standards

All ICVs and CCVs were reviewed to assess the accuracy and sensitivity of the results.

- Did all ICVs and CCVs meet the recovery criteria? **Yes / No.** If no, list the outliers and the affected samples in the comment section, below.

**Actions:** If the ICV/CCV recovery criteria exceeded the defined limits indicated below, estimate (J) associated positive results; no action is required for nondetect results. If ICV/CCV recoveries were below defined QC limits, estimate (J and UJ) associated positive and nondetect results.

Control Limits

| | |
|---|---|
| Metals by ICP or ICP/MS: | 90-110% |
| Mercury by CVAA: | 90-110% |

[ICV/CCV for other parameters: check lab narrative for deviations; not required in summary QC forms]

Comments: Tl: ICV 113% } No Actions because all GW
Sb: CCV 111% } results are non-detected
therefore, as high bias not
expected.

12/6/06

**B. Calibration (continued)**

2. Low Level Standard analyzed consistent with sample-equivalent reporting or quantitation limit. (QL).

- Were the low-level standards in the calibration curves for inorganic analyses (ICP-MS, ICP-AES, CVAA) analyzed at the correct concentrations to support the laboratory QL? **Yes / No.** (NA) All comments

If no, results reported as non-detects and within 2x the QL may be uncertain.

**Actions:** If No, estimate (UJ) all non-detect data for the affected metal(s) and estimate (J) detected results < 2xQL due to potential uncertainty in the sensitivity of analysis and accuracy at the low end of the calibration curve.

| Analyte | Action / Bias | Affected Sample(s) / Comments |
|---|---|---|
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Comments:
Low level std not analyzed for metals. Instead, lab included an RL std as the low-level std in the calibration curves. This is acceptable to support sensitivity needs of the project.



RMC 12/6/06

**C. Blank Results**

1. Laboratory Blanks *[QAPP Worksheet #9b, 11b, and #24a]*

Laboratory (preparation and calibration) blank results were reviewed to assess the presence of contaminants that ultimately affect the accuracy and sensitivity of the results. Blanks were assessed compared to the project-required quantitation limits (PQLs) listed in Worksheet 9b of the QAPP and to the laboratory QLs.

- Were all analytes detected in the laboratory blanks at levels less than the PQLs? **Yes / No.** If no, list below the analyte and blank level for the highest detected result above the PQLs.

- Were negative baseline drifts, if observed as negative ICB/CCB or preparation blank results, observed at absolute values less than the PQL? **Yes / No / NA.** If no, list below the analyte and blank level for the negative result with an absolute value above the PQL.

| Analyte | Highest Lab Blank Result (Units) |
|---|---|
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Comments:



 12/6/06

**C. Blank Results (continued)**

2. Field Blank Results *[QAPP Worksheet #9b, 11b, #22a, and #22b]*

Field blank results were reviewed to assess the presence of contaminants that ultimately affect the accuracy and sensitivity of the sample results.

- Was there a field equipment rinsate blank associated with the samples in this SDG? **Yes** / **No.** If yes, list the field blank(s) and the associated samples in the table below.

| Field Rinsate Blank Sample ID | Associated Field Sample IDs |
|---|---|
| OW-213A/10-03-06 | all GW samples in this SDG BV213 |
| | |
| | |
| | |
| | |

- Were all analytes detected in the field equipment rinsate blank(s) at levels less than the PQL? **Yes** / **No.** If no, list contaminants below.

NOTE: Use the maximum field blank concentration in cases where multiple field blanks are associated with the samples in a given SDG.

**Field Blank ID:** OW-213A/10-03-06

| Analyte | Field Blank Result (Units) |
|---|---|
| TDS | 24 mg/L |
| | |
| As | 0.13 J ug/L (< calib. range). |
| Na | 62 ug/L |
| Zn | 6.6 ug/L |
| | |
| Ethane | 0.015 J ug/L (< calib. range) |
| Ethene | 0.027 ug/L |
| Methane | 2.000 ug/L |
| TB-504/09-27-06 | Ethane 0.01 J, Ethene 0.047, Methane 0.094 J |
| TB-506/09-28-06 | Ethane 0.007 J, Ethene 0.006 J, Methane 0.098 J |
| TB-509/09-29-06 | Ethane 0.006 J, Ethene 0.006 J, |
| | |
| | |

1.1

contd → TB low-level contamination of gases:

TB-510/10-02-06
Ethane 0.007 J ug/L
Ethene 0.010 J ug/L
Methane 0.081 J ug/L
} all < calib. range

TB-511/10-03-06
Ethane 0.006 J ug/L
Ethene 0.011 J ug/L
Methane 0.100 J ug/L
} all < calib. range

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**C. Blank Results (continued)**

**Actions:** Blank Contamination: Determine the maximum concentration of each analyte based upon a review of all blanks (laboratory blanks and field equipment rinsate blanks). For Water: sample results which are greater than the PQL but less than 5 times the amount found in the associated blank are negated (qualified U) at the level found in the sample. For Soil/Sediment: sample results which are greater than the PQL but less than 5 times the amount found in the associated blanks are qualified "B" to indicate that the analyte was also found in the associated blank(s) – this is the action for non-matrix matched blanks (e.g., aqueous field rinsate blanks associated with soil/sediment samples) -- reference QAPP Worksheet #29c. Data flagged "B" may be biased high. No actions are taken for results greater than 5x the blank level. No actions are taken to qualify field equipment rinsate blank results, unless contamination observed in associated aqueous method blank.

Negative Baseline Drift: Any blank reported with a negative result for which the absolute value was greater than the PQL, are evaluated for this project using the absolute value of the blank result as the rule for action. If the sample result was > PQL but < the absolute value of the blank concentration, estimate the nondetect and detect results (UJ and J). These results may be biased low. No actions are taken for results greater than the absolute value of the blank level (negative baseline drift). The action for negative baseline drift affects all associated field samples and field equipment rinsate blank samples analyzed in the SDG.

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| Analyte | Maximum Blank Concentration (Units) | Blank Action Level (5x BAL) (Units) | Actions/Affected Samples |
|---|---|---|---|
| As | 0.13 ug/L | 0.65 ug/L | (U): SH-27R/09-29-06 and SH-29D/09-27-06 |
| Na | 62 ug/L | 310 ug/L | NONE; all results > BAL |
| Zn | 6.6 ug/L | ~~330~~ 33.0 ug/L SW 12/6/06 J | (U): SH-02R/09-29-06, SH-03D/10-03-06, SH-05D/10-02-06, SH-05R-A/10-03-06, SH-05R-B/10-03-06, SH-06R-A/10-02-06, SH-06R-B/10-02-06, SH-19R/09-28-06 |
| TDS | 24 mg/L | ⟶ | No Action – all results > blank level (No formal Blank Actions usually performed for Tier I-type DV.) |
| | (Highest BLK=EB) | | |
| Ethane | 0.015J ug/L | (NA) | see actions below (U) ≤ QL |
| Ethene | 0.027 J | 5x = 0.135 ug/L | EB > QL (J)* detects |
| Methane | 2 | 5x = 10 ug/L | EB > QL (J)* detects |

Tier I-type DV review does not require "formal" blank actions – judgment used to negate all ethane, ethene & methane results reported <QLs due to observed low-level contamination in EB + TBs, and raise RLs to the QL. *Also (J) all detects >RL but <5x EB levels for Ethene & Methane since EB

## D. Matrix QC Results

1. Matrix Spike Recoveries *[QAPP Worksheet #11b and #24a]*

Matrix spike (MS) results were reviewed to assess the accuracy of the results relative to the specific sample matrix.

- Were matrix spike (MS) results present for all required analytes at the proper frequency as required by the Site QAPP? (Yes) / No. Were matrix spike recovery criteria met? **Yes** (No)

**QAPP MS Recovery Criteria:**

Metals and TOC in all matrices: 75-125%

All other parameters: 80-120%

List the affected analytes and actions in the table below.

**Actions:** If the spike recovery was > upper control limit, estimate (J) all positive results. No action is taken for non-detects. If the spike recovery fell within the range of 30-74% for metals or within the range of 30-79% for the other parameters, estimate (UJ or J) all sample results. If the spike recoveries were less than 30% for any parameter, reject (R) the nondetect results as unusable and estimate (J) the positive results for extremely low bias.

If the sample concentration exceeds the spike-added concentration by a factor of 4 or more, no action is taken because the spike level was "swamped-out" by the native concentration in the sample.

**Matrix Spike (MS) Accuracy Action Table**

| Analyte | MS % Recovery | Action | Comments/Affected Samples |
|---|---|---|---|
| Fe+2 | 246 | NONE for N.D | MS/MSD recovered high - assoc. results |
| MS/MSD | | | with this batch were Non-detected - |
| | | (J) | detected result @ < QL - SH-13S/09-28-06 |
| | | | |
| Sulfide | 17% | (UJ) GW only | LCS acceptable - potential low bias. |
| | | | Used professional judgment to qualify |
| | | | UJ rather than reject non-detects because |
| | | | of project uses for "non-definitive" Tier I-type |
| | | | data |

**MS Sample ID#:** SH-13S/09-28-06

MS Actions not applicable to EB.



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**D. Matrix QC Results (continued)**

2. Sample/Matrix Duplicate Results *[QAPP Worksheet #11b and #24a]*

Matrix (laboratory) duplicate (MD) results were reviewed to access the precision of the results relative to the specific sample matrix.

- Were matrix duplicate (MD) analyses present for all analytes at the proper frequency as required by the Site QAPP? **Yes / No.** Were criteria as defined below, met for all analytes? **Yes / No.**

List the analytes affected and actions in the table below.

| | | |
|---|---|---|
| Site QAPP Control Limits: | Aqueous | RPD ≤ 20% for results > 5x QL<br>difference ± QL for results ≤ 5x QL |
| | Soil/Sediment | RPD ≤ 35% for results > 5x QL<br>difference ± 2x QL for results < 5x QL |

**Actions:** Estimate (J and UJ) all results for analytes which do not meet precision criteria.

**Matrix Duplicate (MD) Precision Action Table**

| Analyte | MD RPD | Action | Comments/Affected Samples |
|---|---|---|---|
| | | | |
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Comments: MD Sample ID #: SH-133 / 09-28-06

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**D. Matrix QC Results (continued)**

3. Field Duplicate Precision: *Worksheet #11b, #22a, and #22b*

Field duplicate sample results were reviewed to assess representativeness of the sample aliquot to the area sampled and the precision of the results relative to field sampling techniques.

- Was a field duplicate pair included in this SDG? **Yes** / **No.** If Yes, identify in the following table.

**Actions:** If field duplicate precision exceeded criteria, below, for any analyte, estimate (J and UJ) positive and non-detected results for the affected analytes in the field duplicate pair only. If severe imprecision was noted in the field duplicate results, qualify the remainder of the associated field sample data based on sound technical judgment.

| | | |
|---|---|---|
| Site QAPP Control Limits: | Aqueous | RPD ≤ 30% for results > 5x QL; difference ± 2x QL for results < 5x QL |
| | Soil/Sediment | RPD ≤ 50% for results > 5x QL; difference ± 4x QL for results < 5x QL |

**Field Duplicate (FD) Precision/Representativeness Actions**

Field Duplicate Pair Samples: SH-145/10-2-06 & OW-213/10-2-06

See Page 10a for field duplicate RPD calculations and Actions

Comments:

FD imprecision: Ethane - see following pg.



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Field Duplicate Precision Evaluation Worksheet

**SDG: BU213 Groundwater**

Labs: AWHL for metals, alk, Cl, nitrate, sulfate, sulfide, TDS. Katahdin for TOC; Groundwater Analytical for TKN; Microseeps for gases & Fe+2.

| Analyte | Units | Sample Result SH-14S/10-02-06 | Qual | Field Duplicate Result OW-213/10-02-06 | Qual | Precision RPD* | Action | Comment |
|---|---|---|---|---|---|---|---|---|
| Aluminum - total | ug/L | 50 | U | 50 | U | NC | None | |
| Antimony - total | ug/L | 0.5 | U | 0.5 | U | NC | None | |
| Arsenic - total | ug/L | 2.1 | | 2.2 | | 5 | None | |
| Barium - total | ug/L | 22 | | 22 | | 0 | None | |
| Beryllium - total | ug/L | 0.2 | U | 0.2 | U | NC | None | |
| Cadmium - total | ug/L | 0.1 | U | 0.1 | U | NC | None | |
| Calcium - total | ug/L | 50000 | | 50000 | | 0 | None | |
| Chromium - total | ug/L | 0.5 | U | 0.5 | U | NC | None | |
| Cobalt - total | ug/L | 1 | | 1.1 | | 10 | None | |
| Copper - total | ug/L | 2.1 | | 2 | | 5 | None | |
| Iron - total | ug/L | 2800 | | 2400 | | 15 | None | |
| Lead - total | ug/L | 0.5 | U | 0.5 | U | NC | None | |
| Magnesium - total | ug/L | 24000 | | 24000 | | 0 | None | |
| Manganese - total | ug/L | 2300 | | 2100 | | 9 | None | |
| Mercury - total | ug/L | 0.2 | U | 0.2 | U | NC | None | |
| Nickel - total | ug/L | 6 | | 6.3 | | 5 | None | |
| Potassium - total | ug/L | 1900 | E | 1800 | E | 5 | None | |
| Selenium - total | ug/L | 1 | U | 1 | U | NC | None | |
| Silver - total | ug/L | 0.1 | U | 0.1 | U | NC | None | |
| Sodium - total | ug/L | 31000 | | 32000 | | 3 | None | |
| Thallium - total | ug/L | 0.2 | U | 0.2 | U | NC | None | |
| Vanadium - total | ug/L | 3 | | 2.8 | | 7 | None | |
| Zinc- total | ug/L | 5 | U | 5 | U | NC | None | |
| Alkalinity | mg/L | 250 | | 250 | | 0 | None | |
| Chloride | mg/L | 41 | | 41 | | 0 | None | |
| Nitrate | mg/L | 0.4 | | 0.4 | | 0 | None | |
| Sulfate | mg/L | 25 | | 25 | | 0 | None | |
| Sulfide | mg/L | 0.20 | U | 0.20 | U | NC | None | |
| Total Dissolved Solids (TDS) | mg/L | 400 | | 410 | | 2 | None | |
| Total Kjeldahl Nitrogen (TKN) | mg/L | 0.5 | U | 0.5 | U | NC | None | |
| Total Organic Carbon (TOC) | mg/L | 3.9 | | 4.2 | | 7 | None | |
| Ethane | ug/L | 0.012 | J | 0.012 | J | 0 | None | |
| Ethene | ug/L | 1.700 | | 0.830 | SDWC 12/6/06 | 69 | J | FD imprecision |
| Methane | ug/L | 58.000 | | 44.000 | | 27 | None | |
| Iron, Ferrous ($Fe^{+2}$) | mg/L | 1.0 | U | 1.0 | U | NC | None | |

NC = Not calculated

* RPD criteria for FD precision: if result is > 5xQL, RPD criterion is < ± 30%; if result is < 5xQL, criterion is difference < ± 2xQL.

Date: 12/6/06 Data Reviewer: SDWC

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## E. Method QC

1. Laboratory Control Sample Recoveries *[QAPP Worksheet #11b and #24a]*

The laboratory control sample (LCS) and/or standard reference material (SRM) recoveries were reviewed to assess the accuracy of the results relative to the laboratory method performance of each step during the preparation, analysis, and reporting of environmental samples for each matrix.

- Was an appropriate (soil, sediment, or water) LCS performed for all analytes at the proper frequency? **Yes** / **No.**
- Did all analytes meet Site QAPP recovery criteria or 80-120% or vendor control limits for SRM? **Yes** / **No.**

If no, list the affected analytes and actions in the comment section, below.

**Actions:** If the LCS recovery for any analyte was greater than 120% or the established upper control limit for an SRM, estimate (J) all detected sample results. If the LCS recovery was less than 80% or less than the established lower control limit, estimate (J and UJ) the detected and non-detected results. Use professional judgment if LCS is severely low (< 50%, EPA Region I criterion for total metals), and the MS was out of control, to reject (R) associated results as unusable. Use professional judgment if LCS is out of control and MS is in control, to accept results for acceptable accuracy in the sample matrix.

**Laboratory Control Sample (LCS) Accuracy Action Table**

| Analyte | LCS % Recovery | Action | Comments/Affected Samples |
|---|---|---|---|
| | | | |
| | | | |
| | | | |

Comments:

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**E. Method QC (continued)**

2. ICP Method QC - ICP Interference Check Sample Results *[QAPP Worksheet #24a]*

ICP interference check procedures were performed to evaluate and verify the laboratory's interelement and background corrections for ICP-AES analyses and to generally evaluate interferences for isotope abundances on ICP-MS.

- Were analyte levels in the ICSA and ICSAB reported for all metals? **Yes / No**.
- Was the ICSA and ICSAB analyzed at the correct frequency? **Yes / No**.
- Did all analytes meet recovery criteria of 80-120% in the ICSAB solution? **Yes / No**.

If no to any of the above, list the affected samples, analytes, concentrations and actions in the section below.

Comments:

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**E. Method QC (continued)**

3. ICP-MS Method QC - Internal Standard Recovery Results *[QAPP Worksheet #24a]*

   - Were internal standards added to all samples analyzed by ICP-MS? **Yes / No.**
   - Did internal standards meet recovery criteria of 80-120% for CCVs and 30-120% for field samples as defined in the Site QAPP? **Yes / No.**

   If no, results might be uncertain with either a high or low bias dependent upon the internal standard recovery results. Professional judgment should be used to estimate (J and UJ) all affected field results for low (<30%) recoveries of the internal standards and to estimate detected results (J) for high recoveries of the internal standards. For internal standard recoveries that do not meet criteria in the CCV, professional judgment may be used to estimate (J or UJ) associated field sample results bracketed during analysis by the affected CCV.

   All actions must be described below.

Comments:

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**E. Method QC (continued)**

4. ICP Serial Dilution Results *[QAPP Worksheet #24a]*

- Was a field sample used for ICP serial dilution analysis? **Yes / No.**
  **Sample ID#:** SH-13S/09-28/06
- Did all analytes meet criterion of < 15% Difference (%D) for values that were > 50x QL in the serial dilution results? **Yes / No.**

List the affected samples/analytes and actions in the table below.

**Actions:** Estimate (J) all positive results if the %D > 15% for results that are > 50x the QL.

**Serial Dilution Result Actions**

| Analyte | % Difference | Action / Affected Samples |
|---|---|---|
| K | 12% | Remove qualifier placed by lab- meets QAPP limits. |
| | | NO ACTION |
| | | |
| | | |
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## F. Verification of MDLs/RLs, Linear Ranges, IECs

1. Sample Detection Limits *[QAPP Worksheet #9b]*

Analyte detection limits were reviewed to assess if the sensitivity of the results met the project-specific requirements.

Review Form 10, or equivalent. For this project, Method Detection Limits (MDL) should be performed annually.

- ~~Were~~ current (annual) MDLs present for all analytes and all instruments used for analysis? (Yes) / No.
- Were the MDLs and/or QLs compliant with project-specific reporting limit (PQL) requirements as listed in Worksheet #9b of the Site QAPP? Yes / (No.) see comments . Arsenic

**Actions:** Non-detected results that do not meet required PQLs may not be usable for specific data uses such as risk assessment.

**Table of Results That Do Not Meet QAPP PQL (Sensitivity) Requirements**

| Analyte | Sample ID # (s) Affected | Highest QL reported (units) | QAPP PQL (units) | QAPP PAL (units) | Reason (% solids; blank action; etc.) | Usability |
|---|---|---|---|---|---|---|
| | Truncated IDs ug/L | | | | | |
| (As) | SH-27R and SH-28D | 0.46 | 0.092 | 0.045 | Blank Actions | Data User to decide - should be usable |
| | | | | | | |
| Zn | all results negated due to blank actions | 15 | 20 | 1100 | blank action | Yes < PQL & < PAL |

Comments: All results reported to RL (supported by low-level in calibration curve) except As to MDL as required by Phase 1B-5 Workplan to help meet PALs.

Note: Worksheet 9b's have incorrect values + units for gases PQLs. Lab QLs considered acceptable:
ethane/ethene: 0.025 mg/L
methane: 0.1 mg/L

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**F. Verification of MDLs/RLs, Linear Ranges, IECs - continued**

**2. ICP Interelement Correction Factors** (For ICP-AES only -- Not required for ICP-MS)

- Review Form 11, or equivalent, ICP-AES Interelement Correction Factors (Annually)
- Were the current (annual) IECs present in the data package? **Yes / No / NA** JWC 12/6/06 ICP-MS data only

**Actions:** If no, use professional judgment to determine the severity of the affect on the results.

**3. ICP-AES and ICP-MS Linear Ranges (Annual)**

- Review Form 12, or equivalent, ICP Linear Ranges are checked daily and updated, at a minimum, annually for this project.
- Were current (annual) linear range data present in the data package? **Yes / No.**

**Actions:** If no, use professional judgment to determine the severity of the affect on the results.

Comments: LR from April 2005 – No Action taken – professional judgment: ICP-MS linearity range very stable over time.

**G. Preparation and Analysis Logs**

**1. Preparation Logs**

- Were sample preparation logs present and do they contain all samples/analytes performed in the SDG? **Yes / No.**

**2. Analysis Run Logs**

- Were analysis run logs present for all required samples/methods for this SDG? **Yes / No**
- Was the correct analytical sequence followed for the QC for each method? **Yes / No.**
- Were the calibration standards (*i.e.*, CCVs, CCBs, ICSA, ICSAB, etc.) analyzed at the proper frequency consistent with the methods and the Site QAPP? **Yes / No.**

If no to questions for Form 13 or 14, list the affected samples/analytes and actions in the comment section, below.

Comments: _____

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## H. Additional QA/QC Issues

NA

### 1. Percent Solids

Percent solids data were reviewed to further assess the affect of the sample matrix on result quantitation.

- Review percent solids results for all soil and sediment samples.

  Specific note for Sediments: For this project, all sediment samples were freeze-dried prior to analysis for total metals. The freeze-dried percent solids value used to calculate the total metals results on a dry-weight basis; therefore, the freeze-dried percent solids is used to compare to EPA Region I DV criteria. For TOC, the "as-received" or "native" percent solids is used as sediment aliquots for these parameters were not freeze-dried prior to preparation and analysis.

- Were percent solids > 30% for all soil and sediment samples? **Yes / No**

If no, list affected samples and actions in the table, below.

**Actions:** If percent solids results were > 30%, no actions are required. If percent solids were < 30% but > 10%, use professional judgment to either estimate (UJ) or reject all non-detected results (R) and estimate (J) all detected results. If percent solids were < 10%, use professional judgment to either estimate (UJ) or reject (R) all results. Professional judgment may be used, for example, if data reported are useful to the risk assessors even in low percent solids sediments.

**Percent Solids Action Table**

| Sample ID | % Solids | Action / Comments |
|---|---|---|
| | | |
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**2. Sample Result Verification – Uncertainty Near the Level of Detection**

Detected sample results were reviewed to assess certainty of results near the QLs. Results reported below the lab's QL, down to the IDL or MDL, have uncertainty near this statistically-derived level of detection.

- Were all sample results reported at ≥ QL or PQL? **Yes** / (**No**)
- If No, actions to estimate these results, reported between the MDL and the QL, may be taken.

**Action:** Estimate (J) all results < 2x the lab MDL and < the QL that have not been previously qualified "J" due to other QC criteria, due to uncertainty in the accuracy of the quantitation at this low level. Estimate (UJ) the level of detection if the non-detected result is reported down to the MDL (and if not previously qualified due to other QC criteria exceedance) due to the uncertainty in the statistically-derived MDL.

| Analyte | Sample ID# of affected results / matrix | Comments |
|---|---|---|
| ethane, ethene, methane | all gases results that were not negated due to blank action that were qualified "J" by lab for <QL had "J" maintained during DV uncertainty ← calibration range. | J to indicate |
| As | OW-213A/10-03-06 | (J) Uncertain < calibration range |
| $Fe^{T2}$ | SH-13S/09-28-06 and SH-28D/09-27-06 | (J) Uncertain < calibration range |

Comments:

As reported to MDL for PAL needs



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## III. Review of Overall Data Package Compliance

Review of the overall data package was performed to determine if the laboratory met all EPA SW846 method and project QAPP requirements.

### Case Narrative Review

Review the Case Narrative provided with the data package and list all issues of noncompliance or QA/QC exceedances addressed in the case narrative that have not been previously evaluated in the Data Usability Review. For each issue listed, state what qualification to the data has been taken.

Comments:
COC Sample ID changes based on client communication:
"TB-504/09-04-06" changed to "TB-504/09-27-06".
COC Sample ID "SH-2R/09-29-06" changed to "SH-02R/09-29-06"
"SH-35/09-29-06" " " "SH-035/09-29-06"
correct Sample IDs are included in validated database file.

**Sample result verification through re-calculation from the raw data was not performed, and was not required, for parameters undergoing a Tier II-type review or Tier I-type review.** ***[Reference QAPP Worksheet # 29b and #29c for data validation levels and modifications.]*** As sample result calculation verification was performed for the Tier-III type reviews previously documented for this Site for these media, and no anomalies were noted, it was assumed that the calculations were performed correctly for the remainder of the environmental data.

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## Data Summary Key for Data Usability Checklist Review

J - The associated numerical value is an estimated quantity due to quality control criteria exceedance(s). The value is usable for project decisions as an estimated result. The Data Usability Report discusses the potential bias in estimated results.

U - The analyte was analyzed for, but was not detected. The associated numerical value is the sample-specific quantitation limit. The value is usable for project decisions as a nondetect result at the quantitation limit.

UJ - The analyte was analyzed for, but was not detected. The associated numerical value is the sample reporting/quantitation limit and is an estimated quantity. The value is usable for project decisions as a non-detect result at the estimated reporting limit.

B - The analyte was detected in an associated non-matrix-matched blank. The result is usable for project decisions.

R - Reject data due to severe or cumulative exceedance of quality control criteria. The value is unusable (analyte may or may not be present) for project decisions. Re-sampling and reanalysis is necessary for verification.

## List of Inorganic Data Usability Checklist Review Acronyms

| | | |
|---|---|---|
| CCB | - | Continuing Calibration Blank |
| CCV | - | Continuing Calibration Verification Sample |
| CLP | - | Contract Laboratory Program |
| CRDL | - | Contract Required Detection Limit |
| %D | - | Percent Difference |
| DQO | - | Data Quality Objective |
| EPA | - | Environmental Protection Agency |
| FD | - | Field Duplicate |
| g | - | gram |
| ICB | - | Initial Calibration Blank |
| ICP | - | Inductively Coupled Plasma Spectrophotometry |
| ICP-MS | - | ICP-Mass Spectrometry |
| ICS | - | Interference Check Sample |
| ICV | - | Initial Calibration Verification Sample |
| IDL | - | Instrument Detection Limit |
| IEC | - | Interelement Correction Factor |
| IS | - | Internal Standard (ICP-MS only) |
| Kg | - | kilogram |
| L | - | liter |
| LCS | - | Laboratory Control Sample |
| MD | - | Matrix Duplicate |
| MDL | - | Method Detection Limit |
| mg | - | milligram |
| mg/Kg | - | milligram per kilogram |
| MS | - | Matrix Spike |
| NA | - | Not Applicable |
| ND | - | Non-detect |
| PQL | - | Project Quantitation Limit |
| QA | - | Quality Assurance |
| QAPP | - | Quality Assurance Project Plan |
| QC | - | Quality Control |
| QL | - | Quantitation Limit |
| r | - | correlation coefficient of linear regression curve |
| RB | - | Rinsate Blank (equipment rinsate field blank) |
| RPD | - | Relative Percent Difference |
| SDG | - | Sample Delivery Group |
| SRM | - | Standard Reference Material |
| TAL | - | Target Analyte List |
| µg/Kg | - | micrograms per kilogram |
| µg/L | - | micrograms per liter |

## References

1. *Phase 1A Remedial Investigation*, Blackburn & Union Privileges Superfund Site, Walpole, Massachusetts, November 2000; inclusive of the *Project Operations Plan (POP), Sampling and Analysis Plan (SAP), and Quality Assurance Project Plan (QAPP).*

2. *Phase 1B-2 Remedial Investigation Work Plan*, Blackburn & Union Privileges Superfund Site, Walpole, Massachusetts, June 2003.

3. *Phase 1B-5 Work Plan Remedial Investigation Work Plan,* Blackburn & Union Privileges Superfund Site, Walpole Massachusetts, Rev 02, September 21, 2006

4. *EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses,* EPA Region I, December 1996.

5. *Region I Laboratory Data Validation Functional Guidelines for Evaluating Inorganics Analyses,* EPA Region I, February 1989.

6. *Guidance for Data Useability in Risk Assessment* (Part A), Publication 9285.7-09A, EPA 1992.

7. *Test Methods for Evaluating Solid Waste, Physical Chemical Methods, SW-846*, EPA Office of Solid Waste, Third Edition, Final Update, December 1996.

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# DATA USABILITY ASSESSMENT

**Organic Analysis by Method 8260B and Method 8270C**
**EPA Region I Tier II – type review**

| | |
|---|---|
| **Client:** | Sanborn, Head & Associates, Inc., Concord, New Hampshire |
| **Site:** | Blackburn & Union Privileges Superfund Site, Walpole, Massachusetts<br>Phase 1B-5 Remedial Investigation |
| **Laboratory:** | Alpha Woods Hole Labs (AWHL), Raynham, Massachusetts |
| **SDG:** | BU213 |
| **Lab ETR:** | 0609122 |
| **# Samples/Analyses:** | 18 groundwaters, 1 equipment rinsate blank (EB), and 5 trip blanks (TB) for forty project-specific Volatile Organic Compounds (VOC)<br>18 groundwaters and 1 EB for nineteen project-specific Semivolatile Organic Compounds (SVOC) |
| **Initial Reviewer:** | Dr. Nancy C. Rothman, New Environmental Horizons, Inc. |
| **Senior Reviewer:** | Susan D. Chapnick, New Environmental Horizons, Inc. |
| **Date Completed:** | December 6, 2006 |

An EPA Tier II-type Data Validation/Usability Checklist Review was performed on the data included in this SDG with the following intentions: 1) to determine if the data were generated and reported in accordance with the *Phase 1B-5 Remedial Investigation Work Plan, Blackburn & Union Privileges Superfund Site, Walpole, MA,* prepared by Sanborn, Head & Associates, Inc., Rev. 02, September 21, 2006 (Phase IB-5 Work Plan); USEPA *Test Methods for Evaluating Solid Waste, Physical Chemical Methods, SW-846, Third Edition, Final Update, December 1996 Method 8260B and Method 8270C;* Region I, *EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses,* December 1996; *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review*; Publication EPA A540/R-99/008, October 1999; and *Guidance for Data Useability in Risk Assessment* (Part A), Publication 9285.7-09A, USEPA 1992; 2) to determine if the data met the project data quality objectives for acceptable accuracy, precision, sensitivity; and technical usability; and 3) to update the project database with appropriate data quality qualifiers.

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The Data Review Checklists, attached, were completed during this assessment to document the review.

The Chain-of-Custody (COC) listed samples "SH-2R/09-29-06"and "SH-3S/09-29-06", which were changed to "SH-02R/09-29-06" and "SH-03S/09-29-06", respectively, based on client communication with the laboratory. In addition, the trip blank identified on the COC as "TB-504/09-04-06" was changed to "TB-504/09-27-06" by the client after receipt. The corrected sample identifications are included in the validated database file.

All results for VOCs and SVOCs in the samples included in this SDG BU213 are usable for project objectives with one exception. The result for 2-chloroethylvinyl ether in sample SH-13S/09-28-06 was rejected (R) due to less than 10% recovery of this compound in the matrix spike / matrix spike duplicate (MS/MSD) analysis performed on this sample. This result is not usable for project objectives. Several other results have been negated (U) due to blank actions or qualified as estimated (J or UJ) due to quality control criteria exceedance(s). Data users should note the uncertainties in the qualified results as summarized below in Table 1. The qualified (U, J, UJ) and unqualified results are usable for project objectives.

A Laboratory Fortified Blank (LFB), as designated in the original QAPP (2000), was not required for this Phase 1B-5 Remedial Investigation. As compared to previous investigations, the lowest-level initial calibration standards for VOCs and SVOCs were at very low concentrations and the laboratory analyzed full target analyte Laboratory Control samples/Laboratory Control Sample Duplicates (LCS/LCSD). Therefore, the laboratory was not required to perform the LFB analysis.

All non-detect results for VOCs and SVOCs in the groundwater samples met Project Action Limits (PALs) with the following exceptions: VOC compounds bromodichloromethane, bromoform, carbon tetrachloride, chloroform, dibromochloromethane, 1,2-dichloroethane, 1,2-dichloropropane, cis-1,3-dichloropropene, trans-1,3-dichloropropene, 1,1,2,2-tetrachloroethane, tetrachloroethene, trichloroethene, and vinyl chloride in all samples and benzene, bromomethane, and 1,1,2-trichloroethane in all samples except SH-06R-A/10-02/06, SH-06R-B/10-02-06, SH-14S/10-02-06, SH-14D/10-02-06, SH-27D/10-02-06, and OW-213/10-02-06; and SVOCs benzo(a)pyrene and dibenz(a,h)anthracene in all samples. These non-detects did not meet PALs, as expected, due to method limitations. The data user will have to evaluate the usability of these elevated non-detected data on a case-by-case basis to determine if these data can be used for project objectives.

All other quality control information associated with accuracy, precision, sensitivity, and representativeness for the project-specific list of VOCs and SVOCs reported met project criteria for the samples in this SDG with the exceptions in the following table.

**Table 1. Summary of Data Validation/Usability Actions**

| Sample ID | Lab Chemical Name | Qualifier | Bias | Comment |
|---|---|---|---|---|
| SH-13S / 09-28-06 | 2-Chloroethylvinyl ether | R | | Unusable: < 10% MS/MSD recoveries |
| SH-13S / 09-28-06 | Vinyl acetate & Styrene | UJ | L | Low MS/MSD recoveries |
| SH-27R / 09-29-06 | 1,1-Dichloroethene | J | I | High Surrogate recovery + Result uncertain below the calibration range |
| OW-213A / 10-03-06 | Methylene chloride | J | H | High Surrogate recovery |
| SH-27R / 09-29-06 & SH-05D / 10-02-06 | Trichloroethene | J | H | High Surrogate recovery |
| SH-28R / 09-29-06 | Trichloroethene | J | I | High Surrogate recovery + Result uncertain below the calibration range |
| All samples | Bromomethane | UJ | I | Initial Calibration outside criteria |
| SH-13S / 09-28-06, SH-02R / 09-29-06, SH-03S / 09-29-06, & TB-511 / 10-03-06 | Acetone | U | | Negated due to Blank Action |
| SH-28D / 09-27-06, SH-13S / 09-28-06, SH-24R / 09-28-06, SH-02R / 09-29-06, SH-14S / 10-02-06, & OW-213 / 10-02-06 | Acenaphthene | J | I | Result uncertain below the calibration range |
| SH-14S / 10-02-06 & OW-213 / 10-02-06 | Anthracene | J | I | Result uncertain below the calibration range |
| SH-28D / 09-27-06, SH-13S / 09-28-06, SH-19R / 09-28-06, SH-14S / 10-02-06, & OW-213 / 10-02-06 | Carbazole | J | I | Result uncertain below the calibration range |
| SH-28D / 09-27-06, SH-13S / 09-28-06, SH-24R / 09-28-06, SH-02R / 09-29-06, SH-03S / 09-29-06, SH-06R-B / 10-02-06, SH-14S / 10-02-06, SH-27D / 10-02-06, OW-213 / 10-02-06, SH-05R-A / 10-03-06, & SH-05R-B / 10-03-06 | Dibenz[a,h]anthracene | J | I | Result uncertain below the calibration range |
| SH-14S / 10-02-06 & OW-213 / 10-02-06 | Fluorene | J | I | Result uncertain below the calibration range |

**Table 1. Summary of Data Validation/Usability Actions** - *continued*

| Sample ID | Lab Chemical Name | Qualifier | Bias | Comment |
|---|---|---|---|---|
| All samples except: SH-05R-A / 10-03-06 | 2-Methylnaphthalene | U | | Negated due to Blank Action |
| SH-28D / 09-27-06, SH-13S / 09-28-06, SH-19R / 09-28-06, SH-24R / 09-28-06, SH-02R / 09-29-06, SH-03S / 09-29-06, SH-06R-B / 10-02-06, SH-14S / 10-02-06, & OW-213 / 10-02-06 | Acenaphthylene | U | | Negated due to Blank Action |
| SH-28D / 09-27-06, SH-13S / 09-28-06, SH-24R / 09-28-06, SH-02R / 09-29-06, SH-03S / 09-29-06, SH-27R / 09-29-06, SH-06R-A / 10-02-06, SH-06R-B / 10-02-06, & SH-27D / 10-02-06 | Anthracene | U | | Negated due to Blank Action |
| SH-28D / 09-27-06, SH-13S / 09-28-06, SH-19R / 09-28-06, SH-24R / 09-28-06, SH-02R / 09-29-06, SH-03S / 09-29-06, SH-27R / 09-29-06, SH-28R / 09-29-06, SH-06R-B / 10-02-06, SH-05R-A / 10-03-06, & SH-05R-B / 10-03-06 | Benz[a]anthracene | U | | Negated due to Blank Action |
| SH-28D / 09-27-06, SH-13S / 09-28-06, SH-19R / 09-28-06, SH-24R / 09-28-06, SH-02R / 09-29-06, SH-03S / 09-29-06, SH-27R / 09-29-06 SH-06R-B / 10-02-06, SH-27D / 10-02-06 SH-05R-A / 10-03-06, & SH-05R-B / 10-03-06 | Benzo[a]pyrene | U | | Negated due to Blank Action |
| All samples except: SH-28R / 09-29-06, SH-05D / 10-02-06, SH-06R-A / 10-02-06, SH-14D / 10-02-06, & SH-03D / 10-03-06 | Benzo[b]fluoranthene | U | | Negated due to Blank Action |

**Table 1. Summary of Data Validation/Usability Actions** - *continued*

| Sample ID | Lab Chemical Name | Qualifier | Bias | Comment |
|---|---|---|---|---|
| All samples except: SH-05D / 10-02-06, SH-06R-A / 10-02-06, SH-14D / 10-02-06, SH-03D / 10-03-06, SH-05R-A / 10-03-06, SH-05R-B / 10-03-06, & OW-213A / 10-03-06 | Benzo[g,h,i]perylene | U | | Negated due to Blank Action |
| SH-03D / 10-03-06 | Benzo[g,h,i]perylene | UJ | L | Low Calibration verification |
| SH-05R-A / 10-03-06, SH-05R-B / 10-03-06, & OW-213A / 10-03-06 | Benzo[g,h,i]perylene | UJ | I | Negated due to Blank Action + Low Calibration verification |
| All samples except: SH-05D / 10-02-06, SH-06R-A / 10-02-06, SH-14D / 10-02-06, & SH-03D / 10-03-06 | Benzo[k]fluoranthene & Indeno[1,2,3-cd]pyrene | U | | Negated due to Blank Action |
| All samples | bis(2-Ethylhexyl)phthalate & Phenanthrene | U | | Negated due to Blank Action |
| All samples except: SH-05D / 10-02-06, SH-14D / 10-02-06, OW-213 / 10-02-06, SH-03D / 10-03-06, & OW-213A / 10-03-06 | Chrysene | U | | Negated due to Blank Action |
| All samples except: SH-02R / 09-29-06, SH-14S / 10-02-06, & OW-213 / 10-02-06 | Fluoranthene & Naphthalene | U | | Negated due to Blank Action |
| SH-28D / 09-27-06, SH-13S / 09-28-06, SH-24R / 09-28-06, SH-02R / 09-29-06, & SH-06R-B / 10-02-06 | Fluorene | U | | Negated due to Blank Action |
| All samples except: SH-14S / 10-02-06, SH-14D / 10-02-06, & OW-213 / 10-02-06 | Pyrene | U | | Negated due to Blank Action |

*Qualifiers: U = Analyte is not detected; UJ = Non-detect is estimated; J = Result is estimated; R = Result is rejected and is unusable for project decisions.*

*Bias: L = Low; H = High; I = Indeterminate*

The qualified (J, UJ, and U) and unqualified results presented in the validated database, submitted electronically to Sanborn, Head & Associates, Inc. are considered usable for project objectives. The rejected result for 2-chloroethylvinyl ether in sample SH-13S/09-28-06 is not usable for project decisions.

| Smpl | Lab_ID | Anal_Date | Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TB-504 / 09-27-06 | 0609122-01 | 10/7/2006 | 8260 | VOCs | 74-87-3 | Chloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-504 / 09-27-06 | 0609122-01 | 10/7/2006 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-504 / 09-27-06 | 0609122-01 | 10/7/2006 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-504 / 09-27-06 | 0609122-01 | 10/7/2006 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-504 / 09-27-06 | 0609122-01 | 10/7/2006 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-504 / 09-27-06 | 0609122-01 | 10/7/2006 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-504 / 09-27-06 | 0609122-01 | 10/7/2006 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-504 / 09-27-06 | 0609122-01 | 10/7/2006 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-504 / 09-27-06 | 0609122-01 | 10/7/2006 | 8260 | VOCs | 67-66-3 | Chloroform | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-504 / 09-27-06 | 0609122-01 | 10/7/2006 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-504 / 09-27-06 | 0609122-01 | 10/7/2006 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-504 / 09-27-06 | 0609122-01 | 10/7/2006 | 8260 | VOCs | 71-43-2 | Benzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-504 / 09-27-06 | 0609122-01 | 10/7/2006 | 8260 | VOCs | 74-83-9 | Bromomethane | 2 | µg/L | UJ | I | 2 | µg/L | 1 | Initial Calibration outside criteria |
| TB-504 / 09-27-06 | 0609122-01 | 10/7/2006 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-504 / 09-27-06 | 0609122-01 | 10/7/2006 | 8260 | VOCs | 79-01-6 | Trichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-504 / 09-27-06 | 0609122-01 | 10/7/2006 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-504 / 09-27-06 | 0609122-01 | 10/7/2006 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-504 / 09-27-06 | 0609122-01 | 10/7/2006 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-504 / 09-27-06 | 0609122-01 | 10/7/2006 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-504 / 09-27-06 | 0609122-01 | 10/7/2006 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-504 / 09-27-06 | 0609122-01 | 10/7/2006 | 8260 | VOCs | 108-88-3 | Toluene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-504 / 09-27-06 | 0609122-01 | 10/7/2006 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-504 / 09-27-06 | 0609122-01 | 10/7/2006 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-504 / 09-27-06 | 0609122-01 | 10/7/2006 | 8260 | VOCs | 75-00-3 | Chloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-504 / 09-27-06 | 0609122-01 | 10/7/2006 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-504 / 09-27-06 | 0609122-01 | 10/7/2006 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-504 / 09-27-06 | 0609122-01 | 10/7/2006 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-504 / 09-27-06 | 0609122-01 | 10/7/2006 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-504 / 09-27-06 | 0609122-01 | 10/7/2006 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-504 / 09-27-06 | 0609122-01 | 10/7/2006 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4 | µg/L | U | | 4 | µg/L | 1 | |
| TB-504 / 09-27-06 | 0609122-01 | 10/7/2006 | 8260 | VOCs | 95-47-6 | o-Xylene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-504 / 09-27-06 | 0609122-01 | 10/7/2006 | 8260 | VOCs | 100-42-5 | Styrene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-504 / 09-27-06 | 0609122-01 | 10/7/2006 | 8260 | VOCs | 75-25-2 | Bromoform | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-504 / 09-27-06 | 0609122-01 | 10/7/2006 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-504 / 09-27-06 | 0609122-01 | 10/7/2006 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-504 / 09-27-06 | 0609122-01 | 10/7/2006 | 8260 | VOCs | 67-64-1 | Acetone | 5 | µg/L | U | | 5 | µg/L | 1 | |
| TB-504 / 09-27-06 | 0609122-01 | 10/7/2006 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-504 / 09-27-06 | 0609122-01 | 10/7/2006 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-504 / 09-27-06 | 0609122-01 | 10/7/2006 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-504 / 09-27-06 | 0609122-01 | 10/7/2006 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/7/2006 | 8260 | VOCs | 74-87-3 | Chloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/7/2006 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/7/2006 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/7/2006 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/7/2006 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/7/2006 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/7/2006 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/7/2006 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/7/2006 | 8260 | VOCs | 67-66-3 | Chloroform | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/7/2006 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/7/2006 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2 | µg/L | U | | 2 | µg/L | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low, H = High, I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Anal_Date | Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-28D / 09-27-06 | 0609122-02 | 10/7/2006 | 8260 | VOCs | 71-43-2 | Benzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/7/2006 | 8260 | VOCs | 74-83-9 | Bromomethane | 2 | µg/L | UJ | I | 2 | µg/L | 1 | Initial Calibration outside criteria |
| SH-28D / 09-27-06 | 0609122-02 | 10/7/2006 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/7/2006 | 8260 | VOCs | 79-01-6 | Trichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/7/2006 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/7/2006 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/7/2006 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/7/2006 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/7/2006 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/7/2006 | 8260 | VOCs | 108-88-3 | Toluene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/7/2006 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/7/2006 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/7/2006 | 8260 | VOCs | 75-00-3 | Chloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/7/2006 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/7/2006 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/7/2006 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/7/2006 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/7/2006 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/7/2006 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4 | µg/L | U | | 4 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/7/2006 | 8260 | VOCs | 95-47-6 | o-Xylene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/7/2006 | 8260 | VOCs | 100-42-5 | Styrene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/7/2006 | 8260 | VOCs | 75-25-2 | Bromoform | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/7/2006 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/7/2006 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/7/2006 | 8260 | VOCs | 67-64-1 | Acetone | 5 | µg/L | U | | 5 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/7/2006 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/7/2006 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/7/2006 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/7/2006 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-506 / 09-28-06 | 0609122-03 | 10/3/2006 | 8260 | VOCs | 74-87-3 | Chloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-506 / 09-28-06 | 0609122-03 | 10/3/2006 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| TB-506 / 09-28-06 | 0609122-03 | 10/3/2006 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-506 / 09-28-06 | 0609122-03 | 10/3/2006 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-506 / 09-28-06 | 0609122-03 | 10/3/2006 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-506 / 09-28-06 | 0609122-03 | 10/3/2006 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-506 / 09-28-06 | 0609122-03 | 10/3/2006 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-506 / 09-28-06 | 0609122-03 | 10/3/2006 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-506 / 09-28-06 | 0609122-03 | 10/3/2006 | 8260 | VOCs | 67-66-3 | Chloroform | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| TB-506 / 09-28-06 | 0609122-03 | 10/3/2006 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-506 / 09-28-06 | 0609122-03 | 10/3/2006 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-506 / 09-28-06 | 0609122-03 | 10/3/2006 | 8260 | VOCs | 71-43-2 | Benzene | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| TB-506 / 09-28-06 | 0609122-03 | 10/3/2006 | 8260 | VOCs | 74-83-9 | Bromomethane | 0.2 | µg/L | UJ | I | 0.2 | µg/L | 1 | Initial Calibration outside criteria |
| TB-506 / 09-28-06 | 0609122-03 | 10/3/2006 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| TB-506 / 09-28-06 | 0609122-03 | 10/3/2006 | 8260 | VOCs | 79-01-6 | Trichloroethene | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| TB-506 / 09-28-06 | 0609122-03 | 10/3/2006 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| TB-506 / 09-28-06 | 0609122-03 | 10/3/2006 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| TB-506 / 09-28-06 | 0609122-03 | 10/3/2006 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-506 / 09-28-06 | 0609122-03 | 10/3/2006 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-506 / 09-28-06 | 0609122-03 | 10/3/2006 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| TB-506 / 09-28-06 | 0609122-03 | 10/3/2006 | 8260 | VOCs | 108-88-3 | Toluene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-506 / 09-28-06 | 0609122-03 | 10/3/2006 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low, H = High, I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Anal_Date | Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TB-506 / 09-28-06 | 0609122-03 | 10/3/2006 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| TB-506 / 09-28-06 | 0609122-03 | 10/3/2006 | 8260 | VOCs | 75-00-3 | Chloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-506 / 09-28-06 | 0609122-03 | 10/3/2006 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-506 / 09-28-06 | 0609122-03 | 10/3/2006 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| TB-506 / 09-28-06 | 0609122-03 | 10/3/2006 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| TB-506 / 09-28-06 | 0609122-03 | 10/3/2006 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-506 / 09-28-06 | 0609122-03 | 10/3/2006 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-506 / 09-28-06 | 0609122-03 | 10/3/2006 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4 | µg/L | U | | 4 | µg/L | 1 | |
| TB-506 / 09-28-06 | 0609122-03 | 10/3/2006 | 8260 | VOCs | 95-47-6 | o-Xylene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-506 / 09-28-06 | 0609122-03 | 10/3/2006 | 8260 | VOCs | 100-42-5 | Styrene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-506 / 09-28-06 | 0609122-03 | 10/3/2006 | 8260 | VOCs | 75-25-2 | Bromoform | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| TB-506 / 09-28-06 | 0609122-03 | 10/3/2006 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| TB-506 / 09-28-06 | 0609122-03 | 10/3/2006 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-506 / 09-28-06 | 0609122-03 | 10/3/2006 | 8260 | VOCs | 67-64-1 | Acetone | 5 | µg/L | U | | 5 | µg/L | 1 | |
| TB-506 / 09-28-06 | 0609122-03 | 10/3/2006 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-506 / 09-28-06 | 0609122-03 | 10/3/2006 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-506 / 09-28-06 | 0609122-03 | 10/3/2006 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-506 / 09-28-06 | 0609122-03 | 10/3/2006 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/7/2006 | 8260 | VOCs | 74-87-3 | Chloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/7/2006 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/7/2006 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/7/2006 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/7/2006 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2 | µg/L | UJ | L | 2 | µg/L | 1 | Low MS/MSD recoveries |
| SH-13S / 09-28-06 | 0609122-04 | 10/7/2006 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/7/2006 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/7/2006 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/7/2006 | 8260 | VOCs | 67-66-3 | Chloroform | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/7/2006 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/7/2006 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/7/2006 | 8260 | VOCs | 71-43-2 | Benzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/7/2006 | 8260 | VOCs | 74-83-9 | Bromomethane | 2 | µg/L | UJ | I | 2 | µg/L | 1 | Initial Calibration outside criteria |
| SH-13S / 09-28-06 | 0609122-04 | 10/7/2006 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/7/2006 | 8260 | VOCs | 79-01-6 | Trichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/7/2006 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/7/2006 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/7/2006 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2 | µg/L | R | | 2 | µg/L | 1 | Unusable: < 10% MS/MSD recoveries |
| SH-13S / 09-28-06 | 0609122-04 | 10/7/2006 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/7/2006 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/7/2006 | 8260 | VOCs | 108-88-3 | Toluene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/7/2006 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/7/2006 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/7/2006 | 8260 | VOCs | 75-00-3 | Chloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/7/2006 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/7/2006 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/7/2006 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/7/2006 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/7/2006 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/7/2006 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4 | µg/L | U | | 4 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/7/2006 | 8260 | VOCs | 95-47-6 | o-Xylene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/7/2006 | 8260 | VOCs | 100-42-5 | Styrene | 2 | µg/L | UJ | L | 2 | µg/L | 1 | Low MS/MSD recoveries |
| SH-13S / 09-28-06 | 0609122-04 | 10/7/2006 | 8260 | VOCs | 75-25-2 | Bromoform | 2 | µg/L | U | | 2 | µg/L | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low, H = High, I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Anal_Date | Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-13S / 09-28-06 | 0609122-04 | 10/7/2006 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/7/2006 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/7/2006 | 8260 | VOCs | 67-64-1 | Acetone | 5 | µg/L | U | | 5 | µg/L | 1 | Negated due to Blank Action |
| SH-13S / 09-28-06 | 0609122-04 | 10/7/2006 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/7/2006 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/7/2006 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-13S / 09-28-06 | 0609122-04 | 10/7/2006 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/7/2006 | 8260 | VOCs | 74-87-3 | Chloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/7/2006 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/7/2006 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/7/2006 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/7/2006 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/7/2006 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/7/2006 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/7/2006 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/7/2006 | 8260 | VOCs | 67-66-3 | Chloroform | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/7/2006 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/7/2006 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/7/2006 | 8260 | VOCs | 71-43-2 | Benzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/7/2006 | 8260 | VOCs | 74-83-9 | Bromomethane | 2 | µg/L | UJ | I | 2 | µg/L | 1 | Initial Calibration outside criteria |
| SH-19R / 09-28-06 | 0609122-05 | 10/7/2006 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/7/2006 | 8260 | VOCs | 79-01-6 | Trichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/7/2006 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/7/2006 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/7/2006 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/7/2006 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/7/2006 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/7/2006 | 8260 | VOCs | 108-88-3 | Toluene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/7/2006 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/7/2006 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/7/2006 | 8260 | VOCs | 75-00-3 | Chloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/7/2006 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/7/2006 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/7/2006 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/7/2006 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/7/2006 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/7/2006 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4 | µg/L | U | | 4 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/7/2006 | 8260 | VOCs | 95-47-6 | o-Xylene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/7/2006 | 8260 | VOCs | 100-42-5 | Styrene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/7/2006 | 8260 | VOCs | 75-25-2 | Bromoform | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/7/2006 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/7/2006 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/7/2006 | 8260 | VOCs | 67-64-1 | Acetone | 5 | µg/L | U | | 5 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/7/2006 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/7/2006 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/7/2006 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/7/2006 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/7/2006 | 8260 | VOCs | 74-87-3 | Chloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/7/2006 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/7/2006 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/7/2006 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low, H = High, I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Anal_Date | Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-24R / 09-28-06 | 0609122-06 | 10/7/2006 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/7/2006 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/7/2006 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/7/2006 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/7/2006 | 8260 | VOCs | 67-66-3 | Chloroform | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/7/2006 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/7/2006 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/7/2006 | 8260 | VOCs | 71-43-2 | Benzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/7/2006 | 8260 | VOCs | 74-83-9 | Bromomethane | 2 | µg/L | UJ | I | 2 | µg/L | 1 | Initial Calibration outside criteria |
| SH-24R / 09-28-06 | 0609122-06 | 10/7/2006 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/7/2006 | 8260 | VOCs | 79-01-6 | Trichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/7/2006 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/7/2006 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/7/2006 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/7/2006 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/7/2006 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/7/2006 | 8260 | VOCs | 108-88-3 | Toluene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/7/2006 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/7/2006 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/7/2006 | 8260 | VOCs | 75-00-3 | Chloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/7/2006 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/7/2006 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/7/2006 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/7/2006 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/7/2006 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/7/2006 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4 | µg/L | U | | 4 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/7/2006 | 8260 | VOCs | 95-47-6 | o-Xylene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/7/2006 | 8260 | VOCs | 100-42-5 | Styrene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/7/2006 | 8260 | VOCs | 75-25-2 | Bromoform | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/7/2006 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/7/2006 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/7/2006 | 8260 | VOCs | 67-64-1 | Acetone | 5 | µg/L | U | | 5 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/7/2006 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/7/2006 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/7/2006 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/7/2006 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-509 / 09-29-06 | 0609122-07 | 10/7/2006 | 8260 | VOCs | 74-87-3 | Chloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-509 / 09-29-06 | 0609122-07 | 10/7/2006 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-509 / 09-29-06 | 0609122-07 | 10/7/2006 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-509 / 09-29-06 | 0609122-07 | 10/7/2006 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-509 / 09-29-06 | 0609122-07 | 10/7/2006 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-509 / 09-29-06 | 0609122-07 | 10/7/2006 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-509 / 09-29-06 | 0609122-07 | 10/7/2006 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-509 / 09-29-06 | 0609122-07 | 10/7/2006 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-509 / 09-29-06 | 0609122-07 | 10/7/2006 | 8260 | VOCs | 67-66-3 | Chloroform | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-509 / 09-29-06 | 0609122-07 | 10/7/2006 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-509 / 09-29-06 | 0609122-07 | 10/7/2006 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-509 / 09-29-06 | 0609122-07 | 10/7/2006 | 8260 | VOCs | 71-43-2 | Benzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-509 / 09-29-06 | 0609122-07 | 10/7/2006 | 8260 | VOCs | 74-83-9 | Bromomethane | 2 | µg/L | UJ | I | 2 | µg/L | 1 | Initial Calibration outside criteria |
| TB-509 / 09-29-06 | 0609122-07 | 10/7/2006 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-509 / 09-29-06 | 0609122-07 | 10/7/2006 | 8260 | VOCs | 79-01-6 | Trichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low, H = High, I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Anal_Date | Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TB-509 / 09-29-06 | 0609122-07 | 10/7/2006 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-509 / 09-29-06 | 0609122-07 | 10/7/2006 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-509 / 09-29-06 | 0609122-07 | 10/7/2006 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-509 / 09-29-06 | 0609122-07 | 10/7/2006 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-509 / 09-29-06 | 0609122-07 | 10/7/2006 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-509 / 09-29-06 | 0609122-07 | 10/7/2006 | 8260 | VOCs | 108-88-3 | Toluene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-509 / 09-29-06 | 0609122-07 | 10/7/2006 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-509 / 09-29-06 | 0609122-07 | 10/7/2006 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-509 / 09-29-06 | 0609122-07 | 10/7/2006 | 8260 | VOCs | 75-00-3 | Chloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-509 / 09-29-06 | 0609122-07 | 10/7/2006 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-509 / 09-29-06 | 0609122-07 | 10/7/2006 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-509 / 09-29-06 | 0609122-07 | 10/7/2006 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-509 / 09-29-06 | 0609122-07 | 10/7/2006 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-509 / 09-29-06 | 0609122-07 | 10/7/2006 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-509 / 09-29-06 | 0609122-07 | 10/7/2006 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4 | µg/L | U | | 4 | µg/L | 1 | |
| TB-509 / 09-29-06 | 0609122-07 | 10/7/2006 | 8260 | VOCs | 95-47-6 | o-Xylene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-509 / 09-29-06 | 0609122-07 | 10/7/2006 | 8260 | VOCs | 100-42-5 | Styrene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-509 / 09-29-06 | 0609122-07 | 10/7/2006 | 8260 | VOCs | 75-25-2 | Bromoform | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-509 / 09-29-06 | 0609122-07 | 10/7/2006 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-509 / 09-29-06 | 0609122-07 | 10/7/2006 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-509 / 09-29-06 | 0609122-07 | 10/7/2006 | 8260 | VOCs | 67-64-1 | Acetone | 5 | µg/L | U | | 5 | µg/L | 1 | |
| TB-509 / 09-29-06 | 0609122-07 | 10/7/2006 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-509 / 09-29-06 | 0609122-07 | 10/7/2006 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-509 / 09-29-06 | 0609122-07 | 10/7/2006 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-509 / 09-29-06 | 0609122-07 | 10/7/2006 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/7/2006 | 8260 | VOCs | 74-87-3 | Chloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/7/2006 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/7/2006 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/7/2006 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/7/2006 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/7/2006 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/7/2006 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/7/2006 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/7/2006 | 8260 | VOCs | 67-66-3 | Chloroform | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/7/2006 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/7/2006 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/7/2006 | 8260 | VOCs | 71-43-2 | Benzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/7/2006 | 8260 | VOCs | 74-83-9 | Bromomethane | 2 | µg/L | UJ | I | 2 | µg/L | 1 | Initial Calibration outside criteria |
| SH-02R / 09-29-06 | 0609122-08 | 10/7/2006 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/7/2006 | 8260 | VOCs | 79-01-6 | Trichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/7/2006 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/7/2006 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/7/2006 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/7/2006 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/7/2006 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/7/2006 | 8260 | VOCs | 108-88-3 | Toluene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/7/2006 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/7/2006 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/7/2006 | 8260 | VOCs | 75-00-3 | Chloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/7/2006 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/7/2006 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low, H = High, I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Anal_Date | Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-02R / 09-29-06 | 0609122-08 | 10/7/2006 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/7/2006 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/7/2006 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/7/2006 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4 | µg/L | U | | 4 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/7/2006 | 8260 | VOCs | 95-47-6 | o-Xylene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/7/2006 | 8260 | VOCs | 100-42-5 | Styrene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/7/2006 | 8260 | VOCs | 75-25-2 | Bromoform | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/7/2006 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/7/2006 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/7/2006 | 8260 | VOCs | 67-64-1 | Acetone | 5 | µg/L | U | | 5 | µg/L | 1 | Negated due to Blank Action |
| SH-02R / 09-29-06 | 0609122-08 | 10/7/2006 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/7/2006 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/7/2006 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/7/2006 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/7/2006 | 8260 | VOCs | 74-87-3 | Chloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/7/2006 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/7/2006 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/7/2006 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/7/2006 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/7/2006 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/7/2006 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/7/2006 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/7/2006 | 8260 | VOCs | 67-66-3 | Chloroform | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/7/2006 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/7/2006 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/7/2006 | 8260 | VOCs | 71-43-2 | Benzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/7/2006 | 8260 | VOCs | 74-83-9 | Bromomethane | 2 | µg/L | UJ | I | 2 | µg/L | 1 | Initial Calibration outside criteria |
| SH-03S / 09-29-06 | 0609122-09 | 10/7/2006 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/7/2006 | 8260 | VOCs | 79-01-6 | Trichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/7/2006 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/7/2006 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/7/2006 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/7/2006 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/7/2006 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/7/2006 | 8260 | VOCs | 108-88-3 | Toluene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/7/2006 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/7/2006 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/7/2006 | 8260 | VOCs | 75-00-3 | Chloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/7/2006 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/7/2006 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/7/2006 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/7/2006 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/7/2006 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/7/2006 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4 | µg/L | U | | 4 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/7/2006 | 8260 | VOCs | 95-47-6 | o-Xylene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/7/2006 | 8260 | VOCs | 100-42-5 | Styrene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/7/2006 | 8260 | VOCs | 75-25-2 | Bromoform | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/7/2006 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/7/2006 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/7/2006 | 8260 | VOCs | 67-64-1 | Acetone | 5.4 | µg/L | U | | 5 | µg/L | 1 | Negated due to Blank Action |
| SH-03S / 09-29-06 | 0609122-09 | 10/7/2006 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |

| Smpl | Lab_ID | Anal_Date | Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-03S / 09-29-06 | 0609122-09 | 10/7/2006 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/7/2006 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/7/2006 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/7/2006 | 8260 | VOCs | 74-87-3 | Chloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/7/2006 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/7/2006 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/7/2006 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/7/2006 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/7/2006 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/7/2006 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/7/2006 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/7/2006 | 8260 | VOCs | 67-66-3 | Chloroform | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/7/2006 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/7/2006 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/7/2006 | 8260 | VOCs | 71-43-2 | Benzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/7/2006 | 8260 | VOCs | 74-83-9 | Bromomethane | 2 | µg/L | UJ | I | 2 | µg/L | 1 | Initial Calibration outside criteria |
| SH-27R / 09-29-06 | 0609122-10 | 10/7/2006 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/7/2006 | 8260 | VOCs | 79-01-6 | Trichloroethene | 3.9 | µg/L | J | H | 2 | µg/L | 1 | High Surrogate recovery |
| SH-27R / 09-29-06 | 0609122-10 | 10/7/2006 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/7/2006 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/7/2006 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/7/2006 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/7/2006 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/7/2006 | 8260 | VOCs | 108-88-3 | Toluene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/7/2006 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/7/2006 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/7/2006 | 8260 | VOCs | 75-00-3 | Chloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/7/2006 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/7/2006 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/7/2006 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/7/2006 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/7/2006 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/7/2006 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4 | µg/L | U | | 4 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/7/2006 | 8260 | VOCs | 95-47-6 | o-Xylene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/7/2006 | 8260 | VOCs | 100-42-5 | Styrene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/7/2006 | 8260 | VOCs | 75-25-2 | Bromoform | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/7/2006 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/7/2006 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/7/2006 | 8260 | VOCs | 67-64-1 | Acetone | 5 | µg/L | U | | 5 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/7/2006 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 1 | µg/L | J | I | 2 | µg/L | 1 | High Surrogate recovery + Result uncertain below the calibration range |
| SH-27R / 09-29-06 | 0609122-10 | 10/7/2006 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/7/2006 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/7/2006 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/7/2006 | 8260 | VOCs | 74-87-3 | Chloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/7/2006 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/7/2006 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/7/2006 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/7/2006 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/7/2006 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/7/2006 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low, H = High, I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Anal_Date | Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-28R / 09-29-06 | 0609122-11 | 10/7/2006 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/7/2006 | 8260 | VOCs | 67-66-3 | Chloroform | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/7/2006 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/7/2006 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/7/2006 | 8260 | VOCs | 71-43-2 | Benzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/7/2006 | 8260 | VOCs | 74-83-9 | Bromomethane | 2 | µg/L | UJ | I | 2 | µg/L | 1 | Initial Calibration outside criteria |
| SH-28R / 09-29-06 | 0609122-11 | 10/7/2006 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/7/2006 | 8260 | VOCs | 79-01-6 | Trichloroethene | 1.3 | µg/L | J | I | 2 | µg/L | 1 | High Surrogate recovery + Result uncertain below the calibration range |
| SH-28R / 09-29-06 | 0609122-11 | 10/7/2006 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/7/2006 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/7/2006 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/7/2006 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/7/2006 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/7/2006 | 8260 | VOCs | 108-88-3 | Toluene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/7/2006 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/7/2006 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/7/2006 | 8260 | VOCs | 75-00-3 | Chloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/7/2006 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/7/2006 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/7/2006 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/7/2006 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/7/2006 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/7/2006 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4 | µg/L | U | | 4 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/7/2006 | 8260 | VOCs | 95-47-6 | o-Xylene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/7/2006 | 8260 | VOCs | 100-42-5 | Styrene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/7/2006 | 8260 | VOCs | 75-25-2 | Bromoform | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/7/2006 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/7/2006 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/7/2006 | 8260 | VOCs | 67-64-1 | Acetone | 5 | µg/L | U | | 5 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/7/2006 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/7/2006 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/7/2006 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/7/2006 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-510 / 10-02-06 | 0609122-12 | 10/3/2006 | 8260 | VOCs | 74-87-3 | Chloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-510 / 10-02-06 | 0609122-12 | 10/3/2006 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| TB-510 / 10-02-06 | 0609122-12 | 10/3/2006 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-510 / 10-02-06 | 0609122-12 | 10/3/2006 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-510 / 10-02-06 | 0609122-12 | 10/3/2006 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-510 / 10-02-06 | 0609122-12 | 10/3/2006 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-510 / 10-02-06 | 0609122-12 | 10/3/2006 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-510 / 10-02-06 | 0609122-12 | 10/3/2006 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-510 / 10-02-06 | 0609122-12 | 10/3/2006 | 8260 | VOCs | 67-66-3 | Chloroform | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| TB-510 / 10-02-06 | 0609122-12 | 10/3/2006 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-510 / 10-02-06 | 0609122-12 | 10/3/2006 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-510 / 10-02-06 | 0609122-12 | 10/3/2006 | 8260 | VOCs | 71-43-2 | Benzene | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| TB-510 / 10-02-06 | 0609122-12 | 10/3/2006 | 8260 | VOCs | 74-83-9 | Bromomethane | 0.2 | µg/L | UJ | I | 0.2 | µg/L | 1 | Initial Calibration outside criteria |
| TB-510 / 10-02-06 | 0609122-12 | 10/3/2006 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| TB-510 / 10-02-06 | 0609122-12 | 10/3/2006 | 8260 | VOCs | 79-01-6 | Trichloroethene | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| TB-510 / 10-02-06 | 0609122-12 | 10/3/2006 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| TB-510 / 10-02-06 | 0609122-12 | 10/3/2006 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low, H = High, I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Anal_Date | Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TB-510 / 10-02-06 | 0609122-12 | 10/3/2006 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-510 / 10-02-06 | 0609122-12 | 10/3/2006 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-510 / 10-02-06 | 0609122-12 | 10/3/2006 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| TB-510 / 10-02-06 | 0609122-12 | 10/3/2006 | 8260 | VOCs | 108-88-3 | Toluene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-510 / 10-02-06 | 0609122-12 | 10/3/2006 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| TB-510 / 10-02-06 | 0609122-12 | 10/3/2006 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| TB-510 / 10-02-06 | 0609122-12 | 10/3/2006 | 8260 | VOCs | 75-00-3 | Chloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-510 / 10-02-06 | 0609122-12 | 10/3/2006 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-510 / 10-02-06 | 0609122-12 | 10/3/2006 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| TB-510 / 10-02-06 | 0609122-12 | 10/3/2006 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| TB-510 / 10-02-06 | 0609122-12 | 10/3/2006 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-510 / 10-02-06 | 0609122-12 | 10/3/2006 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-510 / 10-02-06 | 0609122-12 | 10/3/2006 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4 | µg/L | U | | 4 | µg/L | 1 | |
| TB-510 / 10-02-06 | 0609122-12 | 10/3/2006 | 8260 | VOCs | 95-47-6 | o-Xylene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-510 / 10-02-06 | 0609122-12 | 10/3/2006 | 8260 | VOCs | 100-42-5 | Styrene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-510 / 10-02-06 | 0609122-12 | 10/3/2006 | 8260 | VOCs | 75-25-2 | Bromoform | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| TB-510 / 10-02-06 | 0609122-12 | 10/3/2006 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| TB-510 / 10-02-06 | 0609122-12 | 10/3/2006 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-510 / 10-02-06 | 0609122-12 | 10/3/2006 | 8260 | VOCs | 67-64-1 | Acetone | 5 | µg/L | U | | 5 | µg/L | 1 | |
| TB-510 / 10-02-06 | 0609122-12 | 10/3/2006 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-510 / 10-02-06 | 0609122-12 | 10/3/2006 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-510 / 10-02-06 | 0609122-12 | 10/3/2006 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-510 / 10-02-06 | 0609122-12 | 10/3/2006 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/7/2006 | 8260 | VOCs | 74-87-3 | Chloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/7/2006 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/7/2006 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/7/2006 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/7/2006 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/7/2006 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/7/2006 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/7/2006 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/7/2006 | 8260 | VOCs | 67-66-3 | Chloroform | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/7/2006 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/7/2006 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/7/2006 | 8260 | VOCs | 71-43-2 | Benzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/7/2006 | 8260 | VOCs | 74-83-9 | Bromomethane | 2 | µg/L | UJ | I | 2 | µg/L | 1 | Initial Calibration outside criteria |
| SH-05D / 10-02-06 | 0609122-13 | 10/7/2006 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/7/2006 | 8260 | VOCs | 79-01-6 | Trichloroethene | 2.1 | µg/L | J | H | 2 | µg/L | 1 | High Surrogate recovery |
| SH-05D / 10-02-06 | 0609122-13 | 10/7/2006 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/7/2006 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/7/2006 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/7/2006 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/7/2006 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/7/2006 | 8260 | VOCs | 108-88-3 | Toluene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/7/2006 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/7/2006 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/7/2006 | 8260 | VOCs | 75-00-3 | Chloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/7/2006 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/7/2006 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/7/2006 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/7/2006 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low, H = High, I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Anal_Date | Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-05D / 10-02-06 | 0609122-13 | 10/7/2006 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/7/2006 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4 | µg/L | U | | 4 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/7/2006 | 8260 | VOCs | 95-47-6 | o-Xylene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/7/2006 | 8260 | VOCs | 100-42-5 | Styrene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/7/2006 | 8260 | VOCs | 75-25-2 | Bromoform | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/7/2006 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/7/2006 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/7/2006 | 8260 | VOCs | 67-64-1 | Acetone | 5 | µg/L | U | | 5 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/7/2006 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/7/2006 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/7/2006 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/7/2006 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/3/2006 | 8260 | VOCs | 74-87-3 | Chloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/3/2006 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/3/2006 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/3/2006 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/3/2006 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/3/2006 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/3/2006 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/3/2006 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/3/2006 | 8260 | VOCs | 67-66-3 | Chloroform | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/3/2006 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/3/2006 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/3/2006 | 8260 | VOCs | 71-43-2 | Benzene | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/3/2006 | 8260 | VOCs | 74-83-9 | Bromomethane | 0.2 | µg/L | UJ | I | 0.2 | µg/L | 1 | Initial Calibration outside criteria |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/3/2006 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/3/2006 | 8260 | VOCs | 79-01-6 | Trichloroethene | 1.2 | µg/L | | | 0.2 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/3/2006 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/3/2006 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/3/2006 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/3/2006 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/3/2006 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/3/2006 | 8260 | VOCs | 108-88-3 | Toluene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/3/2006 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/3/2006 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/3/2006 | 8260 | VOCs | 75-00-3 | Chloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/3/2006 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/3/2006 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/3/2006 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/3/2006 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/3/2006 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/3/2006 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4 | µg/L | U | | 4 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/3/2006 | 8260 | VOCs | 95-47-6 | o-Xylene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/3/2006 | 8260 | VOCs | 100-42-5 | Styrene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/3/2006 | 8260 | VOCs | 75-25-2 | Bromoform | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/3/2006 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/3/2006 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/3/2006 | 8260 | VOCs | 67-64-1 | Acetone | 5 | µg/L | U | | 5 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/3/2006 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/3/2006 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/3/2006 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low, H = High, I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Anal_Date | Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-06R-A / 10-02-06 | 0609122-14 | 10/3/2006 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/3/2006 | 8260 | VOCs | 74-87-3 | Chloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/3/2006 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/3/2006 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/3/2006 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/3/2006 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/3/2006 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/3/2006 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/3/2006 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/3/2006 | 8260 | VOCs | 67-66-3 | Chloroform | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/3/2006 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/3/2006 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/3/2006 | 8260 | VOCs | 71-43-2 | Benzene | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/3/2006 | 8260 | VOCs | 74-83-9 | Bromomethane | 0.2 | µg/L | UJ | I | 0.2 | µg/L | 1 | Initial Calibration outside criteria |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/3/2006 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/3/2006 | 8260 | VOCs | 79-01-6 | Trichloroethene | 0.44 | µg/L | | | 0.2 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/3/2006 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/3/2006 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/3/2006 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/3/2006 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/3/2006 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/3/2006 | 8260 | VOCs | 108-88-3 | Toluene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/3/2006 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/3/2006 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/3/2006 | 8260 | VOCs | 75-00-3 | Chloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/3/2006 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/3/2006 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/3/2006 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/3/2006 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/3/2006 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/3/2006 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4 | µg/L | U | | 4 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/3/2006 | 8260 | VOCs | 95-47-6 | o-Xylene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/3/2006 | 8260 | VOCs | 100-42-5 | Styrene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/3/2006 | 8260 | VOCs | 75-25-2 | Bromoform | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/3/2006 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/3/2006 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/3/2006 | 8260 | VOCs | 67-64-1 | Acetone | 5 | µg/L | U | | 5 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/3/2006 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/3/2006 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/3/2006 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/3/2006 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/3/2006 | 8260 | VOCs | 74-87-3 | Chloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/3/2006 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/3/2006 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/3/2006 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/3/2006 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/3/2006 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/3/2006 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/3/2006 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/3/2006 | 8260 | VOCs | 67-66-3 | Chloroform | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/3/2006 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low, H = High, I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Anal_Date | Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-14S / 10-02-06 | 0609122-16 | 10/3/2006 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/3/2006 | 8260 | VOCs | 71-43-2 | Benzene | 0.61 | µg/L | | | 0.2 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/3/2006 | 8260 | VOCs | 74-83-9 | Bromomethane | 0.2 | µg/L | UJ | I | 0.2 | µg/L | 1 | Initial Calibration outside criteria |
| SH-14S / 10-02-06 | 0609122-16 | 10/3/2006 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/3/2006 | 8260 | VOCs | 79-01-6 | Trichloroethene | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/3/2006 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/3/2006 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/3/2006 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/3/2006 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/3/2006 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/3/2006 | 8260 | VOCs | 108-88-3 | Toluene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/3/2006 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/3/2006 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/3/2006 | 8260 | VOCs | 75-00-3 | Chloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/3/2006 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/3/2006 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/3/2006 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/3/2006 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/3/2006 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/3/2006 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4 | µg/L | U | | 4 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/3/2006 | 8260 | VOCs | 95-47-6 | o-Xylene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/3/2006 | 8260 | VOCs | 100-42-5 | Styrene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/3/2006 | 8260 | VOCs | 75-25-2 | Bromoform | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/3/2006 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/3/2006 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/3/2006 | 8260 | VOCs | 67-64-1 | Acetone | 5 | µg/L | U | | 5 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/3/2006 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/3/2006 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/3/2006 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/3/2006 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/3/2006 | 8260 | VOCs | 74-87-3 | Chloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/3/2006 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/3/2006 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/3/2006 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/3/2006 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/3/2006 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/3/2006 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/3/2006 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/3/2006 | 8260 | VOCs | 67-66-3 | Chloroform | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/3/2006 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/3/2006 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/3/2006 | 8260 | VOCs | 71-43-2 | Benzene | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/3/2006 | 8260 | VOCs | 74-83-9 | Bromomethane | 0.2 | µg/L | UJ | I | 0.2 | µg/L | 1 | Initial Calibration outside criteria |
| SH-14D / 10-02-06 | 0609122-17 | 10/3/2006 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/3/2006 | 8260 | VOCs | 79-01-6 | Trichloroethene | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/3/2006 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/3/2006 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/3/2006 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/3/2006 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/3/2006 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/3/2006 | 8260 | VOCs | 108-88-3 | Toluene | 2 | µg/L | U | | 2 | µg/L | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low, H = High, I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Anal_Date | Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-14D / 10-02-06 | 0609122-17 | 10/3/2006 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/3/2006 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/3/2006 | 8260 | VOCs | 75-00-3 | Chloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/3/2006 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/3/2006 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/3/2006 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/3/2006 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/3/2006 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/3/2006 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4 | µg/L | U | | 4 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/3/2006 | 8260 | VOCs | 95-47-6 | o-Xylene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/3/2006 | 8260 | VOCs | 100-42-5 | Styrene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/3/2006 | 8260 | VOCs | 75-25-2 | Bromoform | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/3/2006 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/3/2006 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/3/2006 | 8260 | VOCs | 67-64-1 | Acetone | 5 | µg/L | U | | 5 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/3/2006 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/3/2006 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/3/2006 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/3/2006 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/3/2006 | 8260 | VOCs | 74-87-3 | Chloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/3/2006 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/3/2006 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/3/2006 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/3/2006 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/3/2006 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/3/2006 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/3/2006 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/3/2006 | 8260 | VOCs | 67-66-3 | Chloroform | 0.61 | µg/L | | | 0.2 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/3/2006 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/3/2006 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/3/2006 | 8260 | VOCs | 71-43-2 | Benzene | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/3/2006 | 8260 | VOCs | 74-83-9 | Bromomethane | 0.2 | µg/L | UJ | I | 0.2 | µg/L | 1 | Initial Calibration outside criteria |
| SH-27D / 10-02-06 | 0609122-18 | 10/3/2006 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/3/2006 | 8260 | VOCs | 79-01-6 | Trichloroethene | 1.5 | µg/L | | | 0.2 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/3/2006 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/3/2006 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/3/2006 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/3/2006 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/3/2006 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/3/2006 | 8260 | VOCs | 108-88-3 | Toluene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/3/2006 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/3/2006 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/3/2006 | 8260 | VOCs | 75-00-3 | Chloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/3/2006 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/3/2006 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/3/2006 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/3/2006 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/3/2006 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/3/2006 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4 | µg/L | U | | 4 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/3/2006 | 8260 | VOCs | 95-47-6 | o-Xylene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/3/2006 | 8260 | VOCs | 100-42-5 | Styrene | 2 | µg/L | U | | 2 | µg/L | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low, H = High, I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Anal_Date | Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-27D / 10-02-06 | 0609122-18 | 10/3/2006 | 8260 | VOCs | 75-25-2 | Bromoform | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/3/2006 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/3/2006 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/3/2006 | 8260 | VOCs | 67-64-1 | Acetone | 5 | µg/L | U | | 5 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/3/2006 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/3/2006 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/3/2006 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/3/2006 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/3/2006 | 8260 | VOCs | 74-87-3 | Chloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/3/2006 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/3/2006 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/3/2006 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/3/2006 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/3/2006 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/3/2006 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/3/2006 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/3/2006 | 8260 | VOCs | 67-66-3 | Chloroform | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/3/2006 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/3/2006 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/3/2006 | 8260 | VOCs | 71-43-2 | Benzene | 0.67 | µg/L | | | 0.2 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/3/2006 | 8260 | VOCs | 74-83-9 | Bromomethane | 0.2 | µg/L | UJ | I | 0.2 | µg/L | 1 | Initial Calibration outside criteria |
| OW-213 / 10-02-06 | 0609122-19 | 10/3/2006 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/3/2006 | 8260 | VOCs | 79-01-6 | Trichloroethene | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/3/2006 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/3/2006 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/3/2006 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/3/2006 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/3/2006 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/3/2006 | 8260 | VOCs | 108-88-3 | Toluene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/3/2006 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/3/2006 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/3/2006 | 8260 | VOCs | 75-00-3 | Chloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/3/2006 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/3/2006 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/3/2006 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/3/2006 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/3/2006 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/3/2006 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4 | µg/L | U | | 4 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/3/2006 | 8260 | VOCs | 95-47-6 | o-Xylene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/3/2006 | 8260 | VOCs | 100-42-5 | Styrene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/3/2006 | 8260 | VOCs | 75-25-2 | Bromoform | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/3/2006 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/3/2006 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/3/2006 | 8260 | VOCs | 67-64-1 | Acetone | 5 | µg/L | U | | 5 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/3/2006 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/3/2006 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/3/2006 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/3/2006 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-511 / 10-03-06 | 0609122-20 | 10/7/2006 | 8260 | VOCs | 74-87-3 | Chloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-511 / 10-03-06 | 0609122-20 | 10/7/2006 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-511 / 10-03-06 | 0609122-20 | 10/7/2006 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low, H = High, I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Anal_Date | Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TB-511 / 10-03-06 | 0609122-20 | 10/7/2006 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-511 / 10-03-06 | 0609122-20 | 10/7/2006 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-511 / 10-03-06 | 0609122-20 | 10/7/2006 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-511 / 10-03-06 | 0609122-20 | 10/7/2006 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-511 / 10-03-06 | 0609122-20 | 10/7/2006 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-511 / 10-03-06 | 0609122-20 | 10/7/2006 | 8260 | VOCs | 67-66-3 | Chloroform | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-511 / 10-03-06 | 0609122-20 | 10/7/2006 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-511 / 10-03-06 | 0609122-20 | 10/7/2006 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-511 / 10-03-06 | 0609122-20 | 10/7/2006 | 8260 | VOCs | 71-43-2 | Benzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-511 / 10-03-06 | 0609122-20 | 10/7/2006 | 8260 | VOCs | 74-83-9 | Bromomethane | 2 | µg/L | UJ | I | 2 | µg/L | 1 | Initial Calibration outside criteria |
| TB-511 / 10-03-06 | 0609122-20 | 10/7/2006 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-511 / 10-03-06 | 0609122-20 | 10/7/2006 | 8260 | VOCs | 79-01-6 | Trichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-511 / 10-03-06 | 0609122-20 | 10/7/2006 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-511 / 10-03-06 | 0609122-20 | 10/7/2006 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-511 / 10-03-06 | 0609122-20 | 10/7/2006 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-511 / 10-03-06 | 0609122-20 | 10/7/2006 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-511 / 10-03-06 | 0609122-20 | 10/7/2006 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-511 / 10-03-06 | 0609122-20 | 10/7/2006 | 8260 | VOCs | 108-88-3 | Toluene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-511 / 10-03-06 | 0609122-20 | 10/7/2006 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-511 / 10-03-06 | 0609122-20 | 10/7/2006 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-511 / 10-03-06 | 0609122-20 | 10/7/2006 | 8260 | VOCs | 75-00-3 | Chloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-511 / 10-03-06 | 0609122-20 | 10/7/2006 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-511 / 10-03-06 | 0609122-20 | 10/7/2006 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-511 / 10-03-06 | 0609122-20 | 10/7/2006 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-511 / 10-03-06 | 0609122-20 | 10/7/2006 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-511 / 10-03-06 | 0609122-20 | 10/7/2006 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-511 / 10-03-06 | 0609122-20 | 10/7/2006 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4 | µg/L | U | | 4 | µg/L | 1 | |
| TB-511 / 10-03-06 | 0609122-20 | 10/7/2006 | 8260 | VOCs | 95-47-6 | o-Xylene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-511 / 10-03-06 | 0609122-20 | 10/7/2006 | 8260 | VOCs | 100-42-5 | Styrene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-511 / 10-03-06 | 0609122-20 | 10/7/2006 | 8260 | VOCs | 75-25-2 | Bromoform | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-511 / 10-03-06 | 0609122-20 | 10/7/2006 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-511 / 10-03-06 | 0609122-20 | 10/7/2006 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-511 / 10-03-06 | 0609122-20 | 10/7/2006 | 8260 | VOCs | 67-64-1 | Acetone | 5 | µg/L | U | | 5 | µg/L | 1 | Negated due to Blank Action |
| TB-511 / 10-03-06 | 0609122-20 | 10/7/2006 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-511 / 10-03-06 | 0609122-20 | 10/7/2006 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-511 / 10-03-06 | 0609122-20 | 10/7/2006 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| TB-511 / 10-03-06 | 0609122-20 | 10/7/2006 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/7/2006 | 8260 | VOCs | 74-87-3 | Chloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/7/2006 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/7/2006 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/7/2006 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/7/2006 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/7/2006 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/7/2006 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/7/2006 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/7/2006 | 8260 | VOCs | 67-66-3 | Chloroform | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/7/2006 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/7/2006 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/7/2006 | 8260 | VOCs | 71-43-2 | Benzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/7/2006 | 8260 | VOCs | 74-83-9 | Bromomethane | 2 | µg/L | UJ | I | 2 | µg/L | 1 | Initial Calibration outside criteria |
| SH-03D / 10-03-06 | 0609122-21 | 10/7/2006 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |

| Smpl | Lab_ID | Anal_Date | Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-03D / 10-03-06 | 0609122-21 | 10/7/2006 | 8260 | VOCs | 79-01-6 | Trichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/7/2006 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/7/2006 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/7/2006 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/7/2006 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/7/2006 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/7/2006 | 8260 | VOCs | 108-88-3 | Toluene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/7/2006 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/7/2006 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/7/2006 | 8260 | VOCs | 75-00-3 | Chloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/7/2006 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/7/2006 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/7/2006 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/7/2006 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/7/2006 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/7/2006 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4 | µg/L | U | | 4 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/7/2006 | 8260 | VOCs | 95-47-6 | o-Xylene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/7/2006 | 8260 | VOCs | 100-42-5 | Styrene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/7/2006 | 8260 | VOCs | 75-25-2 | Bromoform | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/7/2006 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/7/2006 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/7/2006 | 8260 | VOCs | 67-64-1 | Acetone | 5 | µg/L | U | | 5 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/7/2006 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/7/2006 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/7/2006 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/7/2006 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/7/2006 | 8260 | VOCs | 74-87-3 | Chloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/7/2006 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/7/2006 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/7/2006 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/7/2006 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/7/2006 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/7/2006 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/7/2006 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/7/2006 | 8260 | VOCs | 67-66-3 | Chloroform | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/7/2006 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/7/2006 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/7/2006 | 8260 | VOCs | 71-43-2 | Benzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/7/2006 | 8260 | VOCs | 74-83-9 | Bromomethane | 2 | µg/L | UJ | I | 2 | µg/L | 1 | Initial Calibration outside criteria |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/7/2006 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/7/2006 | 8260 | VOCs | 79-01-6 | Trichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/7/2006 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/7/2006 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/7/2006 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/7/2006 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/7/2006 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/7/2006 | 8260 | VOCs | 108-88-3 | Toluene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/7/2006 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/7/2006 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/7/2006 | 8260 | VOCs | 75-00-3 | Chloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/7/2006 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2 | µg/L | U | | 2 | µg/L | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low, H = High, I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Anal_Date | Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-05R-A / 10-03-06 | 0609122-22 | 10/7/2006 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/7/2006 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/7/2006 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/7/2006 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/7/2006 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4 | µg/L | U | | 4 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/7/2006 | 8260 | VOCs | 95-47-6 | o-Xylene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/7/2006 | 8260 | VOCs | 100-42-5 | Styrene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/7/2006 | 8260 | VOCs | 75-25-2 | Bromoform | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/7/2006 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/7/2006 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/7/2006 | 8260 | VOCs | 67-64-1 | Acetone | 5 | µg/L | U | | 5 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/7/2006 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/7/2006 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/7/2006 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/7/2006 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/7/2006 | 8260 | VOCs | 74-87-3 | Chloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/7/2006 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/7/2006 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/7/2006 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/7/2006 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/7/2006 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/7/2006 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/7/2006 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/7/2006 | 8260 | VOCs | 67-66-3 | Chloroform | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/7/2006 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/7/2006 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/7/2006 | 8260 | VOCs | 71-43-2 | Benzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/7/2006 | 8260 | VOCs | 74-83-9 | Bromomethane | 2 | µg/L | UJ | I | 2 | µg/L | 1 | Initial Calibration outside criteria |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/7/2006 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/7/2006 | 8260 | VOCs | 79-01-6 | Trichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/7/2006 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/7/2006 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/7/2006 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/7/2006 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/7/2006 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/7/2006 | 8260 | VOCs | 108-88-3 | Toluene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/7/2006 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/7/2006 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/7/2006 | 8260 | VOCs | 75-00-3 | Chloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/7/2006 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/7/2006 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/7/2006 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/7/2006 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/7/2006 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/7/2006 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4 | µg/L | U | | 4 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/7/2006 | 8260 | VOCs | 95-47-6 | o-Xylene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/7/2006 | 8260 | VOCs | 100-42-5 | Styrene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/7/2006 | 8260 | VOCs | 75-25-2 | Bromoform | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/7/2006 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/7/2006 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/7/2006 | 8260 | VOCs | 67-64-1 | Acetone | 5 | µg/L | U | | 5 | µg/L | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low, H = High, I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Anal_Date | Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-05R-B / 10-03-06 | 0609122-23 | 10/7/2006 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/7/2006 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/7/2006 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/7/2006 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/7/2006 | 8260 | VOCs | 74-87-3 | Chloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/7/2006 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/7/2006 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/7/2006 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/7/2006 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/7/2006 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/7/2006 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/7/2006 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/7/2006 | 8260 | VOCs | 67-66-3 | Chloroform | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/7/2006 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/7/2006 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/7/2006 | 8260 | VOCs | 71-43-2 | Benzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/7/2006 | 8260 | VOCs | 74-83-9 | Bromomethane | 2 | µg/L | UJ | I | 2 | µg/L | 1 | Initial Calibration outside criteria |
| OW-213A / 10-03-06 | 0609122-24 | 10/7/2006 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/7/2006 | 8260 | VOCs | 79-01-6 | Trichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/7/2006 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/7/2006 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/7/2006 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/7/2006 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/7/2006 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/7/2006 | 8260 | VOCs | 108-88-3 | Toluene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/7/2006 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/7/2006 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/7/2006 | 8260 | VOCs | 75-00-3 | Chloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/7/2006 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/7/2006 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/7/2006 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/7/2006 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/7/2006 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/7/2006 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4 | µg/L | U | | 4 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/7/2006 | 8260 | VOCs | 95-47-6 | o-Xylene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/7/2006 | 8260 | VOCs | 100-42-5 | Styrene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/7/2006 | 8260 | VOCs | 75-25-2 | Bromoform | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/7/2006 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/7/2006 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/7/2006 | 8260 | VOCs | 67-64-1 | Acetone | 5 | µg/L | U | | 5 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/7/2006 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/7/2006 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2 | µg/L | U | | 2 | µg/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/7/2006 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2.8 | µg/L | J | H | 2 | µg/L | 1 | High Surrogate recovery |
| OW-213A / 10-03-06 | 0609122-24 | 10/7/2006 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| SH-28D / 09-27-06 | 0609122-02 | 10/9/2006 | PAH SI | SVOCs | 91-20-3 | Naphthalene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-28D / 09-27-06 | 0609122-02 | 10/9/2006 | PAH SI | SVOCs | 91-57-6 | 2-Methylnaphthalene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-28D / 09-27-06 | 0609122-02 | 10/9/2006 | PAH SI | SVOCs | 129-00-0 | Pyrene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-28D / 09-27-06 | 0609122-02 | 10/9/2006 | PAH SI | SVOCs | 56-55-3 | Benz[a]anthracene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-28D / 09-27-06 | 0609122-02 | 10/9/2006 | PAH SI | SVOCs | 218-01-9 | Chrysene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-28D / 09-27-06 | 0609122-02 | 10/9/2006 | PAH SI | SVOCs | 117-81-7 | bis(2-Ethylhexyl)phthalate | 1000 | ng/L | U | | 1000 | ng/L | 1 | Negated due to Blank Action |
| SH-28D / 09-27-06 | 0609122-02 | 10/9/2006 | PAH SI | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low, H = High, I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Anal_Date | Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-28D / 09-27-06 | 0609122-02 | 10/9/2006 | PAH SI | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-28D / 09-27-06 | 0609122-02 | 10/9/2006 | PAH SI | SVOCs | 50-32-8 | Benzo[a]pyrene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-28D / 09-27-06 | 0609122-02 | 10/9/2006 | PAH SI | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-28D / 09-27-06 | 0609122-02 | 10/9/2006 | PAH SI | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 2.5 | ng/L | J | I | 10 | ng/L | 1 | Result uncertain below the calibration range |
| SH-28D / 09-27-06 | 0609122-02 | 10/9/2006 | PAH SI | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-28D / 09-27-06 | 0609122-02 | 10/9/2006 | PAH SI | SVOCs | 208-96-8 | Acenaphthylene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-28D / 09-27-06 | 0609122-02 | 10/9/2006 | PAH SI | SVOCs | 83-32-9 | Acenaphthene | 1.4 | ng/L | J | I | 10 | ng/L | 1 | Result uncertain below the calibration range |
| SH-28D / 09-27-06 | 0609122-02 | 10/9/2006 | PAH SI | SVOCs | 86-73-7 | Fluorene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-28D / 09-27-06 | 0609122-02 | 10/9/2006 | PAH SI | SVOCs | 85-01-8 | Phenanthrene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-28D / 09-27-06 | 0609122-02 | 10/9/2006 | PAH SI | SVOCs | 120-12-7 | Anthracene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-28D / 09-27-06 | 0609122-02 | 10/9/2006 | PAH SI | SVOCs | 86-74-8 | Carbazole | 1.4 | ng/L | J | I | 10 | ng/L | 1 | Result uncertain below the calibration range |
| SH-28D / 09-27-06 | 0609122-02 | 10/9/2006 | PAH SI | SVOCs | 206-44-0 | Fluoranthene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-13S / 09-28-06 | 0609122-04 | 10/9/2006 | PAH SI | SVOCs | 91-20-3 | Naphthalene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-13S / 09-28-06 | 0609122-04 | 10/9/2006 | PAH SI | SVOCs | 91-57-6 | 2-Methylnaphthalene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-13S / 09-28-06 | 0609122-04 | 10/9/2006 | PAH SI | SVOCs | 129-00-0 | Pyrene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-13S / 09-28-06 | 0609122-04 | 10/9/2006 | PAH SI | SVOCs | 56-55-3 | Benz[a]anthracene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-13S / 09-28-06 | 0609122-04 | 10/9/2006 | PAH SI | SVOCs | 218-01-9 | Chrysene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-13S / 09-28-06 | 0609122-04 | 10/9/2006 | PAH SI | SVOCs | 117-81-7 | bis(2-Ethylhexyl)phthalate | 1100 | ng/L | U | | 1100 | ng/L | 1 | Negated due to Blank Action |
| SH-13S / 09-28-06 | 0609122-04 | 10/9/2006 | PAH SI | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-13S / 09-28-06 | 0609122-04 | 10/9/2006 | PAH SI | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-13S / 09-28-06 | 0609122-04 | 10/9/2006 | PAH SI | SVOCs | 50-32-8 | Benzo[a]pyrene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-13S / 09-28-06 | 0609122-04 | 10/9/2006 | PAH SI | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-13S / 09-28-06 | 0609122-04 | 10/9/2006 | PAH SI | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 2.9 | ng/L | J | I | 11 | ng/L | 1 | Result uncertain below the calibration range |
| SH-13S / 09-28-06 | 0609122-04 | 10/9/2006 | PAH SI | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 13 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-13S / 09-28-06 | 0609122-04 | 10/9/2006 | PAH SI | SVOCs | 208-96-8 | Acenaphthylene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-13S / 09-28-06 | 0609122-04 | 10/9/2006 | PAH SI | SVOCs | 83-32-9 | Acenaphthene | 1.7 | ng/L | J | I | 11 | ng/L | 1 | Result uncertain below the calibration range |
| SH-13S / 09-28-06 | 0609122-04 | 10/9/2006 | PAH SI | SVOCs | 86-73-7 | Fluorene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-13S / 09-28-06 | 0609122-04 | 10/9/2006 | PAH SI | SVOCs | 85-01-8 | Phenanthrene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-13S / 09-28-06 | 0609122-04 | 10/9/2006 | PAH SI | SVOCs | 120-12-7 | Anthracene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-13S / 09-28-06 | 0609122-04 | 10/9/2006 | PAH SI | SVOCs | 86-74-8 | Carbazole | 2.2 | ng/L | J | I | 11 | ng/L | 1 | Result uncertain below the calibration range |
| SH-13S / 09-28-06 | 0609122-04 | 10/9/2006 | PAH SI | SVOCs | 206-44-0 | Fluoranthene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-19R / 09-28-06 | 0609122-05 | 10/9/2006 | PAH SI | SVOCs | 91-20-3 | Naphthalene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-19R / 09-28-06 | 0609122-05 | 10/9/2006 | PAH SI | SVOCs | 91-57-6 | 2-Methylnaphthalene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-19R / 09-28-06 | 0609122-05 | 10/9/2006 | PAH SI | SVOCs | 129-00-0 | Pyrene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-19R / 09-28-06 | 0609122-05 | 10/9/2006 | PAH SI | SVOCs | 56-55-3 | Benz[a]anthracene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-19R / 09-28-06 | 0609122-05 | 10/9/2006 | PAH SI | SVOCs | 218-01-9 | Chrysene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-19R / 09-28-06 | 0609122-05 | 10/9/2006 | PAH SI | SVOCs | 117-81-7 | bis(2-Ethylhexyl)phthalate | 1000 | ng/L | U | | 1000 | ng/L | 1 | Negated due to Blank Action |
| SH-19R / 09-28-06 | 0609122-05 | 10/9/2006 | PAH SI | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-19R / 09-28-06 | 0609122-05 | 10/9/2006 | PAH SI | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-19R / 09-28-06 | 0609122-05 | 10/9/2006 | PAH SI | SVOCs | 50-32-8 | Benzo[a]pyrene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-19R / 09-28-06 | 0609122-05 | 10/9/2006 | PAH SI | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-19R / 09-28-06 | 0609122-05 | 10/9/2006 | PAH SI | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/9/2006 | PAH SI | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-19R / 09-28-06 | 0609122-05 | 10/9/2006 | PAH SI | SVOCs | 208-96-8 | Acenaphthylene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-19R / 09-28-06 | 0609122-05 | 10/9/2006 | PAH SI | SVOCs | 83-32-9 | Acenaphthene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/9/2006 | PAH SI | SVOCs | 86-73-7 | Fluorene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/9/2006 | PAH SI | SVOCs | 85-01-8 | Phenanthrene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-19R / 09-28-06 | 0609122-05 | 10/9/2006 | PAH SI | SVOCs | 120-12-7 | Anthracene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| SH-19R / 09-28-06 | 0609122-05 | 10/9/2006 | PAH SI | SVOCs | 86-74-8 | Carbazole | 1 | ng/L | J | I | 10 | ng/L | 1 | Result uncertain below the calibration range |
| SH-19R / 09-28-06 | 0609122-05 | 10/9/2006 | PAH SI | SVOCs | 206-44-0 | Fluoranthene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-24R / 09-28-06 | 0609122-06 | 10/9/2006 | PAH SI | SVOCs | 91-20-3 | Naphthalene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |

| Smpl | Lab_ID | Anal_Date | Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-24R / 09-28-06 | 0609122-06 | 10/9/2006 | PAH SI | SVOCs | 91-57-6 | 2-Methylnaphthalene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-24R / 09-28-06 | 0609122-06 | 10/9/2006 | PAH SI | SVOCs | 129-00-0 | Pyrene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-24R / 09-28-06 | 0609122-06 | 10/9/2006 | PAH SI | SVOCs | 56-55-3 | Benz[a]anthracene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-24R / 09-28-06 | 0609122-06 | 10/9/2006 | PAH SI | SVOCs | 218-01-9 | Chrysene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-24R / 09-28-06 | 0609122-06 | 10/9/2006 | PAH SI | SVOCs | 117-81-7 | bis(2-Ethylhexyl)phthalate | 1100 | ng/L | U | | 1100 | ng/L | 1 | Negated due to Blank Action |
| SH-24R / 09-28-06 | 0609122-06 | 10/9/2006 | PAH SI | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-24R / 09-28-06 | 0609122-06 | 10/9/2006 | PAH SI | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-24R / 09-28-06 | 0609122-06 | 10/9/2006 | PAH SI | SVOCs | 50-32-8 | Benzo[a]pyrene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-24R / 09-28-06 | 0609122-06 | 10/9/2006 | PAH SI | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-24R / 09-28-06 | 0609122-06 | 10/9/2006 | PAH SI | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 1.2 | ng/L | J | I | 11 | ng/L | 1 | Result uncertain below the calibration range |
| SH-24R / 09-28-06 | 0609122-06 | 10/9/2006 | PAH SI | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-24R / 09-28-06 | 0609122-06 | 10/9/2006 | PAH SI | SVOCs | 208-96-8 | Acenaphthylene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-24R / 09-28-06 | 0609122-06 | 10/9/2006 | PAH SI | SVOCs | 83-32-9 | Acenaphthene | 1.6 | ng/L | J | I | 11 | ng/L | 1 | Result uncertain below the calibration range |
| SH-24R / 09-28-06 | 0609122-06 | 10/9/2006 | PAH SI | SVOCs | 86-73-7 | Fluorene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-24R / 09-28-06 | 0609122-06 | 10/9/2006 | PAH SI | SVOCs | 85-01-8 | Phenanthrene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-24R / 09-28-06 | 0609122-06 | 10/9/2006 | PAH SI | SVOCs | 120-12-7 | Anthracene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-24R / 09-28-06 | 0609122-06 | 10/9/2006 | PAH SI | SVOCs | 86-74-8 | Carbazole | 11 | ng/L | U | | 11 | ng/L | 1 | |
| SH-24R / 09-28-06 | 0609122-06 | 10/9/2006 | PAH SI | SVOCs | 206-44-0 | Fluoranthene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-02R / 09-29-06 | 0609122-08 | 10/9/2006 | PAH SI | SVOCs | 91-20-3 | Naphthalene | 24 | ng/L | | | 10 | ng/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/9/2006 | PAH SI | SVOCs | 91-57-6 | 2-Methylnaphthalene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-02R / 09-29-06 | 0609122-08 | 10/9/2006 | PAH SI | SVOCs | 129-00-0 | Pyrene | 59 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-02R / 09-29-06 | 0609122-08 | 10/9/2006 | PAH SI | SVOCs | 56-55-3 | Benz[a]anthracene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-02R / 09-29-06 | 0609122-08 | 10/9/2006 | PAH SI | SVOCs | 218-01-9 | Chrysene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-02R / 09-29-06 | 0609122-08 | 10/9/2006 | PAH SI | SVOCs | 117-81-7 | bis(2-Ethylhexyl)phthalate | 1000 | ng/L | U | | 1000 | ng/L | 1 | Negated due to Blank Action |
| SH-02R / 09-29-06 | 0609122-08 | 10/9/2006 | PAH SI | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-02R / 09-29-06 | 0609122-08 | 10/9/2006 | PAH SI | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-02R / 09-29-06 | 0609122-08 | 10/9/2006 | PAH SI | SVOCs | 50-32-8 | Benzo[a]pyrene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-02R / 09-29-06 | 0609122-08 | 10/9/2006 | PAH SI | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-02R / 09-29-06 | 0609122-08 | 10/9/2006 | PAH SI | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 1.4 | ng/L | J | I | 10 | ng/L | 1 | Result uncertain below the calibration range |
| SH-02R / 09-29-06 | 0609122-08 | 10/9/2006 | PAH SI | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-02R / 09-29-06 | 0609122-08 | 10/9/2006 | PAH SI | SVOCs | 208-96-8 | Acenaphthylene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-02R / 09-29-06 | 0609122-08 | 10/9/2006 | PAH SI | SVOCs | 83-32-9 | Acenaphthene | 2.4 | ng/L | J | I | 10 | ng/L | 1 | Result uncertain below the calibration range |
| SH-02R / 09-29-06 | 0609122-08 | 10/9/2006 | PAH SI | SVOCs | 86-73-7 | Fluorene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-02R / 09-29-06 | 0609122-08 | 10/9/2006 | PAH SI | SVOCs | 85-01-8 | Phenanthrene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-02R / 09-29-06 | 0609122-08 | 10/9/2006 | PAH SI | SVOCs | 120-12-7 | Anthracene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-02R / 09-29-06 | 0609122-08 | 10/9/2006 | PAH SI | SVOCs | 86-74-8 | Carbazole | 18 | ng/L | | | 10 | ng/L | 1 | |
| SH-02R / 09-29-06 | 0609122-08 | 10/9/2006 | PAH SI | SVOCs | 206-44-0 | Fluoranthene | 54 | ng/L | | | 10 | ng/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/9/2006 | PAH SI | SVOCs | 91-20-3 | Naphthalene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-03S / 09-29-06 | 0609122-09 | 10/9/2006 | PAH SI | SVOCs | 91-57-6 | 2-Methylnaphthalene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-03S / 09-29-06 | 0609122-09 | 10/9/2006 | PAH SI | SVOCs | 129-00-0 | Pyrene | 11 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-03S / 09-29-06 | 0609122-09 | 10/9/2006 | PAH SI | SVOCs | 56-55-3 | Benz[a]anthracene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-03S / 09-29-06 | 0609122-09 | 10/9/2006 | PAH SI | SVOCs | 218-01-9 | Chrysene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-03S / 09-29-06 | 0609122-09 | 10/9/2006 | PAH SI | SVOCs | 117-81-7 | bis(2-Ethylhexyl)phthalate | 1000 | ng/L | U | | 1000 | ng/L | 1 | Negated due to Blank Action |
| SH-03S / 09-29-06 | 0609122-09 | 10/9/2006 | PAH SI | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-03S / 09-29-06 | 0609122-09 | 10/9/2006 | PAH SI | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-03S / 09-29-06 | 0609122-09 | 10/9/2006 | PAH SI | SVOCs | 50-32-8 | Benzo[a]pyrene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-03S / 09-29-06 | 0609122-09 | 10/9/2006 | PAH SI | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-03S / 09-29-06 | 0609122-09 | 10/9/2006 | PAH SI | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 4.6 | ng/L | J | I | 10 | ng/L | 1 | Result uncertain below the calibration range |
| SH-03S / 09-29-06 | 0609122-09 | 10/9/2006 | PAH SI | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-03S / 09-29-06 | 0609122-09 | 10/9/2006 | PAH SI | SVOCs | 208-96-8 | Acenaphthylene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-03S / 09-29-06 | 0609122-09 | 10/9/2006 | PAH SI | SVOCs | 83-32-9 | Acenaphthene | 170 | ng/L | | | 10 | ng/L | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low, H = High, I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Anal_Date | Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-03S / 09-29-06 | 0609122-09 | 10/9/2006 | PAH SI | SVOCs | 86-73-7 | Fluorene | 56 | ng/L | | | 10 | ng/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/9/2006 | PAH SI | SVOCs | 85-01-8 | Phenanthrene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-03S / 09-29-06 | 0609122-09 | 10/9/2006 | PAH SI | SVOCs | 120-12-7 | Anthracene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-03S / 09-29-06 | 0609122-09 | 10/9/2006 | PAH SI | SVOCs | 86-74-8 | Carbazole | 10 | ng/L | U | | 10 | ng/L | 1 | |
| SH-03S / 09-29-06 | 0609122-09 | 10/9/2006 | PAH SI | SVOCs | 206-44-0 | Fluoranthene | 14 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-27R / 09-29-06 | 0609122-10 | 10/9/2006 | PAH SI | SVOCs | 91-20-3 | Naphthalene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-27R / 09-29-06 | 0609122-10 | 10/9/2006 | PAH SI | SVOCs | 91-57-6 | 2-Methylnaphthalene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-27R / 09-29-06 | 0609122-10 | 10/9/2006 | PAH SI | SVOCs | 129-00-0 | Pyrene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-27R / 09-29-06 | 0609122-10 | 10/9/2006 | PAH SI | SVOCs | 56-55-3 | Benz[a]anthracene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-27R / 09-29-06 | 0609122-10 | 10/9/2006 | PAH SI | SVOCs | 218-01-9 | Chrysene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-27R / 09-29-06 | 0609122-10 | 10/9/2006 | PAH SI | SVOCs | 117-81-7 | bis(2-Ethylhexyl)phthalate | 1000 | ng/L | U | | 1000 | ng/L | 1 | Negated due to Blank Action |
| SH-27R / 09-29-06 | 0609122-10 | 10/9/2006 | PAH SI | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-27R / 09-29-06 | 0609122-10 | 10/9/2006 | PAH SI | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-27R / 09-29-06 | 0609122-10 | 10/9/2006 | PAH SI | SVOCs | 50-32-8 | Benzo[a]pyrene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-27R / 09-29-06 | 0609122-10 | 10/9/2006 | PAH SI | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-27R / 09-29-06 | 0609122-10 | 10/9/2006 | PAH SI | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/9/2006 | PAH SI | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-27R / 09-29-06 | 0609122-10 | 10/9/2006 | PAH SI | SVOCs | 208-96-8 | Acenaphthylene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/9/2006 | PAH SI | SVOCs | 83-32-9 | Acenaphthene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/9/2006 | PAH SI | SVOCs | 86-73-7 | Fluorene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/9/2006 | PAH SI | SVOCs | 85-01-8 | Phenanthrene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-27R / 09-29-06 | 0609122-10 | 10/9/2006 | PAH SI | SVOCs | 120-12-7 | Anthracene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-27R / 09-29-06 | 0609122-10 | 10/9/2006 | PAH SI | SVOCs | 86-74-8 | Carbazole | 10 | ng/L | U | | 10 | ng/L | 1 | |
| SH-27R / 09-29-06 | 0609122-10 | 10/9/2006 | PAH SI | SVOCs | 206-44-0 | Fluoranthene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-28R / 09-29-06 | 0609122-11 | 10/9/2006 | PAH SI | SVOCs | 91-20-3 | Naphthalene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-28R / 09-29-06 | 0609122-11 | 10/9/2006 | PAH SI | SVOCs | 91-57-6 | 2-Methylnaphthalene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-28R / 09-29-06 | 0609122-11 | 10/9/2006 | PAH SI | SVOCs | 129-00-0 | Pyrene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-28R / 09-29-06 | 0609122-11 | 10/9/2006 | PAH SI | SVOCs | 56-55-3 | Benz[a]anthracene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-28R / 09-29-06 | 0609122-11 | 10/9/2006 | PAH SI | SVOCs | 218-01-9 | Chrysene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-28R / 09-29-06 | 0609122-11 | 10/9/2006 | PAH SI | SVOCs | 117-81-7 | bis(2-Ethylhexyl)phthalate | 1100 | ng/L | U | | 1100 | ng/L | 1 | Negated due to Blank Action |
| SH-28R / 09-29-06 | 0609122-11 | 10/9/2006 | PAH SI | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 11 | ng/L | U | | 11 | ng/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/9/2006 | PAH SI | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-28R / 09-29-06 | 0609122-11 | 10/9/2006 | PAH SI | SVOCs | 50-32-8 | Benzo[a]pyrene | 11 | ng/L | U | | 11 | ng/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/9/2006 | PAH SI | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-28R / 09-29-06 | 0609122-11 | 10/9/2006 | PAH SI | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 11 | ng/L | U | | 11 | ng/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/9/2006 | PAH SI | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-28R / 09-29-06 | 0609122-11 | 10/9/2006 | PAH SI | SVOCs | 208-96-8 | Acenaphthylene | 11 | ng/L | U | | 11 | ng/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/9/2006 | PAH SI | SVOCs | 83-32-9 | Acenaphthene | 11 | ng/L | U | | 11 | ng/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/9/2006 | PAH SI | SVOCs | 86-73-7 | Fluorene | 11 | ng/L | U | | 11 | ng/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/9/2006 | PAH SI | SVOCs | 85-01-8 | Phenanthrene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-28R / 09-29-06 | 0609122-11 | 10/9/2006 | PAH SI | SVOCs | 120-12-7 | Anthracene | 11 | ng/L | U | | 11 | ng/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/9/2006 | PAH SI | SVOCs | 86-74-8 | Carbazole | 11 | ng/L | U | | 11 | ng/L | 1 | |
| SH-28R / 09-29-06 | 0609122-11 | 10/9/2006 | PAH SI | SVOCs | 206-44-0 | Fluoranthene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-05D / 10-02-06 | 0609122-13 | 10/9/2006 | PAH SI | SVOCs | 91-20-3 | Naphthalene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-05D / 10-02-06 | 0609122-13 | 10/9/2006 | PAH SI | SVOCs | 91-57-6 | 2-Methylnaphthalene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-05D / 10-02-06 | 0609122-13 | 10/9/2006 | PAH SI | SVOCs | 129-00-0 | Pyrene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-05D / 10-02-06 | 0609122-13 | 10/9/2006 | PAH SI | SVOCs | 56-55-3 | Benz[a]anthracene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/9/2006 | PAH SI | SVOCs | 218-01-9 | Chrysene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/9/2006 | PAH SI | SVOCs | 117-81-7 | bis(2-Ethylhexyl)phthalate | 1000 | ng/L | U | | 1000 | ng/L | 1 | Negated due to Blank Action |
| SH-05D / 10-02-06 | 0609122-13 | 10/9/2006 | PAH SI | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/9/2006 | PAH SI | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 10 | ng/L | U | | 10 | ng/L | 1 | |

| Smpl | Lab_ID | Anal_Date | Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-05D / 10-02-06 | 0609122-13 | 10/9/2006 | PAH SI | SVOCs | 50-32-8 | Benzo[a]pyrene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/9/2006 | PAH SI | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/9/2006 | PAH SI | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/9/2006 | PAH SI | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/9/2006 | PAH SI | SVOCs | 208-96-8 | Acenaphthylene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/9/2006 | PAH SI | SVOCs | 83-32-9 | Acenaphthene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/9/2006 | PAH SI | SVOCs | 86-73-7 | Fluorene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/9/2006 | PAH SI | SVOCs | 85-01-8 | Phenanthrene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-05D / 10-02-06 | 0609122-13 | 10/9/2006 | PAH SI | SVOCs | 120-12-7 | Anthracene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/9/2006 | PAH SI | SVOCs | 86-74-8 | Carbazole | 10 | ng/L | U | | 10 | ng/L | 1 | |
| SH-05D / 10-02-06 | 0609122-13 | 10/9/2006 | PAH SI | SVOCs | 206-44-0 | Fluoranthene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/9/2006 | PAH SI | SVOCs | 91-20-3 | Naphthalene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/9/2006 | PAH SI | SVOCs | 91-57-6 | 2-Methylnaphthalene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/9/2006 | PAH SI | SVOCs | 129-00-0 | Pyrene | 51 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/9/2006 | PAH SI | SVOCs | 56-55-3 | Benz[a]anthracene | 11 | ng/L | U | | 11 | ng/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/9/2006 | PAH SI | SVOCs | 218-01-9 | Chrysene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/9/2006 | PAH SI | SVOCs | 117-81-7 | bis(2-Ethylhexyl)phthalate | 1700 | ng/L | U | | 1100 | ng/L | 1 | Negated due to Blank Action |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/9/2006 | PAH SI | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 11 | ng/L | U | | 11 | ng/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/9/2006 | PAH SI | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 11 | ng/L | U | | 11 | ng/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/9/2006 | PAH SI | SVOCs | 50-32-8 | Benzo[a]pyrene | 11 | ng/L | U | | 11 | ng/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/9/2006 | PAH SI | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 11 | ng/L | U | | 11 | ng/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/9/2006 | PAH SI | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 11 | ng/L | U | | 11 | ng/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/9/2006 | PAH SI | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 11 | ng/L | U | | 11 | ng/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/9/2006 | PAH SI | SVOCs | 208-96-8 | Acenaphthylene | 11 | ng/L | U | | 11 | ng/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/9/2006 | PAH SI | SVOCs | 83-32-9 | Acenaphthene | 11 | ng/L | U | | 11 | ng/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/9/2006 | PAH SI | SVOCs | 86-73-7 | Fluorene | 11 | ng/L | U | | 11 | ng/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/9/2006 | PAH SI | SVOCs | 85-01-8 | Phenanthrene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/9/2006 | PAH SI | SVOCs | 120-12-7 | Anthracene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/9/2006 | PAH SI | SVOCs | 86-74-8 | Carbazole | 11 | ng/L | U | | 11 | ng/L | 1 | |
| SH-06R-A / 10-02-06 | 0609122-14 | 10/9/2006 | PAH SI | SVOCs | 206-44-0 | Fluoranthene | 19 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/10/2006 | PAH SI | SVOCs | 91-20-3 | Naphthalene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/10/2006 | PAH SI | SVOCs | 91-57-6 | 2-Methylnaphthalene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/10/2006 | PAH SI | SVOCs | 129-00-0 | Pyrene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/10/2006 | PAH SI | SVOCs | 56-55-3 | Benz[a]anthracene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/10/2006 | PAH SI | SVOCs | 218-01-9 | Chrysene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/10/2006 | PAH SI | SVOCs | 117-81-7 | bis(2-Ethylhexyl)phthalate | 1000 | ng/L | U | | 1000 | ng/L | 1 | Negated due to Blank Action |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/10/2006 | PAH SI | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/10/2006 | PAH SI | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/10/2006 | PAH SI | SVOCs | 50-32-8 | Benzo[a]pyrene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/10/2006 | PAH SI | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/10/2006 | PAH SI | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 2 | ng/L | J | I | 10 | ng/L | 1 | Result uncertain below the calibration range |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/10/2006 | PAH SI | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/10/2006 | PAH SI | SVOCs | 208-96-8 | Acenaphthylene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/10/2006 | PAH SI | SVOCs | 83-32-9 | Acenaphthene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/10/2006 | PAH SI | SVOCs | 86-73-7 | Fluorene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/10/2006 | PAH SI | SVOCs | 85-01-8 | Phenanthrene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/10/2006 | PAH SI | SVOCs | 120-12-7 | Anthracene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/10/2006 | PAH SI | SVOCs | 86-74-8 | Carbazole | 10 | ng/L | U | | 10 | ng/L | 1 | |
| SH-06R-B / 10-02-06 | 0609122-15 | 10/10/2006 | PAH SI | SVOCs | 206-44-0 | Fluoranthene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-14S / 10-02-06 | 0609122-16 | 10/10/2006 | PAH SI | SVOCs | 91-20-3 | Naphthalene | 840 | ng/L | | | 10 | ng/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/10/2006 | PAH SI | SVOCs | 91-57-6 | 2-Methylnaphthalene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low, H = High, I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Anal_Date | Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-14S / 10-02-06 | 0609122-16 | 10/10/2006 | PAH SI | SVOCs | 129-00-0 | Pyrene | 68 | ng/L | | | 10 | ng/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/10/2006 | PAH SI | SVOCs | 56-55-3 | Benz[a]anthracene | 17 | ng/L | | | 10 | ng/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/10/2006 | PAH SI | SVOCs | 218-01-9 | Chrysene | 13 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-14S / 10-02-06 | 0609122-16 | 10/10/2006 | PAH SI | SVOCs | 117-81-7 | bis(2-Ethylhexyl)phthalate | 1000 | ng/L | U | | 1000 | ng/L | 1 | Negated due to Blank Action |
| SH-14S / 10-02-06 | 0609122-16 | 10/10/2006 | PAH SI | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-14S / 10-02-06 | 0609122-16 | 10/10/2006 | PAH SI | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-14S / 10-02-06 | 0609122-16 | 10/10/2006 | PAH SI | SVOCs | 50-32-8 | Benzo[a]pyrene | 11 | ng/L | | | 10 | ng/L | 1 | |
| SH-14S / 10-02-06 | 0609122-16 | 10/10/2006 | PAH SI | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-14S / 10-02-06 | 0609122-16 | 10/10/2006 | PAH SI | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 1.5 | ng/L | J | I | 10 | ng/L | 1 | Result uncertain below the calibration range |
| SH-14S / 10-02-06 | 0609122-16 | 10/10/2006 | PAH SI | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-14S / 10-02-06 | 0609122-16 | 10/10/2006 | PAH SI | SVOCs | 208-96-8 | Acenaphthylene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-14S / 10-02-06 | 0609122-16 | 10/10/2006 | PAH SI | SVOCs | 83-32-9 | Acenaphthene | 1.8 | ng/L | J | I | 10 | ng/L | 1 | Result uncertain below the calibration range |
| SH-14S / 10-02-06 | 0609122-16 | 10/10/2006 | PAH SI | SVOCs | 86-73-7 | Fluorene | 8 | ng/L | J | I | 10 | ng/L | 1 | Result uncertain below the calibration range |
| SH-14S / 10-02-06 | 0609122-16 | 10/10/2006 | PAH SI | SVOCs | 85-01-8 | Phenanthrene | 13 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-14S / 10-02-06 | 0609122-16 | 10/10/2006 | PAH SI | SVOCs | 120-12-7 | Anthracene | 8.2 | ng/L | J | I | 10 | ng/L | 1 | Result uncertain below the calibration range |
| SH-14S / 10-02-06 | 0609122-16 | 10/10/2006 | PAH SI | SVOCs | 86-74-8 | Carbazole | 8.6 | ng/L | J | I | 10 | ng/L | 1 | Result uncertain below the calibration range |
| SH-14S / 10-02-06 | 0609122-16 | 10/10/2006 | PAH SI | SVOCs | 206-44-0 | Fluoranthene | 42 | ng/L | | | 10 | ng/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/10/2006 | PAH SI | SVOCs | 91-20-3 | Naphthalene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-14D / 10-02-06 | 0609122-17 | 10/10/2006 | PAH SI | SVOCs | 91-57-6 | 2-Methylnaphthalene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-14D / 10-02-06 | 0609122-17 | 10/10/2006 | PAH SI | SVOCs | 129-00-0 | Pyrene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/10/2006 | PAH SI | SVOCs | 56-55-3 | Benz[a]anthracene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/10/2006 | PAH SI | SVOCs | 218-01-9 | Chrysene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/10/2006 | PAH SI | SVOCs | 117-81-7 | bis(2-Ethylhexyl)phthalate | 1000 | ng/L | U | | 1000 | ng/L | 1 | Negated due to Blank Action |
| SH-14D / 10-02-06 | 0609122-17 | 10/10/2006 | PAH SI | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/10/2006 | PAH SI | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/10/2006 | PAH SI | SVOCs | 50-32-8 | Benzo[a]pyrene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/10/2006 | PAH SI | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/10/2006 | PAH SI | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/10/2006 | PAH SI | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/10/2006 | PAH SI | SVOCs | 208-96-8 | Acenaphthylene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/10/2006 | PAH SI | SVOCs | 83-32-9 | Acenaphthene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/10/2006 | PAH SI | SVOCs | 86-73-7 | Fluorene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/10/2006 | PAH SI | SVOCs | 85-01-8 | Phenanthrene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-14D / 10-02-06 | 0609122-17 | 10/10/2006 | PAH SI | SVOCs | 120-12-7 | Anthracene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/10/2006 | PAH SI | SVOCs | 86-74-8 | Carbazole | 10 | ng/L | U | | 10 | ng/L | 1 | |
| SH-14D / 10-02-06 | 0609122-17 | 10/10/2006 | PAH SI | SVOCs | 206-44-0 | Fluoranthene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-27D / 10-02-06 | 0609122-18 | 10/10/2006 | PAH SI | SVOCs | 91-20-3 | Naphthalene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-27D / 10-02-06 | 0609122-18 | 10/10/2006 | PAH SI | SVOCs | 91-57-6 | 2-Methylnaphthalene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-27D / 10-02-06 | 0609122-18 | 10/10/2006 | PAH SI | SVOCs | 129-00-0 | Pyrene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-27D / 10-02-06 | 0609122-18 | 10/10/2006 | PAH SI | SVOCs | 56-55-3 | Benz[a]anthracene | 11 | ng/L | U | | 11 | ng/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/10/2006 | PAH SI | SVOCs | 218-01-9 | Chrysene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-27D / 10-02-06 | 0609122-18 | 10/10/2006 | PAH SI | SVOCs | 117-81-7 | bis(2-Ethylhexyl)phthalate | 1100 | ng/L | U | | 1100 | ng/L | 1 | Negated due to Blank Action |
| SH-27D / 10-02-06 | 0609122-18 | 10/10/2006 | PAH SI | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-27D / 10-02-06 | 0609122-18 | 10/10/2006 | PAH SI | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-27D / 10-02-06 | 0609122-18 | 10/10/2006 | PAH SI | SVOCs | 50-32-8 | Benzo[a]pyrene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-27D / 10-02-06 | 0609122-18 | 10/10/2006 | PAH SI | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-27D / 10-02-06 | 0609122-18 | 10/10/2006 | PAH SI | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 2.1 | ng/L | J | I | 11 | ng/L | 1 | Result uncertain below the calibration range |
| SH-27D / 10-02-06 | 0609122-18 | 10/10/2006 | PAH SI | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-27D / 10-02-06 | 0609122-18 | 10/10/2006 | PAH SI | SVOCs | 208-96-8 | Acenaphthylene | 11 | ng/L | U | | 11 | ng/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/10/2006 | PAH SI | SVOCs | 83-32-9 | Acenaphthene | 11 | ng/L | U | | 11 | ng/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/10/2006 | PAH SI | SVOCs | 86-73-7 | Fluorene | 11 | ng/L | U | | 11 | ng/L | 1 | |

| Smpl | Lab_ID | Anal_Date | Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-27D / 10-02-06 | 0609122-18 | 10/10/2006 | PAH SI | SVOCs | 85-01-8 | Phenanthrene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-27D / 10-02-06 | 0609122-18 | 10/10/2006 | PAH SI | SVOCs | 120-12-7 | Anthracene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-27D / 10-02-06 | 0609122-18 | 10/10/2006 | PAH SI | SVOCs | 86-74-8 | Carbazole | 11 | ng/L | U | | 11 | ng/L | 1 | |
| SH-27D / 10-02-06 | 0609122-18 | 10/10/2006 | PAH SI | SVOCs | 206-44-0 | Fluoranthene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| OW-213 / 10-02-06 | 0609122-19 | 10/10/2006 | PAH SI | SVOCs | 91-20-3 | Naphthalene | 960 | ng/L | | | 10 | ng/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/10/2006 | PAH SI | SVOCs | 91-57-6 | 2-Methylnaphthalene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| OW-213 / 10-02-06 | 0609122-19 | 10/10/2006 | PAH SI | SVOCs | 129-00-0 | Pyrene | 71 | ng/L | | | 10 | ng/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/10/2006 | PAH SI | SVOCs | 56-55-3 | Benz[a]anthracene | 18 | ng/L | | | 10 | ng/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/10/2006 | PAH SI | SVOCs | 218-01-9 | Chrysene | 15 | ng/L | | | 10 | ng/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/10/2006 | PAH SI | SVOCs | 117-81-7 | bis(2-Ethylhexyl)phthalate | 1000 | ng/L | U | | 1000 | ng/L | 1 | Negated due to Blank Action |
| OW-213 / 10-02-06 | 0609122-19 | 10/10/2006 | PAH SI | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| OW-213 / 10-02-06 | 0609122-19 | 10/10/2006 | PAH SI | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| OW-213 / 10-02-06 | 0609122-19 | 10/10/2006 | PAH SI | SVOCs | 50-32-8 | Benzo[a]pyrene | 12 | ng/L | | | 10 | ng/L | 1 | |
| OW-213 / 10-02-06 | 0609122-19 | 10/10/2006 | PAH SI | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| OW-213 / 10-02-06 | 0609122-19 | 10/10/2006 | PAH SI | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 1.4 | ng/L | J | I | 10 | ng/L | 1 | Result uncertain below the calibration range |
| OW-213 / 10-02-06 | 0609122-19 | 10/10/2006 | PAH SI | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| OW-213 / 10-02-06 | 0609122-19 | 10/10/2006 | PAH SI | SVOCs | 208-96-8 | Acenaphthylene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| OW-213 / 10-02-06 | 0609122-19 | 10/10/2006 | PAH SI | SVOCs | 83-32-9 | Acenaphthene | 1.7 | ng/L | J | I | 10 | ng/L | 1 | Result uncertain below the calibration range |
| OW-213 / 10-02-06 | 0609122-19 | 10/10/2006 | PAH SI | SVOCs | 86-73-7 | Fluorene | 8.5 | ng/L | J | I | 10 | ng/L | 1 | Result uncertain below the calibration range |
| OW-213 / 10-02-06 | 0609122-19 | 10/10/2006 | PAH SI | SVOCs | 85-01-8 | Phenanthrene | 14 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| OW-213 / 10-02-06 | 0609122-19 | 10/10/2006 | PAH SI | SVOCs | 120-12-7 | Anthracene | 9.2 | ng/L | J | I | 10 | ng/L | 1 | Result uncertain below the calibration range |
| OW-213 / 10-02-06 | 0609122-19 | 10/10/2006 | PAH SI | SVOCs | 86-74-8 | Carbazole | 9.5 | ng/L | J | I | 10 | ng/L | 1 | Result uncertain below the calibration range |
| OW-213 / 10-02-06 | 0609122-19 | 10/10/2006 | PAH SI | SVOCs | 206-44-0 | Fluoranthene | 41 | ng/L | | | 10 | ng/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/10/2006 | PAH SI | SVOCs | 91-20-3 | Naphthalene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-03D / 10-03-06 | 0609122-21 | 10/10/2006 | PAH SI | SVOCs | 91-57-6 | 2-Methylnaphthalene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-03D / 10-03-06 | 0609122-21 | 10/10/2006 | PAH SI | SVOCs | 129-00-0 | Pyrene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-03D / 10-03-06 | 0609122-21 | 10/10/2006 | PAH SI | SVOCs | 56-55-3 | Benz[a]anthracene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/10/2006 | PAH SI | SVOCs | 218-01-9 | Chrysene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/10/2006 | PAH SI | SVOCs | 117-81-7 | bis(2-Ethylhexyl)phthalate | 1000 | ng/L | U | | 1000 | ng/L | 1 | Negated due to Blank Action |
| SH-03D / 10-03-06 | 0609122-21 | 10/10/2006 | PAH SI | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/10/2006 | PAH SI | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/10/2006 | PAH SI | SVOCs | 50-32-8 | Benzo[a]pyrene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/10/2006 | PAH SI | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/10/2006 | PAH SI | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/10/2006 | PAH SI | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 10 | ng/L | UJ | L | 10 | ng/L | 1 | Low Calibration verification |
| SH-03D / 10-03-06 | 0609122-21 | 10/10/2006 | PAH SI | SVOCs | 208-96-8 | Acenaphthylene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/10/2006 | PAH SI | SVOCs | 83-32-9 | Acenaphthene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/10/2006 | PAH SI | SVOCs | 86-73-7 | Fluorene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/10/2006 | PAH SI | SVOCs | 85-01-8 | Phenanthrene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-03D / 10-03-06 | 0609122-21 | 10/10/2006 | PAH SI | SVOCs | 120-12-7 | Anthracene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/10/2006 | PAH SI | SVOCs | 86-74-8 | Carbazole | 10 | ng/L | U | | 10 | ng/L | 1 | |
| SH-03D / 10-03-06 | 0609122-21 | 10/10/2006 | PAH SI | SVOCs | 206-44-0 | Fluoranthene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/10/2006 | PAH SI | SVOCs | 91-20-3 | Naphthalene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/10/2006 | PAH SI | SVOCs | 91-57-6 | 2-Methylnaphthalene | 11 | ng/L | U | | 11 | ng/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/10/2006 | PAH SI | SVOCs | 129-00-0 | Pyrene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/10/2006 | PAH SI | SVOCs | 56-55-3 | Benz[a]anthracene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/10/2006 | PAH SI | SVOCs | 218-01-9 | Chrysene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/10/2006 | PAH SI | SVOCs | 117-81-7 | bis(2-Ethylhexyl)phthalate | 1100 | ng/L | U | | 1100 | ng/L | 1 | Negated due to Blank Action |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/10/2006 | PAH SI | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/10/2006 | PAH SI | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/10/2006 | PAH SI | SVOCs | 50-32-8 | Benzo[a]pyrene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low, H = High, I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Anal_Date | Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-05R-A / 10-03-06 | 0609122-22 | 10/10/2006 | PAH SI | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/10/2006 | PAH SI | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 1.8 | ng/L | J | I | 11 | ng/L | 1 | Result uncertain below the calibration range |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/10/2006 | PAH SI | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 11 | ng/L | UJ | I | 11 | ng/L | 1 | Negated due to Blank Action + Low Calibration verification |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/10/2006 | PAH SI | SVOCs | 208-96-8 | Acenaphthylene | 11 | ng/L | U | | 11 | ng/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/10/2006 | PAH SI | SVOCs | 83-32-9 | Acenaphthene | 11 | ng/L | U | | 11 | ng/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/10/2006 | PAH SI | SVOCs | 86-73-7 | Fluorene | 11 | ng/L | U | | 11 | ng/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/10/2006 | PAH SI | SVOCs | 85-01-8 | Phenanthrene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/10/2006 | PAH SI | SVOCs | 120-12-7 | Anthracene | 11 | ng/L | U | | 11 | ng/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/10/2006 | PAH SI | SVOCs | 86-74-8 | Carbazole | 11 | ng/L | U | | 11 | ng/L | 1 | |
| SH-05R-A / 10-03-06 | 0609122-22 | 10/10/2006 | PAH SI | SVOCs | 206-44-0 | Fluoranthene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/10/2006 | PAH SI | SVOCs | 91-20-3 | Naphthalene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/10/2006 | PAH SI | SVOCs | 91-57-6 | 2-Methylnaphthalene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/10/2006 | PAH SI | SVOCs | 129-00-0 | Pyrene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/10/2006 | PAH SI | SVOCs | 56-55-3 | Benz[a]anthracene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/10/2006 | PAH SI | SVOCs | 218-01-9 | Chrysene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/10/2006 | PAH SI | SVOCs | 117-81-7 | bis(2-Ethylhexyl)phthalate | 1100 | ng/L | U | | 1100 | ng/L | 1 | Negated due to Blank Action |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/10/2006 | PAH SI | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/10/2006 | PAH SI | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/10/2006 | PAH SI | SVOCs | 50-32-8 | Benzo[a]pyrene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/10/2006 | PAH SI | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/10/2006 | PAH SI | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 3.2 | ng/L | J | I | 11 | ng/L | 1 | Result uncertain below the calibration range |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/10/2006 | PAH SI | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 11 | ng/L | UJ | I | 11 | ng/L | 1 | Negated due to Blank Action + Low Calibration verification |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/10/2006 | PAH SI | SVOCs | 208-96-8 | Acenaphthylene | 11 | ng/L | U | | 11 | ng/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/10/2006 | PAH SI | SVOCs | 83-32-9 | Acenaphthene | 11 | ng/L | U | | 11 | ng/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/10/2006 | PAH SI | SVOCs | 86-73-7 | Fluorene | 11 | ng/L | U | | 11 | ng/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/10/2006 | PAH SI | SVOCs | 85-01-8 | Phenanthrene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/10/2006 | PAH SI | SVOCs | 120-12-7 | Anthracene | 11 | ng/L | U | | 11 | ng/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/10/2006 | PAH SI | SVOCs | 86-74-8 | Carbazole | 11 | ng/L | U | | 11 | ng/L | 1 | |
| SH-05R-B / 10-03-06 | 0609122-23 | 10/10/2006 | PAH SI | SVOCs | 206-44-0 | Fluoranthene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| OW-213A / 10-03-06 | 0609122-24 | 10/10/2006 | PAH SI | SVOCs | 91-20-3 | Naphthalene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| OW-213A / 10-03-06 | 0609122-24 | 10/10/2006 | PAH SI | SVOCs | 91-57-6 | 2-Methylnaphthalene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| OW-213A / 10-03-06 | 0609122-24 | 10/10/2006 | PAH SI | SVOCs | 129-00-0 | Pyrene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| OW-213A / 10-03-06 | 0609122-24 | 10/10/2006 | PAH SI | SVOCs | 56-55-3 | Benz[a]anthracene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/10/2006 | PAH SI | SVOCs | 218-01-9 | Chrysene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/10/2006 | PAH SI | SVOCs | 117-81-7 | bis(2-Ethylhexyl)phthalate | 1000 | ng/L | U | | 1000 | ng/L | 1 | Negated due to Blank Action |
| OW-213A / 10-03-06 | 0609122-24 | 10/10/2006 | PAH SI | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| OW-213A / 10-03-06 | 0609122-24 | 10/10/2006 | PAH SI | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| OW-213A / 10-03-06 | 0609122-24 | 10/10/2006 | PAH SI | SVOCs | 50-32-8 | Benzo[a]pyrene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/10/2006 | PAH SI | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| OW-213A / 10-03-06 | 0609122-24 | 10/10/2006 | PAH SI | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/10/2006 | PAH SI | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 10 | ng/L | UJ | I | 10 | ng/L | 1 | Negated due to Blank Action + Low Calibration verification |
| OW-213A / 10-03-06 | 0609122-24 | 10/10/2006 | PAH SI | SVOCs | 208-96-8 | Acenaphthylene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/10/2006 | PAH SI | SVOCs | 83-32-9 | Acenaphthene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/10/2006 | PAH SI | SVOCs | 86-73-7 | Fluorene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/10/2006 | PAH SI | SVOCs | 85-01-8 | Phenanthrene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| OW-213A / 10-03-06 | 0609122-24 | 10/10/2006 | PAH SI | SVOCs | 120-12-7 | Anthracene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/10/2006 | PAH SI | SVOCs | 86-74-8 | Carbazole | 10 | ng/L | U | | 10 | ng/L | 1 | |
| OW-213A / 10-03-06 | 0609122-24 | 10/10/2006 | PAH SI | SVOCs | 206-44-0 | Fluoranthene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low, H = High, I = Indeterminate. See Data Usability Report for details.

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase IB-5 2006
8260B Data Review Checklist

ETR # 0609122

Lab: AWHL
Date Sampled: 9/27 - 10/3/06
Method of Analysis: 8260B

Lab Project #: BU213
No. Samples: 17 + 1FD + 1EB + 5TB
Matrix: groundwater

| | Preservation & HT | Surrogate | LCS | MS | FD W:RPD≤30% Other:RPD≤50% | Tunes ICALs CCALs | IS' | RL & Quant. Correct | Other Issues |
|---|---|---|---|---|---|---|---|---|---|
| All Samples in Project | ✓ | ✓ | ✓ | R 1cpd + UJ 2 - see pw S | ✓ | UJ Bromo-methane | ✓ | ✓ | Accept 2 J'd results |
| **Except:** | | | | | | | | | |
| SH-29R | | J TCE + DCE | | | | | | | |
| SH-28R | | J TCE | | | | | | | |
| SH-05D | | J TCE | | | | | | | |
| OW-213A | | J methz | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

Comments: After sample receipt 3 IDs changed as follows:

| COC ID | Bottle Label | Reported ID (per SHA) |
|---|---|---|
| TB-504/09-04-06 | TB504/09-04-06 | TB-504/09-27-06 |
| SH-2R/09-29-06 | SH-02R/09-29-06 | SH-02R/09-29-06 |
| SH-3S/09-29-06 | SH-03S/09-29-06 | SH-03S/09-29-06 |

1 VOA Vial for sample SH-02R 09-29-06 contained headspace => Not used for analysis. All samples received intact at 4±2°C & verified pH < 2 in lab.

Samples were all analyzed within HT => No Action Required.

Date 12/5/06

Data Reviewer

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase IB-5 2006
8260B Data Review Checklist

Lab: ANHL
Date Sampled: 9/27-10/3/06

Lab Project #: BU213
No. Samples: 17+1FD+1EB+5TB

Method of Analysis: 8260B
Matrix: gw

Associated Blanks:
MB: VW100306B04 + VW100606B11
TBs: TB-504, TB-506, TB-509, TB-510 + TB-511
EB: OW-213A

| Blank ID | Contaminant / Level ug/L | Matrix Related ? | | Action Level / Action | | | Corrected Result |
|---|---|---|---|---|---|---|---|
| VW100306B04 | Methylene chloride 1.3J | Y | | 13 ug/L | | All Samples ND => No Action | |
| VW100606B11 | Acetone 1.8J | Y | | 18 ug/L | | SH-13S 3.1JB ug/L | 5U |
| | | | | | | SH-02R 2.7JB | 5U |
| | | | | | | SH-03S 5.4B | 5.4U |
| | | | | | | TB-511 2.3JB | 5U |
| TB-504 | None | | | | | No Blank Action | |
| TB-506 | None | | | | | No Blank Action | |

**8260B Action Summary: see Worksheet #24b**

HT Actions: waters pH >2 or no HCl: 7d<HT≤14 d, J Aromatic det/R Aromatic NDs; Accept all Non-aromatics;
pH < 2, 14d <HT< 28 d; J Aromatic det/R Aromatic NDs; J Non-aromatic det/J Non-aromatic ND
soil/sediment - 14d <HT< 28 d; J Aromatic det/R Aromatic NDs; J Non-aromatic det/J Non-aromatic ND

Surrogate Actions: Recovery > Criteria, J det/Accept ND; 10%≤ Recovery <Criteria, J det/J NDs; Recovery <10%, J det/R NDs

Blank Actions: Surrogates outside criteria - Use Judgment if isolated or analysis related
Non-Matrix related Blank contamination, BB or EB contaminant in all samples associated with Blank
If contamination in blank(s) exist, if Result < RL, U result at RL; RL<Result<Blank Action, U result at level reported

MS Actions: %Rec<10%, J det/ R NDs; 10% <%Rec<Criteria, J det/ J NDs; %Rec >Criteria, J det/Accept NDs- Unspiked Sample only

LCS Actions: %Rec<10%, J det/ R NDs; 10% <%Rec<Criteria, J det/ J NDs; %Rec >Criteria, J det/Accept NDs for all Batch by Compound

FD Action: Both Conc. ≥ 2xRL, RPD >30%, J det; One result ND, other ≥2 x RL, J det/J NDs; Both Conc. < 2xRL; RPD >30%, LCS OK, Accept data

Date 12/5/06

Data Reviewer

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase IB-5 2006
8260B Data Review Checklist

Lab: ANHL
Date Sampled: 9/27 - 10/3/06
Method of Analysis: 8260B

Lab Project #: BU213
No. Samples: 17 + 1FD + 1EB + 5TB
Matrix: gw

Blank Action Continued

| Blank ID | Contaminant / Level | Matrix Related ? | Action Level / Action | | Corrected Result |
|---|---|---|---|---|---|
| TB-509 | None | | | No Blank Actn Reqd | |
| TB-510 | None | | | No Blank Actn Reqd | |
| TB-511 | None after Blank Actn | | | No Blank Actn Reqd. | |
| | | | | | |
| OW-213A/10-03-06 | Methylene chloride 2.8 ug/L | Y | 28 ug/L | All samples were ND => No Actn | |

Date 12/5/06

Data Reviewer MJC. RM

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase IB-5 2006
8260B Data Review Checklist

Lab: AWHL
Date Sampled: 9/27-10/3/06
Method of Analysis: 8260B

Lab Project #: BU 213
No. Samples 17+ 1FD+1EB+5TB
Matrix: GW

Additional Notes:

All 4 Surrogates (3 listed in QAPP + 1,2-Dichloroethane-d4) with in-house limits except:
SH-03S 1 surrogate 132% (high); SH-27R 2 surrogates high; SH-28R 1 surrogate high;
SH-05D, SH-03D, SH-05R-A, SH-05R-B, OW-213A + MS/MSD of SH-13S reported 2 surrogates high.
Narrative indicates that lab reanalyzed all of these samples with the same high surrogate recovery results + only reported the first set of analyses.

Of the samples listed above, only SH-27R (Trichloroethene), SH-05D (Trichloroethene) + OW-213A (methylene chloride) reported detected results ⇒ only these specific results possibly affected by high surrogates

* Action: Trichloroethene in SH-27R + SH-05D + methylene chloride in OW-213A qualified as estimated (J) with possible high bias due to high surrogate recovery (see amendment for J values)

# Amended - SH-27R reported "J" value for 1,1-Dichloroethene + SH-28R reported "J" value for Trichloroethene 2 results accepted as entered values - Overall bias is indeterminate due to Reporting at limit < RL but results may also have been affected by High Surrogate recovery.

LCS/LCSD VW100306LCS02/VW100306LCSD02 All Targets %Rec + RPDs OK except Trichlorofluoromethane %Rec low compared to lab limits of 112-166% but using QAPP 70-130% limits - All Targets OK ⇒ no action required.
VW100606LCS04/VW100606LCSD05 - All Targets within 70-130% recovery (Trichlorofluoromethane %Rec flagged low as compared to lab limit) - No Action Required.
Acceptable accuracy + precision for method demonstrated.

MS/MSD done on SH-13S/09-28-06 - All %Rec in QAPP 70-130% limits except:
chloroethane in MSD 132% (high) MS OK

Cont'd on 5

Date 12/5/06

Data Reviewer

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase IB-5 2006
8260B Data Review Checklist

Lab: AWHL
Date Sampled: 9/27-10/3/06
Method of Analysis: 8260B

Lab Project #: BU213
No. Samples: 17 + 1 FD + 1 EB + STS
Matrix: GW

Additional Notes:

MS/MSD evel. cmt'd: trichlorofluoromethane MSD 147%; MS OK
vinyl acetate 67% MS, 65% MSD - both low
2-chloroethyl vinyl ether 0% MS + 0% MSD
styrene 52% MS, 49% MSD
RPDs all OK - No Actn req'd for high chloroethane + trichlorofluoromethane since unspiked samples

* Actn: 2-chloroethylvinyl ether Rejected (R) due to 0% MS/MSD recov. Vinyl acetate + styrene estimated (UJ) with possible low bias in SH-13S due to low MS/MSD recov.

FD pair = SH-14S/10-02-06 + OW-213/10-02-06

| Compound | SH-14S (ug/L) | | OW-213 | RPD | Action |
|---|---|---|---|---|---|
| Benzene | 0.61 | (>2xRL) | 0.67 (>2xRL) | 9% | None |

FD precision was acceptable for the 1 detected VOC in the FD pair ⇒ No Actn req'd.

Tunes: T1092801 (9/28 ICAL), T1100301, T1100601 (ICAL) + T1100602 - All Abundance OK + all samples injected within 12 hrs. of BFB injection ⇒ No Actn

ICALs 9/28/06 - All %RSDs < 30% except bromomethane at 35.8% RSD
10/06/06 - All %RSDs OK except bromomethane at 33% RSD
In both ICALs, sensitivity OK (RF > 0.05)

* Actn: Bromomethane estimated (UJ) in all samples due to Initial Calibration beyond acceptance criteria.

CCVs: C1100301 - All %D ≤ ±25% ⇒ No Actn
C1100601 - All %D ≤ ±25% ⇒ No Actn.

Date 12/6/06

Data Reviewer M. C. RK

Lab: AWHL
Date Sampled: 9/27 - 10/3/06
Method of Analysis: 8260B

Lab Project #: BU213
No. Samples 17+1FD+1EB+5TB
Matrix: GW

Additional Notes:

IS' - All 3 IS Area + RTs were in criteria for all Sample + QC ⇒ No Action.

Lab analyzed ~~samples~~ standards were 12/5/06 at levels lower than expected so that some compounds expected to have non-detects exceeding PALs were OK here - All non-detects were ≤ PALs except: Benzene, Bromodichloromethane, Bromoform, Bromomethane, Carbon Tetrachloride, Chloroform, Dibromochloromethane, 1,2-Dichloroethane, 1,2-Dichloropropane, cis- + trans- 1,3-dichloropropene; 1,1,2,2-tetrachloroethane, tetrachloroethene, 1,1,2-trichloroethane, trichloroethene + vinyl chloride. Samples analyzed on 10/3/06 (see page 6) had lower calibrations so benzene, bromomethane + 1,1,2-trichloroethane OK (non-detect < PAL) - For all other samples, the non-detects > PALs, as expected, due to method limitations.

2 results were reported at levels < RL + qualified J by lab (results not negated due to Blank Action) - These 2 results accepted as estimated data with indeterminate bias due to uncertainty in quantitation at a level below the calibration range.

There were no issues raised in the narrative which have not been addressed in this review.

Date 12/5/06

Data Reviewer [signature]



New Environmental Horizons, Inc.

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase IB-5 2006
8260B Data Review Checklist

| Sample ID 0609122- | | Date Sampled | Field Blank | Trip Blank | Method Blank | LCS | Date Analyzed |
|---|---|---|---|---|---|---|---|
| TB-504/09-27-06 | -01 | 9/27/06 | NA | NA | VW100606B11 | LCS04/LCSD04 | 10/7/06 |
| SH-28D/09-27-06 | -02 | ↓ | OW-213A | TB-504 | ↓ | ↓ | ↓ |
| TB-506/09-28-06 | -03 | 9/28/06 | NA | NA | VW100306B04 | LCS02/LCSD02 | 10/03/06 |
| SH-13S/09-28-06 | -04 | ↓ | OW-213A | TB-506 | VW100606B11 | LCS04/LCSD04 | 10/7/06 |
| SH-19R/09-28-06 | -05 | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ |
| SH-24R/09-28-06 | -06 | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ |
| TB-509/09-29-06 | -07 | 9/29/06 | NA | NA | ↓ | ↓ | ↓ |
| SH-02R/09-29-06 | -08 | ↓ | OW-213A | TB-509 | ↓ | ↓ | ↓ |
| SH-03S/09-29-06 | -09 | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ |
| SH-27R/09-29-06 | -10 | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ |
| SH-28R/09-29-06 | -11 | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ |
| TB-510/10-02-06 | -12 | 10/2/06 | NA | NA | VW100306B04 | LCS02/LCSD02 | 10/03/06 |
| SH-05D/10-02-06 | -13 | ↓ | OW-213A | TB-510 | VW100606B11 | LCS04/LCSD04 | 10/7/06 |
| SH-06R-A/10-02-06 | -14 | ↓ | ↓ | ↓ | VW100306B04 | LCS02/LCSD02 | 10/03/06 |
| SH-06R-B/10-02-06 | -15 | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ |
| SH-14S/10-02-06 | -16 | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ |
| SH-14D/10-02-06 | -17 | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ |
| SH-27D/10-02-06 | -18 | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ |
| OW-213/10-02-06 | -19 | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ |
| TB-511/10-03-06 | -20 | 10/3/06 | NA | NA | VW100606B11 | LCS04/LCSD04 | 10/7/06 |
| SH-03D/10-03-06 | -21 | ↓ | OW-213A | TB-511 | ↓ | ↓ | ↓ |
| SH-05R-A/10-03-06 | -22 | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ |
| SH-05R-B/10-03-06 | -23 | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ |
| OW-213A/10-03-06 | -24 | ↓ | NA | ↓ | ↓ | ↓ | ↓ |

Date 12/5/06

Data Reviewer [signature]

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase 1B-5 2006
8270C-SIM Data Review Checklist

ETR# 0609122

Lab: AWHL
Date Sampled: 9/27 - 10/3/06
Method of Analysis: 8270C-SIM

Lab Project #: BU213
No. Samples: 17 + 1FD + 1EB
Matrix: groundwater

| | HT w: 7d other: 14d | Surrogate | LCS | MS | FD w: RPD ≤ 30% other: RPD≤50% | Tunes ICALs CCALs | IS' | RL & Quant. Correct | Other Issues |
|---|---|---|---|---|---|---|---|---|---|
| All Samples in Project | ✓ | ✓ | ✓ | ✓ | ✓ | WJ 4 results see pg 5 | ✓ | ✓ | Accept Zb "J" |
| **Except:** | | | | | | | | | |

Comments: Samples were received intact at 4±2°C. COC + Sample labels disagreed for 2 samples as follows:

| COC | Bottle Label | |
|---|---|---|
| SH-2R/09-29-06 | SH-02R/09-29-06 | SHA Confirmed that lab was to report sample with ID on Bottle Label. |
| SH-3S/09-29-06 | SH-03S/09-29-06 | |

Samples were extracted & analyzed within HT ⇒ No Action
The 3 PAH Surrogates were recovered within Lab criteria for all Samples + QC ⇒ No Action

Date 12/5/06

Data Reviewer MJC. RR

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase 1B-5 2006
8270C-SIM Data Review Checklist

Lab: AWHL
Date Sampled: 9127 - 10/3/06

Lab Project #: BU213
No. Samples: 17 + 1FD + 1EB

Method of Analysis: 8270C-SIM
Associated Blanks: MB: SW100406B03
EB: OW-213A / 10-03-06

Matrix: gw

| Blank ID | Contaminant / Level | Matrix Related ? | Action Level / Action | Sample ID and result reported | Corrected Result |
|---|---|---|---|---|---|
| SW100406B03 | Naphthalene 3.8J ng/L | Y | 19 ng/L | SH-02R 24 B ng/L | No Action - Remove B |
| | | | | SH-14S 840 B | No Action - Remove B |
| | | | | OW-213 960 B | No Action - Remove B |
| | | | | All other Samples (16) reported JB | U at RL |
| | | | | 1.9 → 8.6 JB ng/L | |
| | 2-methylnaphthalene 1.6J | Y | 8 ng/L | SH-05R-A Non-Detect ⇒ | No Action |
| | | | | All other 18 Samples | U at RL |
| | | | | 1.2 → 4.2 JB ng/L | |

**8270C Action Summary: see Worksheet #24b**

| | | |
|---|---|---|
| HT Actions: | Waters | 7d <HT≤ 14 d; J det/ J NDs; HT >14 d, J det/R ND |
| | other Matrices | 14d <HT≤ 28 d, J det/ J NDs; HT >28 d, J det/R ND |
| | Analysis | 40d < Extract HT ≤ 60d, J det/ J NDs; Extract HT > 60d; J det/ R NDs |
| Surrogate Actions: | | 2 BN Recovery > Criteria, J det/Accept ND; 10% ≤ 2-All Surrogates < Criteria, J det/J NDs; Recovery < 10%, J det/R NDs. |
| Blank Actions: | | Surrogates outside criteria - Use Judgment if isolated or analysis related<br>Non-Matrix related Blank contamination, BB or EB contaminant in all samples associated with Blank<br>Matrix related Blank contamination: Result < RL, U result at RL; RL<Result<Blank Action, U result at level reported |
| MS Actions: | | %Rec<10%, J det/ R NDs; 10% ≤%Rec<Criteria, J det/ J NDs; %Rec >Criteria, J det/Accept NDs for Unspiked Sample |
| LCS Actions: | | %Rec<10%, J det/ R NDs; 10% ≤%Rec<Criteria, J det/ J NDs; %Rec >Criteria, J det/Accept NDs for all Batch by |
| FD Action: | | Both Conc. ≥ 2xRL, %RPD outside, J det; One result ND, other ≥2 x RL, J det/J NDs; Both Conc. < 2xRL; %RPD out, LCS OK, Accept data |
| ICAL or CCAL Actions: | | ICAL %RSD > Criteria, J/UJ compound in all samples; CCAL %D > criteria due to loss in instrument sensitivity, J/UJ compound in all associated samples; %D out due to enhanced sensitivity, J only associated detects. |
| IS Actions: | | IS Area < criteria, J/UJ all assocaited compounds |
| %Solids Action: | | 10% ≤ % soilds ≤ 30%; J det/R ND; %solids < 10% R det/ R NDs |

Date 12/5/06

Data Reviewer MJC/RM

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase 1B-5 2006
8270C-SIM Data Review Checklist

Lab: AWHL
Date Sampled: 9/27 - 10/3/06
Method of Analysis: 8270C-SIM

Lab Project #: B11213
No. Samples: 17 + 1FD + 1EB
Matrix: gw

Blank Action Continued

| Blank ID | Contaminant / Level | Matrix Related ? | Action Level / Action | Sample ID and result reported | Corrected Result |
|---|---|---|---|---|---|
| SW100406B03 cmt'd | Acenaphthylene 2.8J ng/L | Y | 14 ng/L | SH-28D, SH-13S, SH-19R, SH-24R, SH-02R, SH-03S, SH-06R-B, SH-14S + OW-21 1.5 → 7.2JB ng/L | U at RL |
| | | | | Other 10 Singles Non-Detect ⇒ | No Actn |
| | Fluorene 1.5J ng/L | Y | 7.5 ng/L | SH-03S 56B ng/L | No Actn - Remove B |
| | | | | ~~SH-28D, SH-13S, SH-24R, SH-02R, SH-06R-A, SH-14S~~ ~~GW-213~~ Non 12/4/06 | |
| | | | | SH-14S 8JB ng/L | 8J - Remove B |
| | | | | OW-213 8.5JB ng/L | 8.5J - Remove B |
| | | | | SH-28D, SH-13S, SH-24R, SH-02R, SH-06R-B 1.1→6.2JB | U at RL |
| | | | | Other 11 Singles Non-Detect ⇒ | No Actn |
| | Phenanthrene 5.3J ng/L | Y | 26.5 ng/L | SH-14S 13B ng/L | 13 U |
| | | | | OW-213 14B | 14 U |
| | | | | Other 17 Singles 2.4JB → 8.4JB | U at RL |
| | Anthracene 1.4J ng/L | Y | 7 ng/L | SH-14S 8.2JB | 8.2J - Remove B |
| | | | | OW-213 9.2JB | 9.2J - Remove B |
| | | | | SH-28D, SH-06R-A, SH-24R, SH-27D, SH-06R-B, SH-27R, SH-13S, SH-02R + SH-03S 1.4JB → 6.5JB | U at RL |
| | | | | Remaining 8 Singles Non-detect ⇒ | No Actn |
| | Fluoranthene 5.5J ng/L | Y | 27.5 ng/L | SH-02R 54B | No Actn - Remove B |
| | | | | SH-14S 42B | No Actn - Remove B |
| | | | | OW-213 41B | No Actn - Remove B |
| | | | | SH-03S 14B | 14 U |
| | | | | SH-06R-A 19B | 19 U |
| | | | | Remaining 14 Singles - 2.1JB → 9.3JB ng/L | U at RL |

Date 12/5/06

Data Reviewer MJC. RJL

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase 1B-5 2006
8270C-SIM Data Review Checklist

Lab: AWHL
Date Sampled: 9/27 - 10/3/06
Method of Analysis: 8270C-SIM

Lab Project #: BU213
No. Samples: 17 + 1FD + 1EB
Matrix: GW

Blank Action Continued

| Blank ID | Contaminant / Level | Matrix Related ? | Action Level / Action | Sample ID and result reported | Corrected Result |
|---|---|---|---|---|---|
| SW100406B03 cont'd | Pyrene 13 ng/L | Y | 65 ng/L | SH-14S 68 B ng/L | No Action - Remove B |
| | | | | OW-213 71 B | No Action - Remove B |
| | | | | SH-02R 59 B | 59 U |
| | | | | SH-03S 11 B | 11 U |
| | | | | SH-06R-A 51 B | 51 U |
| | | | | SH-14D Non-Detect | No Action |
| | | | | Other 13 Samples | U at RL |
| | | | | 1.4 JB → 9.5 JB ng/L | |
| | Benz(a)anthracene 3.2J | Y | 16 ng/L | SH-14S 17 B | No Action - Remove B |
| | | | | OW-213 18 B | No Action - Remove B |
| | | | | SH-05D, SH-14D, SH-03D, | |
| | | | | OW-213A, SH-06R-A, SH-27D | |
| | | | | Non-Detect ⇒ No Action | |
| | | | | Other 11 Samples | U at RL |
| | | | | 1.1 JB → 5.3 JB ng/L | |
| | Chrysene 2.8J ng/L | Y | 14 ng/L | SH-14S 13 B | 13 U |
| | | | | OW-213 1.5 B | No Action - Remove B |
| | | | | SH-05D, SH-14D, SH-03D, | |
| | | | | OW-213A - Non-Detect ⇒ No | Action |
| | | | | Other 13 Samples | U at RL |
| | | | | 1.1 JB → 6 JB ng/L | |
| | Bis(2-ethylhexyl)phthalate 490 J ng/L | Y | 4900 ng/L | SH-06R-A 1700 B | 1700 U |
| | | | | Other 18 Samples | U at RL |
| | | | | 140 JB ⇒ 700 JB ng/L | |
| | Benzo(b)fluoranthene 2.7J | Y | 13.5 ng/L | SH-28R, SH-05D, SH-06R-A, | |
| | | | | SH-14D, SH-03D ⇒ Non-Detect ⇒ | No Action |
| | | | | Other 14 Samples | U at RL |
| | | | | 1.2 JB ⇒ 7.9 JB ng/L | |
| | Benzo(k)fluoranthene 2.6J | Y | 13 ng/L | SH-05D, SH-06R-A, SH-14D + | |
| | | | | SH-03D - Non-Detect ⇒ No | Action Req. |
| | | | | Other 15 Samples | U at RL |
| | | | | 1.2 → 6.9 JB ng/L | |

Date 12/5/06

Data Reviewer

A
3 of 6

cont'd on 3B

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase 1B-5 2006
8270C-SIM Data Review Checklist

Lab: AWHL
Date Sampled: 9/27 - 10/3/06
Method of Analysis: 8270C-SIM

Lab Project #: BU213
No. Samples: 17 + 1FD + 1EB
Matrix: GW

Blank Action Continued

| Blank ID | Contaminant / Level | Matrix Related ? | Action Level / Action | Sample ID and result reported | Corrected Result |
|---|---|---|---|---|---|
| SW100406B03 Continued | Benzo(a)pyrene 2.0 J ng/L | Y | 10 ng/L | SH-14S 11B | No Action - Remove B |
| | | | | OW-213 12B | No Action - Remove B |
| | | | | SH-28R, SH-05D, SH-06R-A, SH-14D + SH-03D + OW-213A - Non-Detect | No Action |
| | | | | Other 11 Samples 1.2JB → 7.1JB ng/L | U at RL |
| | Indeno(1,2,3-cd)pyrene 2.4J | Y | 12 ng/L | SH-13S 11B | 11U |
| | | | | SH-05D, SH-14D, SH-03D + SH-06R-A - Non-Detect | No Action. |
| | | | | Other 14 Samples 1.4JB → 6.4JB ng/L | U at RL |
| | Benzo(g,h,i)perylene 2.8J | Y | 14 ng/L | SH-13S 13B | 13U |
| | | | | SH-05D, SH-06R-A, SH-14D + SH-03D - Non-Detect | No Action |
| | | | | Other 14 Samples - 1.4JB → 7.1JB ng/L | U at RL |
| OW-213A | None After Blank Action | | | No Additional Actions Required. | |

Date 12/5/06

Data Reviewer

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase 1B-5 2006
8270C-SIM Data Review Checklist

Lab: AWHL
Date Sampled: 9/27 - 10/3/06
Method of Analysis: 8270C-SIM

Lab Project #: BU213
No. Samples: 17 + 1FD + 1EB
Matrix: gw

Additional Notes:

LCS = SW100406L01 - All 17 PAHs + Carbazole + Bis(2-Ethylhexyl)phthalate were recovered within criteria ⇒ No Action required.

MS/MSD done on SH-135/09-28-06 - All %Rec + MS/MSD RPD OK ⇒ Acceptable Accuracy + Precision for method + matrix demonstrated ⇒ No Action Required.

FD pair = SH-145/10-02-06 + DW-213/10-02-06

| Compound | SH-145 (ng/L) | DW-213 (ng/L) | RPD | Action |
|---|---|---|---|---|
| Naphthalene | 840 (>2×RL) | 960 (>2×RL) | 13% | None |
| Pyrene | 68 (>2×RL) | 71 (>2×RL) | 4% | |
| Benz(a)anthracene | 17 (>RL, <2×RL) | 18 (>RL <2×RL) | 6% | |
| Chrysene | 13U (=RL) | 15 (>RL, <2×RL) | NA | |
| Benzo(a)pyrene | 11 (>RL, <2×RL) | 12 (>RL, <2×RL) | 9% | |
| Dibenz(ah)anthracene | 1.5J (<RL) | 1.4J (<RL) | NA | |
| Acenaphthene | 1.8J (<RL) | 1.7J | | |
| Fluorene | 8J (<RL) | 8.5J | | |
| Anthracene | 8.2J (<RL) | 9.2J | | |
| Carbazole | 8.6J (<RL) | 9.5J | | |

FD precision was acceptable for the 9-10 detected SVOCs in these samples ⇒ No Action required.

Tune: T4100701 (ICAL), T4100903 + T4100904 - All Abundance OK + all samples analyzed within 12 hrs. of DFTPP Injection.

ICAL: 10/7/06 - 10 → 10000 ng/L - %RSD all <30% + RFs > 0.05 ⇒ Acceptable ICAL - No Action

Date 12/5/06
Data Reviewer MJC. RK

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase 1B-5 2006
8270C-SIM Data Review Checklist

Lab: AWHL
Date Sampled: 9/27-10/3/06
Method of Analysis: 8270C-SIM

Lab Project #: BU213
No. Samples: 17 + 1FD + 1EB
Matrix: gw

Additional Notes:

CCAL: C4100903 - All %D & ≤ ±25%.
C4100904 - All %D ≤ ±25% except benzo(g,h,i)perylene %D = 29.1% due to loss in instrument sensitivity to detection of this compound during analysis as compared to ICAL.

* Action: Benzo(g,h,i)perylene estimated (UJ) in SH-05R-A, SH-05R-B, DW-213A and SH-03D with possible low bias due to low calibration verification

All 5 IS Area + RTs within criteria in all Samples + QC ⇒ No Action

All non-detects were < PALs except for Benzo(a)pyrene + Dibenz(a,h)anthracene, as expected, due to method limitations. The RLs were = PALs except for 7 Samples where RLs were 11 ng/L (1100 ng/L Bis(2-ethylhexyl)phthalate) due to limited volume for sample extraction.

26 Results, not reported due to Blank Actions, were reported as "J" values by lab at levels < RL. These J data were accepted with indeterminate bias due to uncertainty in quantitation at a level < calibration range.

There were no additional issues raised in narration.

Date 12/5/06

Data Reviewer [signature]

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase 1B-5 2006
8270C-SIM Data Review Checklist

| Sample ID 0609122 - | | Date Sampled | Field Blank | Method Blank | LCS | Date Extracted | Date Analyzed |
|---|---|---|---|---|---|---|---|
| SH-28D/09-27-06 | -02 | 9/27/06 | OW-213A | SW100406B03 | SW100406L01 | 10/04/06 | 10/9/06 |
| SH-13S/09-28-06 | -04 | 9/28/06 | | | | | |
| SH-19R/09-28-06 | -05 | | | | | | |
| SH-24R/09-28-06 | -06 | | | | | | |
| SH-02R/09-29-06 | -08 | 9/29/06 | | | | | |
| SH-03S/09-29-06 | -09 | | | | | | |
| SH-27R/09-29-06 | -10 | | | | | | |
| SH-28R/09-29-06 | -11 | | | | | | |
| SH-05D/10-02-06 | -13 | 10/2/06 | | | | | |
| SH-06R-A/10-02-06 | -14 | | | | | | |
| SH-06R-B/10-02-06 | -15 | | | | | | 10/10/06 |
| SH-14S/10-02-06 | -16 | | | | | | |
| SH-14D/10-02-06 | -17 | | | | | | |
| SH-27D/10-02-06 | -18 | | | | | | |
| OW-213/10-02-06 | -19 | | | | | | |
| SH-03D/10-03-06 | -21 | 10/3/06 | | | | | |
| SH-05R-A/10-03-06 | -22 | | | | | | |
| SH-05R-B/10-03-06 | -23 | | | | | | |
| OW-213A/10-03-06 | -24 | | NA | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Date 12/5/06

Data Reviewer

# DATA USABILITY ASSESSMENT

**TAL Metals Analysis by Methods 6020 & 7470A**
**EPA Region I Tier II – type review**
**Natural Attenuation and Miscellaneous Wet Chemistry Parameters**
**EPA Region I Tier I – type review**

| | |
|---|---|
| **Client:** | Sanborn, Head & Associates, Inc., Concord, New Hampshire |
| **Site:** | Blackburn & Union Privileges Superfund Site, Walpole, Massachusetts<br>Phase 1B-5 Remedial Investigation |
| **Laboratories:** | Alpha Woods Hole Labs (AWHL), Raynham, Massachusetts<br>Groundwater Analytical, Inc., Buzzards Bay, Massachusetts<br>Katahdin Analytical Services, Inc., Westbrook, Maine<br>Microseeps, Pittsburgh, Pennsylvania |
| **SDG:** | BU214 |
| **Lab ETR:** | 0610018 |
| **# Samples/Analyses:** | 11 groundwaters and 1 equipment rinseate blank (EB) for Total TAL Metals, Alkalinity, Chloride, Nitrate, Sulfate, Sulfide, Total Dissolved Solids (TDS), Total Kjeldahl Nitrogen (TKN), Total Organic Carbon (TOC), and Ferrous Iron ($Fe^{+2}$)<br>11 groundwaters, 1 EB, and 3 trip blanks for Gases (ethane, ethene, methane) |
| **Initial Reviewer:** | Susan D. Chapnick, New Environmental Horizons, Inc. |
| **Senior Reviewer:** | Dr. Nancy C. Rothman, New Environmental Horizons, Inc. |
| **Date Completed:** | December 11, 2006 |

An EPA Tier II-type Data Validation/Usability Checklist Review was performed on the TAL Metals data and an EPA Tier I-type review was performed on the remainder of the parameters included in this SDG with the following intentions: 1) to determine if the data were generated and reported in accordance with the *Phase 1B-5 Remedial Investigation Work Plan, Blackburn & Union Privileges Superfund Site, Walpole, MA*, prepared by Sanborn, Head & Associates, Inc., Rev. 02, September 21, 2006 (Phase IB-5 Work Plan); USEPA *Test Methods for Evaluating Solid Waste, Physical Chemical Methods, SW-846, Third*

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*Edition, Final Update, December 1996,* Methods 6020 (ICP-MS metals) and 7470A (CVAA mercury); EPA wet chemistry test methods 310.1 (alkalinity), 300.0 (anions: chloride, nitrate, sulfate), 376.2 (sulfide), 160.1 (TDS), 351.2 (TKN), 415.1 (TOC), 7199 modified ($Fe^{+2}$), and Microseeps SOP AM20GAX (gases: ethane, ethene, methane); Region I, *EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses,* December 1996; *Region I Laboratory Data Validation Functional Guidelines for Evaluating Inorganics Analyses,* February 1989; and *Guidance for Data Useability in Risk Assessment* (Part A), Publication 9285.7-09A, USEPA 1992; 2) to determine if the data met the project data quality objectives for acceptable accuracy, precision, sensitivity; and technical usability; and 3) to update the project database with appropriate data quality qualifiers.

The Data Review Checklist, attached, was completed during this assessment to document the review.

All results for total TAL Metals, Alkalinity, Anions (Chloride, Nitrate, and Sulfate), Sulfide, Total Dissolved Solids (TDS), Total Kjeldahl Nitrogen (TKN), Total Organic Carbon (TOC), Ferrous Iron ($Fe^{+2}$), and Gases (Ethane, Ethene, and Methane) in the samples included in this SDG BU214 are usable for project objectives. Several results have been negated (U) due to blank actions or qualified as estimated (J or UJ) due to quality control criteria exceedance(s). Data users should note the uncertainties in the qualified results as summarized below in Table 1. The qualified (U, J, UJ) and unqualified results are usable for project objectives.

All non-detected results in the groundwater samples included in this SDG met either the project-required quantitation limits (PQLs), or, if those were exceeded, met all applicable project action limits (PALs) as listed in QAPP Worksheet #9b (Phase 1B-5 Work Plan, September 2006) with the following exceptions: antimony, beryllium, cadmium, chromium, iron, lead, selenium, and thallium in samples SH-01D/10-03-06 and SH-01R/10-04-06; aluminum and manganese in sample SH-01D/10-03-06; and zinc in sample SH-01R/10-04-06. Note that these two samples, SH-01D/10-03-06 and SH-01R/10-04-06, had pH >14. Interferences caused by this complex matrix made it necessary for the laboratory to perform both preparation and analytical dilutions to obtain valid results for TAL Metals in these samples. The data user will have to evaluate the usability of these elevated non-detected data on a case-by-case basis to determine if these data can be used for project objectives.

Note that many of the wet chemistry parameters did not have PALs. In addition, the Worksheet #9b had incorrect values and units for PQLs for the Gases. The laboratory reporting limits (RLs) achieved for Ethane (0.025 µg/L), Ethene (0.025 µg/L), and Methane (0.100 µg/L) in these groundwater samples were considered acceptable based on method calibration information.

A low-level standard was not analyzed with the TAL Metals, as required by the original QAPP (2000). However, the laboratory included a low-level standard in the calibration curve for TAL Metals that was equivalent to the RL for each metal. This was considered acceptable to support the RL; therefore, no action was taken other than to note this deviation.

Professional judgment was used to take blank actions for Ethane, Ethene, and Methane due to the observation of low-level contamination of these gases in the equipment blank (EB) and the trip blanks (TB) associated with these groundwater samples. Table 1 summarizes the actions taken to negate (U) or qualify as estimated (J) the affected results. Data users are directed to pages 5 through 7 of the attached Data Usability Checklist Review for further details.

The Chain-of-Custody (COC) listed samples "SH-1D/10-03-06" and "SH-1S/10-05-06", which were changed to "SH-01D/10-03-06" and "SH-01S/10-05-06", respectively, based on client communication with the laboratory. The corrected sample identifications are included in the validated database file.

All other quality control information associated with accuracy, precision, representativeness, and sensitivity for the Total TAL Metals and the project-specific list of natural attenuation and other wet chemistry parameters reported met project criteria for the samples in this SDG with the exceptions in the following table.

**Table 1. Summary of Data Validation/Usability Actions**

| Sample ID | Analyte | Qualifier | Bias | Comment |
|---|---|---|---|---|
| OW-214A / 10-05-06 | Arsenic | UJ | I | Uncertain at MDL |
| All groundwater samples | Calcium | J | L | Matrix suppression |
| OW-214 / 10-04-06, SH-026S / 10-04-06, SH-05S / 10-04-06, SH-15S / 10-03-06, SH-17D / 10-05-06, SH-17R / 10-04-06, & WP-06 / 10-05-06 | Potassium | UJ | I | MS low + Blank action + matrix suppression |
| SH-01D / 10-03-06, SH-01R / 10-04-06, SH-01S / 10-05-06, & SH-04S / 10-04-06 | Potassium | J | L | MS low + matrix suppression |
| All groundwater samples | Vanadium | J | L | Matrix suppression |
| OW-214 / 10-04-06, SH-01S / 10-05-06, SH-026S / 10-04-06, SH-04S / 10-04-06, SH-05S / 10-04-06, & SH-17D / 10-05-06 | Zinc | U | | Blank action |
| SH-01D / 10-03-06, SH-15S / 10-03-06, SH-01R / 10-04-06, SH-04S / 10-04-06, SH-05S / 10-04-06, SH-17R / 10-04-06, SH-026S / 10-04-06, & OW-214 / 10-04-06 | Ferrous Iron | UJ | L | MS/MSD low |
| SH-01D / 10-03-06 | Sulfide | UJ | I | Headspace present in bottle |
| SH-01R / 10-04-06, SH-01S / 10-05-06, & SH-04S / 10-04-06 | Sulfide | J | H | MS high |

**Table 1. Summary of Data Validation/Usability Actions** - *continued*

| Sample ID | Analyte | Qualifier | Bias | Comment |
|---|---|---|---|---|
| SH-01D / 10-03-06 & SH-01R / 10-04-06 | TKN | J / UJ | I | Preservation issue: pH > 14 |
| SH-01D / 10-03-06 & SH-01R / 10-04-06 | TOC | J | I | Preservation issue: pH > 14 |
| SH-026S / 10-04-06 | Ethane | U | | Blank action |
| OW-214 / 10-04-06 & SH-05S / 10-04-06 | Ethane & Ethene | J | I | FD imprecision |
| OW-214A / 10-05-06, TB-512 / 10-03-06, TB-513 / 10-04-06, & TB-514 / 10-05-06 | Ethane & Ethene | J | I | Uncertain < calibration range |
| SH-026S / 10-04-06, SH-15S / 10-03-06, & WP-06 / 10-05-06 | Ethene | U | | Blank action |
| TB-512 / 10-03-06 & TB-513 / 10-04-06 | Methane | J | I | Uncertain < calibration range |

*Qualifiers: U = Analyte is not detected; UJ = Non-detect is estimated; J = Result is estimated; R = Result is rejected and is unusable for project decisions.*

*Bias: L = Low; H = High; I = Indeterminate*

*Acronyms used in Table:*

*EB = Equipment Rinseate Blank*
*FD = Field Duplicate sample(s)*
*HT = Holding Time*
*MDL = Method Detection Limit*
*MS = Matrix Spike sample*
*TB = Trip Blank*
*< "Less Than"*
*> "Greater Than"*

The qualified (J, UJ, and U) and unqualified results presented in the validated database, submitted electronically to Sanborn, Head & Associates, Inc. are considered usable for project objectives.

| Smpl | Lab_ID | Anal_Date | Method | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OW-214 / 10-04-06 | 0610018-10 | 10/26/2006 | 6020A | 7429-90-5 | Aluminum | 960 | µg/L | | | 250 | µg/L | 5 | |
| OW-214A / 10-05-06 | 0610018-15 | 10/26/2006 | 6020A | 7429-90-5 | Aluminum | 250 | µg/L | U | | 250 | µg/L | 5 | |
| SH-01D / 10-03-06 | 0610018-02 | 10/26/2006 | 6020A | 7429-90-5 | Aluminum | 120000 | µg/L | U | | 120000 | µg/L | 500 | |
| SH-01R / 10-04-06 | 0610018-05 | 10/26/2006 | 6020A | 7429-90-5 | Aluminum | 34000 | µg/L | | | 25000 | µg/L | 100 | |
| SH-01S / 10-05-06 | 0610018-12 | 10/26/2006 | 6020A | 7429-90-5 | Aluminum | 1300 | µg/L | | | 250 | µg/L | 5 | |
| SH-026S / 10-04-06 | 0610018-09 | 10/26/2006 | 6020A | 7429-90-5 | Aluminum | 6200 | µg/L | | | 250 | µg/L | 5 | |
| SH-04S / 10-04-06 | 0610018-06 | 10/26/2006 | 6020A | 7429-90-5 | Aluminum | 380 | µg/L | | | 250 | µg/L | 5 | |
| SH-05S / 10-04-06 | 0610018-07 | 10/26/2006 | 6020A | 7429-90-5 | Aluminum | 840 | µg/L | | | 250 | µg/L | 5 | |
| SH-15S / 10-03-06 | 0610018-03 | 10/26/2006 | 6020A | 7429-90-5 | Aluminum | 1000 | µg/L | | | 250 | µg/L | 5 | |
| SH-17D / 10-05-06 | 0610018-13 | 10/26/2006 | 6020A | 7429-90-5 | Aluminum | 1000 | µg/L | U | | 1000 | µg/L | 20 | |
| SH-17R / 10-04-06 | 0610018-08 | 10/26/2006 | 6020A | 7429-90-5 | Aluminum | 1000 | µg/L | U | | 1000 | µg/L | 20 | |
| WP-06 / 10-05-06 | 0610018-14 | 10/26/2006 | 6020A | 7429-90-5 | Aluminum | 380 | µg/L | | | 250 | µg/L | 5 | |
| OW-214 / 10-04-06 | 0610018-10 | 10/25/2006 | 6020A | 7440-36-0 | Antimony | 1.9 | µg/L | | | 0.5 | µg/L | 1 | |
| OW-214A / 10-05-06 | 0610018-15 | 10/25/2006 | 6020A | 7440-36-0 | Antimony | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-01D / 10-03-06 | 0610018-02 | 10/25/2006 | 6020A | 7440-36-0 | Antimony | 50 | µg/L | U | | 50 | µg/L | 20 | |
| SH-01R / 10-04-06 | 0610018-05 | 10/25/2006 | 6020A | 7440-36-0 | Antimony | 50 | µg/L | U | | 50 | µg/L | 20 | |
| SH-01S / 10-05-06 | 0610018-12 | 10/25/2006 | 6020A | 7440-36-0 | Antimony | 5.6 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-026S / 10-04-06 | 0610018-09 | 10/25/2006 | 6020A | 7440-36-0 | Antimony | 0.7 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-04S / 10-04-06 | 0610018-06 | 10/25/2006 | 6020A | 7440-36-0 | Antimony | 0.74 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-05S / 10-04-06 | 0610018-07 | 10/25/2006 | 6020A | 7440-36-0 | Antimony | 2.2 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-15S / 10-03-06 | 0610018-03 | 10/25/2006 | 6020A | 7440-36-0 | Antimony | 0.65 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-17D / 10-05-06 | 0610018-13 | 10/25/2006 | 6020A | 7440-36-0 | Antimony | 2.1 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-17R / 10-04-06 | 0610018-08 | 10/25/2006 | 6020A | 7440-36-0 | Antimony | 2 | µg/L | | | 0.5 | µg/L | 1 | |
| WP-06 / 10-05-06 | 0610018-14 | 10/25/2006 | 6020A | 7440-36-0 | Antimony | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| OW-214 / 10-04-06 | 0610018-10 | 10/25/2006 | 6020A | 7440-38-2 | Arsenic | 11 | µg/L | | | 0.092 | µg/L | 1 | |
| OW-214A / 10-05-06 | 0610018-15 | 10/25/2006 | 6020A | 7440-38-2 | Arsenic | 0.092 | µg/L | UJ | I | 0.092 | µg/L | 1 | Uncertain at MDL |
| SH-01D / 10-03-06 | 0610018-02 | 10/25/2006 | 6020A | 7440-38-2 | Arsenic | 660 | µg/L | | | 9.2 | µg/L | 20 | |
| SH-01R / 10-04-06 | 0610018-05 | 10/25/2006 | 6020A | 7440-38-2 | Arsenic | 620 | µg/L | | | 9.2 | µg/L | 20 | |
| SH-01S / 10-05-06 | 0610018-12 | 10/25/2006 | 6020A | 7440-38-2 | Arsenic | 8 | µg/L | | | 0.092 | µg/L | 1 | |
| SH-026S / 10-04-06 | 0610018-09 | 10/25/2006 | 6020A | 7440-38-2 | Arsenic | 31 | µg/L | | | 0.092 | µg/L | 1 | |
| SH-04S / 10-04-06 | 0610018-06 | 10/25/2006 | 6020A | 7440-38-2 | Arsenic | 17 | µg/L | | | 0.092 | µg/L | 1 | |
| SH-05S / 10-04-06 | 0610018-07 | 10/25/2006 | 6020A | 7440-38-2 | Arsenic | 11 | µg/L | | | 0.092 | µg/L | 1 | |
| SH-15S / 10-03-06 | 0610018-03 | 10/25/2006 | 6020A | 7440-38-2 | Arsenic | 12 | µg/L | | | 0.092 | µg/L | 1 | |
| SH-17D / 10-05-06 | 0610018-13 | 10/25/2006 | 6020A | 7440-38-2 | Arsenic | 52 | µg/L | | | 0.092 | µg/L | 1 | |
| SH-17R / 10-04-06 | 0610018-08 | 10/25/2006 | 6020A | 7440-38-2 | Arsenic | 63 | µg/L | | | 0.092 | µg/L | 1 | |
| WP-06 / 10-05-06 | 0610018-14 | 10/25/2006 | 6020A | 7440-38-2 | Arsenic | 14 | µg/L | | | 0.092 | µg/L | 1 | |
| OW-214 / 10-04-06 | 0610018-10 | 10/25/2006 | 6020A | 7440-39-3 | Barium | 8.5 | µg/L | | | 0.5 | µg/L | 1 | |
| OW-214A / 10-05-06 | 0610018-15 | 10/25/2006 | 6020A | 7440-39-3 | Barium | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-01D / 10-03-06 | 0610018-02 | 10/25/2006 | 6020A | 7440-39-3 | Barium | 50 | µg/L | U | | 50 | µg/L | 20 | |
| SH-01R / 10-04-06 | 0610018-05 | 10/25/2006 | 6020A | 7440-39-3 | Barium | 50 | µg/L | U | | 50 | µg/L | 20 | |
| SH-01S / 10-05-06 | 0610018-12 | 10/25/2006 | 6020A | 7440-39-3 | Barium | 50 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-026S / 10-04-06 | 0610018-09 | 10/25/2006 | 6020A | 7440-39-3 | Barium | 11 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-04S / 10-04-06 | 0610018-06 | 10/25/2006 | 6020A | 7440-39-3 | Barium | 17 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-05S / 10-04-06 | 0610018-07 | 10/25/2006 | 6020A | 7440-39-3 | Barium | 9.3 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-15S / 10-03-06 | 0610018-03 | 10/25/2006 | 6020A | 7440-39-3 | Barium | 3.6 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-17D / 10-05-06 | 0610018-13 | 10/25/2006 | 6020A | 7440-39-3 | Barium | 2.9 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-17R / 10-04-06 | 0610018-08 | 10/25/2006 | 6020A | 7440-39-3 | Barium | 3.3 | µg/L | | | 0.5 | µg/L | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low; H = High; I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Anal_Date | Method | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WP-06 / 10-05-06 | 0610018-14 | 10/25/2006 | 6020A | 7440-39-3 | Barium | 1.8 | µg/L | | | 0.5 | µg/L | 1 | |
| OW-214 / 10-04-06 | 0610018-10 | 10/25/2006 | 6020A | 7440-41-7 | Beryllium | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| OW-214A / 10-05-06 | 0610018-15 | 10/25/2006 | 6020A | 7440-41-7 | Beryllium | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-01D / 10-03-06 | 0610018-02 | 10/25/2006 | 6020A | 7440-41-7 | Beryllium | 20 | µg/L | U | | 20 | µg/L | 20 | |
| SH-01R / 10-04-06 | 0610018-05 | 10/25/2006 | 6020A | 7440-41-7 | Beryllium | 20 | µg/L | U | | 20 | µg/L | 20 | |
| SH-01S / 10-05-06 | 0610018-12 | 10/25/2006 | 6020A | 7440-41-7 | Beryllium | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-026S / 10-04-06 | 0610018-09 | 10/25/2006 | 6020A | 7440-41-7 | Beryllium | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-04S / 10-04-06 | 0610018-06 | 10/25/2006 | 6020A | 7440-41-7 | Beryllium | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-05S / 10-04-06 | 0610018-07 | 10/25/2006 | 6020A | 7440-41-7 | Beryllium | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-15S / 10-03-06 | 0610018-03 | 10/25/2006 | 6020A | 7440-41-7 | Beryllium | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-17D / 10-05-06 | 0610018-13 | 10/25/2006 | 6020A | 7440-41-7 | Beryllium | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-17R / 10-04-06 | 0610018-08 | 10/25/2006 | 6020A | 7440-41-7 | Beryllium | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| WP-06 / 10-05-06 | 0610018-14 | 10/25/2006 | 6020A | 7440-41-7 | Beryllium | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| OW-214 / 10-04-06 | 0610018-10 | 10/25/2006 | 6020A | 7440-43-9 | Cadmium | 0.14 | µg/L | | | 0.1 | µg/L | 1 | |
| OW-214A / 10-05-06 | 0610018-15 | 10/25/2006 | 6020A | 7440-43-9 | Cadmium | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SH-01D / 10-03-06 | 0610018-02 | 10/25/2006 | 6020A | 7440-43-9 | Cadmium | 10 | µg/L | U | | 10 | µg/L | 20 | |
| SH-01R / 10-04-06 | 0610018-05 | 10/25/2006 | 6020A | 7440-43-9 | Cadmium | 10 | µg/L | U | | 10 | µg/L | 20 | |
| SH-01S / 10-05-06 | 0610018-12 | 10/25/2006 | 6020A | 7440-43-9 | Cadmium | 0.13 | µg/L | | | 0.1 | µg/L | 1 | |
| SH-026S / 10-04-06 | 0610018-09 | 10/25/2006 | 6020A | 7440-43-9 | Cadmium | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SH-04S / 10-04-06 | 0610018-06 | 10/25/2006 | 6020A | 7440-43-9 | Cadmium | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SH-05S / 10-04-06 | 0610018-07 | 10/25/2006 | 6020A | 7440-43-9 | Cadmium | 0.15 | µg/L | | | 0.1 | µg/L | 1 | |
| SH-15S / 10-03-06 | 0610018-03 | 10/25/2006 | 6020A | 7440-43-9 | Cadmium | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SH-17D / 10-05-06 | 0610018-13 | 10/25/2006 | 6020A | 7440-43-9 | Cadmium | 0.15 | µg/L | | | 0.1 | µg/L | 1 | |
| SH-17R / 10-04-06 | 0610018-08 | 10/25/2006 | 6020A | 7440-43-9 | Cadmium | 0.16 | µg/L | | | 0.1 | µg/L | 1 | |
| WP-06 / 10-05-06 | 0610018-14 | 10/25/2006 | 6020A | 7440-43-9 | Cadmium | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| OW-214 / 10-04-06 | 0610018-10 | 10/25/2006 | 6020A | 7440-70-2 | Calcium | 2700 | µg/L | J | L | 200 | µg/L | 1 | Matrix suppression |
| OW-214A / 10-05-06 | 0610018-15 | 10/25/2006 | 6020A | 7440-70-2 | Calcium | 230 | µg/L | | | 200 | µg/L | 1 | |
| SH-01D / 10-03-06 | 0610018-02 | 10/25/2006 | 6020A | 7440-70-2 | Calcium | 230000 | µg/L | J | L | 20000 | µg/L | 20 | Matrix suppression |
| SH-01R / 10-04-06 | 0610018-05 | 10/25/2006 | 6020A | 7440-70-2 | Calcium | 160000 | µg/L | J | L | 20000 | µg/L | 20 | Matrix suppression |
| SH-01S / 10-05-06 | 0610018-12 | 10/25/2006 | 6020A | 7440-70-2 | Calcium | 4600 | µg/L | J | L | 200 | µg/L | 1 | Matrix suppression |
| SH-026S / 10-04-06 | 0610018-09 | 10/25/2006 | 6020A | 7440-70-2 | Calcium | 1400 | µg/L | J | L | 200 | µg/L | 1 | Matrix suppression |
| SH-04S / 10-04-06 | 0610018-06 | 10/25/2006 | 6020A | 7440-70-2 | Calcium | 6800 | µg/L | J | L | 200 | µg/L | 1 | Matrix suppression |
| SH-05S / 10-04-06 | 0610018-07 | 10/25/2006 | 6020A | 7440-70-2 | Calcium | 2700 | µg/L | J | L | 200 | µg/L | 1 | Matrix suppression |
| SH-15S / 10-03-06 | 0610018-03 | 10/25/2006 | 6020A | 7440-70-2 | Calcium | 3900 | µg/L | J | L | 200 | µg/L | 1 | Matrix suppression |
| SH-17D / 10-05-06 | 0610018-13 | 10/25/2006 | 6020A | 7440-70-2 | Calcium | 2800 | µg/L | J | L | 200 | µg/L | 1 | Matrix suppression |
| SH-17R / 10-04-06 | 0610018-08 | 10/25/2006 | 6020A | 7440-70-2 | Calcium | 13000 | µg/L | J | L | 200 | µg/L | 1 | Matrix suppression |
| WP-06 / 10-05-06 | 0610018-14 | 10/25/2006 | 6020A | 7440-70-2 | Calcium | 6400 | µg/L | J | L | 200 | µg/L | 1 | Matrix suppression |
| OW-214 / 10-04-06 | 0610018-10 | 10/26/2006 | 6020A | 7440-47-3 | Chromium | 5 | µg/L | | | 2.5 | µg/L | 5 | |
| OW-214A / 10-05-06 | 0610018-15 | 10/26/2006 | 6020A | 7440-47-3 | Chromium | 2.5 | µg/L | U | | 2.5 | µg/L | 5 | |
| SH-01D / 10-03-06 | 0610018-02 | 10/26/2006 | 6020A | 7440-47-3 | Chromium | 50 | µg/L | U | | 50 | µg/L | 20 | |
| SH-01R / 10-04-06 | 0610018-05 | 10/26/2006 | 6020A | 7440-47-3 | Chromium | 50 | µg/L | U | | 50 | µg/L | 20 | |
| SH-01S / 10-05-06 | 0610018-12 | 10/26/2006 | 6020A | 7440-47-3 | Chromium | 4.8 | µg/L | | | 2.5 | µg/L | 5 | |
| SH-026S / 10-04-06 | 0610018-09 | 10/26/2006 | 6020A | 7440-47-3 | Chromium | 6.8 | µg/L | | | 2.5 | µg/L | 5 | |
| SH-04S / 10-04-06 | 0610018-06 | 10/26/2006 | 6020A | 7440-47-3 | Chromium | 5 | µg/L | | | 2.5 | µg/L | 5 | |
| SH-05S / 10-04-06 | 0610018-07 | 10/26/2006 | 6020A | 7440-47-3 | Chromium | 5.4 | µg/L | | | 2.5 | µg/L | 5 | |
| SH-15S / 10-03-06 | 0610018-03 | 10/26/2006 | 6020A | 7440-47-3 | Chromium | 2.5 | µg/L | U | | 2.5 | µg/L | 5 | |
| SH-17D / 10-05-06 | 0610018-13 | 10/26/2006 | 6020A | 7440-47-3 | Chromium | 2.5 | µg/L | U | | 2.5 | µg/L | 5 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low; H = High; I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Anal_Date | Method | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-17R / 10-04-06 | 0610018-08 | 10/26/2006 | 6020A | 7440-47-3 | Chromium | 2.5 | µg/L | U | | 2.5 | µg/L | 5 | |
| WP-06 / 10-05-06 | 0610018-14 | 10/26/2006 | 6020A | 7440-47-3 | Chromium | 2.7 | µg/L | | | 2.5 | µg/L | 5 | |
| OW-214 / 10-04-06 | 0610018-10 | 10/25/2006 | 6020A | 7440-48-4 | Cobalt | 2 | µg/L | | | 0.2 | µg/L | 1 | |
| OW-214A / 10-05-06 | 0610018-15 | 10/25/2006 | 6020A | 7440-48-4 | Cobalt | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-01D / 10-03-06 | 0610018-02 | 10/25/2006 | 6020A | 7440-48-4 | Cobalt | 20 | µg/L | U | | 20 | µg/L | 20 | |
| SH-01R / 10-04-06 | 0610018-05 | 10/25/2006 | 6020A | 7440-48-4 | Cobalt | 20 | µg/L | U | | 20 | µg/L | 20 | |
| SH-01S / 10-05-06 | 0610018-12 | 10/25/2006 | 6020A | 7440-48-4 | Cobalt | 1.4 | µg/L | | | 0.2 | µg/L | 1 | |
| SH-026S / 10-04-06 | 0610018-09 | 10/25/2006 | 6020A | 7440-48-4 | Cobalt | 1.8 | µg/L | | | 0.2 | µg/L | 1 | |
| SH-04S / 10-04-06 | 0610018-06 | 10/25/2006 | 6020A | 7440-48-4 | Cobalt | 1.4 | µg/L | | | 0.2 | µg/L | 1 | |
| SH-05S / 10-04-06 | 0610018-07 | 10/25/2006 | 6020A | 7440-48-4 | Cobalt | 2 | µg/L | | | 0.2 | µg/L | 1 | |
| SH-15S / 10-03-06 | 0610018-03 | 10/25/2006 | 6020A | 7440-48-4 | Cobalt | 0.32 | µg/L | | | 0.2 | µg/L | 1 | |
| SH-17D / 10-05-06 | 0610018-13 | 10/25/2006 | 6020A | 7440-48-4 | Cobalt | 0.81 | µg/L | | | 0.2 | µg/L | 1 | |
| SH-17R / 10-04-06 | 0610018-08 | 10/25/2006 | 6020A | 7440-48-4 | Cobalt | 2.8 | µg/L | | | 0.2 | µg/L | 1 | |
| WP-06 / 10-05-06 | 0610018-14 | 10/25/2006 | 6020A | 7440-48-4 | Cobalt | 0.53 | µg/L | | | 0.2 | µg/L | 1 | |
| OW-214 / 10-04-06 | 0610018-10 | 10/25/2006 | 6020A | 7440-50-8 | Copper | 27 | µg/L | | | 1 | µg/L | 1 | |
| OW-214A / 10-05-06 | 0610018-15 | 10/25/2006 | 6020A | 7440-50-8 | Copper | 3 | µg/L | | | 1 | µg/L | 1 | |
| SH-01D / 10-03-06 | 0610018-02 | 10/25/2006 | 6020A | 7440-50-8 | Copper | 730 | µg/L | | | 100 | µg/L | 20 | |
| SH-01R / 10-04-06 | 0610018-05 | 10/25/2006 | 6020A | 7440-50-8 | Copper | 460 | µg/L | | | 100 | µg/L | 20 | |
| SH-01S / 10-05-06 | 0610018-12 | 10/25/2006 | 6020A | 7440-50-8 | Copper | 49 | µg/L | | | 1 | µg/L | 1 | |
| SH-026S / 10-04-06 | 0610018-09 | 10/25/2006 | 6020A | 7440-50-8 | Copper | 54 | µg/L | | | 1 | µg/L | 1 | |
| SH-04S / 10-04-06 | 0610018-06 | 10/25/2006 | 6020A | 7440-50-8 | Copper | 17 | µg/L | | | 1 | µg/L | 1 | |
| SH-05S / 10-04-06 | 0610018-07 | 10/25/2006 | 6020A | 7440-50-8 | Copper | 29 | µg/L | | | 1 | µg/L | 1 | |
| SH-15S / 10-03-06 | 0610018-03 | 10/25/2006 | 6020A | 7440-50-8 | Copper | 15 | µg/L | | | 1 | µg/L | 1 | |
| SH-17D / 10-05-06 | 0610018-13 | 10/25/2006 | 6020A | 7440-50-8 | Copper | 41 | µg/L | | | 1 | µg/L | 1 | |
| SH-17R / 10-04-06 | 0610018-08 | 10/25/2006 | 6020A | 7440-50-8 | Copper | 31 | µg/L | | | 1 | µg/L | 1 | |
| WP-06 / 10-05-06 | 0610018-14 | 10/25/2006 | 6020A | 7440-50-8 | Copper | 17 | µg/L | | | 1 | µg/L | 1 | |
| OW-214 / 10-04-06 | 0610018-10 | 10/26/2006 | 6020A | 7439-89-6 | Iron | 2000 | µg/L | | | 250 | µg/L | 5 | |
| OW-214A / 10-05-06 | 0610018-15 | 10/26/2006 | 6020A | 7439-89-6 | Iron | 250 | µg/L | U | | 250 | µg/L | 5 | |
| SH-01D / 10-03-06 | 0610018-02 | 10/26/2006 | 6020A | 7439-89-6 | Iron | 5000 | µg/L | U | | 5000 | µg/L | 20 | |
| SH-01R / 10-04-06 | 0610018-05 | 10/26/2006 | 6020A | 7439-89-6 | Iron | 5000 | µg/L | U | | 5000 | µg/L | 20 | |
| SH-01S / 10-05-06 | 0610018-12 | 10/26/2006 | 6020A | 7439-89-6 | Iron | 3300 | µg/L | | | 250 | µg/L | 5 | |
| SH-026S / 10-04-06 | 0610018-09 | 10/26/2006 | 6020A | 7439-89-6 | Iron | 3500 | µg/L | | | 250 | µg/L | 5 | |
| SH-04S / 10-04-06 | 0610018-06 | 10/26/2006 | 6020A | 7439-89-6 | Iron | 1900 | µg/L | | | 250 | µg/L | 5 | |
| SH-05S / 10-04-06 | 0610018-07 | 10/26/2006 | 6020A | 7439-89-6 | Iron | 2100 | µg/L | | | 250 | µg/L | 5 | |
| SH-15S / 10-03-06 | 0610018-03 | 10/26/2006 | 6020A | 7439-89-6 | Iron | 250 | µg/L | U | | 250 | µg/L | 5 | |
| SH-17D / 10-05-06 | 0610018-13 | 10/26/2006 | 6020A | 7439-89-6 | Iron | 430 | µg/L | | | 250 | µg/L | 5 | |
| SH-17R / 10-04-06 | 0610018-08 | 10/26/2006 | 6020A | 7439-89-6 | Iron | 360 | µg/L | | | 250 | µg/L | 5 | |
| WP-06 / 10-05-06 | 0610018-14 | 10/26/2006 | 6020A | 7439-89-6 | Iron | 660 | µg/L | | | 250 | µg/L | 5 | |
| OW-214 / 10-04-06 | 0610018-10 | 10/25/2006 | 6020A | 7439-92-1 | Lead | 25 | µg/L | | | 0.5 | µg/L | 1 | |
| OW-214A / 10-05-06 | 0610018-15 | 10/25/2006 | 6020A | 7439-92-1 | Lead | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-01D / 10-03-06 | 0610018-02 | 10/25/2006 | 6020A | 7439-92-1 | Lead | 50 | µg/L | U | | 50 | µg/L | 20 | |
| SH-01R / 10-04-06 | 0610018-05 | 10/25/2006 | 6020A | 7439-92-1 | Lead | 50 | µg/L | U | | 50 | µg/L | 20 | |
| SH-01S / 10-05-06 | 0610018-12 | 10/25/2006 | 6020A | 7439-92-1 | Lead | 70 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-026S / 10-04-06 | 0610018-09 | 10/25/2006 | 6020A | 7439-92-1 | Lead | 2.8 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-04S / 10-04-06 | 0610018-06 | 10/25/2006 | 6020A | 7439-92-1 | Lead | 8 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-05S / 10-04-06 | 0610018-07 | 10/25/2006 | 6020A | 7439-92-1 | Lead | 26 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-15S / 10-03-06 | 0610018-03 | 10/25/2006 | 6020A | 7439-92-1 | Lead | 0.92 | µg/L | | | 0.5 | µg/L | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low; H = High; I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Anal_Date | Method | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-17D / 10-05-06 | 0610018-13 | 10/25/2006 | 6020A | 7439-92-1 | Lead | 2 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-17R / 10-04-06 | 0610018-08 | 10/25/2006 | 6020A | 7439-92-1 | Lead | 1.2 | µg/L | | | 0.5 | µg/L | 1 | |
| WP-06 / 10-05-06 | 0610018-14 | 10/25/2006 | 6020A | 7439-92-1 | Lead | 2.4 | µg/L | | | 0.5 | µg/L | 1 | |
| OW-214 / 10-04-06 | 0610018-10 | 10/26/2006 | 6020A | 7439-95-4 | Magnesium | 400 | µg/L | | | 50 | µg/L | 5 | |
| OW-214A / 10-05-06 | 0610018-15 | 10/26/2006 | 6020A | 7439-95-4 | Magnesium | 50 | µg/L | U | | 50 | µg/L | 5 | |
| SH-01D / 10-03-06 | 0610018-02 | 10/26/2006 | 6020A | 7439-95-4 | Magnesium | 25000 | µg/L | U | | 25000 | µg/L | 500 | |
| SH-01R / 10-04-06 | 0610018-05 | 10/26/2006 | 6020A | 7439-95-4 | Magnesium | 5000 | µg/L | U | | 5000 | µg/L | 100 | |
| SH-01S / 10-05-06 | 0610018-12 | 10/26/2006 | 6020A | 7439-95-4 | Magnesium | 1200 | µg/L | | | 50 | µg/L | 5 | |
| SH-026S / 10-04-06 | 0610018-09 | 10/26/2006 | 6020A | 7439-95-4 | Magnesium | 800 | µg/L | | | 50 | µg/L | 5 | |
| SH-04S / 10-04-06 | 0610018-06 | 10/26/2006 | 6020A | 7439-95-4 | Magnesium | 560 | µg/L | | | 50 | µg/L | 5 | |
| SH-05S / 10-04-06 | 0610018-07 | 10/26/2006 | 6020A | 7439-95-4 | Magnesium | 410 | µg/L | | | 50 | µg/L | 5 | |
| SH-15S / 10-03-06 | 0610018-03 | 10/26/2006 | 6020A | 7439-95-4 | Magnesium | 94 | µg/L | | | 50 | µg/L | 5 | |
| SH-17D / 10-05-06 | 0610018-13 | 10/26/2006 | 6020A | 7439-95-4 | Magnesium | 200 | µg/L | U | | 200 | µg/L | 20 | |
| SH-17R / 10-04-06 | 0610018-08 | 10/26/2006 | 6020A | 7439-95-4 | Magnesium | 3200 | µg/L | | | 200 | µg/L | 20 | |
| WP-06 / 10-05-06 | 0610018-14 | 10/26/2006 | 6020A | 7439-95-4 | Magnesium | 1400 | µg/L | | | 50 | µg/L | 5 | |
| OW-214 / 10-04-06 | 0610018-10 | 10/26/2006 | 6020A | 7439-96-5 | Manganese | 150 | µg/L | | | 25 | µg/L | 5 | |
| OW-214A / 10-05-06 | 0610018-15 | 10/26/2006 | 6020A | 7439-96-5 | Manganese | 25 | µg/L | U | | 25 | µg/L | 5 | |
| SH-01D / 10-03-06 | 0610018-02 | 10/26/2006 | 6020A | 7439-96-5 | Manganese | 500 | µg/L | U | | 500 | µg/L | 20 | |
| SH-01R / 10-04-06 | 0610018-05 | 10/26/2006 | 6020A | 7439-96-5 | Manganese | 840 | µg/L | | | 500 | µg/L | 20 | |
| SH-01S / 10-05-06 | 0610018-12 | 10/26/2006 | 6020A | 7439-96-5 | Manganese | 82 | µg/L | | | 25 | µg/L | 5 | |
| SH-026S / 10-04-06 | 0610018-09 | 10/26/2006 | 6020A | 7439-96-5 | Manganese | 120 | µg/L | | | 25 | µg/L | 5 | |
| SH-04S / 10-04-06 | 0610018-06 | 10/26/2006 | 6020A | 7439-96-5 | Manganese | 73 | µg/L | | | 25 | µg/L | 5 | |
| SH-05S / 10-04-06 | 0610018-07 | 10/26/2006 | 6020A | 7439-96-5 | Manganese | 150 | µg/L | | | 25 | µg/L | 5 | |
| SH-15S / 10-03-06 | 0610018-03 | 10/26/2006 | 6020A | 7439-96-5 | Manganese | 25 | µg/L | U | | 25 | µg/L | 5 | |
| SH-17D / 10-05-06 | 0610018-13 | 10/26/2006 | 6020A | 7439-96-5 | Manganese | 30 | µg/L | | | 25 | µg/L | 5 | |
| SH-17R / 10-04-06 | 0610018-08 | 10/26/2006 | 6020A | 7439-96-5 | Manganese | 93 | µg/L | | | 25 | µg/L | 5 | |
| WP-06 / 10-05-06 | 0610018-14 | 10/26/2006 | 6020A | 7439-96-5 | Manganese | 55 | µg/L | | | 25 | µg/L | 5 | |
| OW-214 / 10-04-06 | 0610018-10 | 10/26/2006 | 7470A | 7439-97-6 | Mercury | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| OW-214A / 10-05-06 | 0610018-15 | 10/26/2006 | 7470A | 7439-97-6 | Mercury | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-01D / 10-03-06 | 0610018-02 | 10/26/2006 | 7470A | 7439-97-6 | Mercury | 1 | µg/L | U | | 1 | µg/L | 1 | |
| SH-01R / 10-04-06 | 0610018-05 | 10/26/2006 | 7470A | 7439-97-6 | Mercury | 1 | µg/L | U | | 1 | µg/L | 1 | |
| SH-01S / 10-05-06 | 0610018-12 | 10/26/2006 | 7470A | 7439-97-6 | Mercury | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-026S / 10-04-06 | 0610018-09 | 10/26/2006 | 7470A | 7439-97-6 | Mercury | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-04S / 10-04-06 | 0610018-06 | 10/26/2006 | 7470A | 7439-97-6 | Mercury | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-05S / 10-04-06 | 0610018-07 | 10/26/2006 | 7470A | 7439-97-6 | Mercury | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-15S / 10-03-06 | 0610018-03 | 10/26/2006 | 7470A | 7439-97-6 | Mercury | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-17D / 10-05-06 | 0610018-13 | 10/26/2006 | 7470A | 7439-97-6 | Mercury | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SH-17R / 10-04-06 | 0610018-08 | 10/26/2006 | 7470A | 7439-97-6 | Mercury | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| WP-06 / 10-05-06 | 0610018-14 | 10/26/2006 | 7470A | 7439-97-6 | Mercury | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| OW-214 / 10-04-06 | 0610018-10 | 10/25/2006 | 6020A | 7440-02-0 | Nickel | 8.1 | µg/L | | | 0.5 | µg/L | 1 | |
| OW-214A / 10-05-06 | 0610018-15 | 10/25/2006 | 6020A | 7440-02-0 | Nickel | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SH-01D / 10-03-06 | 0610018-02 | 10/25/2006 | 6020A | 7440-02-0 | Nickel | 170 | µg/L | | | 50 | µg/L | 20 | |
| SH-01R / 10-04-06 | 0610018-05 | 10/25/2006 | 6020A | 7440-02-0 | Nickel | 220 | µg/L | | | 50 | µg/L | 20 | |
| SH-01S / 10-05-06 | 0610018-12 | 10/25/2006 | 6020A | 7440-02-0 | Nickel | 5.9 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-026S / 10-04-06 | 0610018-09 | 10/25/2006 | 6020A | 7440-02-0 | Nickel | 3.8 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-04S / 10-04-06 | 0610018-06 | 10/25/2006 | 6020A | 7440-02-0 | Nickel | 10 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-05S / 10-04-06 | 0610018-07 | 10/25/2006 | 6020A | 7440-02-0 | Nickel | 8.3 | µg/L | | | 0.5 | µg/L | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low; H = High; I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Anal_Date | Method | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-15S / 10-03-06 | 0610018-03 | 10/25/2006 | 6020A | 7440-02-0 | Nickel | 3 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-17D / 10-05-06 | 0610018-13 | 10/25/2006 | 6020A | 7440-02-0 | Nickel | 6.2 | µg/L | | | 0.5 | µg/L | 1 | |
| SH-17R / 10-04-06 | 0610018-08 | 10/25/2006 | 6020A | 7440-02-0 | Nickel | 14 | µg/L | | | 0.5 | µg/L | 1 | |
| WP-06 / 10-05-06 | 0610018-14 | 10/25/2006 | 6020A | 7440-02-0 | Nickel | 2.6 | µg/L | | | 0.5 | µg/L | 1 | |
| OW-214 / 10-04-06 | 0610018-10 | 10/25/2006 | 6020A | 7440-09-7 | Potassium | 400 | µg/L | UJ | I | 100 | µg/L | 1 | MS low + Blank action + matrix suppression |
| OW-214A / 10-05-06 | 0610018-15 | 10/25/2006 | 6020A | 7440-09-7 | Potassium | 180 | µg/L | | | 100 | µg/L | 1 | |
| SH-01D / 10-03-06 | 0610018-02 | 10/25/2006 | 6020A | 7440-09-7 | Potassium | 90000 | µg/L | J | L | 10000 | µg/L | 20 | MS low + matrix suppression |
| SH-01R / 10-04-06 | 0610018-05 | 10/25/2006 | 6020A | 7440-09-7 | Potassium | 69000 | µg/L | J | L | 10000 | µg/L | 20 | MS low + matrix suppression |
| SH-01S / 10-05-06 | 0610018-12 | 10/25/2006 | 6020A | 7440-09-7 | Potassium | 1900 | µg/L | J | L | 100 | µg/L | 1 | MS low + matrix suppression |
| SH-026S / 10-04-06 | 0610018-09 | 10/25/2006 | 6020A | 7440-09-7 | Potassium | 510 | µg/L | UJ | I | 100 | µg/L | 1 | MS low + Blank action + matrix suppression |
| SH-04S / 10-04-06 | 0610018-06 | 10/25/2006 | 6020A | 7440-09-7 | Potassium | 1300 | µg/L | J | L | 100 | µg/L | 1 | MS low + matrix suppression |
| SH-05S / 10-04-06 | 0610018-07 | 10/25/2006 | 6020A | 7440-09-7 | Potassium | 400 | µg/L | UJ | I | 100 | µg/L | 1 | MS low + Blank action + matrix suppression |
| SH-15S / 10-03-06 | 0610018-03 | 10/25/2006 | 6020A | 7440-09-7 | Potassium | 710 | µg/L | UJ | I | 100 | µg/L | 1 | MS low + Blank action + matrix suppression |
| SH-17D / 10-05-06 | 0610018-13 | 10/25/2006 | 6020A | 7440-09-7 | Potassium | 570 | µg/L | UJ | I | 100 | µg/L | 1 | MS low + Blank action + matrix suppression |
| SH-17R / 10-04-06 | 0610018-08 | 10/25/2006 | 6020A | 7440-09-7 | Potassium | 670 | µg/L | UJ | I | 100 | µg/L | 1 | MS low + Blank action + matrix suppression |
| WP-06 / 10-05-06 | 0610018-14 | 10/25/2006 | 6020A | 7440-09-7 | Potassium | 720 | µg/L | UJ | I | 100 | µg/L | 1 | MS low + Blank action + matrix suppression |
| OW-214 / 10-04-06 | 0610018-10 | 10/25/2006 | 6020A | 7782-49-2 | Selenium | 1.2 | µg/L | | | 1 | µg/L | 1 | |
| OW-214A / 10-05-06 | 0610018-15 | 10/25/2006 | 6020A | 7782-49-2 | Selenium | 1 | µg/L | U | | 1 | µg/L | 1 | |
| SH-01D / 10-03-06 | 0610018-02 | 10/25/2006 | 6020A | 7782-49-2 | Selenium | 100 | µg/L | U | | 100 | µg/L | 20 | |
| SH-01R / 10-04-06 | 0610018-05 | 10/25/2006 | 6020A | 7782-49-2 | Selenium | 100 | µg/L | U | | 100 | µg/L | 20 | |
| SH-01S / 10-05-06 | 0610018-12 | 10/25/2006 | 6020A | 7782-49-2 | Selenium | 1.4 | µg/L | | | 1 | µg/L | 1 | |
| SH-026S / 10-04-06 | 0610018-09 | 10/25/2006 | 6020A | 7782-49-2 | Selenium | 2 | µg/L | | | 1 | µg/L | 1 | |
| SH-04S / 10-04-06 | 0610018-06 | 10/25/2006 | 6020A | 7782-49-2 | Selenium | 2.4 | µg/L | | | 1 | µg/L | 1 | |
| SH-05S / 10-04-06 | 0610018-07 | 10/25/2006 | 6020A | 7782-49-2 | Selenium | 1.3 | µg/L | | | 1 | µg/L | 1 | |
| SH-15S / 10-03-06 | 0610018-03 | 10/25/2006 | 6020A | 7782-49-2 | Selenium | 1.7 | µg/L | | | 1 | µg/L | 1 | |
| SH-17D / 10-05-06 | 0610018-13 | 10/25/2006 | 6020A | 7782-49-2 | Selenium | 2.6 | µg/L | | | 1 | µg/L | 1 | |
| SH-17R / 10-04-06 | 0610018-08 | 10/25/2006 | 6020A | 7782-49-2 | Selenium | 5.1 | µg/L | | | 1 | µg/L | 1 | |
| WP-06 / 10-05-06 | 0610018-14 | 10/25/2006 | 6020A | 7782-49-2 | Selenium | 2 | µg/L | | | 1 | µg/L | 1 | |
| OW-214 / 10-04-06 | 0610018-10 | 10/25/2006 | 6020A | 7440-22-4 | Silver | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| OW-214A / 10-05-06 | 0610018-15 | 10/25/2006 | 6020A | 7440-22-4 | Silver | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SH-01D / 10-03-06 | 0610018-02 | 10/25/2006 | 6020A | 7440-22-4 | Silver | 10 | µg/L | U | | 10 | µg/L | 20 | |
| SH-01R / 10-04-06 | 0610018-05 | 10/25/2006 | 6020A | 7440-22-4 | Silver | 10 | µg/L | U | | 10 | µg/L | 20 | |
| SH-01S / 10-05-06 | 0610018-12 | 10/25/2006 | 6020A | 7440-22-4 | Silver | 0.26 | µg/L | | | 0.1 | µg/L | 1 | |
| SH-026S / 10-04-06 | 0610018-09 | 10/25/2006 | 6020A | 7440-22-4 | Silver | 0.12 | µg/L | | | 0.1 | µg/L | 1 | |
| SH-04S / 10-04-06 | 0610018-06 | 10/25/2006 | 6020A | 7440-22-4 | Silver | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SH-05S / 10-04-06 | 0610018-07 | 10/25/2006 | 6020A | 7440-22-4 | Silver | 0.13 | µg/L | | | 0.1 | µg/L | 1 | |
| SH-15S / 10-03-06 | 0610018-03 | 10/25/2006 | 6020A | 7440-22-4 | Silver | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SH-17D / 10-05-06 | 0610018-13 | 10/25/2006 | 6020A | 7440-22-4 | Silver | 0.47 | µg/L | | | 0.1 | µg/L | 1 | |
| SH-17R / 10-04-06 | 0610018-08 | 10/25/2006 | 6020A | 7440-22-4 | Silver | 0.39 | µg/L | | | 0.1 | µg/L | 1 | |
| WP-06 / 10-05-06 | 0610018-14 | 10/25/2006 | 6020A | 7440-22-4 | Silver | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| OW-214 / 10-04-06 | 0610018-10 | 10/26/2006 | 6020A | 7440-23-5 | Sodium | 270000 | µg/L | | | 2000 | µg/L | 20 | |
| OW-214A / 10-05-06 | 0610018-15 | 10/26/2006 | 6020A | 7440-23-5 | Sodium | 550 | µg/L | | | 500 | µg/L | 5 | |
| SH-01D / 10-03-06 | 0610018-02 | 10/26/2006 | 6020A | 7440-23-5 | Sodium | 33000000 | µg/L | | | 250000 | µg/L | 500 | |
| SH-01R / 10-04-06 | 0610018-05 | 10/26/2006 | 6020A | 7440-23-5 | Sodium | 18000000 | µg/L | | | 50000 | µg/L | 100 | |
| SH-01S / 10-05-06 | 0610018-12 | 10/26/2006 | 6020A | 7440-23-5 | Sodium | 240000 | µg/L | | | 500 | µg/L | 5 | |
| SH-026S / 10-04-06 | 0610018-09 | 10/26/2006 | 6020A | 7440-23-5 | Sodium | 220000 | µg/L | | | 500 | µg/L | 5 | |
| SH-04S / 10-04-06 | 0610018-06 | 10/26/2006 | 6020A | 7440-23-5 | Sodium | 390000 | µg/L | | | 2000 | µg/L | 20 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low; H = High; I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Anal_Date | Method | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-05S / 10-04-06 | 0610018-07 | 10/26/2006 | 6020A | 7440-23-5 | Sodium | 260000 | µg/L | | | 2000 | µg/L | 20 | |
| SH-15S / 10-03-06 | 0610018-03 | 10/26/2006 | 6020A | 7440-23-5 | Sodium | 200000 | µg/L | | | 500 | µg/L | 5 | |
| SH-17D / 10-05-06 | 0610018-13 | 10/26/2006 | 6020A | 7440-23-5 | Sodium | 460000 | µg/L | | | 2000 | µg/L | 20 | |
| SH-17R / 10-04-06 | 0610018-08 | 10/26/2006 | 6020A | 7440-23-5 | Sodium | 480000 | µg/L | | | 2000 | µg/L | 20 | |
| WP-06 / 10-05-06 | 0610018-14 | 10/26/2006 | 6020A | 7440-23-5 | Sodium | 140000 | µg/L | | | 500 | µg/L | 5 | |
| OW-214 / 10-04-06 | 0610018-10 | 10/25/2006 | 6020A | 7440-28-0 | Thallium | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| OW-214A / 10-05-06 | 0610018-15 | 10/25/2006 | 6020A | 7440-28-0 | Thallium | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SH-01D / 10-03-06 | 0610018-02 | 10/25/2006 | 6020A | 7440-28-0 | Thallium | 10 | µg/L | U | | 10 | µg/L | 20 | |
| SH-01R / 10-04-06 | 0610018-05 | 10/25/2006 | 6020A | 7440-28-0 | Thallium | 10 | µg/L | U | | 10 | µg/L | 20 | |
| SH-01S / 10-05-06 | 0610018-12 | 10/25/2006 | 6020A | 7440-28-0 | Thallium | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SH-026S / 10-04-06 | 0610018-09 | 10/25/2006 | 6020A | 7440-28-0 | Thallium | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SH-04S / 10-04-06 | 0610018-06 | 10/25/2006 | 6020A | 7440-28-0 | Thallium | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SH-05S / 10-04-06 | 0610018-07 | 10/25/2006 | 6020A | 7440-28-0 | Thallium | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SH-15S / 10-03-06 | 0610018-03 | 10/25/2006 | 6020A | 7440-28-0 | Thallium | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SH-17D / 10-05-06 | 0610018-13 | 10/25/2006 | 6020A | 7440-28-0 | Thallium | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SH-17R / 10-04-06 | 0610018-08 | 10/25/2006 | 6020A | 7440-28-0 | Thallium | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| WP-06 / 10-05-06 | 0610018-14 | 10/25/2006 | 6020A | 7440-28-0 | Thallium | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| OW-214 / 10-04-06 | 0610018-10 | 10/26/2006 | 6020A | 7440-62-2 | Vanadium | 23 | µg/L | J | L | 5 | µg/L | 5 | Matrix suppression |
| OW-214A / 10-05-06 | 0610018-15 | 10/26/2006 | 6020A | 7440-62-2 | Vanadium | 5 | µg/L | U | | 5 | µg/L | 5 | |
| SH-01D / 10-03-06 | 0610018-02 | 10/26/2006 | 6020A | 7440-62-2 | Vanadium | 2400 | µg/L | J | L | 100 | µg/L | 20 | Matrix suppression |
| SH-01R / 10-04-06 | 0610018-05 | 10/26/2006 | 6020A | 7440-62-2 | Vanadium | 2300 | µg/L | J | L | 100 | µg/L | 20 | Matrix suppression |
| SH-01S / 10-05-06 | 0610018-12 | 10/26/2006 | 6020A | 7440-62-2 | Vanadium | 7.9 | µg/L | J | L | 5 | µg/L | 5 | Matrix suppression |
| SH-026S / 10-04-06 | 0610018-09 | 10/26/2006 | 6020A | 7440-62-2 | Vanadium | 80 | µg/L | J | L | 5 | µg/L | 5 | Matrix suppression |
| SH-04S / 10-04-06 | 0610018-06 | 10/26/2006 | 6020A | 7440-62-2 | Vanadium | 36 | µg/L | J | L | 5 | µg/L | 5 | Matrix suppression |
| SH-05S / 10-04-06 | 0610018-07 | 10/26/2006 | 6020A | 7440-62-2 | Vanadium | 25 | µg/L | J | L | 5 | µg/L | 5 | Matrix suppression |
| SH-15S / 10-03-06 | 0610018-03 | 10/26/2006 | 6020A | 7440-62-2 | Vanadium | 37 | µg/L | J | L | 5 | µg/L | 5 | Matrix suppression |
| SH-17D / 10-05-06 | 0610018-13 | 10/26/2006 | 6020A | 7440-62-2 | Vanadium | 220 | µg/L | J | L | 5 | µg/L | 5 | Matrix suppression |
| SH-17R / 10-04-06 | 0610018-08 | 10/26/2006 | 6020A | 7440-62-2 | Vanadium | 240 | µg/L | J | L | 5 | µg/L | 5 | Matrix suppression |
| WP-06 / 10-05-06 | 0610018-14 | 10/26/2006 | 6020A | 7440-62-2 | Vanadium | 42 | µg/L | J | L | 5 | µg/L | 5 | Matrix suppression |
| OW-214 / 10-04-06 | 0610018-10 | 10/25/2006 | 6020A | 7440-66-6 | Zinc | 9.2 | µg/L | U | | 5 | µg/L | 1 | Blank action |
| OW-214A / 10-05-06 | 0610018-15 | 10/25/2006 | 6020A | 7440-66-6 | Zinc | 8.7 | µg/L | | | 5 | µg/L | 1 | |
| SH-01D / 10-03-06 | 0610018-02 | 10/25/2006 | 6020A | 7440-66-6 | Zinc | 1800 | µg/L | | | 500 | µg/L | 20 | |
| SH-01R / 10-04-06 | 0610018-05 | 10/25/2006 | 6020A | 7440-66-6 | Zinc | 500 | µg/L | U | | 500 | µg/L | 20 | |
| SH-01S / 10-05-06 | 0610018-12 | 10/25/2006 | 6020A | 7440-66-6 | Zinc | 40 | µg/L | U | | 5 | µg/L | 1 | Blank action |
| SH-026S / 10-04-06 | 0610018-09 | 10/25/2006 | 6020A | 7440-66-6 | Zinc | 14 | µg/L | U | | 5 | µg/L | 1 | Blank action |
| SH-04S / 10-04-06 | 0610018-06 | 10/25/2006 | 6020A | 7440-66-6 | Zinc | 6.9 | µg/L | U | | 5 | µg/L | 1 | Blank action |
| SH-05S / 10-04-06 | 0610018-07 | 10/25/2006 | 6020A | 7440-66-6 | Zinc | 9.6 | µg/L | U | | 5 | µg/L | 1 | Blank action |
| SH-15S / 10-03-06 | 0610018-03 | 10/25/2006 | 6020A | 7440-66-6 | Zinc | 5 | µg/L | U | | 5 | µg/L | 1 | |
| SH-17D / 10-05-06 | 0610018-13 | 10/25/2006 | 6020A | 7440-66-6 | Zinc | 5.9 | µg/L | U | | 5 | µg/L | 1 | Blank action |
| SH-17R / 10-04-06 | 0610018-08 | 10/25/2006 | 6020A | 7440-66-6 | Zinc | 5 | µg/L | U | | 5 | µg/L | 1 | |
| WP-06 / 10-05-06 | 0610018-14 | 10/25/2006 | 6020A | 7440-66-6 | Zinc | 5 | µg/L | U | | 5 | µg/L | 1 | |
| OW-214 / 10-04-06 | 0610018-10 | 10/17/2006 | 310.1 | | Alkalinity | 560 | mg/L | | | 5 | mg/L | 1 | |
| OW-214A / 10-05-06 | 0610018-15 | 10/18/2006 | 310.1 | | Alkalinity | 5 | mg/L | U | | 5 | mg/L | 1 | |
| SH-01D / 10-03-06 | 0610018-02 | 10/17/2006 | 310.1 | | Alkalinity | 85000 | mg/L | | | 5 | mg/L | 1 | |
| SH-01R / 10-04-06 | 0610018-05 | 10/17/2006 | 310.1 | | Alkalinity | 42000 | mg/L | | | 5 | mg/L | 1 | |
| SH-01S / 10-05-06 | 0610018-12 | 10/17/2006 | 310.1 | | Alkalinity | 540 | mg/L | | | 5 | mg/L | 1 | |
| SH-026S / 10-04-06 | 0610018-09 | 10/17/2006 | 310.1 | | Alkalinity | 390 | mg/L | | | 5 | mg/L | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low; H = High; I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Anal_Date | Method | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-04S / 10-04-06 | 0610018-06 | 10/17/2006 | 310.1 | | Alkalinity | 810 | mg/L | | | 5 | mg/L | 1 | |
| SH-05S / 10-04-06 | 0610018-07 | 10/18/2006 | 310.1 | | Alkalinity | 610 | mg/L | | | 5 | mg/L | 1 | |
| SH-15S / 10-03-06 | 0610018-03 | 10/17/2006 | 310.1 | | Alkalinity | 340 | mg/L | | | 5 | mg/L | 1 | |
| SH-17D / 10-05-06 | 0610018-13 | 10/17/2006 | 310.1 | | Alkalinity | 900 | mg/L | | | 5 | mg/L | 1 | |
| SH-17R / 10-04-06 | 0610018-08 | 10/17/2006 | 310.1 | | Alkalinity | 980 | mg/L | | | 5 | mg/L | 1 | |
| WP-06 / 10-05-06 | 0610018-14 | 10/17/2006 | 310.1 | | Alkalinity | 220 | mg/L | | | 5 | mg/L | 1 | |
| OW-214 / 10-04-06 | 0610018-10 | 10/5/2006 | 300.0 | 16887-00-6 | Chloride | 6.7 | mg/L | | | 5 | mg/L | 5 | |
| OW-214A / 10-05-06 | 0610018-15 | 10/5/2006 | 300.0 | 16887-00-6 | Chloride | 1 | mg/L | U | | 1 | mg/L | 1 | |
| SH-01D / 10-03-06 | 0610018-02 | 10/5/2006 | 300.0 | 16887-00-6 | Chloride | 120 | mg/L | | | 20 | mg/L | 20 | |
| SH-01R / 10-04-06 | 0610018-05 | 10/5/2006 | 300.0 | 16887-00-6 | Chloride | 160 | mg/L | | | 20 | mg/L | 20 | |
| SH-01S / 10-05-06 | 0610018-12 | 10/5/2006 | 300.0 | 16887-00-6 | Chloride | 6.8 | mg/L | | | 5 | mg/L | 5 | |
| SH-026S / 10-04-06 | 0610018-09 | 10/5/2006 | 300.0 | 16887-00-6 | Chloride | 90 | mg/L | | | 5 | mg/L | 5 | |
| SH-04S / 10-04-06 | 0610018-06 | 10/4/2006 | 300.0 | 16887-00-6 | Chloride | 24 | mg/L | | | 5 | mg/L | 5 | |
| SH-05S / 10-04-06 | 0610018-07 | 10/4/2006 | 300.0 | 16887-00-6 | Chloride | 6.6 | mg/L | | | 5 | mg/L | 5 | |
| SH-15S / 10-03-06 | 0610018-03 | 10/4/2006 | 300.0 | 16887-00-6 | Chloride | 23 | mg/L | | | 5 | mg/L | 5 | |
| SH-17D / 10-05-06 | 0610018-13 | 10/5/2006 | 300.0 | 16887-00-6 | Chloride | 16 | mg/L | | | 5 | mg/L | 5 | |
| SH-17R / 10-04-06 | 0610018-08 | 10/4/2006 | 300.0 | 16887-00-6 | Chloride | 55 | mg/L | | | 5 | mg/L | 5 | |
| WP-06 / 10-05-06 | 0610018-14 | 10/5/2006 | 300.0 | 16887-00-6 | Chloride | 34 | mg/L | | | 5 | mg/L | 5 | |
| OW-214 / 10-04-06 | 0610018-10 | 10/5/2006 | 300.0 | | Nitrate | 0.5 | mg/L | U | | 0.5 | mg/L | 5 | |
| OW-214A / 10-05-06 | 0610018-15 | 10/5/2006 | 300.0 | | Nitrate | 0.1 | mg/L | U | | 0.1 | mg/L | 1 | |
| SH-01D / 10-03-06 | 0610018-02 | 10/5/2006 | 300.0 | | Nitrate | 2 | mg/L | U | | 2 | mg/L | 20 | |
| SH-01R / 10-04-06 | 0610018-05 | 10/5/2006 | 300.0 | | Nitrate | 2 | mg/L | U | | 2 | mg/L | 20 | |
| SH-01S / 10-05-06 | 0610018-12 | 10/5/2006 | 300.0 | | Nitrate | 0.5 | mg/L | U | | 0.5 | mg/L | 5 | |
| SH-026S / 10-04-06 | 0610018-09 | 10/5/2006 | 300.0 | | Nitrate | 1.3 | mg/L | | | 0.5 | mg/L | 5 | |
| SH-04S / 10-04-06 | 0610018-06 | 10/4/2006 | 300.0 | | Nitrate | 0.5 | mg/L | U | | 0.5 | mg/L | 5 | |
| SH-05S / 10-04-06 | 0610018-07 | 10/4/2006 | 300.0 | | Nitrate | 0.5 | mg/L | U | | 0.5 | mg/L | 5 | |
| SH-15S / 10-03-06 | 0610018-03 | 10/4/2006 | 300.0 | | Nitrate | 0.5 | mg/L | U | | 0.5 | mg/L | 5 | |
| SH-17D / 10-05-06 | 0610018-13 | 10/5/2006 | 300.0 | | Nitrate | 0.5 | mg/L | U | | 0.5 | mg/L | 5 | |
| SH-17R / 10-04-06 | 0610018-08 | 10/4/2006 | 300.0 | | Nitrate | 0.5 | mg/L | U | | 0.5 | mg/L | 5 | |
| WP-06 / 10-05-06 | 0610018-14 | 10/5/2006 | 300.0 | | Nitrate | 0.5 | mg/L | U | | 0.5 | mg/L | 5 | |
| OW-214 / 10-04-06 | 0610018-10 | 10/5/2006 | 300.0 | | Sulfate | 10 | mg/L | | | 5 | mg/L | 5 | |
| OW-214A / 10-05-06 | 0610018-15 | 10/5/2006 | 300.0 | | Sulfate | 1 | mg/L | U | | 1 | mg/L | 1 | |
| SH-01D / 10-03-06 | 0610018-02 | 10/5/2006 | 300.0 | | Sulfate | 140 | mg/L | | | 20 | mg/L | 20 | |
| SH-01R / 10-04-06 | 0610018-05 | 10/5/2006 | 300.0 | | Sulfate | 260 | mg/L | | | 50 | mg/L | 20 | |
| SH-01S / 10-05-06 | 0610018-12 | 10/5/2006 | 300.0 | | Sulfate | 40 | mg/L | | | 5 | mg/L | 5 | |
| SH-026S / 10-04-06 | 0610018-09 | 10/5/2006 | 300.0 | | Sulfate | 26 | mg/L | | | 5 | mg/L | 5 | |
| SH-04S / 10-04-06 | 0610018-06 | 10/4/2006 | 300.0 | | Sulfate | 24 | mg/L | | | 5 | mg/L | 5 | |
| SH-05S / 10-04-06 | 0610018-07 | 10/4/2006 | 300.0 | | Sulfate | 10 | mg/L | | | 5 | mg/L | 5 | |
| SH-15S / 10-03-06 | 0610018-03 | 10/4/2006 | 300.0 | | Sulfate | 9 | mg/L | | | 5 | mg/L | 5 | |
| SH-17D / 10-05-06 | 0610018-13 | 10/5/2006 | 300.0 | | Sulfate | 33 | mg/L | | | 5 | mg/L | 5 | |
| SH-17R / 10-04-06 | 0610018-08 | 10/4/2006 | 300.0 | | Sulfate | 130 | mg/L | | | 5 | mg/L | 5 | |
| WP-06 / 10-05-06 | 0610018-14 | 10/5/2006 | 300.0 | | Sulfate | 15 | mg/L | | | 5 | mg/L | 5 | |
| OW-214 / 10-04-06 | 0610018-10 | 10/10/2006 | 376.2 | 18496-25-8 | Sulfide | 0.2 | mg/L | U | | 0.2 | mg/L | 1 | |
| OW-214A / 10-05-06 | 0610018-15 | 10/10/2006 | 376.2 | 18496-25-8 | Sulfide | 0.2 | mg/L | U | | 0.2 | mg/L | 1 | |
| SH-01D / 10-03-06 | 0610018-02 | 10/10/2006 | 376.2 | 18496-25-8 | Sulfide | 0.2 | mg/L | UJ | I | 0.2 | mg/L | 1 | Headspace present in bottle |
| SH-01R / 10-04-06 | 0610018-05 | 10/10/2006 | 376.2 | 18496-25-8 | Sulfide | 0.2 | mg/L | J | H | 0.2 | mg/L | 1 | MS high |
| SH-01S / 10-05-06 | 0610018-12 | 10/10/2006 | 376.2 | 18496-25-8 | Sulfide | 0.25 | mg/L | J | H | 0.2 | mg/L | 1 | MS high |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low; H = High; I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Anal_Date | Method | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-026S / 10-04-06 | 0610018-09 | 10/10/2006 | 376.2 | 18496-25-8 | Sulfide | 0.2 | mg/L | U | | 0.2 | mg/L | 1 | |
| SH-04S / 10-04-06 | 0610018-06 | 10/10/2006 | 376.2 | 18496-25-8 | Sulfide | 0.35 | mg/L | J | H | 0.2 | mg/L | 1 | MS high |
| SH-05S / 10-04-06 | 0610018-07 | 10/10/2006 | 376.2 | 18496-25-8 | Sulfide | 0.2 | mg/L | U | | 0.2 | mg/L | 1 | |
| SH-15S / 10-03-06 | 0610018-03 | 10/10/2006 | 376.2 | 18496-25-8 | Sulfide | 0.2 | mg/L | U | | 0.2 | mg/L | 1 | |
| SH-17D / 10-05-06 | 0610018-13 | 10/10/2006 | 376.2 | 18496-25-8 | Sulfide | 0.2 | mg/L | U | | 0.2 | mg/L | 1 | |
| SH-17R / 10-04-06 | 0610018-08 | 10/10/2006 | 376.2 | 18496-25-8 | Sulfide | 0.2 | mg/L | U | | 0.2 | mg/L | 1 | |
| WP-06 / 10-05-06 | 0610018-14 | 10/10/2006 | 376.2 | 18496-25-8 | Sulfide | 0.2 | mg/L | U | | 0.2 | mg/L | 1 | |
| OW-214 / 10-04-06 | 0610018-10 | 10/9/2006 | 160.1 | | Total Dissolved Solids | 890 | mg/L | | | 6 | mg/L | 1 | |
| OW-214A / 10-05-06 | 0610018-15 | 10/9/2006 | 160.1 | | Total Dissolved Solids | 12 | mg/L | | | 6 | mg/L | 1 | |
| SH-01D / 10-03-06 | 0610018-02 | 10/10/2006 | 160.1 | | Total Dissolved Solids | 130000 | mg/L | | | 6 | mg/L | 1 | |
| SH-01R / 10-04-06 | 0610018-05 | 10/10/2006 | 160.1 | | Total Dissolved Solids | 72000 | mg/L | | | 6 | mg/L | 1 | |
| SH-01S / 10-05-06 | 0610018-12 | 10/9/2006 | 160.1 | | Total Dissolved Solids | 790 | mg/L | | | 6 | mg/L | 1 | |
| SH-026S / 10-04-06 | 0610018-09 | 10/9/2006 | 160.1 | | Total Dissolved Solids | 630 | mg/L | | | 6 | mg/L | 1 | |
| SH-04S / 10-04-06 | 0610018-06 | 10/9/2006 | 160.1 | | Total Dissolved Solids | 1300 | mg/L | | | 6 | mg/L | 1 | |
| SH-05S / 10-04-06 | 0610018-07 | 10/9/2006 | 160.1 | | Total Dissolved Solids | 870 | mg/L | | | 6 | mg/L | 1 | |
| SH-15S / 10-03-06 | 0610018-03 | 10/9/2006 | 160.1 | | Total Dissolved Solids | 630 | mg/L | | | 6 | mg/L | 1 | |
| SH-17D / 10-05-06 | 0610018-13 | 10/9/2006 | 160.1 | | Total Dissolved Solids | 1600 | mg/L | | | 6 | mg/L | 1 | |
| SH-17R / 10-04-06 | 0610018-08 | 10/9/2006 | 160.1 | | Total Dissolved Solids | 2000 | mg/L | | | 6 | mg/L | 1 | |
| WP-06 / 10-05-06 | 0610018-14 | 10/9/2006 | 160.1 | | Total Dissolved Solids | 410 | mg/L | | | 6 | mg/L | 1 | |

| Smpl | Lab_ID | Anal_Date | _Method | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-01D / 10-03-06 | 99723-01 | 10/19/2006 | 351.2 | TKN | Total Kjeldahl Nitrogen | 7 | mg/L | J | I | 5 | mg/L | 10 | Preservation issue: pH > 14 |
| SH-15S / 10-03-06 | 99723-02 | 10/17/2006 | 351.2 | TKN | Total Kjeldahl Nitrogen | 1.0 | mg/L | | | 0.5 | mg/L | 1 | |
| SH-01R / 10-04-06 | 99723-03 | 10/19/2006 | 351.2 | TKN | Total Kjeldahl Nitrogen | 5 | mg/L | UJ | I | 5 | mg/L | 10 | Preservation issue: pH > 14 |
| SH-04S / 10-04-06 | 99723-04 | 10/17/2006 | 351.2 | TKN | Total Kjeldahl Nitrogen | 1.7 | mg/L | | | 0.5 | mg/L | 1 | |
| SH-05S / 10-04-06 | 99723-05 | 10/17/2006 | 351.2 | TKN | Total Kjeldahl Nitrogen | 0.7 | mg/L | | | 0.5 | mg/L | 1 | |
| SH-17R / 10-04-06 | 99723-06 | 10/17/2006 | 351.2 | TKN | Total Kjeldahl Nitrogen | 1.3 | mg/L | | | 0.5 | mg/L | 1 | |
| SH-026S / 10-04-06 | 99723-07 | 10/17/2006 | 351.2 | TKN | Total Kjeldahl Nitrogen | 0.5 | mg/L | U | | 0.5 | mg/L | 1 | |
| OW-214 / 10-04-06 | 99723-08 | 10/17/2006 | 351.2 | TKN | Total Kjeldahl Nitrogen | 0.6 | mg/L | | | 0.5 | mg/L | 1 | |
| SH-01S / 10-05-06 | 99723-09 | 10/17/2006 | 351.2 | TKN | Total Kjeldahl Nitrogen | 1.3 | mg/L | | | 0.5 | mg/L | 1 | |
| SH-17D / 10-05-06 | 99723-10 | 10/17/2006 | 351.2 | TKN | Total Kjeldahl Nitrogen | 1.1 | mg/L | | | 0.5 | mg/L | 1 | |
| WP-06 / 10-05-06 | 99723-11 | 10/17/2006 | 351.2 | TKN | Total Kjeldahl Nitrogen | 0.7 | mg/L | | | 0.5 | mg/L | 1 | |
| OW-214A / 10-05-06 | 99723-12 | 10/17/2006 | 351.2 | TKN | Total Kjeldahl Nitrogen | 0.5 | mg/L | U | | 0.5 | mg/L | 1 | |
| SH-01D / 10-03-06 | WW5443-1 | 10/17/2006 | 415.1 | TOC | Total Organic Carbon | 260 | mg/L | J | I | 5 | mg/L | 5 | Preservation issue: pH > 14 |
| SH-15S / 10-03-06 | WW5443-2 | 10/17/2006 | 415.1 | TOC | Total Organic Carbon | 6.3 | mg/L | | | 1 | mg/L | 1 | |
| SH-01R / 10-04-06 | WW5443-3 | 10/17/2006 | 415.1 | TOC | Total Organic Carbon | 86 | mg/L | J | I | 10 | mg/L | 10 | Preservation issue: pH > 14 |
| SH-04S / 10-04-06 | WW5443-4 | 10/17/2006 | 415.1 | TOC | Total Organic Carbon | 18 | mg/L | | | 1 | mg/L | 1 | |
| SH-05S / 10-04-06 | WW5443-5 | 10/17/2006 | 415.1 | TOC | Total Organic Carbon | 7.2 | mg/L | | | 1 | mg/L | 1 | |
| SH-17R / 10-04-06 | WW5443-6 | 10/17/2006 | 415.1 | TOC | Total Organic Carbon | 14 | mg/L | | | 1 | mg/L | 1 | |
| SH-026S / 10-04-06 | WW5443-7 | 10/18/2006 | 415.1 | TOC | Total Organic Carbon | 2.4 | mg/L | | | 1 | mg/L | 1 | |
| OW-214 / 10-04-06 | WW5443-8 | 10/18/2006 | 415.1 | TOC | Total Organic Carbon | 7.3 | mg/L | | | 1 | mg/L | 1 | |
| SH-01S / 10-05-06 | WW5443-9 | 10/18/2006 | 415.1 | TOC | Total Organic Carbon | 7.9 | mg/L | | | 1 | mg/L | 1 | |
| SH-17D / 10-05-06 | WW5443-10 | 10/18/2006 | 415.1 | TOC | Total Organic Carbon | 8.9 | mg/L | | | 1 | mg/L | 1 | |
| WP-06 / 10-05-06 | WW5443-11 | 10/18/2006 | 415.1 | TOC | Total Organic Carbon | 6.4 | mg/L | | | 1 | mg/L | 1 | |
| OW-214A / 10-05-06 | WW5443-12 | 10/18/2006 | 415.1 | TOC | Total Organic Carbon | 1.0 | mg/L | U | | 1 | mg/L | 1 | |
| SH-01D / 10-03-06 | P0610051-01 | 10/4/2006 | 7199 (Mo | Fe+2 | Iron, Ferrous | 1.0 | mg/L | UJ | L | 1 | mg/L | 1 | MS/MSD low |
| SH-15S / 10-03-06 | P0610051-02 | 10/4/2006 | 7199 (Mo | Fe+2 | Iron, Ferrous | 1.0 | mg/L | UJ | L | 1 | mg/L | 1 | MS/MSD low |
| SH-01R / 10-04-06 | P0610070-01 | 10/5/2006 | 7199 (Mo | Fe+2 | Iron, Ferrous | 1.0 | mg/L | UJ | L | 1 | mg/L | 1 | MS/MSD low |
| SH-04S / 10-04-06 | P0610070-02 | 10/5/2006 | 7199 (Mo | Fe+2 | Iron, Ferrous | 1.0 | mg/L | UJ | L | 1 | mg/L | 1 | MS/MSD low |
| SH-05S / 10-04-06 | P0610070-05 | 10/5/2006 | 7199 (Mo | Fe+2 | Iron, Ferrous | 1.0 | mg/L | UJ | L | 1 | mg/L | 1 | MS/MSD low |
| SH-17R / 10-04-06 | P0610070-06 | 10/5/2006 | 7199 (Mo | Fe+2 | Iron, Ferrous | 1.0 | mg/L | UJ | L | 1 | mg/L | 1 | MS/MSD low |
| SH-026S / 10-04-06 | P0610070-07 | 10/5/2006 | 7199 (Mo | Fe+2 | Iron, Ferrous | 1.0 | mg/L | UJ | L | 1 | mg/L | 1 | MS/MSD low |
| OW-214 / 10-04-06 | P0610070-08 | 10/5/2006 | 7199 (Mo | Fe+2 | Iron, Ferrous | 1.0 | mg/L | UJ | L | 1 | mg/L | 1 | MS/MSD low |
| SH-01S / 10-05-06 | P0610086-01 | 10/6/2006 | 7199 (Mo | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1 | mg/L | 1 | |
| SH-17D / 10-05-06 | P0610086-02 | 10/6/2006 | 7199 (Mo | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1 | mg/L | 1 | |
| WP-06 / 10-05-06 | P0610086-03 | 10/6/2006 | 7199 (Mo | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1 | mg/L | 1 | |
| OW-214A / 10-05-06 | P0610086-04 | 10/6/2006 | 7199 (Mo | Fe+2 | Iron, Ferrous | 1.0 | mg/L | U | | 1 | mg/L | 1 | |
| OW-214 / 10-04-06 | P0610071-09 | 10/7/2006 | AM20GA | 74-84-0 | Ethane | 0.088 | µg/L | J | I | 0.025 | µg/L | | FD imprecision |
| OW-214A / 10-05-06 | P0610087-05 | 10/11/2006 | AM20GA | 74-84-0 | Ethane | 0.008 | µg/L | J | I | 0.025 | µg/L | | Uncertain < calibration range |
| SH-01D / 10-03-06 | P0610050-02 | 10/6/2006 | AM20GA | 74-84-0 | Ethane | 1.100 | µg/L | | | 0.025 | µg/L | | |
| SH-01R / 10-04-06 | P0610071-02 | 10/7/2006 | AM20GA | 74-84-0 | Ethane | 0.450 | µg/L | | | 0.025 | µg/L | | |
| SH-01S / 10-05-06 | P0610087-02 | 10/11/2006 | AM20GA | 74-84-0 | Ethane | 0.120 | µg/L | | | 0.025 | µg/L | | |
| SH-026S / 10-04-06 | P0610071-08 | 10/7/2006 | AM20GA | 74-84-0 | Ethane | 0.025 | µg/L | U | | 0.025 | µg/L | | Blank action |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low; H = High; I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Anal_Date | _Method | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SH-04S / 10-04-06 | P0610071-03 | 10/7/2006 | AM20GA | 74-84-0 | Ethane | 0.230 | µg/L | | | 0.025 | µg/L | | |
| SH-05S / 10-04-06 | P0610071-06 | 10/7/2006 | AM20GA | 74-84-0 | Ethane | 0.220 | µg/L | J | I | 0.025 | µg/L | | FD imprecision |
| SH-15S / 10-03-06 | P0610050-03 | 10/6/2006 | AM20GA | 74-84-0 | Ethane | 0.071 | µg/L | | | 0.025 | µg/L | | |
| SH-17D / 10-05-06 | P0610087-03 | 10/11/2006 | AM20GA | 74-84-0 | Ethane | 0.480 | µg/L | | | 0.025 | µg/L | | |
| SH-17R / 10-04-06 | P0610071-07 | 10/7/2006 | AM20GA | 74-84-0 | Ethane | 0.700 | µg/L | | | 0.025 | µg/L | | |
| TB-512 / 10-03-06 | P0610050-01 | 10/6/2006 | AM20GA | 74-84-0 | Ethane | 0.006 | µg/L | J | I | 0.025 | µg/L | | Uncertain < calibration range |
| TB-513 / 10-04-06 | P0610071-01 | 10/7/2006 | AM20GA | 74-84-0 | Ethane | 0.005 | µg/L | J | I | 0.025 | µg/L | | Uncertain < calibration range |
| TB-514 / 10-05-06 | P0610087-01 | 10/11/2006 | AM20GA | 74-84-0 | Ethane | 0.007 | µg/L | J | I | 0.025 | µg/L | | Uncertain < calibration range |
| WP-06 / 10-05-06 | P0610087-04 | 10/11/2006 | AM20GA | 74-84-0 | Ethane | 0.040 | µg/L | | | 0.025 | µg/L | | |
| OW-214 / 10-04-06 | P0610071-09 | 10/7/2006 | AM20GA | 74-85-1 | Ethene | 0.100 | µg/L | J | I | 0.025 | µg/L | | FD imprecision |
| OW-214A / 10-05-06 | P0610087-05 | 10/11/2006 | AM20GA | 74-85-1 | Ethene | 0.014 | µg/L | J | I | 0.025 | µg/L | | Uncertain < calibration range |
| SH-01D / 10-03-06 | P0610050-02 | 10/6/2006 | AM20GA | 74-85-1 | Ethene | 1.600 | µg/L | | | 0.025 | µg/L | | |
| SH-01R / 10-04-06 | P0610071-02 | 10/7/2006 | AM20GA | 74-85-1 | Ethene | 0.930 | µg/L | | | 0.025 | µg/L | | |
| SH-01S / 10-05-06 | P0610087-02 | 10/11/2006 | AM20GA | 74-85-1 | Ethene | 0.110 | µg/L | | | 0.025 | µg/L | | |
| SH-026S / 10-04-06 | P0610071-08 | 10/7/2006 | AM20GA | 74-85-1 | Ethene | 0.025 | µg/L | U | | 0.025 | µg/L | | Blank action |
| SH-04S / 10-04-06 | P0610071-03 | 10/7/2006 | AM20GA | 74-85-1 | Ethene | 0.120 | µg/L | | | 0.025 | µg/L | | |
| SH-05S / 10-04-06 | P0610071-06 | 10/7/2006 | AM20GA | 74-85-1 | Ethene | 0.480 | µg/L | J | I | 0.025 | µg/L | | FD imprecision |
| SH-15S / 10-03-06 | P0610050-03 | 10/6/2006 | AM20GA | 74-85-1 | Ethene | 0.025 | µg/L | U | | 0.025 | µg/L | | Blank action |
| SH-17D / 10-05-06 | P0610087-03 | 10/11/2006 | AM20GA | 74-85-1 | Ethene | 0.033 | µg/L | | | 0.025 | µg/L | | |
| SH-17R / 10-04-06 | P0610071-07 | 10/7/2006 | AM20GA | 74-85-1 | Ethene | 0.260 | µg/L | | | 0.025 | µg/L | | |
| TB-512 / 10-03-06 | P0610050-01 | 10/6/2006 | AM20GA | 74-85-1 | Ethene | 0.01 | µg/L | J | I | 0.025 | µg/L | | Uncertain < calibration range |
| TB-513 / 10-04-06 | P0610071-01 | 10/7/2006 | AM20GA | 74-85-1 | Ethene | 0.011 | µg/L | J | I | 0.025 | µg/L | | Uncertain < calibration range |
| TB-514 / 10-05-06 | P0610087-01 | 10/11/2006 | AM20GA | 74-85-1 | Ethene | 0.021 | µg/L | J | I | 0.025 | µg/L | | Uncertain < calibration range |
| WP-06 / 10-05-06 | P0610087-04 | 10/11/2006 | AM20GA | 74-85-1 | Ethene | 0.025 | µg/L | U | | 0.025 | µg/L | | Blank action |
| OW-214 / 10-04-06 | P0610071-09 | 10/7/2006 | AM20GA | 74-82-8 | Methane | 1900.000 | µg/L | | | 0.100 | µg/L | | |
| OW-214A / 10-05-06 | P0610087-05 | 10/11/2006 | AM20GA | 74-82-8 | Methane | 3.500 | µg/L | | | 0.100 | µg/L | | |
| SH-01D / 10-03-06 | P0610050-02 | 10/6/2006 | AM20GA | 74-82-8 | Methane | 4200.000 | µg/L | | | 0.100 | µg/L | | |
| SH-01R / 10-04-06 | P0610071-02 | 10/7/2006 | AM20GA | 74-82-8 | Methane | 1200.000 | µg/L | | | 0.100 | µg/L | | |
| SH-01S / 10-05-06 | P0610087-02 | 10/11/2006 | AM20GA | 74-82-8 | Methane | 1200.000 | µg/L | | | 0.100 | µg/L | | |
| SH-026S / 10-04-06 | P0610071-08 | 10/7/2006 | AM20GA | 74-82-8 | Methane | 6.300 | µg/L | | | 0.100 | µg/L | | |
| SH-04S / 10-04-06 | P0610071-03 | 10/7/2006 | AM20GA | 74-82-8 | Methane | 2800.000 | µg/L | | | 0.100 | µg/L | | |
| SH-05S / 10-04-06 | P0610071-06 | 10/7/2006 | AM20GA | 74-82-8 | Methane | 1600.000 | µg/L | | | 0.100 | µg/L | | |
| SH-15S / 10-03-06 | P0610050-03 | 10/6/2006 | AM20GA | 74-82-8 | Methane | 1700.000 | µg/L | | | 0.100 | µg/L | | |
| SH-17D / 10-05-06 | P0610087-03 | 10/11/2006 | AM20GA | 74-82-8 | Methane | 3800.000 | µg/L | | | 0.100 | µg/L | | |
| SH-17R / 10-04-06 | P0610071-07 | 10/7/2006 | AM20GA | 74-82-8 | Methane | 2900.000 | µg/L | | | 0.100 | µg/L | | |
| TB-512 / 10-03-06 | P0610050-01 | 10/6/2006 | AM20GA | 74-82-8 | Methane | 0.084 | µg/L | J | I | 0.100 | µg/L | | Uncertain < calibration range |
| TB-513 / 10-04-06 | P0610071-01 | 10/7/2006 | AM20GA | 74-82-8 | Methane | 0.090 | µg/L | J | I | 0.100 | µg/L | | Uncertain < calibration range |
| TB-514 / 10-05-06 | P0610087-01 | 10/11/2006 | AM20GA | 74-82-8 | Methane | 0.170 | µg/L | | | 0.100 | µg/L | | |
| WP-06 / 10-05-06 | P0610087-04 | 10/11/2006 | AM20GA | 74-82-8 | Methane | 610.000 | µg/L | | | 0.100 | µg/L | | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low; H = High; I = Indeterminate. See Data Usability Report for details.

## I. Data Package Completeness

***Phase 1B-5 Work Plan Remedial Investigation Work Plan,* Blackburn & Union Privileges Superfund Site, Walpole Massachusetts, Rev 02, September 21, 2006**

Laboratories: *Alpha Woods Hole Labs (AWHL), Raynham, MA*
*Katahdin Lab, Groundwater Analytical Lab, Microseeps*

SDG: BU214

AWHL ETR #: 610018

Review the data package for completeness based on EPA Region I and Site QAPP requirements.

- Were all required reporting forms and associated raw data for field samples and QC included in the data package? **Yes / No.**
- Were all sample analyses requested on the Chain-of-Custody performed by the laboratory? **Yes / No.**

If "No" to any of the above questions, document missing information and resubmittal requests in the comment section below.

Tabulate the number and types of samples in this SDG and the QAPP-required data validation level.

| **Number and Type of Samples** EB = Equipment Blank TB= Trip Blanks | **Parameter(s)** all Groundwaters | **Data Validation Level (EPA Region I Tier)** |
|---|---|---|
| 11 GW + 1 EB | *TAL Metals (Methods 6020 + 7470A)* | Tier II-type |
| | *Alkalinity (Method 310.1)* | Tier I-type enhanced |
| | *Chloride, Nitrate, Sulfate (Method 300.0)* | |
| | *Sulfide (Method 376.2)* | |
| | *Total Dissolved Solids (TDS Method 160.1)* | |
| | *Total Kjeldahl Nitrogen (TKN Method 351.2)* | |
| | *Total Organic Carbon (TOC Method 415.1)* | |
| + 3 TB | *Gases: Ethane, Ethene, Methane (Microseeps Method AM20GAX)* | |
| | *Ferrous Iron ($Fe^{+2}$ Method 7199 mod)* | |

Comments:

*Note: Site QAPP DQOs do not require a formal data validation report for natural attenuation parameters in groundwater (alkalinity, nitrate, chloride, sulfate, TKN), sulfide, TDS, TOC, gases, or ferrous iron [see QAPP Worksheet #29b and #29c]. These parameters are reviewed herein, if present in this SDG, based on an enhanced Tier I-type review, for completeness, holding time and preservation QC, LCS, MD, FD, and blank contamination, as applicable [see QAPP Worksheets #11b, #23a, #23b, and 24a for applicable QC measures].*

***Density & Viscosity reported in this SDG but not required for validation based on project DQOs.***

Data Reviewer: Susan D Chapnick Date: 12/8/06

Susan D. Chapnick, Principal Scientist
New Environmental Horizons, Inc.

## II. Review of QC Summary (CLP-like) Forms and Additional QA/QC Parameters

### A. Holding Times/Preservation Criteria *[QAPP Worksheet #11b and #12b]*

- Were holding time criteria met for all samples/analyses as indicated below? **Yes / No.**
- Were preservation criteria met for all samples/analyses as indicated below? **Yes / No.** All below

Aqueous (Groundwater/Surface Water, as applicable):

| | |
|---|---|
| Metals (except Hg) | 180 days from date of collection, preserved to pH ≤ 2 and 4°± 2° C |
| Mercury | 28 days from date of collection, preserved to pH ≤ 2 and 4°± 2° C |
| Alkalinity | 14 days from date of collection, maintained at 4°± 2° C |
| Chloride | 28 days from date of collection, maintained at 4°± 2° C |
| Nitrate | 48 hours from time of collection, maintained at 4°± 2° C |
| Sulfate | 28 days from date of collection, maintained at 4°± 2° C |
| Sulfide | 7 days from date of collection, preserved to pH ≥ 12 and 4°± 2° C |
| TDS | 7 days from date of collection, maintained at 4°± 2° C |
| TKN | 28 days from date of collection, preserved to pH < 2 and 4°± 2° C |
| TOC | 28 days from date of collection, preserved to pH < 2 and 4°± 2° C |
| Gases | 7 days from date of collection, maintained at 4°± 2° C |
| Ferrous Iron | 48 hours from date of collection, maintained at 4°± 2° C |

Soils/Sediments[1]:

| | |
|---|---|
| Metals (except Hg) | 180 days from date of collection, maintained at 4°± 2° C |
| Mercury | 28 days from date of collection, maintained at 4°± 2° C |
| TOC | 28 days from date of collection, maintained at 4°± 2° C |

[1] Sediments will be freeze-dried prior to preparation/analysis for total metals if % solids < 75% in "native" sample. Soils and Sediments can be maintained frozen to arrest holding times. If frozen, holding time starts when thawed.

**Actions:** If the holding times were exceeded, estimate (J and UJ) positive and nondetect results. If the holding times were grossly exceeded, estimate (J) positive results and reject (R) nondetect results. If samples were improperly preserved, use professional judgment – may estimate (J and UJ) associated results.

**Holding Time / Preservation Actions**

| Analyte | Holding Time Exceedance | Preservation Issue | Action / Bias | Affected Sample(s) / Comments |
|---|---|---|---|---|
| TOC | — | pH>14 | J/UJ / ~~LOW~~ | SH-01D / 10-03-06 + SH-01R / 10-04-06 (pH3± TOC) |
| TKN | — | pH>14 | J | Indeterminate " " |
| | | | | bias (uncertain what effects of |
| Sulfide | | headspace | UJ | biological activities would have |
| | | | | on results in unpreserved |
| | | | | samples at this high pH) |

Comments: _____

→ SH01D / 10-03-06



12/8/06

**B. Calibration** *[QAPP Worksheet #21 and #24a]*

1. Instrument Calibration

Instrument calibrations were reviewed to ensure that the laboratory followed the correct method procedures.

- Were instrument calibrations performed daily for all methods/instruments used for analysis? **Yes / No.**
- Were the proper number of standards used for each calibration as compliant with SW846 Method requirements? **Yes / No.**
- Were the calibration curves compliant with linearity requirements of the SW846 Method if a linear curve was used ($r \geq 0.995$)? **Yes / No.**

If no to any of the above, list affected samples/analytes and actions in the comment section, below.

2. Initial Calibration Verification (ICV) and Continuing Calibration Verification (CCV) Standards

All ICVs and CCVs were reviewed to assess the accuracy and sensitivity of the results.

- Did all ICVs and CCVs meet the recovery criteria? **Yes / No.** If no, list the outliers and the affected samples in the comment section, below. but re-runs OK see comments

**Actions:** If the ICV/CCV recovery criteria exceeded the defined limits indicated below, estimate (J) associated positive results; no action is required for nondetect results. If ICV/CCV recoveries were below defined QC limits, estimate (J and UJ) associated positive and nondetect results.

| Control Limits | |
|---|---|
| Metals by ICP or ICP/MS: | 90-110% |
| Mercury by CVAA: | 90-110% |

[ICV/CCV for other parameters: check lab narrative for deviations; not required in summary QC forms]

Comments: Lab re-ran CCVs + samples bracketed by CCVs that were out of control limits – all data reported bracketed from compliant CCVs – No Action needed.



12/8/06

**B. Calibration (continued)**

2. Low Level Standard analyzed consistent with sample-equivalent reporting or quantitation limit. (QL).

- Were the low-level standards in the calibration curves for inorganic analyses (ICP-MS, ICP-AES, CVAA) analyzed at the correct concentrations to support the laboratory QL? **Yes / No.** NA all comments

If no, results reported as non-detects and within 2x the QL may be uncertain.

**Actions:** If No, estimate (UJ) all non-detect data for the affected metal(s) and estimate (J) detected results < 2xQL due to potential uncertainty in the sensitivity of analysis and accuracy at the low end of the calibration curve.

| Analyte | Action / Bias | Affected Sample(s) / Comments |
|---|---|---|
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Comments:
Low level std not analyzed for metals. Instead lab included an RL std as the low-level std in the calibration curves. This is acceptable to support sensitivity needs of project.



12/8/06

**C. Blank Results**

1. Laboratory Blanks *[QAPP Worksheet #9b, 11b, and #24a]*

Laboratory (preparation and calibration) blank results were reviewed to assess the presence of contaminants that ultimately affect the accuracy and sensitivity of the results. Blanks were assessed compared to the project-required quantitation limits (PQLs) listed in Worksheet 9b of the QAPP and to the laboratory QLs.

- Were all analytes detected in the laboratory blanks at levels less than the PQLs? **Yes** / **No.** If no, list below the analyte and blank level for the highest detected result above the PQLs.

- Were negative baseline drifts, if observed as negative ICB/CCB or preparation blank results, observed at absolute values less than the PQL? **Yes / No / NA.** If no, list below the analyte and blank level for the negative result with an absolute value above the PQL.

| Analyte | Highest Lab Blank Result (Units) |
|---|---|
| Arsenic | 0.12 ug/L (in accv) |
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However, Arsenic evaluated to MDL since reported this way.

Comments:

12/8/06.

**C. Blank Results (continued)**

2. Field Blank Results *[QAPP Worksheet #9b, 11b, #22a, and #22b]*

Field blank results were reviewed to assess the presence of contaminants that ultimately affect the accuracy and sensitivity of the sample results.

- Was there a field equipment rinsate blank associated with the samples in this SDG? **Yes** / **No.** If yes, list the field blank(s) and the associated samples in the table below.

| Field Rinsate Blank Sample ID | Associated Field Sample IDs |
|---|---|
| OW-214A/10-05-06 | all GW samples in this SDG BU214 |
| | |
| | |
| | |
| | |

- Were all analytes detected in the field equipment rinsate blank(s) at levels less than the PQL? **Yes** / **No.** If no, list contaminants below.

NOTE: Use the maximum field blank concentration in cases where multiple field blanks are associated with the samples in a given SDG.

**Field Blank ID:** OW-214A/10-05-06

| Analyte | Field Blank Result (Units) | |
|---|---|---|
| Ca | 230 | ug/L |
| Cu | 3 J | ug/L |
| K | 180 J | ug/L |
| Na | 550 | ug/L |
| Zn | 8.7 J | ug/L |
| | | |
| Ethane | 0.008 J | ug/L |
| Ethene | 0.014 J | ↓ |
| Methane | 3.5 J | ↓ |
| | | |
| TDS | 12 | mg/L |
| | | |
| | | |
| | | |

TBs: TB-512/10-03-06
ethane: 0.006 J ug/L
ethene: 0.01 J ↓
methane: 0.084 J ↓

TB-513/10-04-06
ethane: 0.005 J ug/L
ethene: 0.011 J ↓
methane: 0.090 J ↓

TB-514/10-04-06
ethane: 0.007 J ug/L
ethene: 0.021 J ↓
methane: 0.170 ↓

~~FB-515~~
~~DC~~ 12/8/06.



12/8/06

## C. Blank Results (continued)

**Actions:** Blank Contamination: Determine the maximum concentration of each analyte based upon a review of all blanks (laboratory blanks and field equipment rinsate blanks). For Water: sample results which are greater than the PQL but less than 5 times the amount found in the associated blank are negated (qualified U) at the level found in the sample. For Soil/Sediment: sample results which are greater than the PQL but less than 5 times the amount found in the associated blanks are qualified "B" to indicate that the analyte was also found in the associated blank(s) – this is the action for non-matrix matched blanks (e.g., aqueous field rinsate blanks associated with soil/sediment samples) -- reference QAPP Worksheet #29c. Data flagged "B" may be biased high. No actions are taken for results greater than 5x the blank level. No actions are taken to qualify field equipment rinsate blank results, unless contamination observed in associated aqueous method blank.

Negative Baseline Drift: Any blank reported with a negative result for which the absolute value was greater than the PQL, are evaluated for this project using the absolute value of the blank result as the rule for action. If the sample result was > PQL but < the absolute value of the blank concentration, estimate the nondetect and detect results (UJ and J). These results may be biased low. No actions are taken for results greater than the absolute value of the blank level (negative baseline drift). The action for negative baseline drift affects all associated field samples and field equipment rinsate blank samples analyzed in the SDG.

| Analyte | Maximum Blank Concentration (Units) ug/L | Blank Action Level (BAL) 5X (Units) ug/L | Actions/Affected Samples |
|---|---|---|---|
| Ca | 230 J | 1150 | NONE- all results ≥ BAL. |
| Cu | 3 | 15 | NONE - " " ≥ BAL |
| K | 180 | 900 | (U) OW-214/10-04-06 SH-026S/10-04-06, SH-055/10-04-06, SH-215S/10-03-06, SH-17D/10-05-06 SH-17R/10-04-06, & WP-06/10-05-06 |
| Na | 550 | 2750 ug/L | NONE - all results > BAL |
| Zn | 8.7 | 43.5 | (U) OW-214/10-04-06, SH-015/10-05-06, SH-026S/10-04-06, SH-015/10-04-06, SH-055/10-04-06, SH-17D/10-05-06 |
| Methane | 3.5 (EB) 0.17 (TB) | 17.5 ug/L (BAL) | (J) qualify all results ≥ QL but < BAL with potential High bias. (U) negate all results < QL and raise RL to QL for GW. |
| Ethene | 0.014 J (EB) 0.021 J (TB) | | (U) negate all results < QL and raise RL to QL for GW only ↳ 0.025 ug/L. |
| Ethane | 0.008 J (EB) 0.007 J (TB) | | |
| Arsenic | 0.12 ug/L | 0.60 ug/L | NONE - all GW results > BAL. |
| TDS | 12 mg/L J | | NONE - all results > order-of-magnitude EB level. |

Tier I-type DV review does not require formal blank actions – judgment used to negate all ethane, ethene, & methane results reported < QLs & raise RL to QL due to observed low-level contamination in EBs & TBs. Also (J) all detects < QL but < 5X EB for EB contam. > QL.

DVC 12/8/06

## D. Matrix QC Results

1. Matrix Spike Recoveries *[QAPP Worksheet #11b and #24a]*

Matrix spike (MS) results were reviewed to assess the accuracy of the results relative to the specific sample matrix.

- Were matrix spike (MS) results present for all required analytes at the proper frequency as required by the Site QAPP? **Yes / No.** Were matrix spike recovery criteria met? **Yes / No.**

**QAPP MS Recovery Criteria:**

Metals and TOC in all matrices: 75-125%

All other parameters: 80-120%

List the affected analytes and actions in the table below.

**Actions:** If the spike recovery was > upper control limit, estimate (J) all positive results. No action is taken for non-detects. If the spike recovery fell within the range of 30-74% for metals or within the range of 30-79% for the other parameters, estimate (UJ or J) all sample results. If the spike recoveries were less than 30% for any parameter, reject (R) the nondetect results as unusable and estimate (J) the positive results for extremely low bias.

If the sample concentration exceeds the spike-added concentration by a factor of 4 or more, no action is taken because the spike level was "swamped-out" by the native concentration in the sample.

**Matrix Spike (MS) Accuracy Action Table**

also low due to serial dil. (see pg 14)

| Analyte | MS % Recovery | Action | Comments/Affected Samples |
|---|---|---|---|
| K | 72 | J / UJ | Potential low bias for detected results; UJ results indeterminate bias due to Blank action |
| | | | |
| Sulfide | 121 | → NONE | for all non-detected results non-detected - high bias therefore not expected |
| | | | |
| | | J | Detected results - potential high bias: SH-01R/10-04-06, SH-01S/10-05-06, SH-04S/10-04-06 |
| Na | 388 | NONE | sample conc > 4x spike level |
| Ferrous Fe | 74/78 | UJ | SH-15S/10-03-06, SH-1D/10-03-06 |

**MS Sample ID#:** SH-04S/09-28-06 all except Ferrous Iron

$Fe^{+2}$ on SH-15S/10-03-06; SH-04S/10-04-06

MS Actions not applicable to EB.

Ferrous Fe 24 (SH-04S/10-04-06) UJ

Prof judgment for high pH samples to UJ rather than R for <30% MS results: SH-01R, SH-04S, SH-05S, SH-17R, SH-26S, OW-214

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**D. Matrix QC Results (continued)**

2. Sample/Matrix Duplicate Results *[QAPP Worksheet #11b and #24a]*

Matrix (laboratory) duplicate (MD) results were reviewed to access the precision of the results relative to the specific sample matrix.

- Were matrix duplicate (MD) analyses present for all analytes at the proper frequency as required by the Site QAPP? **Yes / No.** Were criteria as defined below, met for all analytes? **Yes / No.**

List the analytes affected and actions in the table below.

| | | |
|---|---|---|
| Site QAPP Control Limits: | Aqueous | RPD ≤ 20% for results > 5x QL<br>difference ± QL for results < 5x QL |
| | Soil/Sediment | RPD ≤ 35% for results > 5x QL<br>difference ± 2x QL for results < 5x QL |

**Actions:** Estimate (J and UJ) all results for analytes which do not meet precision criteria.

**Matrix Duplicate (MD) Precision Action Table**

| Analyte | MD RPD | Action | Comments/Affected Samples |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
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| | | | |
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| | | | |
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| | | | |
| | | | |
| | | | |

Comments: MD Sample ID #: SH-04S/09-28-06

**D. Matrix QC Results (continued)**

3. Field Duplicate Precision: *Worksheet #11b, #22a, and #22b*

Field duplicate sample results were reviewed to assess representativeness of the sample aliquot to the area sampled and the precision of the results relative to field sampling techniques.

- Was a field duplicate pair included in this SDG? **Yes** / **No.** If Yes, identify in the following table.

**Actions:** If field duplicate precision exceeded criteria, below, for any analyte, estimate (J and UJ) positive and non-detected results for the affected analytes in the field duplicate pair only. If severe imprecision was noted in the field duplicate results, qualify the remainder of the associated field sample data based on sound technical judgment.

| | | |
|---|---|---|
| Site QAPP Control Limits: | Aqueous | RPD ≤ 30% for results > 5x QL; difference ± 2x QL for results < 5x QL |
| | Soil/Sediment | RPD ≤ 50% for results > 5x QL; difference ± 4x QL for results < 5x QL |

**Field Duplicate (FD) Precision/Representativeness Actions**

Field Duplicate Pair Samples: SH-053/10-04-05T OW-214/10-04-05

See Page 10a for field duplicate RPD calculations and Actions

Comments:

ethane + ethene show FD imprecision.

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Field Duplicate Precision Evaluation Worksheet

**SDG: BU214 Groundwater**

Labs: AWHL for metals, alk, Cl, nitrate, sulfate, sulfide, TDS. Katahdin for TOC; Groundwater Analytical for TKN; Microseeps for gases & Fe+2.

| Analyte | Units | Sample Result SH-05S/10-04-06 | Qual | Field Duplicate Result OW-214/10-04-06 | Qual | Precision RPD* | Action | Comment |
|---|---|---|---|---|---|---|---|---|
| Aluminum - total | ug/L | 840 | | 960 | | 13 | None | |
| Antimony - total | ug/L | 2.2 | | 1.9 | | 15 | None | |
| Arsenic - total | ug/L | 11 | | 11 | | 0 | None | |
| Barium - total | ug/L | 9.3 | | 8.5 | | 9 | None | |
| Beryllium - total | ug/L | 0.2 | U | 0.2 | U | NC | None | |
| Cadmium - total | ug/L | 0.15 | | 0.14 | | 7 | None | |
| Calcium - total | ug/L | 2700 | | 2700 | | 0 | None | |
| Chromium - total | ug/L | 5.4 | | 5 | | 8 | None | |
| Cobalt - total | ug/L | 2 | | 2 | | 0 | None | |
| Copper - total | ug/L | 29 | | 27 | | 7 | None | |
| Iron - total | ug/L | 2100 | | 2000 | | 5 | None | |
| Lead - total | ug/L | 26 | | 25 | | 4 | None | |
| Magnesium - total | ug/L | 410 | | 400 | | 2 | None | |
| Manganese - total | ug/L | 150 | | 150 | | 0 | None | |
| Mercury - total | ug/L | 0.2 | U | 0.2 | U | NC | None | |
| Nickel - total | ug/L | 8.3 | | 8.1 | | 2 | None | |
| Potassium - total | ug/L | 400 | | 400 | | 0 | None | |
| Selenium - total | ug/L | 1.3 | | 1.2 | | 8 | None | |
| Silver - total | ug/L | 0.13 | | 0.1 | U | 200 | None | Result < 5x RL; meets difference criterion |
| Sodium - total | ug/L | 260000 | | 270000 | | 4 | None | |
| Thallium - total | ug/L | 0.1 | U | 0.1 | U | NC | None | |
| Vanadium - total | ug/L | 25 | E | 23 | | 8 | None | |
| Zinc- total | ug/L | 9.6 | | 9.2 | | 4 | None | |
| Alkalinity | mg/L | 610 | | 560 | | 9 | None | |
| Chloride | mg/L | 6.6 | | 6.7 | | 2 | None | |
| Nitrate | mg/L | 0.5 | U | 0.5 | U | NC | None | |
| Sulfate | mg/L | 10 | | 10 | | 0 | None | |
| Sulfide | mg/L | 0.2 | U | 0.2 | U | NC | None | |
| Total Dissolved Solids (TDS) | mg/L | 870 | | 890 | | 2 | None | |
| Total Kjeldahl Nitrogen (TKN) | mg/L | 0.7 | | 0.6 | | 15 | None | |
| Total Organic Carbon (TOC) | mg/L | 7.2 | | 7.3 | | 1 | None | |
| Ethane | ug/L | 0.220 | | 0.088 | | 86 | J | FD imprecision |
| Ethene | ug/L | 0.480 | | 0.100 | | 131 | J | FD imprecision |
| Methane | ug/L | 1600.000 | | 1900.000 | | 17 | None | |
| Iron, Ferrous ($Fe^{+2}$) | mg/L | 1.0 | U | 1.0 | U | NC | None | |

NC = Not calculated

* RPD criteria for FD precision: if result is > 5xQL, RPD criterion is < ± 30%; if result is < 5xQL, criterion is difference < ± 2xQL.

Date: 12/8/06 Data Reviewer: _____

**New Environmental Horizons, Inc.**

## E. Method QC

1. Laboratory Control Sample Recoveries *[QAPP Worksheet #11b and #24a]*

The laboratory control sample (LCS) and/or standard reference material (SRM) recoveries were reviewed to assess the accuracy of the results relative to the laboratory method performance of each step during the preparation, analysis, and reporting of environmental samples for each matrix.

- Was an appropriate (soil, sediment, or water) LCS performed for all analytes at the proper frequency? **Yes / No.**
- Did all analytes meet Site QAPP recovery criteria or 80-120% or vendor control limits for SRM? **Yes / No.**

If no, list the affected analytes and actions in the comment section, below.

**Actions:** If the LCS recovery for any analyte was greater than 120% or the established upper control limit for an SRM, estimate (J) all detected sample results. If the LCS recovery was less than 80% or less than the established lower control limit, estimate (J and UJ) the detected and non-detected results. Use professional judgment if LCS is severely low (< 50%, EPA Region I criterion for total metals), and the MS was out of control, to reject (R) associated results as unusable. Use professional judgment if LCS is out of control and MS is in control, to accept results for acceptable accuracy in the sample matrix.

**Laboratory Control Sample (LCS) Accuracy Action Table**

| Analyte | LCS % Recovery | Action | Comments/Affected Samples |
|---|---|---|---|
| | | | |
| | | | |
| | | | |

Comments:



12/8/06

**E. Method QC (continued)**

2. ICP Method QC - ICP Interference Check Sample Results *[QAPP Worksheet #24a]*

ICP interference check procedures were performed to evaluate and verify the laboratory's interelement and background corrections for ICP-AES analyses and to generally evaluate interferences for isotope abundances on ICP-MS.

- Were analyte levels in the ICSA and ICSAB reported for all metals? **Yes / No.**
- Was the ICSA and ICSAB analyzed at the correct frequency? **Yes / No.**
- Did all analytes meet recovery criteria of 80-120% in the ICSAB solution? **Yes / No.**

If no to any of the above, list the affected samples, analytes, concentrations and actions in the section below.

Comments:



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**E. Method QC (continued)**

3. ICP-MS Method QC - Internal Standard Recovery Results *[QAPP Worksheet #24a]*

   - Were internal standards added to all samples analyzed by ICP-MS? **Yes / No.**
   - Did internal standards meet recovery criteria of 80-120% for CCVs and 30-120% for field samples as defined in the Site QAPP? **Yes** / **No.** for results reported –

   If no, results might be uncertain with either a high or low bias dependent upon the internal standard recovery results. Professional judgment should be used to estimate (J and UJ) all affected field results for low (<30%) recoveries of the internal standards and to estimate detected results (J) for high recoveries of the internal standards. For internal standard recoveries that do not meet criteria in the CCV, professional judgment may be used to estimate (J or UJ) associated field sample results bracketed during analysis by the affected CCV.

   All actions must be described below.

Comments:

Note: IS out several inial analyses of SH-01D + SH-01R high pH samples – these were re-analyzed @ dilutions with acceptable ISs. See pg 19. for further dil. info.



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## E. Method QC (continued)

4. ICP Serial Dilution Results *[QAPP Worksheet #24a]*

- Was a field sample used for ICP serial dilution analysis? **Yes** / **No.**
  **Sample ID#:** SH-04S/09-28-06
- Did all analytes meet criterion of < 15% Difference (%D) for values that were > 50x QL in the serial dilution results? **Yes** / **No.**

List the affected samples/analytes and actions in the table below.

**Actions:** Estimate (J) all positive results if the %D > 15% for results that are > 50x the QL.

**Serial Dilution Result Actions**

| Analyte | % Difference | Action / Affected Samples |
|---|---|---|
| Ca | 34 % | (J) all GW results for Ca, evidence of matrix suppression - low bias |
| Cu | 12% | Meets QAPP limits – remove lab "E" qualifier |
| K | 41% | Potential low bias – evidence of matrix suppression. |
| V | 26% | (J) + (UJ) Note "UJ" results have in determinate bias due to other QC issues. |
| | | (J) all GW results; evidence of matrix suppression – low bias |
| | | |
| | | |
| | | |
| | | |
| | | |

Remove "E" lab qual as DV qual for EB - Serial Dilution actions do not affect EB.

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## F. Verification of MDLs/RLs, Linear Ranges, IECs

1. Sample Detection Limits *[QAPP Worksheet #9b]*

Analyte detection limits were reviewed to assess if the sensitivity of the results met the project-specific requirements.

Review Form 10, or equivalent. For this project, Method Detection Limits (MDL) should be performed annually.

- Were current (annual) MDLs present for all analytes and all instruments used for analysis? (Yes) / No.
- Were the MDLs and/or QLs compliant with project-specific reporting limit (PQL) requirements as listed in Worksheet #9b of the Site QAPP? Yes / (No.)

**Actions:** Non-detected results that do not meet required PQLs may not be usable for specific data uses such as risk assessment.

**Table of Results That Do Not Meet QAPP PQL (Sensitivity) Requirements**

| Analyte | Sample ID # (s) Affected<br>Truncated IDs: | Highest QL reported (units) ug/L | QAPP PQL (units) ug/L | QAPP PAL (units) ug/L | Reason (% solids; blank action; etc.) | Usability |
|---|---|---|---|---|---|---|
| Zn | SH-01S | 40 | 20 | 1100 | Blank Action | Yes - < PAL |
| K | SH-02S, SH-15S, SH-17D, SH-17R, WP-06 | 720 | 500 | NA | Blank Action | Yes - No PAL established. |
| Al | SH-01D/10-03-06 (others > PQL but < PAL so OK). | 120,000 | 50 | 3600 | Dil due to matrix interference | Data user to decid |
| Sb | SH-01D/10-03-06<br>SH-01R/10-03-06 | 50 | 0.5 | 1.5 | | |
| Ba | SH-01D + SH-01R | 50 | 0.5 | 260 | | Yes - < PAL |
| Be | " " | 20 | 0.2 | 4 12/8/06 | | Data user to decid |
| Cd | " " | 10 | 0.1 ~~0.8~~ | ~~1.8~~ | | |
| Cr | " " | 50 | 0.5 | 11 | | |
| Co | " " | 20 | 0.2 | 73 | | Yes - < PAL |
| Fe | " " | 5000 | 500 | 1,100 | | Data user to deci |
| Pb | " " | 50 | 0.5 | 15 | | |
| Mg | " " | 25000 | 500 | NA | | Yes - No PAL |
| Mn | SH-01D | 500 | 5 | 86 | | Data user to decid |
| Hg | SH-01D + SH-01R | 1 | 0.2 | 1.1 | | Yes < PAL |

Comments:
all results reported to RL (supported by low-level in calibration curve) except As to MDL as required by Phase 1B-5 Workplan to help meet PAL. Note: Worksheet #9b have incorrect values + units for gases PQLs. Lab QLs were considered acceptable: ethane/ethene: 0.025 ug/L
methane: 0.100 ug/L
12/8/06.

(continued)

## F. Verification of MDLs/RLs, Linear Ranges, IECs – continued

1. Sample Detection Limits *[QAPP Worksheet #9b]*

Analyte detection limits were reviewed to assess if the sensitivity of the results met the project-specific requirements.

Review Form 10, or equivalent. For this project, Method Detection Limits (MDL) should be performed annually.

- Were current (annual) MDLs present for all analytes and all instruments used for analysis? **Yes / No.**
- Were the MDLs and/or QLs compliant with project-specific reporting limit (PQL) requirements as listed in Worksheet #9b of the Site QAPP? **Yes / No.**

**Actions:** Non-detected results that do not meet required PQLs may not be usable for specific data uses such as risk assessment.

**Table of Results That Do Not Meet QAPP PQL (Sensitivity) Requirements**

| Analyte | Sample ID # (s) Affected | Highest QL reported (units) ug/L | QAPP PQL (units) ug/L | QAPP PAL (units) ug/L | Reason (% solids; blank action; etc.) | Usability |
|---|---|---|---|---|---|---|
| Se | SH-01D/10-03-06 + SH-01R/10-04-06 | 100 | 1 | 18 | Dil. due to matrix interference | Data user to decid |
| Tl | ↓ ↓ | 10 | 0.1 | 2 | ↓ | ↓ |
| Zn | ~~SH-01D/10-03-06~~ DC 12/8/06 SH-01R/10-04-06 | 500 | 20 | 1100 | ↓ | Yes < PAL |

Comments:





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**F. Verification of MDLs/RLs, Linear Ranges, IECs - continued**

**2. ICP Interelement Correction Factors** (For ICP-AES only -- Not required for ICP-MS)

- Review Form 11, or equivalent, ICP-AES Interelement Correction Factors (Annually)
- Were the current (annual) IECs present in the data package? **Yes / No / NA** ICP-MS only

DC 12/8/06

**Actions:** If no, use professional judgment to determine the severity of the affect on the results.

**3. ICP-AES and ICP-MS Linear Ranges (Annual)**

- Review Form 12, or equivalent, ICP Linear Ranges are checked daily and updated, at a minimum, annually for this project.
- Were current (annual) linear range data present in the data package? **Yes / No.**

**Actions:** If no, use professional judgment to determine the severity of the affect on the results.

Comments: LR from April 2005 – No action taken – professional judgment: ICP-MS linearity range is very stable over time.

**G. Preparation and Analysis Logs**

**1. Preparation Logs**

- Were sample preparation logs present and do they contain all samples/analytes performed in the SDG? **Yes / No.**

**2. Analysis Run Logs**

- Were analysis run logs present for all required samples/methods for this SDG? **Yes / No**
- Was the correct analytical sequence followed for the QC for each method? **Yes / No.**
- Were the calibration standards (*i.e.*, CCVs, CCBs, ICSA, ICSAB, etc.) analyzed at the proper frequency consistent with the methods and the Site QAPP? **Yes / No.**

If no to questions for Form 13 or 14, list the affected samples/analytes and actions in the comment section, below.

Comments: _____



DC 12/8/06

## H. Additional QA/QC Issues

NA

### 1. Percent Solids

Percent solids data were reviewed to further assess the affect of the sample matrix on result quantitation.

- Review percent solids results for all soil and sediment samples.

Specific note for Sediments: For this project, all sediment samples were freeze-dried prior to analysis for total metals. The freeze-dried percent solids value used to calculate the total metals results on a dry-weight basis; therefore, the freeze-dried percent solids is used to compare to EPA Region I DV criteria. For TOC, the "as-received" or "native" percent solids is used as sediment aliquots for these parameters were not freeze-dried prior to preparation and analysis.

- Were percent solids > 30% for all soil and sediment samples? **Yes / No**

If no, list affected samples and actions in the table, below.

**Actions:** If percent solids results were > 30%, no actions are required. If percent solids were < 30% but > 10%, use professional judgment to either estimate (UJ) or reject all non-detected results (R) and estimate (J) all detected results. If percent solids were < 10%, use professional judgment to either estimate (UJ) or reject (R) all results. Professional judgment may be used, for example, if data reported are useful to the risk assessors even in low percent solids sediments.

**Percent Solids Action Table**

| Sample ID | % Solids | Action / Comments |
|---|---|---|
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DC 12/8/06

**2. Sample Result Verification – Uncertainty Near the Level of Detection**

Detected sample results were reviewed to assess certainty of results near the QLs. Results reported below the lab's QL, down to the IDL or MDL, have uncertainty near this statistically-derived level of detection.

- Were all sample results reported at ≥ QL or PQL? **Yes / (No)**
- If No, actions to estimate these results, reported between the MDL and the QL, may be taken.

**Action:** Estimate (J) all results < 2x the lab MDL and < the QL that have not been previously qualified "J" due to other QC criteria, due to uncertainty in the accuracy of the quantitation at this low level. Estimate (UJ) the level of detection if the non-detected result is reported down to the MDL (and if not previously qualified due to other QC criteria exceedance) due to the uncertainty in the statistically-derived MDL.

| Analyte | Sample ID# of affected results / matrix | Comments |
|---|---|---|
| ethane, ethene, methane | All gases results that were not negated due to blanks action or that were qualified "J" by lab for <QL had (J) maintained during DV to indicate uncertainty < calibration range. | |
| As | DW-214A/10-05-06 | (UJ) uncertain at MDL |

Comments:
As reported to MDL for PAL needs.


12/8/06

## III. Review of Overall Data Package Compliance

Review of the overall data package was performed to determine if the laboratory met all EPA SW846 method and project QAPP requirements.

### Case Narrative Review

Review the Case Narrative provided with the data package and list all issues of noncompliance or QA/QC exceedances addressed in the case narrative that have not been previously evaluated in the Data Usability Review. For each issue listed, state what qualification to the data has been taken.

Comments:
COC ID changes/discrepancies:
"SH-1D/10-03-06" changed to SH-01D/10-03-06
"SH-1D/10-05-06" " " SH-01S/10-05-06
pH TOC + TKN = 14 for Sample: SH-01D/10-03-06 +
SH-01R/10-04-06
ICP-MS: Metals: high pH samples SH-01D + SH-01R
analyzed at 20x dil. due to initial poor IS responses
(prep 5 ml → 25 ml = 1:5 dil.) → ICPMS

mercury prep 5 ml → 50 ml 1:10 dil for SH-01D + SH-01R
mercury prep others 25 ml → 50 ml 1:2 "
Lab calibrated Hg to 0.1 ug/L in curve; used that value to calculate non-detects OK ✓

DWC 12/8/06 ~~Hg Inst dil: 20X SH-17R + SH-17D~~
~~100X SH-01R ; 500X SH-01D~~

**Sample result verification through re-calculation from the raw data was not performed, and was not required, for parameters undergoing a Tier II-type review or Tier I-type review.** ***[Reference QAPP Worksheet # 29b and #29c for data validation levels and modifications.]*** As sample result calculation verification was performed for the Tier-III type reviews previously documented for this Site for these media, and no anomalies were noted, it was assumed that the calculations were performed correctly for the remainder of the environmental data.

DWC 12/8/06.

## Data Summary Key for Data Usability Checklist Review

J - The associated numerical value is an estimated quantity due to quality control criteria exceedance(s). The value is usable for project decisions as an estimated result. The Data Usability Report discusses the potential bias in estimated results.

U - The analyte was analyzed for, but was not detected. The associated numerical value is the sample-specific quantitation limit. The value is usable for project decisions as a nondetect result at the quantitation limit.

UJ - The analyte was analyzed for, but was not detected. The associated numerical value is the sample reporting/quantitation limit and is an estimated quantity. The value is usable for project decisions as a non-detect result at the estimated reporting limit.

B - The analyte was detected in an associated non-matrix-matched blank. The result is usable for project decisions.

R - Reject data due to severe or cumulative exceedance of quality control criteria. The value is unusable (analyte may or may not be present) for project decisions. Re-sampling and reanalysis is necessary for verification.

## List of Inorganic Data Usability Checklist Review Acronyms

| | | |
|---|---|---|
| CCB | - | Continuing Calibration Blank |
| CCV | - | Continuing Calibration Verification Sample |
| CLP | - | Contract Laboratory Program |
| CRDL | - | Contract Required Detection Limit |
| %D | - | Percent Difference |
| DQO | - | Data Quality Objective |
| EPA | - | Environmental Protection Agency |
| FD | - | Field Duplicate |
| g | - | gram |
| ICB | - | Initial Calibration Blank |
| ICP | - | Inductively Coupled Plasma Spectrophotometry |
| ICP-MS | - | ICP-Mass Spectrometry |
| ICS | - | Interference Check Sample |
| ICV | - | Initial Calibration Verification Sample |
| IDL | - | Instrument Detection Limit |
| IEC | - | Interelement Correction Factor |
| IS | - | Internal Standard (ICP-MS only) |
| Kg | - | kilogram |
| L | - | liter |
| LCS | - | Laboratory Control Sample |
| MD | - | Matrix Duplicate |
| MDL | - | Method Detection Limit |
| mg | - | milligram |
| mg/Kg | - | milligram per kilogram |
| MS | - | Matrix Spike |
| NA | - | Not Applicable |
| ND | - | Non-detect |
| PQL | - | Project Quantitation Limit |
| QA | - | Quality Assurance |
| QAPP | - | Quality Assurance Project Plan |
| QC | - | Quality Control |
| QL | - | Quantitation Limit |
| r | - | correlation coefficient of linear regression curve |
| RB | - | Rinsate Blank (equipment rinsate field blank) |
| RPD | - | Relative Percent Difference |
| SDG | - | Sample Delivery Group |
| SRM | - | Standard Reference Material |
| TAL | - | Target Analyte List |
| µg/Kg | - | micrograms per kilogram |
| µg/L | - | micrograms per liter |

## References

1. *Phase 1A Remedial Investigation*, Blackburn & Union Privileges Superfund Site, Walpole, Massachusetts, November 2000; inclusive of the *Project Operations Plan (POP), Sampling and Analysis Plan (SAP), and Quality Assurance Project Plan (QAPP).*

2. *Phase 1B-2 Remedial Investigation Work Plan*, Blackburn & Union Privileges Superfund Site, Walpole, Massachusetts, June 2003.

3. *Phase 1B-5 Work Plan Remedial Investigation Work Plan,* Blackburn & Union Privileges Superfund Site, Walpole Massachusetts, Rev 02, September 21, 2006

4. *EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses,* EPA Region I, December 1996.

5. *Region I Laboratory Data Validation Functional Guidelines for Evaluating Inorganics Analyses,* EPA Region I, February 1989.

6. *Guidance for Data Useability in Risk Assessment* (Part A), Publication 9285.7-09A, EPA 1992.

7. *Test Methods for Evaluating Solid Waste, Physical Chemical Methods, SW-846*, EPA Office of Solid Waste, Third Edition, Final Update, December 1996.

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*New Environmental Horizons, Inc.*

# DATA USABILITY ASSESSMENT

**Organic Analysis by Method 8260B and Method 8270C**
**EPA Region I Tier II – type review**

| | |
|---|---|
| **Client:** | Sanborn, Head & Associates, Inc., Concord, New Hampshire |
| **Site:** | Blackburn & Union Privileges Superfund Site, Walpole, Massachusetts<br>Phase 1B-5 Remedial Investigation |
| **Laboratory:** | Alpha Woods Hole Labs (AWHL), Raynham, Massachusetts |
| **SDG:** | BU214 |
| **Lab ETR:** | 0610018 |
| **# Samples/Analyses:** | 11 groundwaters, 1 equipment rinsate blank (EB), and 3 trip blanks (TB) for forty project-specific Volatile Organic Compounds (VOC)<br>11 groundwaters and 1 EB for nineteen project-specific Semivolatile Organic Compounds (SVOC) |
| **Initial Reviewer:** | Dr. Nancy C. Rothman, New Environmental Horizons, Inc. |
| **Senior Reviewer:** | Susan D. Chapnick, New Environmental Horizons, Inc. |
| **Date Completed:** | December 8, 2006 |

An EPA Tier II-type Data Validation/Usability Checklist Review was performed on the data included in this SDG with the following intentions: 1) to determine if the data were generated and reported in accordance with the *Phase 1B-5 Remedial Investigation Work Plan, Blackburn & Union Privileges Superfund Site, Walpole, MA,* prepared by Sanborn, Head & Associates, Inc., Rev. 02, September 21, 2006 (Phase IB-5 Work Plan); USEPA *Test Methods for Evaluating Solid Waste, Physical Chemical Methods, SW-846, Third Edition, Final Update, December 1996 Method 8260B and Method 8270C;* Region I, *EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses,* December 1996; *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review*; Publication EPA A540/R-99/008, October 1999; and *Guidance for Data Useability in Risk Assessment* (Part A), Publication 9285.7-09A, USEPA 1992; 2) to determine if the data met the project data quality objectives for acceptable accuracy, precision, sensitivity; and technical usability; and 3) to update the project database with appropriate data quality qualifiers.

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The Data Review Checklists, attached, were completed during this assessment to document the review.

The Chain-of-Custody (COC) listed samples "SH-1D/10-03-06" and "SH-1S/10-05-06" which were changed to "SH-01D/10-03-06"and "SH-01S/10-05-06", respectively, based on client communication with the laboratory. The corrected sample identifications are included in the validated database file.

All results for VOCs and SVOCs in the samples included in this SDG BU214 are usable for project objectives. Several results have been negated (U) due to blank actions or qualified as estimated (J or UJ) due to quality control criteria exceedance(s). Data users should note the uncertainties in the qualified results as summarized below in Table 1. The qualified (U, J, UJ) and unqualified results are usable for project objectives.

A Laboratory Fortified Blank (LFB), as designated in the original QAPP (2000), was not required for this Phase 1B-5 Remedial Investigation. As compared to previous investigations, the lowest-level initial calibration standards for VOCs and SVOCs were at very low concentrations and the laboratory analyzed full target analyte Laboratory Control samples/Laboratory Control Sample Duplicates (LCS/LCSD). Therefore, the laboratory was not required to perform the LFB analysis.

All non-detect results for VOCs and SVOCs in the groundwater samples met Project Action Limits (PALs) with the following exceptions: VOC compounds bromodichloromethane, bromoform, carbon tetrachloride, chloroform, dibromochloromethane, 1,2-dichloroethane, 1,2-dichloropropane, cis-1,3-dichloropropene, trans-1,3-dichloropropene, 1,1,2,2-tetrachloroethane, tetrachloroethene, trichloroethene, and vinyl chloride in all samples; VOCs chloroethane, chloromethane, 1,1-dichloroethene, cis-1,2-dichloroethene, and methylene chloride in samples SH-01D/10-03-06, SH-15S/10-03-06, SH-01R/10-04-06, SH-04S/10-04-06, SH-05S/10-04-06, and SH-17R/10-04-06; VOCs chlorobenzene, tran-1,2-dichloroethene, methyl-tert-butyl ether, trichlorofluoromethane, o-xylene, and m/p-xylene in samples SH-01D/10-03-06 and SH-01R/10-04-06; and SVOCs benzo(a)pyrene and dibenz(a,h)anthracene in all samples. These non-detects did not meet PALs, as expected, either due to method limitations or due to dilutions employed for sample analysis. The project narrative indicated that the volatile aliquots for samples SH-01D/10-03-06, SH-15S/10-03-06, SH-01R/10-04-06, SH-04S/10-04-06, SH-05S/10-04-06, and SH-17R/10-04-06 were dark and viscous; therefore, the laboratory performed dilutions on the samples (dilution factor (DF) = 5 to DF=20) to prevent instrument malfunction as a consequence of the complex nature of the samples. The data user will have to evaluate the usability of these elevated non-detected data on a case-by-case basis to determine if these data can be used for project objectives.

All samples in this SDG had a native pH > 9; therefore, as required by the QAPP, the samples were not acid preserved for VOC analysis. The VOC aliquots of samples SH-01D/10-03-06 and SH-01R/10-04-06 did not have headspace when they were shipped from the site; however, at the time of analysis, all three VOC vials of each sample did contain headspace. The laboratory chose the vial with the least headspace to analyze for each sample, yet the presence of headspace in the vials may have lead to loss of VOCs. Professional judgment was used to accept as estimated (J and UJ) rather than reject the VOC results in these two samples since it is the nature of these samples which caused the headspace and re-sampling would not improve the integrity of the results.

Six SVOC samples were initially analyzed undiluted (i.e., DF=1) and several target compounds were reported at a level exceeding the calibration range. The samples were reanalyzed at a secondary dilution reporting all results within range. During this review, both sets of data for each sample were reviewed and the following data were accepted for reporting of results:

- SH-01D/10-03-06: all DF=1 data accepted except 2-methylnaphthalene, acenaphthene, acenaphthylene, fluorene, naphthalene, and phenanthrene were chosen for reporting from the DF=500 analysis
- SH-01R/10-04-06: all DF=1 data accepted except 2-methylnaphthalene, acenaphthene, acenaphthylene, carbazole, fluorene, naphthalene, and phenanthrene were chosen for reporting from the DF=500 analysis
- SH-04S/10-04-06: all DF=1 data accepted except 2-methylnaphthalene and naphthalene were chosen for reporting from the DF=10 analysis
- SH-05S/10-04-06 and OW-214/10-04-06: all DF=1 data accepted except 2-methylnaphthalene, naphthalene, and phenanthrene were chosen for reporting from the DF=10 analysis
- SH-01S/10-05-06: all DF=1 data accepted except 2-methylnaphthalene, acenaphthene, naphthalene, and phenanthrene were chosen for reporting from the DF=10 analysis

The database was edited to reflect this data acceptance strategy of the SVOC results (*i.e.*, data not accepted for reporting were eliminated from the database so that only one set of SVOC data exists in the project database).

All other quality control information associated with accuracy, precision, sensitivity, and representativeness for the project-specific list of VOCs and SVOCs reported met project criteria for the samples in this SDG with the exceptions in the following table.

**Table 1. Summary of Data Validation/Usability Actions**

| Sample ID | Lab Chemical Name | Qualifier | Bias | Comment |
|---|---|---|---|---|
| OW-214 / 10-04-06 | Benzene, Toluene, Ethylbenzene, p/m-Xylene, & o-Xylene | J | H | High Surrogate recovery |
| SH-15S / 10-03-06 | Bromomethane | UJ | I | Initial Calibration outside criteria |
| SH-05S / 10-04-06, SH-17R / 10-04-06, SH-026S / 10-04-06, OW-214 / 10-04-06, SH-01S / 10-05-06, SH-17D / 10-05-06, WP-06 / 10-05-06, & OW-214A / 10-05-06 | Bromomethane | UJ | I | Initial Calibration outside criteria + Low Calibration verification |
| All samples except: SH-15S / 10-03-06, SH-04S / 10-04-06, SH-01R / 10-04-06, & SH-01D / 10-03-06 | Dibromochloromethane | UJ | I | Initial Calibration outside criteria |
| SH-15S / 10-03-06 | Dibromochloromethane | UJ | I | LCS/LCSD imprecision + Initial Calibration outside criteria |

**Table 1. Summary of Data Validation/Usability Actions** - *continued*

| Sample ID | Lab Chemical Name | Qualifier | Bias | Comment |
|---|---|---|---|---|
| SH-04S / 10-04-06 | All VOCs except: Dibromochloromethane, Bromomethane, Vinyl acetate, Ethylbenzene, & Acetone | J / UJ | L | Low Surrogate recovery |
| SH-04S / 10-04-06 | Dibromochloromethane | UJ | I | Low Surrogate recovery + Initial Calibration outside criteria |
| SH-04S / 10-04-06 | Bromomethane | UJ | I | Low Surrogate recovery + Initial Calibration outside criteria + Low Calibration verification |
| SH-04S / 10-04-06 | Vinyl acetate | UJ | I | Low Surrogate recovery + Low MSD recovery + MS/MSD imprecision |
| SH-04S / 10-04-06 | Ethylbenzene | J | I | Low Surrogate recovery + Result uncertain below the calibration range |
| SH-04S / 10-04-06 | Acetone | UJ | I | Negated due to Blank Action + Low Surrogate recovery |
| SH-15S / 10-03-06, SH-05S / 10-04-06, SH-17R / 10-04-06, OW-214 / 10-04-06, SH-01S / 10-05-06, & SH-17D / 10-05-06 | Acetone | U | | Negated due to Blank Action |
| SH-01R / 10-04-06 | All VOCs except: Benzene, Toluene, Ethylbenzene, p/m-Xylene, o-Xylene, Styrene, 2-Hexanone, 2-Butanone (MEK), Bromomethane, Acetone, & Dibromochloromethane | UJ | L | Possible loss of VOCs due to headspace |
| SH-01R / 10-04-06 | Benzene, Toluene, Ethylbenzene, p/m-Xylene, o-Xylene, & Styrene | J | I | Possible loss of VOCs due to headspace + High Surrogate recovery |
| SH-01R / 10-04-06 | 2-Hexanone | J | I | Possible loss of VOCs due to headspace + High Surrogate recovery + High Calibration verification |
| SH-01R / 10-04-06 | 2-Butanone (MEK) | J | I | Possible loss of VOCs due to headspace + High Surrogate recovery + Result uncertain below the calibration range |
| SH-01R / 10-04-06 | Bromomethane | UJ | I | Possible loss of VOCs due to headspace + Initial Calibration outside criteria |
| SH-01R / 10-04-06 | Acetone | UJ | I | Possible loss of VOCs due to headspace + Negated due to Blank Action |

**Table 1. Summary of Data Validation/Usability Actions** - *continued*

| Sample ID | Lab Chemical Name | Qualifier | Bias | Comment |
|---|---|---|---|---|
| SH-01R / 10-04-06 | Dibromochloromethane | UJ | I | Possible loss of VOCs due to headspace + LCS/LCSD imprecision + Initial Calibration outside criteria |
| SH-01D / 10-03-06 | All VOCs except: Dibromochloromethane & Styrene | J / UJ | I | Possible loss of VOCs due to headspace + Conflicting Surrogate recovery |
| SH-01D / 10-03-06 | Dibromochloromethane | UJ | I | Possible loss of VOCs due to headspace + Conflicting Surrogate recovery + Initial Calibration outside criteria |
| SH-01D / 10-03-06 | Styrene | J | I | Possible loss of VOCs due to headspace + Conflicting Surrogate recovery + Result uncertain below the calibration range |
| SH-17D / 10-05-06 | Ethylbenzene & p/m-Xylene | J | I | Result uncertain below the calibration range |
| SH-026S / 10-04-06 & OW-214A / 10-05-06 | 2-Methylnaphthalene | U | | Negated due to Blank Action |
| SH-026S / 10-04-06 | Acenaphthylene | U | | Negated due to Blank Action |
| SH-17R / 10-04-06 & OW-214A / 10-05-06 | Anthracene | U | | Negated due to Blank Action |
| SH-17R / 10-04-06, SH-17D / 10-05-06, & WP-06 / 10-05-06 | Benzo[a]pyrene & Benzo[b]fluoranthene | U | | Negated due to Blank Action |
| SH-15S / 10-03-06, SH-17R / 10-04-06, SH-026S / 10-04-06, SH-17D / 10-05-06, & WP-06 / 10-05-06 | Benzo[g,h,i]perylene | U | | Negated due to Blank Action |
| SH-17R / 10-04-06, SH-026S / 10-04-06, SH-17D / 10-05-06, & WP-06 / 10-05-06 | Benzo[k]fluoranthene | U | | Negated due to Blank Action |
| All samples except SH-01R / 10-04-06 | bis(2-Ethylhexyl)phthalate | U | | Negated due to Blank Action |
| WP-06 / 10-05-06 | Chrysene | U | | Negated due to Blank Action |
| SH-01D / 10-03-06, SH-15S / 10-03-06, SH-04S / 10-04-06, SH-17R / 10-04-06, SH-01S / 10-05-06, & SH-17D / 10-05-06 | Dibenz[a,h]anthracene | U | | Negated due to Blank Action |

**Table 1. Summary of Data Validation/Usability Actions** - *continued*

| Sample ID | Lab Chemical Name | Qualifier | Bias | Comment |
|---|---|---|---|---|
| OW-214A / 10-05-06 | Acenaphthene, Fluoranthene, Fluorene, Phenanthrene, & Pyrene | U | | Negated due to Blank Action |
| SH-15S / 10-03-06, SH-17R / 10-04-06, SH-026S / 10-04-06, SH-17D / 10-05-06, & WP-06 / 10-05-06 | Indeno[1,2,3-cd]pyrene | U | | Negated due to Blank Action |
| SH-026S / 10-04-06 & OW-214A / 10-05-06 | Naphthalene | U | | Negated due to Blank Action |
| SH-17R / 10-04-06, SH-17D / 10-05-06, & WP-06 / 10-05-06 | Benz[a]anthracene | J | I | Result uncertain below the calibration range |
| SH-026S / 10-04-06 | Benzo[a]pyrene | J | I | Result uncertain below the calibration range |
| SH-15S / 10-03-06 & SH-026S / 10-04-06 | Benzo[b]fluoranthene | J | I | Result uncertain below the calibration range |
| SH-15S / 10-03-06 | Benzo[k]fluoranthene | J | I | Result uncertain below the calibration range |
| SH-17R / 10-04-06 | Chrysene | J | I | Result uncertain below the calibration range |

*Qualifiers: U = Analyte is not detected; UJ = Non-detect is estimated; J = Result is estimated; R = Result is rejected and is unusable for project decisions.*

*Bias:* *L = Low; H = High; I = Indeterminate*

The qualified (J, UJ, and U) and unqualified results presented in the validated database, submitted electronically to Sanborn, Head & Associates, Inc. are considered usable for project objectives.

| ID | Smpl | Lab_ID | Extr_Date | Anal_Date | Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 349 | TB-512 / 10-03-06 | 0610018-01 | | 10/9/2006 | 8260 | VOCs | 74-87-3 | Chloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 350 | TB-512 / 10-03-06 | 0610018-01 | | 10/9/2006 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 351 | TB-512 / 10-03-06 | 0610018-01 | | 10/9/2006 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 352 | TB-512 / 10-03-06 | 0610018-01 | | 10/9/2006 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 353 | TB-512 / 10-03-06 | 0610018-01 | | 10/9/2006 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 354 | TB-512 / 10-03-06 | 0610018-01 | | 10/9/2006 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 355 | TB-512 / 10-03-06 | 0610018-01 | | 10/9/2006 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 356 | TB-512 / 10-03-06 | 0610018-01 | | 10/9/2006 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 357 | TB-512 / 10-03-06 | 0610018-01 | | 10/9/2006 | 8260 | VOCs | 67-66-3 | Chloroform | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 358 | TB-512 / 10-03-06 | 0610018-01 | | 10/9/2006 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 359 | TB-512 / 10-03-06 | 0610018-01 | | 10/9/2006 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 360 | TB-512 / 10-03-06 | 0610018-01 | | 10/9/2006 | 8260 | VOCs | 71-43-2 | Benzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 361 | TB-512 / 10-03-06 | 0610018-01 | | 10/9/2006 | 8260 | VOCs | 74-83-9 | Bromomethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 362 | TB-512 / 10-03-06 | 0610018-01 | | 10/9/2006 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 363 | TB-512 / 10-03-06 | 0610018-01 | | 10/9/2006 | 8260 | VOCs | 79-01-6 | Trichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 364 | TB-512 / 10-03-06 | 0610018-01 | | 10/9/2006 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 365 | TB-512 / 10-03-06 | 0610018-01 | | 10/9/2006 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 366 | TB-512 / 10-03-06 | 0610018-01 | | 10/9/2006 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 367 | TB-512 / 10-03-06 | 0610018-01 | | 10/9/2006 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 368 | TB-512 / 10-03-06 | 0610018-01 | | 10/9/2006 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 369 | TB-512 / 10-03-06 | 0610018-01 | | 10/9/2006 | 8260 | VOCs | 108-88-3 | Toluene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 370 | TB-512 / 10-03-06 | 0610018-01 | | 10/9/2006 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 371 | TB-512 / 10-03-06 | 0610018-01 | | 10/9/2006 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 372 | TB-512 / 10-03-06 | 0610018-01 | | 10/9/2006 | 8260 | VOCs | 75-00-3 | Chloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 373 | TB-512 / 10-03-06 | 0610018-01 | | 10/9/2006 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 374 | TB-512 / 10-03-06 | 0610018-01 | | 10/9/2006 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 375 | TB-512 / 10-03-06 | 0610018-01 | | 10/9/2006 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 2 | µg/L | UJ | I | 2 | µg/L | 1 | Initial Calibration outside criteria |
| 376 | TB-512 / 10-03-06 | 0610018-01 | | 10/9/2006 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 377 | TB-512 / 10-03-06 | 0610018-01 | | 10/9/2006 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 378 | TB-512 / 10-03-06 | 0610018-01 | | 10/9/2006 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4 | µg/L | U | | 4 | µg/L | 1 | |
| 379 | TB-512 / 10-03-06 | 0610018-01 | | 10/9/2006 | 8260 | VOCs | 95-47-6 | o-Xylene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 380 | TB-512 / 10-03-06 | 0610018-01 | | 10/9/2006 | 8260 | VOCs | 100-42-5 | Styrene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 381 | TB-512 / 10-03-06 | 0610018-01 | | 10/9/2006 | 8260 | VOCs | 75-25-2 | Bromoform | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 382 | TB-512 / 10-03-06 | 0610018-01 | | 10/9/2006 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 383 | TB-512 / 10-03-06 | 0610018-01 | | 10/9/2006 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 384 | TB-512 / 10-03-06 | 0610018-01 | | 10/9/2006 | 8260 | VOCs | 67-64-1 | Acetone | 5 | µg/L | U | | 5 | µg/L | 1 | |
| 385 | TB-512 / 10-03-06 | 0610018-01 | | 10/9/2006 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 386 | TB-512 / 10-03-06 | 0610018-01 | | 10/9/2006 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 387 | TB-512 / 10-03-06 | 0610018-01 | | 10/9/2006 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 388 | TB-512 / 10-03-06 | 0610018-01 | | 10/9/2006 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 389 | SH-01D / 10-03-06 | 0610018-02 | | 10/10/2006 | 8260 | VOCs | 74-87-3 | Chloromethane | 40 | µg/L | UJ | I | 40 | µg/L | 20 | Possible loss of VOCs due to headspace + Conflicting Surrogate recovery |
| 390 | SH-01D / 10-03-06 | 0610018-02 | | 10/10/2006 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 40 | µg/L | UJ | I | 40 | µg/L | 20 | Possible loss of VOCs due to headspace + Conflicting Surrogate recovery |
| 391 | SH-01D / 10-03-06 | 0610018-02 | | 10/10/2006 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 40 | µg/L | UJ | I | 40 | µg/L | 20 | Possible loss of VOCs due to headspace + Conflicting Surrogate recovery |
| 392 | SH-01D / 10-03-06 | 0610018-02 | | 10/10/2006 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 40 | µg/L | UJ | I | 40 | µg/L | 20 | Possible loss of VOCs due to headspace + Conflicting Surrogate recovery |
| 393 | SH-01D / 10-03-06 | 0610018-02 | | 10/10/2006 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 40 | µg/L | UJ | I | 40 | µg/L | 20 | Possible loss of VOCs due to headspace + Conflicting Surrogate recovery |
| 394 | SH-01D / 10-03-06 | 0610018-02 | | 10/10/2006 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 40 | µg/L | UJ | I | 40 | µg/L | 20 | Possible loss of VOCs due to headspace + Conflicting Surrogate recovery |
| 395 | SH-01D / 10-03-06 | 0610018-02 | | 10/10/2006 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 40 | µg/L | UJ | I | 40 | µg/L | 20 | Possible loss of VOCs due to headspace + Conflicting Surrogate recovery |
| 396 | SH-01D / 10-03-06 | 0610018-02 | | 10/10/2006 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 40 | µg/L | UJ | I | 40 | µg/L | 20 | Possible loss of VOCs due to headspace + Conflicting Surrogate recovery |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low, H = High, I = Indeterminate. See Data Usability Report for details.

| ID | Smpl | Lab_ID | Extr_Date | Anal_Date | Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 397 | SH-01D / 10-03-06 | 0610018-02 | | 10/10/2006 | 8260 | VOCs | 67-66-3 | Chloroform | 40 | µg/L | UJ | I | 40 | µg/L | 20 | Possible loss of VOCs due to headspace + Conflicting Surrogate recovery |
| 398 | SH-01D / 10-03-06 | 0610018-02 | | 10/10/2006 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 40 | µg/L | UJ | I | 40 | µg/L | 20 | Possible loss of VOCs due to headspace + Conflicting Surrogate recovery |
| 399 | SH-01D / 10-03-06 | 0610018-02 | | 10/10/2006 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 40 | µg/L | UJ | I | 40 | µg/L | 20 | Possible loss of VOCs due to headspace + Conflicting Surrogate recovery |
| 400 | SH-01D / 10-03-06 | 0610018-02 | | 10/10/2006 | 8260 | VOCs | 71-43-2 | Benzene | 41 | µg/L | J | I | 40 | µg/L | 20 | Possible loss of VOCs due to headspace + Conflicting Surrogate recovery |
| 401 | SH-01D / 10-03-06 | 0610018-02 | | 10/10/2006 | 8260 | VOCs | 74-83-9 | Bromomethane | 40 | µg/L | UJ | I | 40 | µg/L | 20 | Possible loss of VOCs due to headspace + Conflicting Surrogate recovery |
| 402 | SH-01D / 10-03-06 | 0610018-02 | | 10/10/2006 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 40 | µg/L | UJ | I | 40 | µg/L | 20 | Possible loss of VOCs due to headspace + Conflicting Surrogate recovery |
| 403 | SH-01D / 10-03-06 | 0610018-02 | | 10/10/2006 | 8260 | VOCs | 79-01-6 | Trichloroethene | 40 | µg/L | UJ | I | 40 | µg/L | 20 | Possible loss of VOCs due to headspace + Conflicting Surrogate recovery |
| 404 | SH-01D / 10-03-06 | 0610018-02 | | 10/10/2006 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 40 | µg/L | UJ | I | 40 | µg/L | 20 | Possible loss of VOCs due to headspace + Conflicting Surrogate recovery |
| 405 | SH-01D / 10-03-06 | 0610018-02 | | 10/10/2006 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 40 | µg/L | UJ | I | 40 | µg/L | 20 | Possible loss of VOCs due to headspace + Conflicting Surrogate recovery |
| 406 | SH-01D / 10-03-06 | 0610018-02 | | 10/10/2006 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 40 | µg/L | UJ | I | 40 | µg/L | 20 | Possible loss of VOCs due to headspace + Conflicting Surrogate recovery |
| 407 | SH-01D / 10-03-06 | 0610018-02 | | 10/10/2006 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 40 | µg/L | UJ | I | 40 | µg/L | 20 | Possible loss of VOCs due to headspace + Conflicting Surrogate recovery |
| 408 | SH-01D / 10-03-06 | 0610018-02 | | 10/10/2006 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 40 | µg/L | UJ | I | 40 | µg/L | 20 | Possible loss of VOCs due to headspace + Conflicting Surrogate recovery |
| 409 | SH-01D / 10-03-06 | 0610018-02 | | 10/10/2006 | 8260 | VOCs | 108-88-3 | Toluene | 160 | µg/L | J | I | 40 | µg/L | 20 | Possible loss of VOCs due to headspace + Conflicting Surrogate recovery |
| 410 | SH-01D / 10-03-06 | 0610018-02 | | 10/10/2006 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 40 | µg/L | UJ | I | 40 | µg/L | 20 | Possible loss of VOCs due to headspace + Conflicting Surrogate recovery |
| 411 | SH-01D / 10-03-06 | 0610018-02 | | 10/10/2006 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 40 | µg/L | UJ | I | 40 | µg/L | 20 | Possible loss of VOCs due to headspace + Conflicting Surrogate recovery |
| 412 | SH-01D / 10-03-06 | 0610018-02 | | 10/10/2006 | 8260 | VOCs | 75-00-3 | Chloroethane | 40 | µg/L | UJ | I | 40 | µg/L | 20 | Possible loss of VOCs due to headspace + Conflicting Surrogate recovery |
| 413 | SH-01D / 10-03-06 | 0610018-02 | | 10/10/2006 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 40 | µg/L | UJ | I | 40 | µg/L | 20 | Possible loss of VOCs due to headspace + Conflicting Surrogate recovery |
| 414 | SH-01D / 10-03-06 | 0610018-02 | | 10/10/2006 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 40 | µg/L | UJ | I | 40 | µg/L | 20 | Possible loss of VOCs due to headspace + Conflicting Surrogate recovery |
| 415 | SH-01D / 10-03-06 | 0610018-02 | | 10/10/2006 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 40 | µg/L | UJ | I | 40 | µg/L | 20 | Possible loss of VOCs due to headspace + Conflicting Surrogate recovery + Initial Calibration outside criteria |
| 416 | SH-01D / 10-03-06 | 0610018-02 | | 10/10/2006 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 40 | µg/L | UJ | I | 40 | µg/L | 20 | Possible loss of VOCs due to headspace + Conflicting Surrogate recovery |
| 417 | SH-01D / 10-03-06 | 0610018-02 | | 10/10/2006 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 200 | µg/L | J | I | 40 | µg/L | 20 | Possible loss of VOCs due to headspace + Conflicting Surrogate recovery |
| 418 | SH-01D / 10-03-06 | 0610018-02 | | 10/10/2006 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 170 | µg/L | J | I | 80 | µg/L | 20 | Possible loss of VOCs due to headspace + Conflicting Surrogate recovery |
| 419 | SH-01D / 10-03-06 | 0610018-02 | | 10/10/2006 | 8260 | VOCs | 95-47-6 | o-Xylene | 75 | µg/L | J | I | 40 | µg/L | 20 | Possible loss of VOCs due to headspace + Conflicting Surrogate recovery |
| 420 | SH-01D / 10-03-06 | 0610018-02 | | 10/10/2006 | 8260 | VOCs | 100-42-5 | Styrene | 26 | µg/L | J | I | 40 | µg/L | 20 | Possible loss of VOCs due to headspace + Conflicting Surrogate recovery + Result uncertain below the calibration range |
| 421 | SH-01D / 10-03-06 | 0610018-02 | | 10/10/2006 | 8260 | VOCs | 75-25-2 | Bromoform | 40 | µg/L | UJ | I | 40 | µg/L | 20 | Possible loss of VOCs due to headspace + Conflicting Surrogate recovery |
| 422 | SH-01D / 10-03-06 | 0610018-02 | | 10/10/2006 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 40 | µg/L | UJ | I | 40 | µg/L | 20 | Possible loss of VOCs due to headspace + Conflicting Surrogate recovery |
| 423 | SH-01D / 10-03-06 | 0610018-02 | | 10/10/2006 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 40 | µg/L | UJ | I | 40 | µg/L | 20 | Possible loss of VOCs due to headspace + Conflicting Surrogate recovery |

| ID | Smpl | Lab_ID | Extr_Date | Anal_Date | Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 424 | SH-01D / 10-03-06 | 0610018-02 | | 10/10/2006 | 8260 | VOCs | 67-64-1 | Acetone | 180 | µg/L | J | I | 100 | µg/L | 20 | Possible loss of VOCs due to headspace + Conflicting Surrogate recovery |
| 425 | SH-01D / 10-03-06 | 0610018-02 | | 10/10/2006 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 40 | µg/L | UJ | I | 40 | µg/L | 20 | Possible loss of VOCs due to headspace + Conflicting Surrogate recovery |
| 426 | SH-01D / 10-03-06 | 0610018-02 | | 10/10/2006 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 40 | µg/L | UJ | I | 40 | µg/L | 20 | Possible loss of VOCs due to headspace + Conflicting Surrogate recovery |
| 427 | SH-01D / 10-03-06 | 0610018-02 | | 10/10/2006 | 8260 | VOCs | 75-09-2 | Methylene chloride | 40 | µg/L | UJ | I | 40 | µg/L | 20 | Possible loss of VOCs due to headspace + Conflicting Surrogate recovery |
| 428 | SH-01D / 10-03-06 | 0610018-02 | | 10/10/2006 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 40 | µg/L | UJ | I | 40 | µg/L | 20 | Possible loss of VOCs due to headspace + Conflicting Surrogate recovery |
| 429 | SH-15S / 10-03-06 | 0610018-03 | | 10/10/2006 | 8260 | VOCs | 74-87-3 | Chloromethane | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 430 | SH-15S / 10-03-06 | 0610018-03 | | 10/10/2006 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 431 | SH-15S / 10-03-06 | 0610018-03 | | 10/10/2006 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 432 | SH-15S / 10-03-06 | 0610018-03 | | 10/10/2006 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 433 | SH-15S / 10-03-06 | 0610018-03 | | 10/10/2006 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 434 | SH-15S / 10-03-06 | 0610018-03 | | 10/10/2006 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 435 | SH-15S / 10-03-06 | 0610018-03 | | 10/10/2006 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 436 | SH-15S / 10-03-06 | 0610018-03 | | 10/10/2006 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 437 | SH-15S / 10-03-06 | 0610018-03 | | 10/10/2006 | 8260 | VOCs | 67-66-3 | Chloroform | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 438 | SH-15S / 10-03-06 | 0610018-03 | | 10/10/2006 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 439 | SH-15S / 10-03-06 | 0610018-03 | | 10/10/2006 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 440 | SH-15S / 10-03-06 | 0610018-03 | | 10/10/2006 | 8260 | VOCs | 71-43-2 | Benzene | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 441 | SH-15S / 10-03-06 | 0610018-03 | | 10/10/2006 | 8260 | VOCs | 74-83-9 | Bromomethane | 10 | µg/L | UJ | I | 10 | µg/L | 5 | Initial Calibration outside criteria |
| 442 | SH-15S / 10-03-06 | 0610018-03 | | 10/10/2006 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 443 | SH-15S / 10-03-06 | 0610018-03 | | 10/10/2006 | 8260 | VOCs | 79-01-6 | Trichloroethene | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 444 | SH-15S / 10-03-06 | 0610018-03 | | 10/10/2006 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 445 | SH-15S / 10-03-06 | 0610018-03 | | 10/10/2006 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 446 | SH-15S / 10-03-06 | 0610018-03 | | 10/10/2006 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 447 | SH-15S / 10-03-06 | 0610018-03 | | 10/10/2006 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 448 | SH-15S / 10-03-06 | 0610018-03 | | 10/10/2006 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 449 | SH-15S / 10-03-06 | 0610018-03 | | 10/10/2006 | 8260 | VOCs | 108-88-3 | Toluene | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 450 | SH-15S / 10-03-06 | 0610018-03 | | 10/10/2006 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 451 | SH-15S / 10-03-06 | 0610018-03 | | 10/10/2006 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 452 | SH-15S / 10-03-06 | 0610018-03 | | 10/10/2006 | 8260 | VOCs | 75-00-3 | Chloroethane | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 453 | SH-15S / 10-03-06 | 0610018-03 | | 10/10/2006 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 454 | SH-15S / 10-03-06 | 0610018-03 | | 10/10/2006 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 455 | SH-15S / 10-03-06 | 0610018-03 | | 10/10/2006 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 10 | µg/L | UJ | I | 10 | µg/L | 5 | LCS/LCSD imprecision + Initial Calibration outside criteria |
| 456 | SH-15S / 10-03-06 | 0610018-03 | | 10/10/2006 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 457 | SH-15S / 10-03-06 | 0610018-03 | | 10/10/2006 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 458 | SH-15S / 10-03-06 | 0610018-03 | | 10/10/2006 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 20 | µg/L | U | | 20 | µg/L | 5 | |
| 459 | SH-15S / 10-03-06 | 0610018-03 | | 10/10/2006 | 8260 | VOCs | 95-47-6 | o-Xylene | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 460 | SH-15S / 10-03-06 | 0610018-03 | | 10/10/2006 | 8260 | VOCs | 100-42-5 | Styrene | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 461 | SH-15S / 10-03-06 | 0610018-03 | | 10/10/2006 | 8260 | VOCs | 75-25-2 | Bromoform | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 462 | SH-15S / 10-03-06 | 0610018-03 | | 10/10/2006 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 463 | SH-15S / 10-03-06 | 0610018-03 | | 10/10/2006 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 464 | SH-15S / 10-03-06 | 0610018-03 | | 10/10/2006 | 8260 | VOCs | 67-64-1 | Acetone | 25 | µg/L | U | | 25 | µg/L | 5 | Negated due to Blank Action |
| 465 | SH-15S / 10-03-06 | 0610018-03 | | 10/10/2006 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 466 | SH-15S / 10-03-06 | 0610018-03 | | 10/10/2006 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 467 | SH-15S / 10-03-06 | 0610018-03 | | 10/10/2006 | 8260 | VOCs | 75-09-2 | Methylene chloride | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 468 | SH-15S / 10-03-06 | 0610018-03 | | 10/10/2006 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 469 | TB-513 / 10-04-06 | 0610018-04 | | 10/9/2006 | 8260 | VOCs | 74-87-3 | Chloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 470 | TB-513 / 10-04-06 | 0610018-04 | | 10/9/2006 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 471 | TB-513 / 10-04-06 | 0610018-04 | | 10/9/2006 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 472 | TB-513 / 10-04-06 | 0610018-04 | | 10/9/2006 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 473 | TB-513 / 10-04-06 | 0610018-04 | | 10/9/2006 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 474 | TB-513 / 10-04-06 | 0610018-04 | | 10/9/2006 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2 | µg/L | U | | 2 | µg/L | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low, H = High, I = Indeterminate. See Data Usability Report for details.

| ID | Smpl | Lab_ID | Extr_Date | Anal_Date | Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 475 | TB-513 / 10-04-06 | 0610018-04 | | 10/9/2006 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 476 | TB-513 / 10-04-06 | 0610018-04 | | 10/9/2006 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 477 | TB-513 / 10-04-06 | 0610018-04 | | 10/9/2006 | 8260 | VOCs | 67-66-3 | Chloroform | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 478 | TB-513 / 10-04-06 | 0610018-04 | | 10/9/2006 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 479 | TB-513 / 10-04-06 | 0610018-04 | | 10/9/2006 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 480 | TB-513 / 10-04-06 | 0610018-04 | | 10/9/2006 | 8260 | VOCs | 71-43-2 | Benzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 481 | TB-513 / 10-04-06 | 0610018-04 | | 10/9/2006 | 8260 | VOCs | 74-83-9 | Bromomethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 482 | TB-513 / 10-04-06 | 0610018-04 | | 10/9/2006 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 483 | TB-513 / 10-04-06 | 0610018-04 | | 10/9/2006 | 8260 | VOCs | 79-01-6 | Trichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 484 | TB-513 / 10-04-06 | 0610018-04 | | 10/9/2006 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 485 | TB-513 / 10-04-06 | 0610018-04 | | 10/9/2006 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 486 | TB-513 / 10-04-06 | 0610018-04 | | 10/9/2006 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 487 | TB-513 / 10-04-06 | 0610018-04 | | 10/9/2006 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 488 | TB-513 / 10-04-06 | 0610018-04 | | 10/9/2006 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 489 | TB-513 / 10-04-06 | 0610018-04 | | 10/9/2006 | 8260 | VOCs | 108-88-3 | Toluene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 490 | TB-513 / 10-04-06 | 0610018-04 | | 10/9/2006 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 491 | TB-513 / 10-04-06 | 0610018-04 | | 10/9/2006 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 492 | TB-513 / 10-04-06 | 0610018-04 | | 10/9/2006 | 8260 | VOCs | 75-00-3 | Chloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 493 | TB-513 / 10-04-06 | 0610018-04 | | 10/9/2006 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 494 | TB-513 / 10-04-06 | 0610018-04 | | 10/9/2006 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 495 | TB-513 / 10-04-06 | 0610018-04 | | 10/9/2006 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 2 | µg/L | UJ | I | 2 | µg/L | 1 | Initial Calibration outside criteria |
| 496 | TB-513 / 10-04-06 | 0610018-04 | | 10/9/2006 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 497 | TB-513 / 10-04-06 | 0610018-04 | | 10/9/2006 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 498 | TB-513 / 10-04-06 | 0610018-04 | | 10/9/2006 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4 | µg/L | U | | 4 | µg/L | 1 | |
| 499 | TB-513 / 10-04-06 | 0610018-04 | | 10/9/2006 | 8260 | VOCs | 95-47-6 | o-Xylene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 500 | TB-513 / 10-04-06 | 0610018-04 | | 10/9/2006 | 8260 | VOCs | 100-42-5 | Styrene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 501 | TB-513 / 10-04-06 | 0610018-04 | | 10/9/2006 | 8260 | VOCs | 75-25-2 | Bromoform | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 502 | TB-513 / 10-04-06 | 0610018-04 | | 10/9/2006 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 503 | TB-513 / 10-04-06 | 0610018-04 | | 10/9/2006 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 504 | TB-513 / 10-04-06 | 0610018-04 | | 10/9/2006 | 8260 | VOCs | 67-64-1 | Acetone | 5 | µg/L | U | | 5 | µg/L | 1 | |
| 505 | TB-513 / 10-04-06 | 0610018-04 | | 10/9/2006 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 506 | TB-513 / 10-04-06 | 0610018-04 | | 10/9/2006 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 507 | TB-513 / 10-04-06 | 0610018-04 | | 10/9/2006 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 508 | TB-513 / 10-04-06 | 0610018-04 | | 10/9/2006 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 509 | SH-01R / 10-04-06 | 0610018-05 | | 10/10/2006 | 8260 | VOCs | 74-87-3 | Chloromethane | 40 | µg/L | UJ | L | 40 | µg/L | 20 | Possible loss of VOCs due to headspace |
| 510 | SH-01R / 10-04-06 | 0610018-05 | | 10/10/2006 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 40 | µg/L | UJ | L | 40 | µg/L | 20 | Possible loss of VOCs due to headspace |
| 511 | SH-01R / 10-04-06 | 0610018-05 | | 10/10/2006 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 40 | µg/L | UJ | L | 40 | µg/L | 20 | Possible loss of VOCs due to headspace |
| 512 | SH-01R / 10-04-06 | 0610018-05 | | 10/10/2006 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 40 | µg/L | UJ | L | 40 | µg/L | 20 | Possible loss of VOCs due to headspace |
| 513 | SH-01R / 10-04-06 | 0610018-05 | | 10/10/2006 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 40 | µg/L | UJ | L | 40 | µg/L | 20 | Possible loss of VOCs due to headspace |
| 514 | SH-01R / 10-04-06 | 0610018-05 | | 10/10/2006 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 20 | µg/L | J | I | 40 | µg/L | 20 | Possible loss of VOCs due to headspace + High Surrogate recovery + Result uncertain below the calibration range |
| 515 | SH-01R / 10-04-06 | 0610018-05 | | 10/10/2006 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 40 | µg/L | UJ | L | 40 | µg/L | 20 | Possible loss of VOCs due to headspace |
| 516 | SH-01R / 10-04-06 | 0610018-05 | | 10/10/2006 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 40 | µg/L | UJ | L | 40 | µg/L | 20 | Possible loss of VOCs due to headspace |
| 517 | SH-01R / 10-04-06 | 0610018-05 | | 10/10/2006 | 8260 | VOCs | 67-66-3 | Chloroform | 40 | µg/L | UJ | L | 40 | µg/L | 20 | Possible loss of VOCs due to headspace |
| 518 | SH-01R / 10-04-06 | 0610018-05 | | 10/10/2006 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 40 | µg/L | UJ | L | 40 | µg/L | 20 | Possible loss of VOCs due to headspace |
| 519 | SH-01R / 10-04-06 | 0610018-05 | | 10/10/2006 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 40 | µg/L | UJ | L | 40 | µg/L | 20 | Possible loss of VOCs due to headspace |
| 520 | SH-01R / 10-04-06 | 0610018-05 | | 10/10/2006 | 8260 | VOCs | 71-43-2 | Benzene | 270 | µg/L | J | I | 40 | µg/L | 20 | Possible loss of VOCs due to headspace + High Surrogate recovery |
| 521 | SH-01R / 10-04-06 | 0610018-05 | | 10/10/2006 | 8260 | VOCs | 74-83-9 | Bromomethane | 40 | µg/L | UJ | I | 40 | µg/L | 20 | Possible loss of VOCs due to headspace + Initial Calibration outside criteria |
| 522 | SH-01R / 10-04-06 | 0610018-05 | | 10/10/2006 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 40 | µg/L | UJ | L | 40 | µg/L | 20 | Possible loss of VOCs due to headspace |
| 523 | SH-01R / 10-04-06 | 0610018-05 | | 10/10/2006 | 8260 | VOCs | 79-01-6 | Trichloroethene | 40 | µg/L | UJ | L | 40 | µg/L | 20 | Possible loss of VOCs due to headspace |
| 524 | SH-01R / 10-04-06 | 0610018-05 | | 10/10/2006 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 40 | µg/L | UJ | L | 40 | µg/L | 20 | Possible loss of VOCs due to headspace |
| 525 | SH-01R / 10-04-06 | 0610018-05 | | 10/10/2006 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 40 | µg/L | UJ | L | 40 | µg/L | 20 | Possible loss of VOCs due to headspace |
| 526 | SH-01R / 10-04-06 | 0610018-05 | | 10/10/2006 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 40 | µg/L | UJ | L | 40 | µg/L | 20 | Possible loss of VOCs due to headspace |
| 527 | SH-01R / 10-04-06 | 0610018-05 | | 10/10/2006 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 40 | µg/L | UJ | L | 40 | µg/L | 20 | Possible loss of VOCs due to headspace |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low, H = High, I = Indeterminate. See Data Usability Report for details.

| ID | Smpl | Lab_ID | Extr_Date | Anal_Date | Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 528 | SH-01R / 10-04-06 | 0610018-05 | | 10/10/2006 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 40 | µg/L | UJ | L | 40 | µg/L | 20 | Possible loss of VOCs due to headspace |
| 529 | SH-01R / 10-04-06 | 0610018-05 | | 10/10/2006 | 8260 | VOCs | 108-88-3 | Toluene | 590 | µg/L | J | I | 40 | µg/L | 20 | Possible loss of VOCs due to headspace + High Surrogate recovery |
| 530 | SH-01R / 10-04-06 | 0610018-05 | | 10/10/2006 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 40 | µg/L | UJ | L | 40 | µg/L | 20 | Possible loss of VOCs due to headspace |
| 531 | SH-01R / 10-04-06 | 0610018-05 | | 10/10/2006 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 40 | µg/L | UJ | L | 40 | µg/L | 20 | Possible loss of VOCs due to headspace |
| 532 | SH-01R / 10-04-06 | 0610018-05 | | 10/10/2006 | 8260 | VOCs | 75-00-3 | Chloroethane | 40 | µg/L | UJ | L | 40 | µg/L | 20 | Possible loss of VOCs due to headspace |
| 533 | SH-01R / 10-04-06 | 0610018-05 | | 10/10/2006 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 49 | µg/L | J | I | 40 | µg/L | 20 | Possible loss of VOCs due to headspace + High Surrogate recovery + High Calibration verification |
| 534 | SH-01R / 10-04-06 | 0610018-05 | | 10/10/2006 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 40 | µg/L | UJ | L | 40 | µg/L | 20 | Possible loss of VOCs due to headspace |
| 535 | SH-01R / 10-04-06 | 0610018-05 | | 10/10/2006 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 40 | µg/L | UJ | I | 40 | µg/L | 20 | Possible loss of VOCs due to headspace + LCS/LCSD imprecision + Initial Calibration outside criteria |
| 536 | SH-01R / 10-04-06 | 0610018-05 | | 10/10/2006 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 40 | µg/L | UJ | L | 40 | µg/L | 20 | Possible loss of VOCs due to headspace |
| 537 | SH-01R / 10-04-06 | 0610018-05 | | 10/10/2006 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 160 | µg/L | J | I | 40 | µg/L | 20 | Possible loss of VOCs due to headspace + High Surrogate recovery |
| 538 | SH-01R / 10-04-06 | 0610018-05 | | 10/10/2006 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 260 | µg/L | J | I | 80 | µg/L | 20 | Possible loss of VOCs due to headspace + High Surrogate recovery |
| 539 | SH-01R / 10-04-06 | 0610018-05 | | 10/10/2006 | 8260 | VOCs | 95-47-6 | o-Xylene | 120 | µg/L | J | I | 40 | µg/L | 20 | Possible loss of VOCs due to headspace + High Surrogate recovery |
| 540 | SH-01R / 10-04-06 | 0610018-05 | | 10/10/2006 | 8260 | VOCs | 100-42-5 | Styrene | 140 | µg/L | J | I | 40 | µg/L | 20 | Possible loss of VOCs due to headspace + High Surrogate recovery |
| 541 | SH-01R / 10-04-06 | 0610018-05 | | 10/10/2006 | 8260 | VOCs | 75-25-2 | Bromoform | 40 | µg/L | UJ | L | 40 | µg/L | 20 | Possible loss of VOCs due to headspace |
| 542 | SH-01R / 10-04-06 | 0610018-05 | | 10/10/2006 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 40 | µg/L | UJ | L | 40 | µg/L | 20 | Possible loss of VOCs due to headspace |
| 543 | SH-01R / 10-04-06 | 0610018-05 | | 10/10/2006 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 40 | µg/L | UJ | L | 40 | µg/L | 20 | Possible loss of VOCs due to headspace |
| 544 | SH-01R / 10-04-06 | 0610018-05 | | 10/10/2006 | 8260 | VOCs | 67-64-1 | Acetone | 150 | µg/L | UJ | I | 100 | µg/L | 20 | Possible loss of VOCs due to headspace + Negated due to Blank Action |
| 545 | SH-01R / 10-04-06 | 0610018-05 | | 10/10/2006 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 40 | µg/L | UJ | L | 40 | µg/L | 20 | Possible loss of VOCs due to headspace |
| 546 | SH-01R / 10-04-06 | 0610018-05 | | 10/10/2006 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 40 | µg/L | UJ | L | 40 | µg/L | 20 | Possible loss of VOCs due to headspace |
| 547 | SH-01R / 10-04-06 | 0610018-05 | | 10/10/2006 | 8260 | VOCs | 75-09-2 | Methylene chloride | 40 | µg/L | UJ | L | 40 | µg/L | 20 | Possible loss of VOCs due to headspace |
| 548 | SH-01R / 10-04-06 | 0610018-05 | | 10/10/2006 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 40 | µg/L | UJ | L | 40 | µg/L | 20 | Possible loss of VOCs due to headspace |
| 549 | SH-04S / 10-04-06 | 0610018-06 | | 10/11/2006 | 8260 | VOCs | 74-87-3 | Chloromethane | 10 | µg/L | UJ | L | 10 | µg/L | 5 | Low Surrogate recovery |
| 550 | SH-04S / 10-04-06 | 0610018-06 | | 10/11/2006 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 10 | µg/L | UJ | L | 10 | µg/L | 5 | Low Surrogate recovery |
| 551 | SH-04S / 10-04-06 | 0610018-06 | | 10/11/2006 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 10 | µg/L | UJ | L | 10 | µg/L | 5 | Low Surrogate recovery |
| 552 | SH-04S / 10-04-06 | 0610018-06 | | 10/11/2006 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 10 | µg/L | UJ | L | 10 | µg/L | 5 | Low Surrogate recovery |
| 553 | SH-04S / 10-04-06 | 0610018-06 | | 10/11/2006 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 10 | µg/L | UJ | I | 10 | µg/L | 5 | Low Surrogate recovery + Low MSD recovery + MS/MSD imprecision |
| 554 | SH-04S / 10-04-06 | 0610018-06 | | 10/11/2006 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 10 | µg/L | UJ | L | 10 | µg/L | 5 | Low Surrogate recovery |
| 555 | SH-04S / 10-04-06 | 0610018-06 | | 10/11/2006 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 10 | µg/L | UJ | L | 10 | µg/L | 5 | Low Surrogate recovery |
| 556 | SH-04S / 10-04-06 | 0610018-06 | | 10/11/2006 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 10 | µg/L | UJ | L | 10 | µg/L | 5 | Low Surrogate recovery |
| 557 | SH-04S / 10-04-06 | 0610018-06 | | 10/11/2006 | 8260 | VOCs | 67-66-3 | Chloroform | 10 | µg/L | UJ | L | 10 | µg/L | 5 | Low Surrogate recovery |
| 558 | SH-04S / 10-04-06 | 0610018-06 | | 10/11/2006 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 10 | µg/L | UJ | L | 10 | µg/L | 5 | Low Surrogate recovery |
| 559 | SH-04S / 10-04-06 | 0610018-06 | | 10/11/2006 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 10 | µg/L | UJ | L | 10 | µg/L | 5 | Low Surrogate recovery |
| 560 | SH-04S / 10-04-06 | 0610018-06 | | 10/11/2006 | 8260 | VOCs | 71-43-2 | Benzene | 12 | µg/L | J | L | 10 | µg/L | 5 | Low Surrogate recovery |
| 561 | SH-04S / 10-04-06 | 0610018-06 | | 10/11/2006 | 8260 | VOCs | 74-83-9 | Bromomethane | 10 | µg/L | UJ | I | 10 | µg/L | 5 | Low Surrogate recovery + Initial Calibration outside criteria + Low Calibration verification |
| 562 | SH-04S / 10-04-06 | 0610018-06 | | 10/11/2006 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 10 | µg/L | UJ | L | 10 | µg/L | 5 | Low Surrogate recovery |
| 563 | SH-04S / 10-04-06 | 0610018-06 | | 10/11/2006 | 8260 | VOCs | 79-01-6 | Trichloroethene | 10 | µg/L | UJ | L | 10 | µg/L | 5 | Low Surrogate recovery |
| 564 | SH-04S / 10-04-06 | 0610018-06 | | 10/11/2006 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 10 | µg/L | UJ | L | 10 | µg/L | 5 | Low Surrogate recovery |
| 565 | SH-04S / 10-04-06 | 0610018-06 | | 10/11/2006 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 10 | µg/L | UJ | L | 10 | µg/L | 5 | Low Surrogate recovery |
| 566 | SH-04S / 10-04-06 | 0610018-06 | | 10/11/2006 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 10 | µg/L | UJ | L | 10 | µg/L | 5 | Low Surrogate recovery |
| 567 | SH-04S / 10-04-06 | 0610018-06 | | 10/11/2006 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 10 | µg/L | UJ | L | 10 | µg/L | 5 | Low Surrogate recovery |
| 568 | SH-04S / 10-04-06 | 0610018-06 | | 10/11/2006 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 10 | µg/L | UJ | L | 10 | µg/L | 5 | Low Surrogate recovery |
| 569 | SH-04S / 10-04-06 | 0610018-06 | | 10/11/2006 | 8260 | VOCs | 108-88-3 | Toluene | 11 | µg/L | J | L | 10 | µg/L | 5 | Low Surrogate recovery |
| 570 | SH-04S / 10-04-06 | 0610018-06 | | 10/11/2006 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 10 | µg/L | UJ | L | 10 | µg/L | 5 | Low Surrogate recovery |
| 571 | SH-04S / 10-04-06 | 0610018-06 | | 10/11/2006 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 10 | µg/L | UJ | L | 10 | µg/L | 5 | Low Surrogate recovery |
| 572 | SH-04S / 10-04-06 | 0610018-06 | | 10/11/2006 | 8260 | VOCs | 75-00-3 | Chloroethane | 10 | µg/L | UJ | L | 10 | µg/L | 5 | Low Surrogate recovery |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low, H = High, I = Indeterminate. See Data Usability Report for details.

| ID | Smpl | Lab_ID | Extr_Date | Anal_Date | Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 573 | SH-04S / 10-04-06 | 0610018-06 | | 10/11/2006 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 10 | µg/L | UJ | L | 10 | µg/L | 5 | Low Surrogate recovery |
| 574 | SH-04S / 10-04-06 | 0610018-06 | | 10/11/2006 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 10 | µg/L | UJ | L | 10 | µg/L | 5 | Low Surrogate recovery |
| 575 | SH-04S / 10-04-06 | 0610018-06 | | 10/11/2006 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 10 | µg/L | UJ | I | 10 | µg/L | 5 | Low Surrogate recovery + Initial Calibration outside criteria |
| 576 | SH-04S / 10-04-06 | 0610018-06 | | 10/11/2006 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 10 | µg/L | UJ | L | 10 | µg/L | 5 | Low Surrogate recovery |
| 577 | SH-04S / 10-04-06 | 0610018-06 | | 10/11/2006 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 5 | µg/L | J | I | 10 | µg/L | 5 | Low Surrogate recovery + Result uncertain below the calibration range |
| 578 | SH-04S / 10-04-06 | 0610018-06 | | 10/11/2006 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 20 | µg/L | UJ | L | 20 | µg/L | 5 | Low Surrogate recovery |
| 579 | SH-04S / 10-04-06 | 0610018-06 | | 10/11/2006 | 8260 | VOCs | 95-47-6 | o-Xylene | 10 | µg/L | UJ | L | 10 | µg/L | 5 | Low Surrogate recovery |
| 580 | SH-04S / 10-04-06 | 0610018-06 | | 10/11/2006 | 8260 | VOCs | 100-42-5 | Styrene | 10 | µg/L | UJ | L | 10 | µg/L | 5 | Low Surrogate recovery |
| 581 | SH-04S / 10-04-06 | 0610018-06 | | 10/11/2006 | 8260 | VOCs | 75-25-2 | Bromoform | 10 | µg/L | UJ | L | 10 | µg/L | 5 | Low Surrogate recovery |
| 582 | SH-04S / 10-04-06 | 0610018-06 | | 10/11/2006 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 10 | µg/L | UJ | L | 10 | µg/L | 5 | Low Surrogate recovery |
| 583 | SH-04S / 10-04-06 | 0610018-06 | | 10/11/2006 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 10 | µg/L | UJ | L | 10 | µg/L | 5 | Low Surrogate recovery |
| 584 | SH-04S / 10-04-06 | 0610018-06 | | 10/11/2006 | 8260 | VOCs | 67-64-1 | Acetone | 25 | µg/L | UJ | I | 25 | µg/L | 5 | Negated due to Blank Action + Low Surrogate recovery |
| 585 | SH-04S / 10-04-06 | 0610018-06 | | 10/11/2006 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 10 | µg/L | UJ | L | 10 | µg/L | 5 | Low Surrogate recovery |
| 586 | SH-04S / 10-04-06 | 0610018-06 | | 10/11/2006 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 10 | µg/L | UJ | L | 10 | µg/L | 5 | Low Surrogate recovery |
| 587 | SH-04S / 10-04-06 | 0610018-06 | | 10/11/2006 | 8260 | VOCs | 75-09-2 | Methylene chloride | 10 | µg/L | UJ | L | 10 | µg/L | 5 | Low Surrogate recovery |
| 588 | SH-04S / 10-04-06 | 0610018-06 | | 10/11/2006 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 10 | µg/L | UJ | L | 10 | µg/L | 5 | Low Surrogate recovery |
| 589 | SH-05S / 10-04-06 | 0610018-07 | | 10/11/2006 | 8260 | VOCs | 74-87-3 | Chloromethane | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 590 | SH-05S / 10-04-06 | 0610018-07 | | 10/11/2006 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 591 | SH-05S / 10-04-06 | 0610018-07 | | 10/11/2006 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 592 | SH-05S / 10-04-06 | 0610018-07 | | 10/11/2006 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 593 | SH-05S / 10-04-06 | 0610018-07 | | 10/11/2006 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 594 | SH-05S / 10-04-06 | 0610018-07 | | 10/11/2006 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 595 | SH-05S / 10-04-06 | 0610018-07 | | 10/11/2006 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 596 | SH-05S / 10-04-06 | 0610018-07 | | 10/11/2006 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 597 | SH-05S / 10-04-06 | 0610018-07 | | 10/11/2006 | 8260 | VOCs | 67-66-3 | Chloroform | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 598 | SH-05S / 10-04-06 | 0610018-07 | | 10/11/2006 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 599 | SH-05S / 10-04-06 | 0610018-07 | | 10/11/2006 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 600 | SH-05S / 10-04-06 | 0610018-07 | | 10/11/2006 | 8260 | VOCs | 71-43-2 | Benzene | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 601 | SH-05S / 10-04-06 | 0610018-07 | | 10/11/2006 | 8260 | VOCs | 74-83-9 | Bromomethane | 10 | µg/L | UJ | I | 10 | µg/L | 5 | Initial Calibration outside criteria + Low Calibration verification |
| 602 | SH-05S / 10-04-06 | 0610018-07 | | 10/11/2006 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 603 | SH-05S / 10-04-06 | 0610018-07 | | 10/11/2006 | 8260 | VOCs | 79-01-6 | Trichloroethene | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 604 | SH-05S / 10-04-06 | 0610018-07 | | 10/11/2006 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 605 | SH-05S / 10-04-06 | 0610018-07 | | 10/11/2006 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 606 | SH-05S / 10-04-06 | 0610018-07 | | 10/11/2006 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 607 | SH-05S / 10-04-06 | 0610018-07 | | 10/11/2006 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 608 | SH-05S / 10-04-06 | 0610018-07 | | 10/11/2006 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 609 | SH-05S / 10-04-06 | 0610018-07 | | 10/11/2006 | 8260 | VOCs | 108-88-3 | Toluene | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 610 | SH-05S / 10-04-06 | 0610018-07 | | 10/11/2006 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 611 | SH-05S / 10-04-06 | 0610018-07 | | 10/11/2006 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 612 | SH-05S / 10-04-06 | 0610018-07 | | 10/11/2006 | 8260 | VOCs | 75-00-3 | Chloroethane | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 613 | SH-05S / 10-04-06 | 0610018-07 | | 10/11/2006 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 614 | SH-05S / 10-04-06 | 0610018-07 | | 10/11/2006 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 615 | SH-05S / 10-04-06 | 0610018-07 | | 10/11/2006 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 10 | µg/L | UJ | I | 10 | µg/L | 5 | Initial Calibration outside criteria |
| 616 | SH-05S / 10-04-06 | 0610018-07 | | 10/11/2006 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 617 | SH-05S / 10-04-06 | 0610018-07 | | 10/11/2006 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 618 | SH-05S / 10-04-06 | 0610018-07 | | 10/11/2006 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 20 | µg/L | U | | 20 | µg/L | 5 | |
| 619 | SH-05S / 10-04-06 | 0610018-07 | | 10/11/2006 | 8260 | VOCs | 95-47-6 | o-Xylene | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 620 | SH-05S / 10-04-06 | 0610018-07 | | 10/11/2006 | 8260 | VOCs | 100-42-5 | Styrene | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 621 | SH-05S / 10-04-06 | 0610018-07 | | 10/11/2006 | 8260 | VOCs | 75-25-2 | Bromoform | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 622 | SH-05S / 10-04-06 | 0610018-07 | | 10/11/2006 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 623 | SH-05S / 10-04-06 | 0610018-07 | | 10/11/2006 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 624 | SH-05S / 10-04-06 | 0610018-07 | | 10/11/2006 | 8260 | VOCs | 67-64-1 | Acetone | 25 | µg/L | U | | 25 | µg/L | 5 | Negated due to Blank Action |
| 625 | SH-05S / 10-04-06 | 0610018-07 | | 10/11/2006 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 10 | µg/L | U | | 10 | µg/L | 5 | |

| ID | Smpl | Lab_ID | Extr_Date | Anal_Date | Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 626 | SH-05S / 10-04-06 | 0610018-07 | | 10/11/2006 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 627 | SH-05S / 10-04-06 | 0610018-07 | | 10/11/2006 | 8260 | VOCs | 75-09-2 | Methylene chloride | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 628 | SH-05S / 10-04-06 | 0610018-07 | | 10/11/2006 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 629 | SH-17R / 10-04-06 | 0610018-08 | | 10/11/2006 | 8260 | VOCs | 74-87-3 | Chloromethane | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 630 | SH-17R / 10-04-06 | 0610018-08 | | 10/11/2006 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 631 | SH-17R / 10-04-06 | 0610018-08 | | 10/11/2006 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 632 | SH-17R / 10-04-06 | 0610018-08 | | 10/11/2006 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 633 | SH-17R / 10-04-06 | 0610018-08 | | 10/11/2006 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 634 | SH-17R / 10-04-06 | 0610018-08 | | 10/11/2006 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 635 | SH-17R / 10-04-06 | 0610018-08 | | 10/11/2006 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 636 | SH-17R / 10-04-06 | 0610018-08 | | 10/11/2006 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 637 | SH-17R / 10-04-06 | 0610018-08 | | 10/11/2006 | 8260 | VOCs | 67-66-3 | Chloroform | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 638 | SH-17R / 10-04-06 | 0610018-08 | | 10/11/2006 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 639 | SH-17R / 10-04-06 | 0610018-08 | | 10/11/2006 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 640 | SH-17R / 10-04-06 | 0610018-08 | | 10/11/2006 | 8260 | VOCs | 71-43-2 | Benzene | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 641 | SH-17R / 10-04-06 | 0610018-08 | | 10/11/2006 | 8260 | VOCs | 74-83-9 | Bromomethane | 10 | µg/L | UJ | I | 10 | µg/L | 5 | Initial Calibration outside criteria + Low Calibration verification |
| 642 | SH-17R / 10-04-06 | 0610018-08 | | 10/11/2006 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 643 | SH-17R / 10-04-06 | 0610018-08 | | 10/11/2006 | 8260 | VOCs | 79-01-6 | Trichloroethene | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 644 | SH-17R / 10-04-06 | 0610018-08 | | 10/11/2006 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 645 | SH-17R / 10-04-06 | 0610018-08 | | 10/11/2006 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 646 | SH-17R / 10-04-06 | 0610018-08 | | 10/11/2006 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 647 | SH-17R / 10-04-06 | 0610018-08 | | 10/11/2006 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 648 | SH-17R / 10-04-06 | 0610018-08 | | 10/11/2006 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 649 | SH-17R / 10-04-06 | 0610018-08 | | 10/11/2006 | 8260 | VOCs | 108-88-3 | Toluene | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 650 | SH-17R / 10-04-06 | 0610018-08 | | 10/11/2006 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 651 | SH-17R / 10-04-06 | 0610018-08 | | 10/11/2006 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 652 | SH-17R / 10-04-06 | 0610018-08 | | 10/11/2006 | 8260 | VOCs | 75-00-3 | Chloroethane | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 653 | SH-17R / 10-04-06 | 0610018-08 | | 10/11/2006 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 654 | SH-17R / 10-04-06 | 0610018-08 | | 10/11/2006 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 655 | SH-17R / 10-04-06 | 0610018-08 | | 10/11/2006 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 10 | µg/L | UJ | I | 10 | µg/L | 5 | Initial Calibration outside criteria |
| 656 | SH-17R / 10-04-06 | 0610018-08 | | 10/11/2006 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 657 | SH-17R / 10-04-06 | 0610018-08 | | 10/11/2006 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 658 | SH-17R / 10-04-06 | 0610018-08 | | 10/11/2006 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 20 | µg/L | U | | 20 | µg/L | 5 | |
| 659 | SH-17R / 10-04-06 | 0610018-08 | | 10/11/2006 | 8260 | VOCs | 95-47-6 | o-Xylene | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 660 | SH-17R / 10-04-06 | 0610018-08 | | 10/11/2006 | 8260 | VOCs | 100-42-5 | Styrene | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 661 | SH-17R / 10-04-06 | 0610018-08 | | 10/11/2006 | 8260 | VOCs | 75-25-2 | Bromoform | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 662 | SH-17R / 10-04-06 | 0610018-08 | | 10/11/2006 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 663 | SH-17R / 10-04-06 | 0610018-08 | | 10/11/2006 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 664 | SH-17R / 10-04-06 | 0610018-08 | | 10/11/2006 | 8260 | VOCs | 67-64-1 | Acetone | 25 | µg/L | U | | 25 | µg/L | 5 | Negated due to Blank Action |
| 665 | SH-17R / 10-04-06 | 0610018-08 | | 10/11/2006 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 666 | SH-17R / 10-04-06 | 0610018-08 | | 10/11/2006 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 667 | SH-17R / 10-04-06 | 0610018-08 | | 10/11/2006 | 8260 | VOCs | 75-09-2 | Methylene chloride | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 668 | SH-17R / 10-04-06 | 0610018-08 | | 10/11/2006 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 10 | µg/L | U | | 10 | µg/L | 5 | |
| 669 | SH-026S / 10-04-06 | 0610018-09 | | 10/11/2006 | 8260 | VOCs | 74-87-3 | Chloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 670 | SH-026S / 10-04-06 | 0610018-09 | | 10/11/2006 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 671 | SH-026S / 10-04-06 | 0610018-09 | | 10/11/2006 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 672 | SH-026S / 10-04-06 | 0610018-09 | | 10/11/2006 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 673 | SH-026S / 10-04-06 | 0610018-09 | | 10/11/2006 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 674 | SH-026S / 10-04-06 | 0610018-09 | | 10/11/2006 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 675 | SH-026S / 10-04-06 | 0610018-09 | | 10/11/2006 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 676 | SH-026S / 10-04-06 | 0610018-09 | | 10/11/2006 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 677 | SH-026S / 10-04-06 | 0610018-09 | | 10/11/2006 | 8260 | VOCs | 67-66-3 | Chloroform | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 678 | SH-026S / 10-04-06 | 0610018-09 | | 10/11/2006 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 679 | SH-026S / 10-04-06 | 0610018-09 | | 10/11/2006 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 680 | SH-026S / 10-04-06 | 0610018-09 | | 10/11/2006 | 8260 | VOCs | 71-43-2 | Benzene | 2 | µg/L | U | | 2 | µg/L | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low, H = High, I = Indeterminate. See Data Usability Report for details.

| ID | Smpl | Lab_ID | Extr_Date | Anal_Date | Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 681 | SH-026S / 10-04-06 | 0610018-09 | | 10/11/2006 | 8260 | VOCs | 74-83-9 | Bromomethane | 2 | µg/L | UJ | I | 2 | µg/L | 1 | Initial Calibration outside criteria + Low Calibration verification |
| 682 | SH-026S / 10-04-06 | 0610018-09 | | 10/11/2006 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 683 | SH-026S / 10-04-06 | 0610018-09 | | 10/11/2006 | 8260 | VOCs | 79-01-6 | Trichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 684 | SH-026S / 10-04-06 | 0610018-09 | | 10/11/2006 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 685 | SH-026S / 10-04-06 | 0610018-09 | | 10/11/2006 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 686 | SH-026S / 10-04-06 | 0610018-09 | | 10/11/2006 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 687 | SH-026S / 10-04-06 | 0610018-09 | | 10/11/2006 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 688 | SH-026S / 10-04-06 | 0610018-09 | | 10/11/2006 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 689 | SH-026S / 10-04-06 | 0610018-09 | | 10/11/2006 | 8260 | VOCs | 108-88-3 | Toluene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 690 | SH-026S / 10-04-06 | 0610018-09 | | 10/11/2006 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 691 | SH-026S / 10-04-06 | 0610018-09 | | 10/11/2006 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 692 | SH-026S / 10-04-06 | 0610018-09 | | 10/11/2006 | 8260 | VOCs | 75-00-3 | Chloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 693 | SH-026S / 10-04-06 | 0610018-09 | | 10/11/2006 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 694 | SH-026S / 10-04-06 | 0610018-09 | | 10/11/2006 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 695 | SH-026S / 10-04-06 | 0610018-09 | | 10/11/2006 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 2 | µg/L | UJ | I | 2 | µg/L | 1 | Initial Calibration outside criteria |
| 696 | SH-026S / 10-04-06 | 0610018-09 | | 10/11/2006 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 697 | SH-026S / 10-04-06 | 0610018-09 | | 10/11/2006 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 698 | SH-026S / 10-04-06 | 0610018-09 | | 10/11/2006 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4 | µg/L | U | | 4 | µg/L | 1 | |
| 699 | SH-026S / 10-04-06 | 0610018-09 | | 10/11/2006 | 8260 | VOCs | 95-47-6 | o-Xylene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 700 | SH-026S / 10-04-06 | 0610018-09 | | 10/11/2006 | 8260 | VOCs | 100-42-5 | Styrene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 701 | SH-026S / 10-04-06 | 0610018-09 | | 10/11/2006 | 8260 | VOCs | 75-25-2 | Bromoform | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 702 | SH-026S / 10-04-06 | 0610018-09 | | 10/11/2006 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 703 | SH-026S / 10-04-06 | 0610018-09 | | 10/11/2006 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 704 | SH-026S / 10-04-06 | 0610018-09 | | 10/11/2006 | 8260 | VOCs | 67-64-1 | Acetone | 5 | µg/L | U | | 5 | µg/L | 1 | |
| 705 | SH-026S / 10-04-06 | 0610018-09 | | 10/11/2006 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 706 | SH-026S / 10-04-06 | 0610018-09 | | 10/11/2006 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 707 | SH-026S / 10-04-06 | 0610018-09 | | 10/11/2006 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 708 | SH-026S / 10-04-06 | 0610018-09 | | 10/11/2006 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 709 | OW-214 / 10-04-06 | 0610018-10 | | 10/11/2006 | 8260 | VOCs | 74-87-3 | Chloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 710 | OW-214 / 10-04-06 | 0610018-10 | | 10/11/2006 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 711 | OW-214 / 10-04-06 | 0610018-10 | | 10/11/2006 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 712 | OW-214 / 10-04-06 | 0610018-10 | | 10/11/2006 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 713 | OW-214 / 10-04-06 | 0610018-10 | | 10/11/2006 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 714 | OW-214 / 10-04-06 | 0610018-10 | | 10/11/2006 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 715 | OW-214 / 10-04-06 | 0610018-10 | | 10/11/2006 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 716 | OW-214 / 10-04-06 | 0610018-10 | | 10/11/2006 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 717 | OW-214 / 10-04-06 | 0610018-10 | | 10/11/2006 | 8260 | VOCs | 67-66-3 | Chloroform | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 718 | OW-214 / 10-04-06 | 0610018-10 | | 10/11/2006 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 719 | OW-214 / 10-04-06 | 0610018-10 | | 10/11/2006 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 720 | OW-214 / 10-04-06 | 0610018-10 | | 10/11/2006 | 8260 | VOCs | 71-43-2 | Benzene | 3.7 | µg/L | J | H | 2 | µg/L | 1 | High Surrogate recovery |
| 721 | OW-214 / 10-04-06 | 0610018-10 | | 10/11/2006 | 8260 | VOCs | 74-83-9 | Bromomethane | 2 | µg/L | UJ | I | 2 | µg/L | 1 | Initial Calibration outside criteria + Low Calibration verification |
| 722 | OW-214 / 10-04-06 | 0610018-10 | | 10/11/2006 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 723 | OW-214 / 10-04-06 | 0610018-10 | | 10/11/2006 | 8260 | VOCs | 79-01-6 | Trichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 724 | OW-214 / 10-04-06 | 0610018-10 | | 10/11/2006 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 725 | OW-214 / 10-04-06 | 0610018-10 | | 10/11/2006 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 726 | OW-214 / 10-04-06 | 0610018-10 | | 10/11/2006 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 727 | OW-214 / 10-04-06 | 0610018-10 | | 10/11/2006 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 728 | OW-214 / 10-04-06 | 0610018-10 | | 10/11/2006 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 729 | OW-214 / 10-04-06 | 0610018-10 | | 10/11/2006 | 8260 | VOCs | 108-88-3 | Toluene | 4 | µg/L | J | H | 2 | µg/L | 1 | High Surrogate recovery |
| 730 | OW-214 / 10-04-06 | 0610018-10 | | 10/11/2006 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 731 | OW-214 / 10-04-06 | 0610018-10 | | 10/11/2006 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 732 | OW-214 / 10-04-06 | 0610018-10 | | 10/11/2006 | 8260 | VOCs | 75-00-3 | Chloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 733 | OW-214 / 10-04-06 | 0610018-10 | | 10/11/2006 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 734 | OW-214 / 10-04-06 | 0610018-10 | | 10/11/2006 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 735 | OW-214 / 10-04-06 | 0610018-10 | | 10/11/2006 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 2 | µg/L | UJ | I | 2 | µg/L | 1 | Initial Calibration outside criteria |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low, H = High, I = Indeterminate. See Data Usability Report for details.

| ID | Smpl | Lab_ID | Extr_Date | Anal_Date | Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 736 | OW-214 / 10-04-06 | 0610018-10 | | 10/11/2006 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 737 | OW-214 / 10-04-06 | 0610018-10 | | 10/11/2006 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 3.1 | µg/L | J | H | 2 | µg/L | 1 | High Surrogate recovery |
| 738 | OW-214 / 10-04-06 | 0610018-10 | | 10/11/2006 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 8.8 | µg/L | J | H | 4 | µg/L | 1 | High Surrogate recovery |
| 739 | OW-214 / 10-04-06 | 0610018-10 | | 10/11/2006 | 8260 | VOCs | 95-47-6 | o-Xylene | 5 | µg/L | J | H | 2 | µg/L | 1 | High Surrogate recovery |
| 740 | OW-214 / 10-04-06 | 0610018-10 | | 10/11/2006 | 8260 | VOCs | 100-42-5 | Styrene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 741 | OW-214 / 10-04-06 | 0610018-10 | | 10/11/2006 | 8260 | VOCs | 75-25-2 | Bromoform | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 742 | OW-214 / 10-04-06 | 0610018-10 | | 10/11/2006 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 743 | OW-214 / 10-04-06 | 0610018-10 | | 10/11/2006 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 744 | OW-214 / 10-04-06 | 0610018-10 | | 10/11/2006 | 8260 | VOCs | 67-64-1 | Acetone | 6.7 | µg/L | U | | 5 | µg/L | 1 | Negated due to Blank Action |
| 745 | OW-214 / 10-04-06 | 0610018-10 | | 10/11/2006 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 746 | OW-214 / 10-04-06 | 0610018-10 | | 10/11/2006 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 747 | OW-214 / 10-04-06 | 0610018-10 | | 10/11/2006 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 748 | OW-214 / 10-04-06 | 0610018-10 | | 10/11/2006 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 749 | TB-514 / 10-05-06 | 0610018-11 | | 10/9/2006 | 8260 | VOCs | 74-87-3 | Chloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 750 | TB-514 / 10-05-06 | 0610018-11 | | 10/9/2006 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 751 | TB-514 / 10-05-06 | 0610018-11 | | 10/9/2006 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 752 | TB-514 / 10-05-06 | 0610018-11 | | 10/9/2006 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 753 | TB-514 / 10-05-06 | 0610018-11 | | 10/9/2006 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 754 | TB-514 / 10-05-06 | 0610018-11 | | 10/9/2006 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 755 | TB-514 / 10-05-06 | 0610018-11 | | 10/9/2006 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 756 | TB-514 / 10-05-06 | 0610018-11 | | 10/9/2006 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 757 | TB-514 / 10-05-06 | 0610018-11 | | 10/9/2006 | 8260 | VOCs | 67-66-3 | Chloroform | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 758 | TB-514 / 10-05-06 | 0610018-11 | | 10/9/2006 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 759 | TB-514 / 10-05-06 | 0610018-11 | | 10/9/2006 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 760 | TB-514 / 10-05-06 | 0610018-11 | | 10/9/2006 | 8260 | VOCs | 71-43-2 | Benzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 761 | TB-514 / 10-05-06 | 0610018-11 | | 10/9/2006 | 8260 | VOCs | 74-83-9 | Bromomethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 762 | TB-514 / 10-05-06 | 0610018-11 | | 10/9/2006 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 763 | TB-514 / 10-05-06 | 0610018-11 | | 10/9/2006 | 8260 | VOCs | 79-01-6 | Trichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 764 | TB-514 / 10-05-06 | 0610018-11 | | 10/9/2006 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 765 | TB-514 / 10-05-06 | 0610018-11 | | 10/9/2006 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 766 | TB-514 / 10-05-06 | 0610018-11 | | 10/9/2006 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 767 | TB-514 / 10-05-06 | 0610018-11 | | 10/9/2006 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 768 | TB-514 / 10-05-06 | 0610018-11 | | 10/9/2006 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 769 | TB-514 / 10-05-06 | 0610018-11 | | 10/9/2006 | 8260 | VOCs | 108-88-3 | Toluene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 770 | TB-514 / 10-05-06 | 0610018-11 | | 10/9/2006 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 771 | TB-514 / 10-05-06 | 0610018-11 | | 10/9/2006 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 772 | TB-514 / 10-05-06 | 0610018-11 | | 10/9/2006 | 8260 | VOCs | 75-00-3 | Chloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 773 | TB-514 / 10-05-06 | 0610018-11 | | 10/9/2006 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 774 | TB-514 / 10-05-06 | 0610018-11 | | 10/9/2006 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 775 | TB-514 / 10-05-06 | 0610018-11 | | 10/9/2006 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 2 | µg/L | UJ | I | 2 | µg/L | 1 | Initial Calibration outside criteria |
| 776 | TB-514 / 10-05-06 | 0610018-11 | | 10/9/2006 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 777 | TB-514 / 10-05-06 | 0610018-11 | | 10/9/2006 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 778 | TB-514 / 10-05-06 | 0610018-11 | | 10/9/2006 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4 | µg/L | U | | 4 | µg/L | 1 | |
| 779 | TB-514 / 10-05-06 | 0610018-11 | | 10/9/2006 | 8260 | VOCs | 95-47-6 | o-Xylene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 780 | TB-514 / 10-05-06 | 0610018-11 | | 10/9/2006 | 8260 | VOCs | 100-42-5 | Styrene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 781 | TB-514 / 10-05-06 | 0610018-11 | | 10/9/2006 | 8260 | VOCs | 75-25-2 | Bromoform | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 782 | TB-514 / 10-05-06 | 0610018-11 | | 10/9/2006 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 783 | TB-514 / 10-05-06 | 0610018-11 | | 10/9/2006 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 784 | TB-514 / 10-05-06 | 0610018-11 | | 10/9/2006 | 8260 | VOCs | 67-64-1 | Acetone | 5 | µg/L | U | | 5 | µg/L | 1 | |
| 785 | TB-514 / 10-05-06 | 0610018-11 | | 10/9/2006 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 786 | TB-514 / 10-05-06 | 0610018-11 | | 10/9/2006 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 787 | TB-514 / 10-05-06 | 0610018-11 | | 10/9/2006 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 788 | TB-514 / 10-05-06 | 0610018-11 | | 10/9/2006 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 789 | SH-01S / 10-05-06 | 0610018-12 | | 10/11/2006 | 8260 | VOCs | 74-87-3 | Chloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 790 | SH-01S / 10-05-06 | 0610018-12 | | 10/11/2006 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 791 | SH-01S / 10-05-06 | 0610018-12 | | 10/11/2006 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 792 | SH-01S / 10-05-06 | 0610018-12 | | 10/11/2006 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |

| ID | Smpl | Lab_ID | Extr_Date | Anal_Date | Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 793 | SH-01S / 10-05-06 | 0610018-12 | | 10/11/2006 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 794 | SH-01S / 10-05-06 | 0610018-12 | | 10/11/2006 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 795 | SH-01S / 10-05-06 | 0610018-12 | | 10/11/2006 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 796 | SH-01S / 10-05-06 | 0610018-12 | | 10/11/2006 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 797 | SH-01S / 10-05-06 | 0610018-12 | | 10/11/2006 | 8260 | VOCs | 67-66-3 | Chloroform | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 798 | SH-01S / 10-05-06 | 0610018-12 | | 10/11/2006 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 799 | SH-01S / 10-05-06 | 0610018-12 | | 10/11/2006 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 800 | SH-01S / 10-05-06 | 0610018-12 | | 10/11/2006 | 8260 | VOCs | 71-43-2 | Benzene | 2.2 | µg/L | | | 2 | µg/L | 1 | |
| 801 | SH-01S / 10-05-06 | 0610018-12 | | 10/11/2006 | 8260 | VOCs | 74-83-9 | Bromomethane | 2 | µg/L | UJ | I | 2 | µg/L | 1 | Initial Calibration outside criteria + Low Calibration verification |
| 802 | SH-01S / 10-05-06 | 0610018-12 | | 10/11/2006 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 803 | SH-01S / 10-05-06 | 0610018-12 | | 10/11/2006 | 8260 | VOCs | 79-01-6 | Trichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 804 | SH-01S / 10-05-06 | 0610018-12 | | 10/11/2006 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 805 | SH-01S / 10-05-06 | 0610018-12 | | 10/11/2006 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 806 | SH-01S / 10-05-06 | 0610018-12 | | 10/11/2006 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 807 | SH-01S / 10-05-06 | 0610018-12 | | 10/11/2006 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 808 | SH-01S / 10-05-06 | 0610018-12 | | 10/11/2006 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 809 | SH-01S / 10-05-06 | 0610018-12 | | 10/11/2006 | 8260 | VOCs | 108-88-3 | Toluene | 9.2 | µg/L | | | 2 | µg/L | 1 | |
| 810 | SH-01S / 10-05-06 | 0610018-12 | | 10/11/2006 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 811 | SH-01S / 10-05-06 | 0610018-12 | | 10/11/2006 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 812 | SH-01S / 10-05-06 | 0610018-12 | | 10/11/2006 | 8260 | VOCs | 75-00-3 | Chloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 813 | SH-01S / 10-05-06 | 0610018-12 | | 10/11/2006 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 814 | SH-01S / 10-05-06 | 0610018-12 | | 10/11/2006 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 815 | SH-01S / 10-05-06 | 0610018-12 | | 10/11/2006 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 2 | µg/L | UJ | I | 2 | µg/L | 1 | Initial Calibration outside criteria |
| 816 | SH-01S / 10-05-06 | 0610018-12 | | 10/11/2006 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 817 | SH-01S / 10-05-06 | 0610018-12 | | 10/11/2006 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 3.4 | µg/L | | | 2 | µg/L | 1 | |
| 818 | SH-01S / 10-05-06 | 0610018-12 | | 10/11/2006 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 6.4 | µg/L | | | 4 | µg/L | 1 | |
| 819 | SH-01S / 10-05-06 | 0610018-12 | | 10/11/2006 | 8260 | VOCs | 95-47-6 | o-Xylene | 4.1 | µg/L | | | 2 | µg/L | 1 | |
| 820 | SH-01S / 10-05-06 | 0610018-12 | | 10/11/2006 | 8260 | VOCs | 100-42-5 | Styrene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 821 | SH-01S / 10-05-06 | 0610018-12 | | 10/11/2006 | 8260 | VOCs | 75-25-2 | Bromoform | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 822 | SH-01S / 10-05-06 | 0610018-12 | | 10/11/2006 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 823 | SH-01S / 10-05-06 | 0610018-12 | | 10/11/2006 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 824 | SH-01S / 10-05-06 | 0610018-12 | | 10/11/2006 | 8260 | VOCs | 67-64-1 | Acetone | 5.1 | µg/L | U | | 5 | µg/L | 1 | Negated due to Blank Action |
| 825 | SH-01S / 10-05-06 | 0610018-12 | | 10/11/2006 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 826 | SH-01S / 10-05-06 | 0610018-12 | | 10/11/2006 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 827 | SH-01S / 10-05-06 | 0610018-12 | | 10/11/2006 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 828 | SH-01S / 10-05-06 | 0610018-12 | | 10/11/2006 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 829 | SH-17D / 10-05-06 | 0610018-13 | | 10/11/2006 | 8260 | VOCs | 74-87-3 | Chloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 830 | SH-17D / 10-05-06 | 0610018-13 | | 10/11/2006 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 831 | SH-17D / 10-05-06 | 0610018-13 | | 10/11/2006 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 832 | SH-17D / 10-05-06 | 0610018-13 | | 10/11/2006 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 833 | SH-17D / 10-05-06 | 0610018-13 | | 10/11/2006 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 834 | SH-17D / 10-05-06 | 0610018-13 | | 10/11/2006 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 835 | SH-17D / 10-05-06 | 0610018-13 | | 10/11/2006 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 836 | SH-17D / 10-05-06 | 0610018-13 | | 10/11/2006 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 837 | SH-17D / 10-05-06 | 0610018-13 | | 10/11/2006 | 8260 | VOCs | 67-66-3 | Chloroform | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 838 | SH-17D / 10-05-06 | 0610018-13 | | 10/11/2006 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 839 | SH-17D / 10-05-06 | 0610018-13 | | 10/11/2006 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 840 | SH-17D / 10-05-06 | 0610018-13 | | 10/11/2006 | 8260 | VOCs | 71-43-2 | Benzene | 3.4 | µg/L | | | 2 | µg/L | 1 | |
| 841 | SH-17D / 10-05-06 | 0610018-13 | | 10/11/2006 | 8260 | VOCs | 74-83-9 | Bromomethane | 2 | µg/L | UJ | I | 2 | µg/L | 1 | Initial Calibration outside criteria + Low Calibration verification |
| 842 | SH-17D / 10-05-06 | 0610018-13 | | 10/11/2006 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 843 | SH-17D / 10-05-06 | 0610018-13 | | 10/11/2006 | 8260 | VOCs | 79-01-6 | Trichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 844 | SH-17D / 10-05-06 | 0610018-13 | | 10/11/2006 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 845 | SH-17D / 10-05-06 | 0610018-13 | | 10/11/2006 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 846 | SH-17D / 10-05-06 | 0610018-13 | | 10/11/2006 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 847 | SH-17D / 10-05-06 | 0610018-13 | | 10/11/2006 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2 | µg/L | U | | 2 | µg/L | 1 | |

| ID | Smpl | Lab_ID | Extr_Date | Anal_Date | Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 848 | SH-17D / 10-05-06 | 0610018-13 | | 10/11/2006 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 849 | SH-17D / 10-05-06 | 0610018-13 | | 10/11/2006 | 8260 | VOCs | 108-88-3 | Toluene | 2.1 | µg/L | | | 2 | µg/L | 1 | |
| 850 | SH-17D / 10-05-06 | 0610018-13 | | 10/11/2006 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 851 | SH-17D / 10-05-06 | 0610018-13 | | 10/11/2006 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 852 | SH-17D / 10-05-06 | 0610018-13 | | 10/11/2006 | 8260 | VOCs | 75-00-3 | Chloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 853 | SH-17D / 10-05-06 | 0610018-13 | | 10/11/2006 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 854 | SH-17D / 10-05-06 | 0610018-13 | | 10/11/2006 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 855 | SH-17D / 10-05-06 | 0610018-13 | | 10/11/2006 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 2 | µg/L | UJ | I | 2 | µg/L | 1 | Initial Calibration outside criteria |
| 856 | SH-17D / 10-05-06 | 0610018-13 | | 10/11/2006 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 857 | SH-17D / 10-05-06 | 0610018-13 | | 10/11/2006 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 1.2 | µg/L | J | I | 2 | µg/L | 1 | Result uncertain below the calibration range |
| 858 | SH-17D / 10-05-06 | 0610018-13 | | 10/11/2006 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 3.2 | µg/L | J | I | 4 | µg/L | 1 | Result uncertain below the calibration range |
| 859 | SH-17D / 10-05-06 | 0610018-13 | | 10/11/2006 | 8260 | VOCs | 95-47-6 | o-Xylene | 3.3 | µg/L | | | 2 | µg/L | 1 | |
| 860 | SH-17D / 10-05-06 | 0610018-13 | | 10/11/2006 | 8260 | VOCs | 100-42-5 | Styrene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 861 | SH-17D / 10-05-06 | 0610018-13 | | 10/11/2006 | 8260 | VOCs | 75-25-2 | Bromoform | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 862 | SH-17D / 10-05-06 | 0610018-13 | | 10/11/2006 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 863 | SH-17D / 10-05-06 | 0610018-13 | | 10/11/2006 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 864 | SH-17D / 10-05-06 | 0610018-13 | | 10/11/2006 | 8260 | VOCs | 67-64-1 | Acetone | 5 | µg/L | U | | 5 | µg/L | 1 | Negated due to Blank Action |
| 865 | SH-17D / 10-05-06 | 0610018-13 | | 10/11/2006 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 866 | SH-17D / 10-05-06 | 0610018-13 | | 10/11/2006 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 867 | SH-17D / 10-05-06 | 0610018-13 | | 10/11/2006 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 868 | SH-17D / 10-05-06 | 0610018-13 | | 10/11/2006 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 869 | WP-06 / 10-05-06 | 0610018-14 | | 10/11/2006 | 8260 | VOCs | 74-87-3 | Chloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 870 | WP-06 / 10-05-06 | 0610018-14 | | 10/11/2006 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 871 | WP-06 / 10-05-06 | 0610018-14 | | 10/11/2006 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 872 | WP-06 / 10-05-06 | 0610018-14 | | 10/11/2006 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 873 | WP-06 / 10-05-06 | 0610018-14 | | 10/11/2006 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 874 | WP-06 / 10-05-06 | 0610018-14 | | 10/11/2006 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 875 | WP-06 / 10-05-06 | 0610018-14 | | 10/11/2006 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 876 | WP-06 / 10-05-06 | 0610018-14 | | 10/11/2006 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 877 | WP-06 / 10-05-06 | 0610018-14 | | 10/11/2006 | 8260 | VOCs | 67-66-3 | Chloroform | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 878 | WP-06 / 10-05-06 | 0610018-14 | | 10/11/2006 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 879 | WP-06 / 10-05-06 | 0610018-14 | | 10/11/2006 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 880 | WP-06 / 10-05-06 | 0610018-14 | | 10/11/2006 | 8260 | VOCs | 71-43-2 | Benzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 881 | WP-06 / 10-05-06 | 0610018-14 | | 10/11/2006 | 8260 | VOCs | 74-83-9 | Bromomethane | 2 | µg/L | UJ | I | 2 | µg/L | 1 | Initial Calibration outside criteria + Low Calibration verification |
| 882 | WP-06 / 10-05-06 | 0610018-14 | | 10/11/2006 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 883 | WP-06 / 10-05-06 | 0610018-14 | | 10/11/2006 | 8260 | VOCs | 79-01-6 | Trichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 884 | WP-06 / 10-05-06 | 0610018-14 | | 10/11/2006 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 885 | WP-06 / 10-05-06 | 0610018-14 | | 10/11/2006 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 886 | WP-06 / 10-05-06 | 0610018-14 | | 10/11/2006 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 887 | WP-06 / 10-05-06 | 0610018-14 | | 10/11/2006 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 888 | WP-06 / 10-05-06 | 0610018-14 | | 10/11/2006 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 889 | WP-06 / 10-05-06 | 0610018-14 | | 10/11/2006 | 8260 | VOCs | 108-88-3 | Toluene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 890 | WP-06 / 10-05-06 | 0610018-14 | | 10/11/2006 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 891 | WP-06 / 10-05-06 | 0610018-14 | | 10/11/2006 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 892 | WP-06 / 10-05-06 | 0610018-14 | | 10/11/2006 | 8260 | VOCs | 75-00-3 | Chloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 893 | WP-06 / 10-05-06 | 0610018-14 | | 10/11/2006 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 894 | WP-06 / 10-05-06 | 0610018-14 | | 10/11/2006 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 895 | WP-06 / 10-05-06 | 0610018-14 | | 10/11/2006 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 2 | µg/L | UJ | I | 2 | µg/L | 1 | Initial Calibration outside criteria |
| 896 | WP-06 / 10-05-06 | 0610018-14 | | 10/11/2006 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 897 | WP-06 / 10-05-06 | 0610018-14 | | 10/11/2006 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 898 | WP-06 / 10-05-06 | 0610018-14 | | 10/11/2006 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4 | µg/L | U | | 4 | µg/L | 1 | |
| 899 | WP-06 / 10-05-06 | 0610018-14 | | 10/11/2006 | 8260 | VOCs | 95-47-6 | o-Xylene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 900 | WP-06 / 10-05-06 | 0610018-14 | | 10/11/2006 | 8260 | VOCs | 100-42-5 | Styrene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 901 | WP-06 / 10-05-06 | 0610018-14 | | 10/11/2006 | 8260 | VOCs | 75-25-2 | Bromoform | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 902 | WP-06 / 10-05-06 | 0610018-14 | | 10/11/2006 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 903 | WP-06 / 10-05-06 | 0610018-14 | | 10/11/2006 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |

| ID | Smpl | Lab_ID | Extr_Date | Anal_Date | Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 904 | WP-06 / 10-05-06 | 0610018-14 | | 10/11/2006 | 8260 | VOCs | 67-64-1 | Acetone | 5 | µg/L | U | | 5 | µg/L | 1 | |
| 905 | WP-06 / 10-05-06 | 0610018-14 | | 10/11/2006 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 906 | WP-06 / 10-05-06 | 0610018-14 | | 10/11/2006 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 907 | WP-06 / 10-05-06 | 0610018-14 | | 10/11/2006 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 908 | WP-06 / 10-05-06 | 0610018-14 | | 10/11/2006 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 909 | OW-214A / 10-05-06 | 0610018-15 | | 10/11/2006 | 8260 | VOCs | 74-87-3 | Chloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 910 | OW-214A / 10-05-06 | 0610018-15 | | 10/11/2006 | 8260 | VOCs | 75-01-4 | Vinyl chloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 911 | OW-214A / 10-05-06 | 0610018-15 | | 10/11/2006 | 8260 | VOCs | 156-60-5 | trans-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 912 | OW-214A / 10-05-06 | 0610018-15 | | 10/11/2006 | 8260 | VOCs | 75-34-3 | 1,1-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 913 | OW-214A / 10-05-06 | 0610018-15 | | 10/11/2006 | 8260 | VOCs | 108-05-4 | Vinyl acetate | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 914 | OW-214A / 10-05-06 | 0610018-15 | | 10/11/2006 | 8260 | VOCs | 78-93-3 | 2-Butanone (MEK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 915 | OW-214A / 10-05-06 | 0610018-15 | | 10/11/2006 | 8260 | VOCs | 156-59-2 | cis-1,2-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 916 | OW-214A / 10-05-06 | 0610018-15 | | 10/11/2006 | 8260 | VOCs | 74-97-5 | Bromochloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 917 | OW-214A / 10-05-06 | 0610018-15 | | 10/11/2006 | 8260 | VOCs | 67-66-3 | Chloroform | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 918 | OW-214A / 10-05-06 | 0610018-15 | | 10/11/2006 | 8260 | VOCs | 71-55-6 | 1,1,1-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 919 | OW-214A / 10-05-06 | 0610018-15 | | 10/11/2006 | 8260 | VOCs | 56-23-5 | Carbon tetrachloride | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 920 | OW-214A / 10-05-06 | 0610018-15 | | 10/11/2006 | 8260 | VOCs | 71-43-2 | Benzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 921 | OW-214A / 10-05-06 | 0610018-15 | | 10/11/2006 | 8260 | VOCs | 74-83-9 | Bromomethane | 2 | µg/L | UJ | I | 2 | µg/L | 1 | Initial Calibration outside criteria + Low Calibration verification |
| 922 | OW-214A / 10-05-06 | 0610018-15 | | 10/11/2006 | 8260 | VOCs | 107-06-2 | 1,2-Dichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 923 | OW-214A / 10-05-06 | 0610018-15 | | 10/11/2006 | 8260 | VOCs | 79-01-6 | Trichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 924 | OW-214A / 10-05-06 | 0610018-15 | | 10/11/2006 | 8260 | VOCs | 78-87-5 | 1,2-Dichloropropane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 925 | OW-214A / 10-05-06 | 0610018-15 | | 10/11/2006 | 8260 | VOCs | 75-27-4 | Bromodichloromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 926 | OW-214A / 10-05-06 | 0610018-15 | | 10/11/2006 | 8260 | VOCs | 110-75-8 | 2-Chloroethylvinyl ether | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 927 | OW-214A / 10-05-06 | 0610018-15 | | 10/11/2006 | 8260 | VOCs | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 928 | OW-214A / 10-05-06 | 0610018-15 | | 10/11/2006 | 8260 | VOCs | 10061-01- | cis-1,3-Dichloropropene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 929 | OW-214A / 10-05-06 | 0610018-15 | | 10/11/2006 | 8260 | VOCs | 108-88-3 | Toluene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 930 | OW-214A / 10-05-06 | 0610018-15 | | 10/11/2006 | 8260 | VOCs | 10061-02- | trans-1,3-Dichloropropene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 931 | OW-214A / 10-05-06 | 0610018-15 | | 10/11/2006 | 8260 | VOCs | 79-00-5 | 1,1,2-Trichloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 932 | OW-214A / 10-05-06 | 0610018-15 | | 10/11/2006 | 8260 | VOCs | 75-00-3 | Chloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 933 | OW-214A / 10-05-06 | 0610018-15 | | 10/11/2006 | 8260 | VOCs | 591-78-6 | 2-Hexanone | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 934 | OW-214A / 10-05-06 | 0610018-15 | | 10/11/2006 | 8260 | VOCs | 127-18-4 | Tetrachloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 935 | OW-214A / 10-05-06 | 0610018-15 | | 10/11/2006 | 8260 | VOCs | 124-48-1 | Dibromochloromethane | 2 | µg/L | UJ | I | 2 | µg/L | 1 | Initial Calibration outside criteria |
| 936 | OW-214A / 10-05-06 | 0610018-15 | | 10/11/2006 | 8260 | VOCs | 108-90-7 | Chlorobenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 937 | OW-214A / 10-05-06 | 0610018-15 | | 10/11/2006 | 8260 | VOCs | 100-41-4 | Ethylbenzene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 938 | OW-214A / 10-05-06 | 0610018-15 | | 10/11/2006 | 8260 | VOCs | 106-42-3/ | p/m-Xylene | 4 | µg/L | U | | 4 | µg/L | 1 | |
| 939 | OW-214A / 10-05-06 | 0610018-15 | | 10/11/2006 | 8260 | VOCs | 95-47-6 | o-Xylene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 940 | OW-214A / 10-05-06 | 0610018-15 | | 10/11/2006 | 8260 | VOCs | 100-42-5 | Styrene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 941 | OW-214A / 10-05-06 | 0610018-15 | | 10/11/2006 | 8260 | VOCs | 75-25-2 | Bromoform | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 942 | OW-214A / 10-05-06 | 0610018-15 | | 10/11/2006 | 8260 | VOCs | 79-34-5 | 1,1,2,2-Tetrachloroethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 943 | OW-214A / 10-05-06 | 0610018-15 | | 10/11/2006 | 8260 | VOCs | 75-69-4 | Trichlorofluoromethane | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 944 | OW-214A / 10-05-06 | 0610018-15 | | 10/11/2006 | 8260 | VOCs | 67-64-1 | Acetone | 5 | µg/L | U | | 5 | µg/L | 1 | |
| 945 | OW-214A / 10-05-06 | 0610018-15 | | 10/11/2006 | 8260 | VOCs | 75-35-4 | 1,1-Dichloroethene | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 946 | OW-214A / 10-05-06 | 0610018-15 | | 10/11/2006 | 8260 | VOCs | 75-15-0 | Carbon disulfide | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 947 | OW-214A / 10-05-06 | 0610018-15 | | 10/11/2006 | 8260 | VOCs | 75-09-2 | Methylene chloride | 2.6 | µg/L | | | 2 | µg/L | 1 | |
| 948 | OW-214A / 10-05-06 | 0610018-15 | | 10/11/2006 | 8260 | VOCs | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2 | µg/L | U | | 2 | µg/L | 1 | |
| 949 | SH-01D / 10-03-06 | 0610018-02 | 10/9/2006 | 10/26/2006 | PAH SI | SVOCs | 91-20-3 | Naphthalene | 1800000 | ng/L | | | 5200 | ng/L | 500 | |
| 950 | SH-01D / 10-03-06 | 0610018-02 | 10/9/2006 | 10/26/2006 | PAH SI | SVOCs | 91-57-6 | 2-Methylnaphthalene | 230000 | ng/L | | | 5200 | ng/L | 500 | |
| 951 | SH-01D / 10-03-06 | 0610018-02 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 129-00-0 | Pyrene | 1400 | ng/L | | | 10 | ng/L | 1 | |
| 952 | SH-01D / 10-03-06 | 0610018-02 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 56-55-3 | Benz[a]anthracene | 160 | ng/L | | | 10 | ng/L | 1 | |
| 953 | SH-01D / 10-03-06 | 0610018-02 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 218-01-9 | Chrysene | 150 | ng/L | | | 10 | ng/L | 1 | |
| 954 | SH-01D / 10-03-06 | 0610018-02 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 117-81-7 | bis(2-Ethylhexyl)phthalate | 1000 | ng/L | U | | 1000 | ng/L | 1 | Negated due to Blank Action |
| 955 | SH-01D / 10-03-06 | 0610018-02 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 26 | ng/L | | | 10 | ng/L | 1 | |
| 956 | SH-01D / 10-03-06 | 0610018-02 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 60 | ng/L | | | 10 | ng/L | 1 | |
| 957 | SH-01D / 10-03-06 | 0610018-02 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 50-32-8 | Benzo[a]pyrene | 100 | ng/L | | | 10 | ng/L | 1 | |
| 958 | SH-01D / 10-03-06 | 0610018-02 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 23 | ng/L | | | 10 | ng/L | 1 | |
| 959 | SH-01D / 10-03-06 | 0610018-02 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |

| ID | Smpl | Lab_ID | Extr_Date | Anal_Date | Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 960 | SH-01D / 10-03-06 | 0610018-02 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 30 | ng/L | | | 10 | ng/L | 1 | |
| 961 | SH-01D / 10-03-06 | 0610018-02 | 10/9/2006 | 10/26/2006 | PAH SI | SVOCs | 208-96-8 | Acenaphthylene | 23000 | ng/L | | | 5200 | ng/L | 500 | |
| 962 | SH-01D / 10-03-06 | 0610018-02 | 10/9/2006 | 10/26/2006 | PAH SI | SVOCs | 83-32-9 | Acenaphthene | 33000 | ng/L | | | 5200 | ng/L | 500 | |
| 963 | SH-01D / 10-03-06 | 0610018-02 | 10/9/2006 | 10/26/2006 | PAH SI | SVOCs | 86-73-7 | Fluorene | 15000 | ng/L | | | 5200 | ng/L | 500 | |
| 964 | SH-01D / 10-03-06 | 0610018-02 | 10/9/2006 | 10/26/2006 | PAH SI | SVOCs | 85-01-8 | Phenanthrene | 16000 | ng/L | | | 5200 | ng/L | 500 | |
| 965 | SH-01D / 10-03-06 | 0610018-02 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 120-12-7 | Anthracene | 3100 | ng/L | | | 10 | ng/L | 1 | |
| 966 | SH-01D / 10-03-06 | 0610018-02 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 86-74-8 | Carbazole | 9500 | ng/L | | | 10 | ng/L | 1 | |
| 967 | SH-01D / 10-03-06 | 0610018-02 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 206-44-0 | Fluoranthene | 1200 | ng/L | | | 10 | ng/L | 1 | |
| 987 | SH-15S / 10-03-06 | 0610018-03 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 91-20-3 | Naphthalene | 8300 | ng/L | | | 10 | ng/L | 1 | |
| 988 | SH-15S / 10-03-06 | 0610018-03 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 91-57-6 | 2-Methylnaphthalene | 2700 | ng/L | | | 10 | ng/L | 1 | |
| 989 | SH-15S / 10-03-06 | 0610018-03 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 129-00-0 | Pyrene | 290 | ng/L | | | 10 | ng/L | 1 | |
| 990 | SH-15S / 10-03-06 | 0610018-03 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 56-55-3 | Benz[a]anthracene | 26 | ng/L | | | 10 | ng/L | 1 | |
| 991 | SH-15S / 10-03-06 | 0610018-03 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 218-01-9 | Chrysene | 26 | ng/L | | | 10 | ng/L | 1 | |
| 992 | SH-15S / 10-03-06 | 0610018-03 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 117-81-7 | bis(2-Ethylhexyl)phthalate | 1000 | ng/L | U | | 1000 | ng/L | 1 | Negated due to Blank Action |
| 993 | SH-15S / 10-03-06 | 0610018-03 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 5.9 | ng/L | J | I | 10 | ng/L | 1 | Result uncertain below the calibration range |
| 994 | SH-15S / 10-03-06 | 0610018-03 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 6.2 | ng/L | J | I | 10 | ng/L | 1 | Result uncertain below the calibration range |
| 995 | SH-15S / 10-03-06 | 0610018-03 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 50-32-8 | Benzo[a]pyrene | 13 | ng/L | | | 10 | ng/L | 1 | |
| 996 | SH-15S / 10-03-06 | 0610018-03 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| 997 | SH-15S / 10-03-06 | 0610018-03 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| 998 | SH-15S / 10-03-06 | 0610018-03 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| 999 | SH-15S / 10-03-06 | 0610018-03 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 208-96-8 | Acenaphthylene | 240 | ng/L | | | 10 | ng/L | 1 | |
| 1000 | SH-15S / 10-03-06 | 0610018-03 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 83-32-9 | Acenaphthene | 1100 | ng/L | | | 10 | ng/L | 1 | |
| 1001 | SH-15S / 10-03-06 | 0610018-03 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 86-73-7 | Fluorene | 700 | ng/L | | | 10 | ng/L | 1 | |
| 1002 | SH-15S / 10-03-06 | 0610018-03 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 85-01-8 | Phenanthrene | 1600 | ng/L | | | 10 | ng/L | 1 | |
| 1003 | SH-15S / 10-03-06 | 0610018-03 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 120-12-7 | Anthracene | 230 | ng/L | | | 10 | ng/L | 1 | |
| 1004 | SH-15S / 10-03-06 | 0610018-03 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 86-74-8 | Carbazole | 160 | ng/L | | | 10 | ng/L | 1 | |
| 1005 | SH-15S / 10-03-06 | 0610018-03 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 206-44-0 | Fluoranthene | 240 | ng/L | | | 10 | ng/L | 1 | |
| 1006 | SH-01R / 10-04-06 | 0610018-05 | 10/9/2006 | 10/26/2006 | PAH SI | SVOCs | 91-20-3 | Naphthalene | 2300000 | ng/L | | | 5500 | ng/L | 500 | |
| 1007 | SH-01R / 10-04-06 | 0610018-05 | 10/9/2006 | 10/26/2006 | PAH SI | SVOCs | 91-57-6 | 2-Methylnaphthalene | 320000 | ng/L | | | 5500 | ng/L | 500 | |
| 1008 | SH-01R / 10-04-06 | 0610018-05 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 129-00-0 | Pyrene | 5400 | ng/L | | | 11 | ng/L | 1 | |
| 1009 | SH-01R / 10-04-06 | 0610018-05 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 56-55-3 | Benz[a]anthracene | 840 | ng/L | | | 11 | ng/L | 1 | |
| 1010 | SH-01R / 10-04-06 | 0610018-05 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 218-01-9 | Chrysene | 650 | ng/L | | | 11 | ng/L | 1 | |
| 1011 | SH-01R / 10-04-06 | 0610018-05 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 117-81-7 | bis(2-Ethylhexyl)phthalate | 6400 | ng/L | | | 1100 | ng/L | 1 | |
| 1012 | SH-01R / 10-04-06 | 0610018-05 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 190 | ng/L | | | 11 | ng/L | 1 | |
| 1013 | SH-01R / 10-04-06 | 0610018-05 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 260 | ng/L | | | 11 | ng/L | 1 | |
| 1014 | SH-01R / 10-04-06 | 0610018-05 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 50-32-8 | Benzo[a]pyrene | 410 | ng/L | | | 11 | ng/L | 1 | |
| 1015 | SH-01R / 10-04-06 | 0610018-05 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 63 | ng/L | | | 11 | ng/L | 1 | |
| 1016 | SH-01R / 10-04-06 | 0610018-05 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 21 | ng/L | | | 11 | ng/L | 1 | |
| 1017 | SH-01R / 10-04-06 | 0610018-05 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 76 | ng/L | | | 11 | ng/L | 1 | |
| 1018 | SH-01R / 10-04-06 | 0610018-05 | 10/9/2006 | 10/26/2006 | PAH SI | SVOCs | 208-96-8 | Acenaphthylene | 47000 | ng/L | | | 5500 | ng/L | 500 | |
| 1019 | SH-01R / 10-04-06 | 0610018-05 | 10/9/2006 | 10/26/2006 | PAH SI | SVOCs | 83-32-9 | Acenaphthene | 37000 | ng/L | | | 5500 | ng/L | 500 | |
| 1020 | SH-01R / 10-04-06 | 0610018-05 | 10/9/2006 | 10/26/2006 | PAH SI | SVOCs | 86-73-7 | Fluorene | 26000 | ng/L | | | 5500 | ng/L | 500 | |
| 1021 | SH-01R / 10-04-06 | 0610018-05 | 10/9/2006 | 10/26/2006 | PAH SI | SVOCs | 85-01-8 | Phenanthrene | 32000 | ng/L | | | 5500 | ng/L | 500 | |
| 1022 | SH-01R / 10-04-06 | 0610018-05 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 120-12-7 | Anthracene | 5800 | ng/L | | | 11 | ng/L | 1 | |
| 1023 | SH-01R / 10-04-06 | 0610018-05 | 10/9/2006 | 10/26/2006 | PAH SI | SVOCs | 86-74-8 | Carbazole | 10000 | ng/L | | | 5500 | ng/L | 500 | |
| 1024 | SH-01R / 10-04-06 | 0610018-05 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 206-44-0 | Fluoranthene | 4400 | ng/L | | | 11 | ng/L | 1 | |
| 1044 | SH-04S / 10-04-06 | 0610018-06 | 10/9/2006 | 10/26/2006 | PAH SI | SVOCs | 91-20-3 | Naphthalene | 71000 | ng/L | | | 100 | ng/L | 10 | |
| 1045 | SH-04S / 10-04-06 | 0610018-06 | 10/9/2006 | 10/26/2006 | PAH SI | SVOCs | 91-57-6 | 2-Methylnaphthalene | 16000 | ng/L | | | 100 | ng/L | 10 | |
| 1046 | SH-04S / 10-04-06 | 0610018-06 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 129-00-0 | Pyrene | 450 | ng/L | | | 10 | ng/L | 1 | |
| 1047 | SH-04S / 10-04-06 | 0610018-06 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 56-55-3 | Benz[a]anthracene | 52 | ng/L | | | 10 | ng/L | 1 | |
| 1048 | SH-04S / 10-04-06 | 0610018-06 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 218-01-9 | Chrysene | 54 | ng/L | | | 10 | ng/L | 1 | |
| 1049 | SH-04S / 10-04-06 | 0610018-06 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 117-81-7 | bis(2-Ethylhexyl)phthalate | 1000 | ng/L | U | | 1000 | ng/L | 1 | Negated due to Blank Action |
| 1050 | SH-04S / 10-04-06 | 0610018-06 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 17 | ng/L | | | 10 | ng/L | 1 | |
| 1051 | SH-04S / 10-04-06 | 0610018-06 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 19 | ng/L | | | 10 | ng/L | 1 | |
| 1052 | SH-04S / 10-04-06 | 0610018-06 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 50-32-8 | Benzo[a]pyrene | 36 | ng/L | | | 10 | ng/L | 1 | |
| 1053 | SH-04S / 10-04-06 | 0610018-06 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 15 | ng/L | | | 10 | ng/L | 1 | |
| 1054 | SH-04S / 10-04-06 | 0610018-06 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |

| ID | Smpl | Lab_ID | Extr_Date | Anal_Date | Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1055 | SH-04S / 10-04-06 | 0610018-06 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 20 | ng/L | | | 10 | ng/L | 1 | |
| 1056 | SH-04S / 10-04-06 | 0610018-06 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 208-96-8 | Acenaphthylene | 2200 | ng/L | | | 10 | ng/L | 1 | |
| 1057 | SH-04S / 10-04-06 | 0610018-06 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 83-32-9 | Acenaphthene | 6200 | ng/L | | | 10 | ng/L | 1 | |
| 1058 | SH-04S / 10-04-06 | 0610018-06 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 86-73-7 | Fluorene | 4600 | ng/L | | | 10 | ng/L | 1 | |
| 1059 | SH-04S / 10-04-06 | 0610018-06 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 85-01-8 | Phenanthrene | 4300 | ng/L | | | 10 | ng/L | 1 | |
| 1060 | SH-04S / 10-04-06 | 0610018-06 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 120-12-7 | Anthracene | 650 | ng/L | | | 10 | ng/L | 1 | |
| 1061 | SH-04S / 10-04-06 | 0610018-06 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 86-74-8 | Carbazole | 840 | ng/L | | | 10 | ng/L | 1 | |
| 1062 | SH-04S / 10-04-06 | 0610018-06 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 206-44-0 | Fluoranthene | 350 | ng/L | | | 10 | ng/L | 1 | |
| 1082 | SH-05S / 10-04-06 | 0610018-07 | 10/9/2006 | 10/26/2006 | PAH SI | SVOCs | 91-20-3 | Naphthalene | 42000 | ng/L | | | 100 | ng/L | 10 | |
| 1083 | SH-05S / 10-04-06 | 0610018-07 | 10/9/2006 | 10/26/2006 | PAH SI | SVOCs | 91-57-6 | 2-Methylnaphthalene | 19000 | ng/L | | | 100 | ng/L | 10 | |
| 1084 | SH-05S / 10-04-06 | 0610018-07 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 129-00-0 | Pyrene | 2200 | ng/L | | | 10 | ng/L | 1 | |
| 1085 | SH-05S / 10-04-06 | 0610018-07 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 56-55-3 | Benz[a]anthracene | 320 | ng/L | | | 10 | ng/L | 1 | |
| 1086 | SH-05S / 10-04-06 | 0610018-07 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 218-01-9 | Chrysene | 300 | ng/L | | | 10 | ng/L | 1 | |
| 1087 | SH-05S / 10-04-06 | 0610018-07 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 117-81-7 | bis(2-Ethylhexyl)phthalate | 1000 | ng/L | U | | 1000 | ng/L | 1 | Negated due to Blank Action |
| 1088 | SH-05S / 10-04-06 | 0610018-07 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 90 | ng/L | | | 10 | ng/L | 1 | |
| 1089 | SH-05S / 10-04-06 | 0610018-07 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 71 | ng/L | | | 10 | ng/L | 1 | |
| 1090 | SH-05S / 10-04-06 | 0610018-07 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 50-32-8 | Benzo[a]pyrene | 160 | ng/L | | | 10 | ng/L | 1 | |
| 1091 | SH-05S / 10-04-06 | 0610018-07 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 36 | ng/L | | | 10 | ng/L | 1 | |
| 1092 | SH-05S / 10-04-06 | 0610018-07 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 18 | ng/L | | | 10 | ng/L | 1 | |
| 1093 | SH-05S / 10-04-06 | 0610018-07 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 46 | ng/L | | | 10 | ng/L | 1 | |
| 1094 | SH-05S / 10-04-06 | 0610018-07 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 208-96-8 | Acenaphthylene | 1800 | ng/L | | | 10 | ng/L | 1 | |
| 1095 | SH-05S / 10-04-06 | 0610018-07 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 83-32-9 | Acenaphthene | 6800 | ng/L | | | 10 | ng/L | 1 | |
| 1096 | SH-05S / 10-04-06 | 0610018-07 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 86-73-7 | Fluorene | 7200 | ng/L | | | 10 | ng/L | 1 | |
| 1097 | SH-05S / 10-04-06 | 0610018-07 | 10/9/2006 | 10/26/2006 | PAH SI | SVOCs | 85-01-8 | Phenanthrene | 16000 | ng/L | | | 100 | ng/L | 10 | |
| 1098 | SH-05S / 10-04-06 | 0610018-07 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 120-12-7 | Anthracene | 2000 | ng/L | | | 10 | ng/L | 1 | |
| 1099 | SH-05S / 10-04-06 | 0610018-07 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 86-74-8 | Carbazole | 740 | ng/L | | | 10 | ng/L | 1 | |
| 1100 | SH-05S / 10-04-06 | 0610018-07 | 10/9/2006 | 10/23/2006 | PAH SI | SVOCs | 206-44-0 | Fluoranthene | 1800 | ng/L | | | 10 | ng/L | 1 | |
| 1120 | SH-17R / 10-04-06 | 0610018-08 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 91-20-3 | Naphthalene | 2700 | ng/L | | | 10 | ng/L | 1 | |
| 1121 | SH-17R / 10-04-06 | 0610018-08 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 91-57-6 | 2-Methylnaphthalene | 2400 | ng/L | | | 10 | ng/L | 1 | |
| 1122 | SH-17R / 10-04-06 | 0610018-08 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 129-00-0 | Pyrene | 78 | ng/L | | | 10 | ng/L | 1 | |
| 1123 | SH-17R / 10-04-06 | 0610018-08 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 56-55-3 | Benz[a]anthracene | 4.8 | ng/L | J | I | 10 | ng/L | 1 | Result uncertain below the calibration range |
| 1124 | SH-17R / 10-04-06 | 0610018-08 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 218-01-9 | Chrysene | 8.4 | ng/L | J | I | 10 | ng/L | 1 | Result uncertain below the calibration range |
| 1125 | SH-17R / 10-04-06 | 0610018-08 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 117-81-7 | bis(2-Ethylhexyl)phthalate | 1000 | ng/L | U | | 1000 | ng/L | 1 | Negated due to Blank Action |
| 1126 | SH-17R / 10-04-06 | 0610018-08 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| 1127 | SH-17R / 10-04-06 | 0610018-08 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| 1128 | SH-17R / 10-04-06 | 0610018-08 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 50-32-8 | Benzo[a]pyrene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| 1129 | SH-17R / 10-04-06 | 0610018-08 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| 1130 | SH-17R / 10-04-06 | 0610018-08 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| 1131 | SH-17R / 10-04-06 | 0610018-08 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| 1132 | SH-17R / 10-04-06 | 0610018-08 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 208-96-8 | Acenaphthylene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| 1133 | SH-17R / 10-04-06 | 0610018-08 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 83-32-9 | Acenaphthene | 73 | ng/L | | | 10 | ng/L | 1 | |
| 1134 | SH-17R / 10-04-06 | 0610018-08 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 86-73-7 | Fluorene | 80 | ng/L | | | 10 | ng/L | 1 | |
| 1135 | SH-17R / 10-04-06 | 0610018-08 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 85-01-8 | Phenanthrene | 220 | ng/L | | | 10 | ng/L | 1 | |
| 1136 | SH-17R / 10-04-06 | 0610018-08 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 120-12-7 | Anthracene | 11 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| 1137 | SH-17R / 10-04-06 | 0610018-08 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 86-74-8 | Carbazole | 410 | ng/L | | | 10 | ng/L | 1 | |
| 1138 | SH-17R / 10-04-06 | 0610018-08 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 206-44-0 | Fluoranthene | 42 | ng/L | | | 10 | ng/L | 1 | |
| 1139 | SH-026S / 10-04-06 | 0610018-09 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 91-20-3 | Naphthalene | 230 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| 1140 | SH-026S / 10-04-06 | 0610018-09 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 91-57-6 | 2-Methylnaphthalene | 87 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| 1141 | SH-026S / 10-04-06 | 0610018-09 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 129-00-0 | Pyrene | 370 | ng/L | | | 10 | ng/L | 1 | |
| 1142 | SH-026S / 10-04-06 | 0610018-09 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 56-55-3 | Benz[a]anthracene | 24 | ng/L | | | 10 | ng/L | 1 | |
| 1143 | SH-026S / 10-04-06 | 0610018-09 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 218-01-9 | Chrysene | 26 | ng/L | | | 10 | ng/L | 1 | |
| 1144 | SH-026S / 10-04-06 | 0610018-09 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 117-81-7 | bis(2-Ethylhexyl)phthalate | 1000 | ng/L | U | | 1000 | ng/L | 1 | Negated due to Blank Action |
| 1145 | SH-026S / 10-04-06 | 0610018-09 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 6.6 | ng/L | J | I | 10 | ng/L | 1 | Result uncertain below the calibration range |
| 1146 | SH-026S / 10-04-06 | 0610018-09 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| 1147 | SH-026S / 10-04-06 | 0610018-09 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 50-32-8 | Benzo[a]pyrene | 7.5 | ng/L | J | I | 10 | ng/L | 1 | Result uncertain below the calibration range |
| 1148 | SH-026S / 10-04-06 | 0610018-09 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| 1149 | SH-026S / 10-04-06 | 0610018-09 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 10 | ng/L | U | | 10 | ng/L | 1 | |

| ID | Smpl | Lab_ID | Extr_Date | Anal_Date | Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1150 | SH-026S / 10-04-06 | 0610018-09 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| 1151 | SH-026S / 10-04-06 | 0610018-09 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 208-96-8 | Acenaphthylene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| 1152 | SH-026S / 10-04-06 | 0610018-09 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 83-32-9 | Acenaphthene | 46 | ng/L | | | 10 | ng/L | 1 | |
| 1153 | SH-026S / 10-04-06 | 0610018-09 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 86-73-7 | Fluorene | 46 | ng/L | | | 10 | ng/L | 1 | |
| 1154 | SH-026S / 10-04-06 | 0610018-09 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 85-01-8 | Phenanthrene | 470 | ng/L | | | 10 | ng/L | 1 | |
| 1155 | SH-026S / 10-04-06 | 0610018-09 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 120-12-7 | Anthracene | 110 | ng/L | | | 10 | ng/L | 1 | |
| 1156 | SH-026S / 10-04-06 | 0610018-09 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 86-74-8 | Carbazole | 15 | ng/L | | | 10 | ng/L | 1 | |
| 1157 | SH-026S / 10-04-06 | 0610018-09 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 206-44-0 | Fluoranthene | 260 | ng/L | | | 10 | ng/L | 1 | |
| 1177 | OW-214 / 10-04-06 | 0610018-10 | 10/9/2006 | 10/26/2006 | PAH SI | SVOCs | 91-20-3 | Naphthalene | 36000 | ng/L | | | 100 | ng/L | 10 | |
| 1178 | OW-214 / 10-04-06 | 0610018-10 | 10/9/2006 | 10/26/2006 | PAH SI | SVOCs | 91-57-6 | 2-Methylnaphthalene | 16000 | ng/L | | | 100 | ng/L | 10 | |
| 1179 | OW-214 / 10-04-06 | 0610018-10 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 129-00-0 | Pyrene | 1800 | ng/L | | | 10 | ng/L | 1 | |
| 1180 | OW-214 / 10-04-06 | 0610018-10 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 56-55-3 | Benz[a]anthracene | 270 | ng/L | | | 10 | ng/L | 1 | |
| 1181 | OW-214 / 10-04-06 | 0610018-10 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 218-01-9 | Chrysene | 250 | ng/L | | | 10 | ng/L | 1 | |
| 1182 | OW-214 / 10-04-06 | 0610018-10 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 117-81-7 | bis(2-Ethylhexyl)phthalate | 1000 | ng/L | U | | 1000 | ng/L | 1 | Negated due to Blank Action |
| 1183 | OW-214 / 10-04-06 | 0610018-10 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 76 | ng/L | | | 10 | ng/L | 1 | |
| 1184 | OW-214 / 10-04-06 | 0610018-10 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 73 | ng/L | | | 10 | ng/L | 1 | |
| 1185 | OW-214 / 10-04-06 | 0610018-10 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 50-32-8 | Benzo[a]pyrene | 150 | ng/L | | | 10 | ng/L | 1 | |
| 1186 | OW-214 / 10-04-06 | 0610018-10 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 41 | ng/L | | | 10 | ng/L | 1 | |
| 1187 | OW-214 / 10-04-06 | 0610018-10 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 19 | ng/L | | | 10 | ng/L | 1 | |
| 1188 | OW-214 / 10-04-06 | 0610018-10 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 54 | ng/L | | | 10 | ng/L | 1 | |
| 1189 | OW-214 / 10-04-06 | 0610018-10 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 208-96-8 | Acenaphthylene | 1600 | ng/L | | | 10 | ng/L | 1 | |
| 1190 | OW-214 / 10-04-06 | 0610018-10 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 83-32-9 | Acenaphthene | 6200 | ng/L | | | 10 | ng/L | 1 | |
| 1191 | OW-214 / 10-04-06 | 0610018-10 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 86-73-7 | Fluorene | 6500 | ng/L | | | 10 | ng/L | 1 | |
| 1192 | OW-214 / 10-04-06 | 0610018-10 | 10/9/2006 | 10/26/2006 | PAH SI | SVOCs | 85-01-8 | Phenanthrene | 15000 | ng/L | | | 100 | ng/L | 10 | |
| 1193 | OW-214 / 10-04-06 | 0610018-10 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 120-12-7 | Anthracene | 1900 | ng/L | | | 10 | ng/L | 1 | |
| 1194 | OW-214 / 10-04-06 | 0610018-10 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 86-74-8 | Carbazole | 680 | ng/L | | | 10 | ng/L | 1 | |
| 1195 | OW-214 / 10-04-06 | 0610018-10 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 206-44-0 | Fluoranthene | 1600 | ng/L | | | 10 | ng/L | 1 | |
| 1215 | SH-01S / 10-05-06 | 0610018-12 | 10/9/2006 | 10/26/2006 | PAH SI | SVOCs | 91-20-3 | Naphthalene | 100000 | ng/L | | | 100 | ng/L | 10 | |
| 1216 | SH-01S / 10-05-06 | 0610018-12 | 10/9/2006 | 10/26/2006 | PAH SI | SVOCs | 91-57-6 | 2-Methylnaphthalene | 46000 | ng/L | | | 100 | ng/L | 10 | |
| 1217 | SH-01S / 10-05-06 | 0610018-12 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 129-00-0 | Pyrene | 1600 | ng/L | | | 10 | ng/L | 1 | |
| 1218 | SH-01S / 10-05-06 | 0610018-12 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 56-55-3 | Benz[a]anthracene | 160 | ng/L | | | 10 | ng/L | 1 | |
| 1219 | SH-01S / 10-05-06 | 0610018-12 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 218-01-9 | Chrysene | 160 | ng/L | | | 10 | ng/L | 1 | |
| 1220 | SH-01S / 10-05-06 | 0610018-12 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 117-81-7 | bis(2-Ethylhexyl)phthalate | 1000 | ng/L | U | | 1000 | ng/L | 1 | Negated due to Blank Action |
| 1221 | SH-01S / 10-05-06 | 0610018-12 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 40 | ng/L | | | 10 | ng/L | 1 | |
| 1222 | SH-01S / 10-05-06 | 0610018-12 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 40 | ng/L | | | 10 | ng/L | 1 | |
| 1223 | SH-01S / 10-05-06 | 0610018-12 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 50-32-8 | Benzo[a]pyrene | 62 | ng/L | | | 10 | ng/L | 1 | |
| 1224 | SH-01S / 10-05-06 | 0610018-12 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 18 | ng/L | | | 10 | ng/L | 1 | |
| 1225 | SH-01S / 10-05-06 | 0610018-12 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| 1226 | SH-01S / 10-05-06 | 0610018-12 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 21 | ng/L | | | 10 | ng/L | 1 | |
| 1227 | SH-01S / 10-05-06 | 0610018-12 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 208-96-8 | Acenaphthylene | 4700 | ng/L | | | 10 | ng/L | 1 | |
| 1228 | SH-01S / 10-05-06 | 0610018-12 | 10/9/2006 | 10/26/2006 | PAH SI | SVOCs | 83-32-9 | Acenaphthene | 15000 | ng/L | | | 100 | ng/L | 10 | |
| 1229 | SH-01S / 10-05-06 | 0610018-12 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 86-73-7 | Fluorene | 10000 | ng/L | | | 10 | ng/L | 1 | |
| 1230 | SH-01S / 10-05-06 | 0610018-12 | 10/9/2006 | 10/26/2006 | PAH SI | SVOCs | 85-01-8 | Phenanthrene | 17000 | ng/L | | | 100 | ng/L | 10 | |
| 1231 | SH-01S / 10-05-06 | 0610018-12 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 120-12-7 | Anthracene | 3100 | ng/L | | | 10 | ng/L | 1 | |
| 1232 | SH-01S / 10-05-06 | 0610018-12 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 86-74-8 | Carbazole | 2800 | ng/L | | | 10 | ng/L | 1 | |
| 1233 | SH-01S / 10-05-06 | 0610018-12 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 206-44-0 | Fluoranthene | 1500 | ng/L | | | 10 | ng/L | 1 | |
| 1253 | SH-17D / 10-05-06 | 0610018-13 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 91-20-3 | Naphthalene | 3600 | ng/L | | | 10 | ng/L | 1 | |
| 1254 | SH-17D / 10-05-06 | 0610018-13 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 91-57-6 | 2-Methylnaphthalene | 2700 | ng/L | | | 10 | ng/L | 1 | |
| 1255 | SH-17D / 10-05-06 | 0610018-13 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 129-00-0 | Pyrene | 66 | ng/L | | | 10 | ng/L | 1 | |
| 1256 | SH-17D / 10-05-06 | 0610018-13 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 56-55-3 | Benz[a]anthracene | 5.7 | ng/L | J | I | 10 | ng/L | 1 | Result uncertain below the calibration range |
| 1257 | SH-17D / 10-05-06 | 0610018-13 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 218-01-9 | Chrysene | 11 | ng/L | | | 10 | ng/L | 1 | |
| 1258 | SH-17D / 10-05-06 | 0610018-13 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 117-81-7 | bis(2-Ethylhexyl)phthalate | 1000 | ng/L | U | | 1000 | ng/L | 1 | Negated due to Blank Action |
| 1259 | SH-17D / 10-05-06 | 0610018-13 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| 1260 | SH-17D / 10-05-06 | 0610018-13 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| 1261 | SH-17D / 10-05-06 | 0610018-13 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 50-32-8 | Benzo[a]pyrene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| 1262 | SH-17D / 10-05-06 | 0610018-13 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| 1263 | SH-17D / 10-05-06 | 0610018-13 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low, H = High, I = Indeterminate. See Data Usability Report for details.

| ID | Smpl | Lab_ID | Extr_Date | Anal_Date | Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1264 | SH-17D / 10-05-06 | 0610018-13 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| 1265 | SH-17D / 10-05-06 | 0610018-13 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 208-96-8 | Acenaphthylene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| 1266 | SH-17D / 10-05-06 | 0610018-13 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 83-32-9 | Acenaphthene | 100 | ng/L | | | 10 | ng/L | 1 | |
| 1267 | SH-17D / 10-05-06 | 0610018-13 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 86-73-7 | Fluorene | 170 | ng/L | | | 10 | ng/L | 1 | |
| 1268 | SH-17D / 10-05-06 | 0610018-13 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 85-01-8 | Phenanthrene | 330 | ng/L | | | 10 | ng/L | 1 | |
| 1269 | SH-17D / 10-05-06 | 0610018-13 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 120-12-7 | Anthracene | 35 | ng/L | | | 10 | ng/L | 1 | |
| 1270 | SH-17D / 10-05-06 | 0610018-13 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 86-74-8 | Carbazole | 740 | ng/L | | | 10 | ng/L | 1 | |
| 1271 | SH-17D / 10-05-06 | 0610018-13 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 206-44-0 | Fluoranthene | 45 | ng/L | | | 10 | ng/L | 1 | |
| 1272 | WP-06 / 10-05-06 | 0610018-14 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 91-20-3 | Naphthalene | 5800 | ng/L | | | 11 | ng/L | 1 | |
| 1273 | WP-06 / 10-05-06 | 0610018-14 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 91-57-6 | 2-Methylnaphthalene | 1500 | ng/L | | | 11 | ng/L | 1 | |
| 1274 | WP-06 / 10-05-06 | 0610018-14 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 129-00-0 | Pyrene | 80 | ng/L | | | 11 | ng/L | 1 | |
| 1275 | WP-06 / 10-05-06 | 0610018-14 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 56-55-3 | Benz[a]anthracene | 4.6 | ng/L | J | I | 11 | ng/L | 1 | Result uncertain below the calibration range |
| 1276 | WP-06 / 10-05-06 | 0610018-14 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 218-01-9 | Chrysene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| 1277 | WP-06 / 10-05-06 | 0610018-14 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 117-81-7 | bis(2-Ethylhexyl)phthalate | 1100 | ng/L | U | | 1100 | ng/L | 1 | Negated due to Blank Action |
| 1278 | WP-06 / 10-05-06 | 0610018-14 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| 1279 | WP-06 / 10-05-06 | 0610018-14 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| 1280 | WP-06 / 10-05-06 | 0610018-14 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 50-32-8 | Benzo[a]pyrene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| 1281 | WP-06 / 10-05-06 | 0610018-14 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| 1282 | WP-06 / 10-05-06 | 0610018-14 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 11 | ng/L | U | | 11 | ng/L | 1 | |
| 1283 | WP-06 / 10-05-06 | 0610018-14 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 11 | ng/L | U | | 11 | ng/L | 1 | Negated due to Blank Action |
| 1284 | WP-06 / 10-05-06 | 0610018-14 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 208-96-8 | Acenaphthylene | 120 | ng/L | | | 11 | ng/L | 1 | |
| 1285 | WP-06 / 10-05-06 | 0610018-14 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 83-32-9 | Acenaphthene | 690 | ng/L | | | 11 | ng/L | 1 | |
| 1286 | WP-06 / 10-05-06 | 0610018-14 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 86-73-7 | Fluorene | 360 | ng/L | | | 11 | ng/L | 1 | |
| 1287 | WP-06 / 10-05-06 | 0610018-14 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 85-01-8 | Phenanthrene | 530 | ng/L | | | 11 | ng/L | 1 | |
| 1288 | WP-06 / 10-05-06 | 0610018-14 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 120-12-7 | Anthracene | 59 | ng/L | | | 11 | ng/L | 1 | |
| 1289 | WP-06 / 10-05-06 | 0610018-14 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 86-74-8 | Carbazole | 76 | ng/L | | | 11 | ng/L | 1 | |
| 1290 | WP-06 / 10-05-06 | 0610018-14 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 206-44-0 | Fluoranthene | 44 | ng/L | | | 11 | ng/L | 1 | |
| 1291 | OW-214A / 10-05-06 | 0610018-15 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 91-20-3 | Naphthalene | 13 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| 1292 | OW-214A / 10-05-06 | 0610018-15 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 91-57-6 | 2-Methylnaphthalene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| 1293 | OW-214A / 10-05-06 | 0610018-15 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 129-00-0 | Pyrene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| 1294 | OW-214A / 10-05-06 | 0610018-15 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 56-55-3 | Benz[a]anthracene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| 1295 | OW-214A / 10-05-06 | 0610018-15 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 218-01-9 | Chrysene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| 1296 | OW-214A / 10-05-06 | 0610018-15 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 117-81-7 | bis(2-Ethylhexyl)phthalate | 1000 | ng/L | U | | 1000 | ng/L | 1 | Negated due to Blank Action |
| 1297 | OW-214A / 10-05-06 | 0610018-15 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| 1298 | OW-214A / 10-05-06 | 0610018-15 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| 1299 | OW-214A / 10-05-06 | 0610018-15 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 50-32-8 | Benzo[a]pyrene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| 1300 | OW-214A / 10-05-06 | 0610018-15 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| 1301 | OW-214A / 10-05-06 | 0610018-15 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| 1302 | OW-214A / 10-05-06 | 0610018-15 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| 1303 | OW-214A / 10-05-06 | 0610018-15 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 208-96-8 | Acenaphthylene | 10 | ng/L | U | | 10 | ng/L | 1 | |
| 1304 | OW-214A / 10-05-06 | 0610018-15 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 83-32-9 | Acenaphthene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| 1305 | OW-214A / 10-05-06 | 0610018-15 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 86-73-7 | Fluorene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| 1306 | OW-214A / 10-05-06 | 0610018-15 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 85-01-8 | Phenanthrene | 15 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| 1307 | OW-214A / 10-05-06 | 0610018-15 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 120-12-7 | Anthracene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |
| 1308 | OW-214A / 10-05-06 | 0610018-15 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 86-74-8 | Carbazole | 10 | ng/L | U | | 10 | ng/L | 1 | |
| 1309 | OW-214A / 10-05-06 | 0610018-15 | 10/9/2006 | 10/24/2006 | PAH SI | SVOCs | 206-44-0 | Fluoranthene | 10 | ng/L | U | | 10 | ng/L | 1 | Negated due to Blank Action |

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase IB-5 2006
8260B Data Review Checklist

ETR 0610018

Lab: AWAL
Date Sampled: 10/3-10/5/06
Method of Analysis: 8260B

Lab Project #: BUZ14
No. Samples: 10+1FD+1EB+3TB
Matrix: groundwater

| | Preservation & HT | Surrogate | LCS | MS | FD W:RPD≤30% Other:RPD≤50% | Tunes ICALs CCALs | IS' | RL & Quant. Correct | Other Issues |
|---|---|---|---|---|---|---|---|---|---|
| All Samples in Project | ✓ | ✓ | ✓ | ✓ | Unable to Assess | see pg 5+5A | ✓ | ✓ | Accept J data |
| **Except:** | | | | | | | | | |
| SH-01D | J/UJ | J/UJ All | | | | | | | |
| SH-01R | All | J Detects | UJ $CHCl_2Br$ | | | | | | |
| OW-214 | | J Detect | | | | | | | |
| SH-04S | | J/UJ All | | UJ Vinyl Acetate | | | | | |
| SH-15S | | | UJ $CBr_2ClH$ | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
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| | | | | | | | | | |

Comments: Samples were received intact at 4±2°C - Samples all had pH >9 (Native) so samples were not preserved with HCl per QAPP requirements. Sample SH-01D/10-03-06 + SH-01R/10-04-06 had air bubbles (headspace) in all 3 vials once samples ready for analysis - lab chose vials with least air headspace for analysis but headspace may have led to loss of VOCs in these samples. Since samples nature caused headspace, decision made to not reject data (i.e., samples had no headspace when they left site - developed over time due to nature of sample).
* All VOCs estimated (J+UJ) in SH-01D + SH-01R due to headspace -

Date 12/8/06

Data Reviewer

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase IB-5 2006
8260B Data Review Checklist

Lab: AWHL
Date Sampled: 10/3 - 10/5/06

Lab Project #: BU214
No. Samples: 10+1FD+1EB+3TB

Method of Analysis: 8260B
Associated Blanks:

Matrix: GW

MBs: VW100906B21, VW101006B08 + VW101106B06
TBs: TB-512, TB-513 + TB-514
EB: OW-214A

| Blank ID | Contaminant / Level | Matrix Related ? | * Action Level / Action | | Corrected Result |
|---|---|---|---|---|---|
| VW100906B21 | None | | | No Action Required | |
| VW101006B08 | Acetone 3.6J ug/L | Y | 36 ug/L | SH-15S 12JB ug/L (BAL=180) | 25U |
| | | | | SH-01R 150JB (BAL=720) NM 12/7/06 | 150U |
| VW101106B06 | Acetone 2.0J ug/L | Y | 20 ug/L | SH-04S 11JB (BAL=100) | 25U |
| | | | | SH-05S 16JB | 25U |
| | | | | SH-17R 12JB | 25U |
| | | | | OW-214 6.7B (BAL=20) | 6.7U |

* BAL = Action level x DF

Continued on pg 3

**8260B Action Summary: see Worksheet #24b**

HT Actions: waters pH >2 or no HCl: 7d<HT≤14 d, J Aromatic det/R Aromatic NDs; Accept all Non-aromatics;
pH < 2, 14d <HT< 28 d; J Aromatic det/R Aromatic NDs; J Non-aromatic det/J Non-aromatic ND
soil/sediment - 14d <HT< 28 d; J Aromatic det/R Aromatic NDs; J Non-aromatic det/J Non-aromatic ND

Surrogate Actions: Recovery > Criteria, J det/Accept ND; 10%≤ Recovery <Criteria, J det/J NDs; Recovery <10%, J det/R NDs

Blank Actions: Surrogates outside criteria - Use Judgment if isolated or analysis related
Non-Matrix related Blank contamination, BB or EB contaminant in all samples associated with Blank
If contamination in blank(s) exist, if Result < RL, U result at RL; RL<Result<Blank Action, U result at level reported

MS Actions: %Rec<10%, J det/ R NDs; 10% <%Rec<Criteria, J det/ J NDs; %Rec >Criteria, J det/Accept NDs- Unspiked Sample only

LCS Actions: %Rec<10%, J det/ R NDs; 10% <%Rec<Criteria, J det/ J NDs; %Rec >Criteria, J det/Accept NDs for all Batch by Compound

FD Action: Both Conc. ≥ 2xRL, RPD >30%, J det; One result ND, other ≥2 x RL, J det/J NDs; Both Conc. < 2xRL; RPD >30%, LCS OK, Accept data

Date 12/8/06

Data Reviewer MJC. RR

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase IB-5 2006
8260B Data Review Checklist

Lab: AWAL
Date Sampled: 10/3-10/5/06
Method of Analysis: 8260B

Lab Project #: BU214
No. Samples 10 + 1FD + 1EB + 3TB
Matrix: gw

Blank Action Continued

| Blank ID | Contaminant / Level | Matrix Related ? | Action Level / Action | | Corrected Result |
|---|---|---|---|---|---|
| VW10110606B06 cont'd | Acetone 2.0J ug/L | Y | 20 ug/L | SH-01S 5.1B ug/L | 5.1U |
| | | | | SH-17D 2.1JB | 5U |
| TB-512 | None | | | No Actn Required | |
| TB-513 | None | | | ↓ | |
| TB-514 | None | | | | |
| OW-214A/10-05-06 | Methylene chloride 2.6 ug/L | Y | 26 ug/L | Samples are all ND ⇒ No Actn Required. | |

Date 12/8/06
Data Reviewer

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase IB-5 2006
8260B Data Review Checklist

Lab: AWHL
Date Sampled: 10/3 - 10/5/06
Method of Analysis: 8260B

Lab Project #: BUZ14
No. Samples: 10+1FD+1EB+3TB
Matrix: GW

Additional Notes:

Surrogates (including extra surrogate 1,2-Dichloroethane-d4) were recovered within Lab limits in all Samples + QC except:

SH-01D DBFM 74% (low) + 1,2-DCE 138% (high)
SH-15S DBFM 127% (high) + Tol-d8 112% (high)
SH-01R Tol-d8 115% (high)
SH-04S Tol-d8 86% (low)
OW-214 1,2-DCA 131% (high)

*Actn: All VOCs in SH-01D estimated (J+UJ) w/ I Bias due to Conflicting surrogate recoveries.
All detects in SH-15S, SH-01R + OW-214 estimated (J) with possible High bias due to high Surrogate recoveries (unless other biases exist in the data).
All VOCs in SH-04S estimated (J+UJ) with possible low bias due to low Surrogate recovery.

SH-15S was non-detect for all VOCs ⇒ No actn required.

LCS/LCSD: Lab limits used but acceptability here judged vs. 70-130% QAPP Criteria -
- VW100906LCS05/LCSD04 - %Rec all OK except: chloroethane 157% + 162% (high)
chloromethane 131% + 131% (high) - All associated samples were non-detect for the 2 compds ⇒ No Actn
- VW101006LCS04/LCSD03 - %Rec all OK except chloromethane LCS 134% (high) · LCSD OK;
Dibromochloromethane 61% (low) LCS + LCSD OK but RPD: 57%
*Actn: Dibromochloromethane estimated (UJ) with Indeterminate bias in SH-15S + SH-01R due to Conflicting LCS/LCSD results ⇒ Imprecision. No Actn for chloromethane since all ND
- V101106LCS06/LCSD06 - %Rec all OK except 2-chloroethylvinyl ether LCS = 68% (low) - LCSD + RPD OK;
- Since LCSD + RPD OK for this compd - No Actn required.

Date 12/8/06

Data Reviewer [signature]

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase IB-5 2006
8260B Data Review Checklist

Lab: ANHL
Date Sampled: 10/3-10/5/06
Method of Analysis: 8260B

Lab Project #: BU214
No. Samples 10+1FD+1EB+3TB
Matrix: GW

Additional Notes:

MS/MSD done on SH-04S - %Rec all within 70-130% & RPDs ≤ 30% except: vinyl acetate MS = 70% (OK) & MSD = 29% (low) with RPD = 84%

* Action: Vinyl acetate in SH-04S estimated (UJ) with indeterminate bias due to MS/MSD imprecision & low MSD recovery.

FD pair: SH-05S & OW-214 - All results ~~else~~ non-detect in SH-05S at DF=5 and all results either ND or "J" value at DF=1 in OW-214 ⇒ Unable to assess FD precision based on these results - No Action Required. *ltr 12/7/06

Tunes: T1100901 (ICAL), T100902, T1101001 (ICAL), T1101002, T1101101 - All Abundances OK & all Samples injected within 12 hrs. of BFB injection ⇒ No Action.

ICALs: 10/9/06 & 10/10/06

10/9/06 - All %RSDs < 30% except Dibromochloromethane at 35.5% ⇒
* Action: $CHCl_2Br$ estimated (UJ) in TB-514, TB-513, TB-512, SH-01D with indeterminate bias due to ICAL being out of criteria.

10/10/06 ICAL - All %RSDs < 30% except Bromomethane 38.8% & Dibromochloromethane 31% -
* Acts: Bromomethane & Dibromochloromethane estimated (UJ) w/ I Bias in all Samples except TB-514, TB-513, TB-512 & SH-01D due to Initial Calibration being out of criteria.

CCALs: C1100902 - %D ≤ ±25% except chloroethane %D = 35.1% due to enhanced sensitivity - Since all assoc. data is non-detect, no action for high recovery in CCV
C1101003 - %D ≤ ±25% except 2-Hexanone %D = 28.4% (enhanced) & Dibromochloromethane %D = 33% also due to enhanced sensitivity. These CCVs will only impact detected data - no action for non-detects.
* Action: 2-Hexanone in SH-01R estimated (J) due to high recovery in CCV - Overall bias Indeterminate due to other QC issues

Date 12/8/06

Data Reviewer

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase IB-5 2006
8260B Data Review Checklist

Lab: AnHL
Date Sampled: 10/3-10/5/06
Method of Analysis: 8260B

Lab Project #: BU214
No. Samples 10 + 1FD + 1EB + 3TB
Matrix: GW

Additional Notes:

C1101101 - %D ≤ I25% except bromomethane 25.1% (loss in sensitivity) & Vinyl acetate 29.6% (enhanced), I

* Bromomethane estimated (UJ) in OW-214A, SH-04S, SH-05S, SH-17R, SH-026S, OW-2M, SH-01S, SH-17D & WP-06 due to low CCV (overall bias I due to other issues). No Action for vinyl acetate since all samples non-detect ⇒ non-detects accurate as reported.

IS' - All 3 IS Areas & RTs were in criteria for all Samples & QC ⇒ No Action

RLs checked - Non-detects were > PALs for benzene, bromodichloromethane, bromoform, bromomethane, Carbon tetrachloride, chloroform, dibromochloromethane, 1,2-Dichloroethane, 1,2-Dichloropropane, cis- & trans-1,3-Dichloropropene, 1,1,2,2-tetrachloroethane, tetrachloroethene, 1,1,2-trichloroethane, trichloroethene & vinyl chloride in all Samples, as expected, due to method limitation.
In addition, ~~chlorobenzene~~ new 12/7/06 chloroethane, chloromethane, 1,1-Dichloroethene, cis-1,2-Dichloroethene methylene chloride non-detects in SH-01D, SH-15S, SH-01R, SH-04S, SH-05S & SH-17R were > PALs due to dilution made for sample analysis (DF=5 for all except SH-01D & SH-01R at DF=20) & non-detects in SH-01D & SH-01R for chlorobenzene, trans-1,2-Dichloroethene, methyl-tert-Butyl ether, trichlorofluoromethane & o- & m/p-Xylene due to DF=20 for analysis.

5 results were reported at a level < RL (qualified "J" by lab) - These J data were accepted as estimated data with I Bias due to uncertainty in quantitation.

Samples were analyzed (5mL) at Dilution due to "dark & viscous nature" of samples according to Narrative - VOC content of sample did not dictate dilution; manual dilution needed to prevent foam over, etc. on instrument (purging process). No additional issues visible in narrative not already addressed.

Date 12/8/06
Data Reviewer



New Environmental Horizons, Inc.

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase IB-5 2006
8260B Data Review Checklist

| Sample ID 0610018 | | Date Sampled | Field Blank | Trip Blank | Method Blank | LCS | Date Analyzed |
|---|---|---|---|---|---|---|---|
| TB-512/10-03-06 | -01 | 10/3/06 | NA | NA | VW100906B21 | LCS05/LCSD04 | 10/9/06 |
| SH-01D/10-03-06 | -02 | ↓ | OW-214A | TB-512 | ↓ | ↓ | ↓ |
| SH-15S/10-03-06 | -03 | ↓ | ↓ | ↓ | VW101006B08 | LCS04/LCSD03 | 10/10/06 |
| TB-513/10-04-06 | -04 | 10/4/06 | NA | NA | VW100906B21 | LCS05/LCSD04 | 10/9/06 |
| SH-01R/10-04-06 | -05 | ↓ | OW-214A | TB-513 | VW101006B08 | LCS04/LCSD03 | 10/10/06 |
| SH-04S/10-04-06 | -06 | ↓ | ↓ | ↓ | VW101106B06 | LCS06/LCSD06 | 10/11/06 |
| SH-05S/10-04-06 | -07 | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ |
| SH-17R/10-04-06 | -08 | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ |
| SH-02GS/10-04-06 | -09 | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ |
| OW-214/10-04-06 | -10 | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ |
| TB-514/10-05-06 | -11 | 10/5/06 | NA | NA | VW100906B21 | LCS05/LCSD04 | 10/9/06 |
| SH-01S/10-05-06 | -12 | ↓ | OW-214A | TB-514 | VW101106B06 | LCS06/LCSD06 | 10/11/06 |
| SH-17D/10-05-06 | -13 | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ |
| WP-06/10-05-06 | -14 | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ |
| OW-214A/10-05-06 | -15 | ↓ | NA | ↓ | ↓ | ↓ | ↓ |
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Date 12/8/06

Data Reviewer [signature]

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase 1B-5 2006
8270C-SIM Data Review Checklist

ETR# 0610018

Lab: AWHL
Date Sampled: 10/3 - 10/5/06
Method of Analysis: 8270C-SIM

Lab Project #: BU 214
No. Samples: 10 + 1FD + 1EB
Matrix: groundwater

| | HT w: 7d other: 14d | Surrogate | LCS | MS | FD w: RPD ≤ 30% other: RPD≤50% | Tunes ICALs CCALs | IS' | RL & Quant. Correct | Other Issues |
|---|---|---|---|---|---|---|---|---|---|
| All Samples in Project | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | Accept 8 "5" |
| **Except:** | | | | | | | | | See pg 5+5A for Dilutions. |
| | | | | | | | | | |
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Comments: Sample ID on COC of SH-1D/10-03-06 changed to SH-01D/10-03-06, after discussion w/ client, since bottle labels all had SH-01D/10-03-06. All Samples had pH >9 - were all received intact at 4±2°C and there were no other issues which would have affected SVOCs with receipt.

Samples were all initially extracted + analyzed within HT. Two samples, SH-026S and OW-214A were reextracted on 11/01/06 (way outside HT) to help evaluate Naphthalene results in samples relative to method Blk - No action taken unless re-extraction data chosen for reporting of results.

MB SW100906B17 had high level Naphthalene contamination - see pages 2 → 3B. Re-extracts not accepted for reporting of results (see page 4).

Date 12/6/06

Data Reviewer [signature]



New Environmental Horizons, Inc.

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase 1B-5 2006
8270C-SIM Data Review Checklist

Lab: ANHL
Date Sampled: 10/3-10/5/06

Lab Project #: BU214
No. Samples: 10 + 1FD + 1EB

Method of Analysis: 8270C-SIM
Associated Blanks: MB: SW100906B17
EB: OW-214A/10-05-06

Matrix: GW

| Blank ID | Contaminant / Level | Matrix Related ? | Action Level / Action | Sample ID and result reported | Corrected Result |
|---|---|---|---|---|---|
| SW100906B17 | Naphthalene 220 ng/L | Y | 1100 ng/L | SH-026S 230 B ng/L | 230 U |
| | | | | OW-214A 13 B ng/L | 13U |
| | | | | Other ID Samples (DF=1 + DF>1) | No Action |
| | | | | Results >> Blank Action | Remove B |
| | 2-methylnaphthalene 25 ng/L | Y | 125 ng/L | SH-026S 87 B ng/L | 87 U |
| | | | | OW-214A 3.1 JB ng/L | 10 U |
| | | | | Other 10 Samples (DF=1 + DF>1) | No Action |
| | | | | Results >> Action Lvl | Remove B |

**8270C Action Summary: see Worksheet #24b**

| | | |
|---|---|---|
| HT Actions: | Waters | 7d <HT≤ 14 d; J det/ J NDs; HT >14 d, J det/R ND |
| | other Matrices | 14d <HT≤ 28 d, J det/ J NDs; HT >28 d, J det/R ND |
| | Analysis | 40d < Extract HT ≤ 60d, J det/ J NDs; Extract HT > 60d; J det/ R NDs |
| Surrogate Actions: | | 2 BN Recovery > Criteria, J det/Accept ND; 10% ≤ 2-All Surrogates < Criteria, J det/J NDs; Recovery < 10%, J det/R NDs. |
| Blank Actions: | | Surrogates outside criteria - Use Judgment if isolated or analysis related<br>Non-Matrix related Blank contamination, BB or EB contaminant in all samples associated with Blank<br>Matrix related Blank contamination: Result < RL, U result at RL; RL<Result<Blank Action, U result at level reported |
| MS Actions: | | %Rec<10%, J det/ R NDs; 10% ≤%Rec<Criteria, J det/ J NDs; %Rec >Criteria, J det/Accept NDs for Unspiked Sample |
| LCS Actions: | | %Rec<10%, J det/ R NDs; 10% ≤%Rec<Criteria, J det/ J NDs; %Rec >Criteria, J det/Accept NDs for all Batch by |
| FD Action: | | Both Conc. ≥ 2xRL, %RPD outside, J det; One result ND, other ≥2 x RL, J det/J NDs; Both Conc. < 2xRL; %RPD out, LCS OK, Accept data |
| ICAL or CCAL Actions: | | ICAL %RSD > Criteria, J/UJ compound in all samples; CCAL %D > criteria due to loss in instrument sensitivity, J/UJ compound in all associated samples; %D out due to enhanced sensitivity, J only associated detects. |
| IS Actions: | | IS Area < criteria, J/UJ all assocaited compounds |
| %Solids Action: | | 10% ≤ % soilds ≤ 30%; J det/R ND; %solids < 10% R det/ R NDs |

Date 12/6/06

Data Reviewer MJC.RM

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase 1B-5 2006
8270C-SIM Data Review Checklist

Lab: Anatek
Date Sampled: 10/3-10/5/06
Method of Analysis: 8270C-SIM

Lab Project #: BU214
No. Samples: 10+1FD+1EB
Matrix: gw

Blank Action Continued

| Blank ID | Contaminant / Level ng/L | Matrix Related ? | Action Level / Action | Sample ID and result reported | Corrected Result |
|---|---|---|---|---|---|
| BW100906B17 contd | Acenaphthylene 3.9J | Y | 19.5ng/L | SH-02S 7.1JB ng/L | 10U |
| | | | | SH-17R + SH-17D + OW-214A ND | ⇒ No Action |
| | | | | Other 8 Samples (DF=1 + DF>1) Results >> BAL | No Action Remove B |
| | Acenaphthene 8.0J | Y | 40ng/L | OW-214A 2.9JB ng/L | 10U |
| | | | | Other 11 Samples (DF=1 + DF>1) Results >> BAL | No Action Remove B |
| | Fluorene 7.5J | Y | 37.5ng/L | OW-214A 3.6J ng/L | 10U |
| | | | | Other 11 Samples (DF=1 + DF>1) Results >> BAL | No Action Remove B |
| | Phenanthrene 15 | Y | 75ng/L | OW-214A 15B ng/L | 15U |
| | | | | Other 11 Samples (DF=1 + DF>1) Results >> BAL | No Action Remove B |
| | Anthracene 4.0J | Y | 20ng/L | SH-17R 11 ng/L (B) | 11U |
| | | | | OW-214A 1.2JB ng/L | 10U |
| | | | | Other 10 Samples (DF=1 + DF>1) Results >> BAL | No Action Remove B |
| | Fluoranthene 4.5J | Y | 22.5ng/L | OW-214A 4.2JB ng/L | 10U |
| | | | | Other 11 Samples (DF=1 + DF>1) Results >> BAL | No Action Remove B |
| | Pyrene 1.9J | Y | 9.5ng/L | OW-214A 1.9JB ng/L | 10U |
| | | | | Other 11 Samples (DF=1 + DF>1) Results >> BAL | No Action Remove B |
| | Chrysene 1.1J | Y | 5.5ng/L | SH-17R 8.4JB | ~~10U~~ Now 12/6 8.4J |
| | | | | WP-04 5JB | 11U |
| | | | | All other Results ND or >BAL | No Action Remove B |
| | Bis(2-ethylhexyl)phthalate 140J | Y | 1400ng/L | SH-01D (DF=1) 250JB | 1000U |
| | | | | SH-15S (DF=1) 520JB | 1000U |
| | | | | SH-04S (DF=1) 180JB | 1000U |
| | | | | SH-05S (DF=1) 180JB | 1000U |

Continued on 3A

Date 12/6/06
Data Reviewer MJC, RPL

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase 1B-5 2006
8270C-SIM Data Review Checklist

Lab: AnalytL
Date Sampled: 10/3-10/5/06
Method of Analysis: 8270C-SIM

Lab Project #: BU214
No. Samples: 10 + 1FD + 1EB
Matrix: GW

Blank Action Continued

| Blank ID | Contaminant / Level | Matrix Related ? | Action Level / Action | Sample ID and result reported | Corrected Result |
|---|---|---|---|---|---|
| SW100906B17 cont'd | Bis(2-ethylhexyl)phthalate cont'd | Y | 1400 ng/L | SH-17R 260JB ng/L | 1000 U |
| | | | | SH-026S 290JB | 1000 U |
| | | | | OW-214 190JB (DF=1) | 1000 U |
| | | | | SH-01S 580JB (DF=1) | 1000 U |
| | | | | SH-17D 220JB | 1000 U |
| | | | | WP-06 140JB | 1100 U |
| | | | | OW-214A 130JB | 1000 U |
| | | | | SH-01R (DF=1) 6400B | No Action-Removed B |
| | | | | All other reported ND => | No Action |
| | Benzo(b)fluoranthene 1.1J | Y | 5.5 ng/L | SH-15S 5.9JB | 5.9J |
| | | | | SH-17R 3JB | 10U |
| | | | | SH-026S 6.6JB | 6.6J |
| | | | | SH-17D 3.5JB | 10U |
| | | | | WP-06 2.5JB | 11U |
| | | | | Other 7 Samples with ND or BAL Result | No Action-Removed B |
| | Benzo(k)fluoranthene 1.2J | Y | 6 ng/L | SH-15S 6.2JB | 6.2J |
| | | | | SH-17R 2.4JB | 10U |
| | | | | SH-026S 4.2JB | 10U |
| | | | | SH-17D 2.2JB | 10U |
| | | | | WP-06 2.4JB | ~~10U~~ 11U Note 12/6/06 |
| | | | | Other 7 Samples with ND or Results >BAL | No Action-Removed B |
| | Benzo(a)pyrene 1.3J | Y | 6.5 ng/L | SH-17R 2.5JB | 10U |
| | | | | SH-026RS 7.5JB | 7.5J |
| | | | | SH-17D 3.1JB | 10U |
| | | | | WP-06 3.7JB | 11U |
| | | | | Other 8 Samples with ND or Results > BAL | No Action-Removed B |

Cont'd on 3B

Date 12/6/06

Data Reviewer C.R.M.



New Environmental Horizons, Inc.

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase 1B-5 2006
8270C-SIM Data Review Checklist

Lab: ANHL
Date Sampled: 10/3-10/5/06
Method of Analysis: 8270C-SIM

Lab Project #: BU214
No. Samples: 10 + 1FD + 1EB
Matrix: GW

Blank Action Continued

| Blank ID | Contaminant / Level | Matrix Related ? | Action Level / Action | Sample ID and result reported | Corrected Result |
|---|---|---|---|---|---|
| SW100906B17 | Indeno(1,2,3-cd)pyrene 2.5J ng/L | Y | 12.5 ng/L | SH-15S 5.9JB ng/L | 10U |
| | | | | SH-17R 2.2JB | 10U |
| | | | | SH-026S 3JB | 10U |
| | | | | SH-17D 2.3JB | 10U |
| | | | | WP-06 2.1JB | 11U |
| | | | | All other results ND or > BAL | Remove B-No Action |
| | Dibenz(a,h)anthracene 2.2J | Y | 11 ng/L | SH-01D 7.8JB | 10U |
| | | | | SH-15S 2.1JB | 10U |
| | | | | SH-04S 5.8JB | 10U |
| | | | | SH-17R 1.1JB | 10U |
| | | | | SH-01S 7.5JB | 10U |
| | | | | SH-17D 1JB | 10U |
| | | | | All other data ND or > BAL | Remove B-No Action |
| | Benzo(g,h,i)perylene 2.9J | Y | 14.5 ng/L | SH-15S 7JB | 10U |
| | | | | SH-17R 3.1JB | 10U |
| | | | | SH-026S 3.9JB | 10U |
| | | | | SH-17D 3.4JB | 10U |
| | | | | WP-06 2.8JB | 11U |
| | | | | All other results ND or > BAL | Remove B-No Action |
| OW-214A/10-05-06 | None after Blank Action | | | No Action Required | |

Date 12/6/06
Data Reviewer MJC.RK



New Environmental Horizons, Inc.

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase 1B-5 2006
8270C-SIM Data Review Checklist

Lab: AMRL
Date Sampled: 10/3 - 10/5/06
Method of Analysis: 8270C-SIM

Lab Project #: BU214
No. Samples: 10 + 1FD + 1EB
Matrix: GW

Additional Notes:

The initial + re-extraction results for Smpls SH-026S and OW-214A compd. The re-extraction was done because the original Method Blk (SW100906B17) reported a relatively high lvl of Naphthalene (greater than lvl in the 2 smpls). ~~The re-ex~~ NM 12/6/06 Using the results of the initial extraction, the naphthalene in these 2 smpls was reported due to Blk Actn (see pg 2). The re-extract for SH-026S reported Naphthalene detected at a lvl which would not be reported due to Blk Actn; however, the Project Action Limit for Naphthalene was not exceeded by either the initial or the re-extraction results ⇒ Re-extraction did not add any value to the data - A comparison of the initial + re-extraction indicates why the initial results need to be included in the data.
In the database the Re-extracts (identified as Lab ID with "X" suffix) were eliminated + the Associated Method Blk (SW110106B09) was not evaluated herein.

Surrogates - 3 PAH surrogates used - All 3 Surrogates were recovered within criteria for all Smpls + QC ⇒ No Actn

LCS - SW100906L02 - %Rec of 19 Targets all OK ⇒ No Actn.
LCS assoc. w/ Re-extracts not required.

MS/MSD done on SH-04S/10-04-06 - %Rec + RPDs all OK except MSD 229% (low) for Naphthalene - MS OK. However, lvl of Naphthalene in unspiked smpl such that spike lvl of MS deemed to be too low for Naphthalene ⇒ reason for erroneous MSD %Rec. No Actn required.

FD = SH-05S + OW-214 - Both required Secondary analysis due to high lvl of targets ⇒ FD precision to be evaluated once 1 result/compd chosen for reporting (after Inst. QC evaluated).

Tunes: T4100701 (10ng ICAL), T4102302, T4102303, T4102601 - All Abundances were in criteria + all Smpls were analyzed within 12 hrs. of DFTPP Injection. Analysis of Re-extract on 11/4/06 NOT evaluated.

Date 12/6/06
Data Reviewer MJC. PK

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase 1B-5 2006
8270C-SIM Data Review Checklist

Lab: AWHL
Date Sampled: 10/3 - 10/5/06
Method of Analysis: 8270C-SIM

Lab Project #: B4214
No. Samples: 10 + 1FD + 1EB
Matrix: gw

Additional Notes:

ICAL 10/7/06 10 ug/L → 10,000 ug/L 7-level ICAL - %RSD < 30% + RFs > 0.05 ⇒ Valid ICAL - No Actn.

CCVs (no review done of CCV assoc. w/ re-extracts)
C4102302 & C4102303 - All %D ≤ ±25%
C4102601 (associated with all DF>1 analyses) - %D ≤ ±25% except: bis(2-ethylhexyl)phthalate %D = 45.5% (loss in sensitivity), 3° on PAHs flagged since lab used %D ≤ ±20% but have Region 1 DV criteria of %D ≤ ±25% used & those 3 PAHs had %D ≤ ±25%.

* Actn: DF>1 Bis(2-ethylhexyl)phthalate results estimated (UJ) with possible low bias - however, since all are ND & since DF=1 either ND or within calibration range, final accepted data will not have those DF>1 phthalate results accepted for reporting.

IS's - All 5 IS Areas & RTs were OK except:
Naphthalene-d8 low in ~~SH-01D~~ MM 12/6/06 SH-01D and SH-01R DF=1 runs - DF=500 runs reported Naphthalene-d8 within Area criteria.
Naphthalene-d8 associated with quantitation of only Naphthalene & 2-Methylnaphthalene in this work. The DF=1 analyses for both of these compounds were over-range in both surges ⇒ DF=1 data will not be chosen for reporting ⇒ No actn required for the low IS in these 2 samples runs.

Multiple Dilutions made - DF=1 & DF>1 results reported & the following data were accepted for reporting of results: Data not chosen eliminated from the data base - All Data eliminated were over-range (flagged "E" in DF=1) - All QA data comparable (RPD ≤ 20%)
- SH-01D - All DF=1 data accepted for reporting except 2-Methylnaphthalene, Acenaphthene, Acenaphthylene, Fluorene, Naphthalene & Phenanthrene chosen for reporting from the DF=500 analysis of this sample

Cont'd on SA

Date 12/6/06
Data Reviewer MJC. RK

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase 1B-5 2006
8270C-SIM Data Review Checklist

Lab: AnWL
Date Sampled: 10/3-10/5/06
Method of Analysis: 8270C-SIM

Lab Project #: BU 214
No. Samples: 10 + 1FD + 1EB
Matrix: gw

Additional Notes:

-SH-01R - All DF=1 data accepted except 2-methylnaphthalene, Acenaphthene, Acenaphthylene, Carbazole, Fluorene, Naphthalene + Phenanthrene chosen for reporting from the DF=500 analysis run 12/6/06 analysis of this sample.

-SH-04S - All DF=1 data accepted except 2-methylnaphthalene + naphthalene chosen for reporting from the DF=10 analysis.

-SH-05S - All DF=1 data accepted except 2-methylnaphthalene, naphthalene + phenanthrene chosen for reporting from the DF=10 analysis.

-OW-214 - All DF=1 data accepted except 2-methylnaphthalene, naphthalene + phenanthrene chosen for reporting from the DF=10 analysis

-SH-01S - All DF=1 accepted for reporting except naphthalene, 2-methylnaphthalene, acenaphthene, and phenanthrene chosen for reporting from DF=10 run.

FD precision evaluation - SH-05S + OW-214 shown on page 5B. FD precision was acceptable for all ~~detects~~ run 12/6/06 18 Detected SVOCs => No Action required.

All non-detects were ≤ PALs except for benzo(a)pyrene + dibenz(a,h)anthracene, as expected, due to method limitations.

8 results reported at lvl < RL (flagged "J" by lab) these data were accepted for reporting as estimated data with indeterminate bias (J) due to uncertainty in quantitation at lvl below the calibration range.

There were no issues raised in narrative not already addressed herein

Date 12/6/06

Data Reviewer MJC.RK

Field Duplicate Precision Evaluation Worksheet

Lab: AWHL
Date Sampled: 10/3 - 10/5/06
Method of Analysis: 8270C-SIM

Lab Project #: BU214
No. Samples 10 + 1FD + 1EB
Matrix: groundwater

| Compound | Sample Result SH-05S / 10-04-06 | Sample Result SH-05S / 10-04-06 | Duplicate Result OW-214 / 10-04-06 | Duplicate Result OW-214 / 10-04-06 | | RPD | Action |
|---|---|---|---|---|---|---|---|
| Sample QL (SQL) | | 10/100 ng/L | | 10/100 ng/L | | | |
| Naphthalene | 42000 | > 2 x SQL | 36000 | > 2 x SQL | | 15 | No Action |
| 2-Methylnaphthalene | 19000 | > 2 x SQL | 16000 | > 2 x SQL | | 17 | No Action |
| Pyrene | 2200 | > 2 x SQL | 1800 | > 2 x SQL | | 20 | No Action |
| Benz[a]anthracene | 320 | > 2 x SQL | 270 | > 2 x SQL | | 17 | No Action |
| Chrysene | 300 | > 2 x SQL | 250 | > 2 x SQL | | 18 | No Action |
| bis(2-Ethylhexyl)phthalate | 1000 U | SQL | 1000 U | SQL | | NA | No Action |
| Benzo[b]fluoranthene | 90 | > 2 x SQL | 76 | > 2 x SQL | | 17 | No Action |
| Benzo[k]fluoranthene | 71 | > 2 x SQL | 73 | > 2 x SQL | | 3 | No Action |
| Benzo[a]pyrene | 160 | > 2 x SQL | 150 | > 2 x SQL | | 6 | No Action |
| Indeno[1,2,3-cd]pyrene | 36 | > 2 x SQL | 41 | > 2 x SQL | | 13 | No Action |
| Dibenz[a,h]anthracene | 18 | > SQL but < 2X SQL | 19 | > SQL but < 2X SQL | | 5 | No Action |
| Benzo[g,h,i]perylene | 46 | > 2 x SQL | 54 | > 2 x SQL | | 16 | No Action |
| Acenaphthylene | 1800 | > 2 x SQL | 1600 | > 2 x SQL | | 12 | No Action |
| Acenaphthene | 6800 | > 2 x SQL | 6200 | > 2 x SQL | | 9 | No Action |
| Fluorene | 7200 | > 2 x SQL | 6500 | > 2 x SQL | | 10 | No Action |
| Phenanthrene | 16000 | > 2 x SQL | 15000 | > 2 x SQL | | 6 | No Action |
| Anthracene | 2000 | > 2 x SQL | 1900 | > 2 x SQL | | 5 | No Action |
| Carbazole | 740 | > 2 x SQL | 680 | > 2 x SQL | | 8 | No Action |
| Fluoranthene | 1800 | > 2 x SQL | 1600 | > 2 x SQL | | 12 | No Action |

Date 12/6/06

Data Reviewer MJC. RM

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase 1B-5 2006
8270C-SIM Data Review Checklist

| Sample ID 0610018 | | Date Sampled | Field Blank | Method Blank | LCS | Date Extracted | Date Analyzed | |
|---|---|---|---|---|---|---|---|---|
| SH-01D/10-03-06 | -02 | 10/3/06 | OW-214A | SU100606B37 | LCZ | 10/09/06 | 10/23/06 + 10/26 | DF=1 + DF=500 |
| SH-15S/10-03-06 | -03 | ↓ | ↑ | ↑ | ↑ | ↑ | ↓ | DF=1 |
| SH-01R/10-04-06 | -05 | 10/4/06 | | | | | + 10/26 | DF=1 + DF=500 |
| SH-04S/10-04-06 | -06 | | | | | | 10/23/06 + 10/26/06 | DF=1 + DF=10 |
| SH-05S/10-04-06 | -07 | | | | | | 10/23/06 + 10/26/06 | DF=1 + DF=10 |
| SH-17R/10-04-06 | -08 | | | | | | 10/24/06 | DF=1 |
| SH-02BS/10-04-06 | -09 | | | SU1101 RE | | RE 11/01 | ↓ + 11/04 RE | DF=1 + RE DF=1 |
| OW-214/10-04-06 | -10 | ↓ | | | | | 10/24 + 10/26/06 | DF=1 + DF=10 |
| SH-15/10-05-06 | -12 | 10/5/06 | | | | | ↓ | DF=1 + DF=10 |
| SH-17D/10-05-06 | -13 | | | | | | 10/24/06 | DF=1 |
| WP-06/10-05-06 | -14 | | ↓ | | | | ↓ | DF=1 |
| OW-214A/10-05-06 | -15 | ↓ | NA | SU1106 RE | ↓ | RE 11/01 | + 11/04 RE | DF=1 + RE DF=1 |
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Date 12/6/06

Data Reviewer MJC. RM

2032 004

*New Environmental Horizons, Inc.*

# DATA USABILITY ASSESSMENT

**TAL Metals Analysis by Methods 6020 & 7470A**
**EPA Region I Tier II – type review**
**Total Organic Carbon**
**EPA Region I Tier I – type review**

DEC 1 9 2006

| | |
|---|---|
| **Client:** | Sanborn, Head & Associates, Inc., Concord, New Hampshire |
| **Site:** | Blackburn & Union Privileges Superfund Site, Walpole, Massachusetts<br>Phase 1B-5 Remedial Investigation |
| **Laboratories:** | Alpha Woods Hole Labs (AWHL), Raynham, Massachusetts<br>Katahdin Analytical Services, Inc., Westbrook, Maine |
| **SDG:** | BU303 |
| **Lab ETR:** | 0610004 |
| **# Samples/Analyses:** | 5 surface waters for Total and Dissolved TAL Metals and Total Organic Carbon (TOC) |
| **Initial Reviewer:** | Susan D. Chapnick, New Environmental Horizons, Inc. |
| **Senior Reviewer:** | Dr. Nancy C. Rothman, New Environmental Horizons, Inc. |
| **Date Completed:** | December 12, 2006 |

An EPA Tier II-type Data Validation/Usability Checklist Review was performed on the TAL Metals data and an EPA Tier I-type review was performed on the remainder of the parameters included in this SDG with the following intentions: 1) to determine if the data were generated and reported in accordance with the *Phase 1B-5 Remedial Investigation Work Plan, Blackburn & Union Privileges Superfund Site, Walpole, MA*, prepared by Sanborn, Head & Associates, Inc., Rev. 02, September 21, 2006 (Phase IB-5 Work Plan); USEPA *Test Methods for Evaluating Solid Waste, Physical Chemical Methods, SW-846, Third Edition, Final Update, December 1996,* Methods 6020 (ICP-MS metals) and 7470A (CVAA mercury); EPA wet chemistry test method 415.1 (TOC); Region I, *EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses,* December 1996; *Region I Laboratory Data Validation Functional Guidelines for Evaluating Inorganics Analyses,* February 1989; and *Guidance for Data Useability in Risk Assessment* (Part A), Publication 9285.7-09A, USEPA 1992; 2) to determine if the data met the project data quality objectives for acceptable accuracy, precision, sensitivity; and technical usability; and 3) to update the project database with appropriate data quality qualifiers.

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The Data Review Checklist, attached, was completed during this assessment to document the review.

All results for Total and Dissolved TAL Metals and Total Organic Carbon (TOC), in the samples included in this SDG BU303 are usable for project objectives. One result was negated (U) due to blank action and several results have been qualified as estimated (J) due to quality control criteria exceedance(s). Data users should note the uncertainties in the qualified results as summarized below in Table 1. The qualified (U and J) and unqualified results are usable for project objectives.

All non-detected results in the surface water samples included in this SDG met either the project-required quantitation limits (PQLs), or, if those were exceeded, met all applicable project action limits (PALs) as listed in QAPP Worksheet #9b (Phase 1B-5 Work Plan, September 2006).

A low-level standard was not analyzed with the TAL Metals, as required by the original QAPP (2000). However, the laboratory included a low-level standard in the calibration curve for TAL Metals that was equivalent to the RL for each metal. This was considered acceptable to support the RL; therefore, no action was taken other than to note this deviation.

The laboratory was contacted to verify that the sample aliquots used for Dissolved TAL Metals analysis were lab-filtered within 24 hr of sample collection. Documentation was submitted by AWHL on 12/12/06.

All other quality control information associated with accuracy, precision, representativeness, and sensitivity for the Total and Dissolved TAL Metals and TOC reported met project criteria for the samples in this SDG with the exceptions in the following table.

**Table 1. Summary of Data Validation/Usability Actions**

| Sample ID | Analyte | Qualifier | Bias | Comment |
|---|---|---|---|---|
| OW-303 / 09-29-06 | Arsenic - Dissolved | J | I | MD imprecision + negative baseline drift |
| SW-102 / 09-29-06 & SW-105 / 09-29-06 | Arsenic – Dissolved | J | I | MD imprecision + negative baseline drift + uncertain < calibration range |
| SW-107 / 09-29-06 & SW-108 / 09-29-06 | Arsenic - Dissolved | J | I | MD imprecision |
| All samples | Arsenic - Total | J | I | MD imprecision |
| SW-107 / 09-29-06 | Magnesium - Dissolved | U | | Blank action |

*Qualifiers: U = Analyte is not detected; UJ = Non-detect is estimated; J = Result is estimated; R = Result is rejected and is unusable for project decisions.*

*Bias: L = Low; H = High; I = Indeterminate*
*Acronyms used in Table:*
*MD = Matrix Duplicate sample*
*< "Less Than"*

The qualified (U and J) and unqualified results presented in the validated database, submitted electronically to Sanborn, Head & Associates, Inc. are considered usable for project objectives.

| Smpl | Lab_ID | Anal_Date | Anal_Method | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OW-303 / 09-29-06 | 0610004-06 | 10/12/2006 | 6020A | 7429-90-5 D | Aluminum - Dissolved | 50 | µg/L | U | | 50 | µg/L | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | 10/12/2006 | 6020A | 7429-90-5 D | Aluminum - Dissolved | 50 | µg/L | U | | 50 | µg/L | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | 10/12/2006 | 6020A | 7429-90-5 D | Aluminum - Dissolved | 50 | µg/L | U | | 50 | µg/L | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/12/2006 | 6020A | 7429-90-5 D | Aluminum - Dissolved | 130 | µg/L | | | 50 | µg/L | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | 10/12/2006 | 6020A | 7429-90-5 D | Aluminum - Dissolved | 50 | µg/L | U | | 50 | µg/L | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | 10/12/2006 | 6020A | 7429-90-5 T | Aluminum - Total | 50 | µg/L | U | | 50 | µg/L | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | 10/12/2006 | 6020A | 7429-90-5 T | Aluminum - Total | 50 | µg/L | U | | 50 | µg/L | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | 10/12/2006 | 6020A | 7429-90-5 T | Aluminum - Total | 50 | µg/L | U | | 50 | µg/L | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/12/2006 | 6020A | 7429-90-5 T | Aluminum - Total | 300 | µg/L | | | 50 | µg/L | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | 10/12/2006 | 6020A | 7429-90-5 T | Aluminum - Total | 50 | µg/L | U | | 50 | µg/L | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | 10/12/2006 | 6020A | 7440-36-0 D | Antimony - Dissolved | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | 10/12/2006 | 6020A | 7440-36-0 D | Antimony - Dissolved | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | 10/12/2006 | 6020A | 7440-36-0 D | Antimony - Dissolved | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/12/2006 | 6020A | 7440-36-0 D | Antimony - Dissolved | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | 10/12/2006 | 6020A | 7440-36-0 D | Antimony - Dissolved | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | 10/12/2006 | 6020A | 7440-36-0 T | Antimony - Total | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | 10/12/2006 | 6020A | 7440-36-0 T | Antimony - Total | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | 10/12/2006 | 6020A | 7440-36-0 T | Antimony - Total | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/12/2006 | 6020A | 7440-36-0 T | Antimony - Total | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | 10/12/2006 | 6020A | 7440-36-0 T | Antimony - Total | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | 10/18/2006 | 6020A | 7440-38-2 D | Arsenic - Dissolved | 0.52 | µg/L | J | I | 0.092 | µg/L | 1 | MD imprecision + negative baseline drift |
| SW-102 / 09-29-06 | 0610004-02 | 10/18/2006 | 6020A | 7440-38-2 D | Arsenic - Dissolved | 0.43 | µg/L | J | I | 0.092 | µg/L | 1 | MD imprecision + negative baseline drift + uncertain < calibration range |
| SW-105 / 09-29-06 | 0610004-03 | 10/18/2006 | 6020A | 7440-38-2 D | Arsenic - Dissolved | 0.46 | µg/L | J | I | 0.092 | µg/L | 1 | MD imprecision + negative baseline drift + uncertain < calibration range |
| SW-107 / 09-29-06 | 0610004-04 | 10/18/2006 | 6020A | 7440-38-2 D | Arsenic - Dissolved | 7.3 | µg/L | J | I | 0.092 | µg/L | 1 | MD imprecision |
| SW-108 / 09-29-06 | 0610004-05 | 10/18/2006 | 6020A | 7440-38-2 D | Arsenic - Dissolved | 1 | µg/L | J | I | 0.092 | µg/L | 1 | MD imprecision |
| OW-303 / 09-29-06 | 0610004-06 | 10/18/2006 | 6020A | 7440-38-2 T | Arsenic - Total | 0.61 | µg/L | J | I | 0.092 | µg/L | 1 | MD imprecision |
| SW-102 / 09-29-06 | 0610004-02 | 10/18/2006 | 6020A | 7440-38-2 T | Arsenic - Total | 0.69 | µg/L | J | I | 0.092 | µg/L | 1 | MD imprecision |
| SW-105 / 09-29-06 | 0610004-03 | 10/18/2006 | 6020A | 7440-38-2 T | Arsenic - Total | 0.62 | µg/L | J | I | 0.092 | µg/L | 1 | MD imprecision |
| SW-107 / 09-29-06 | 0610004-04 | 10/18/2006 | 6020A | 7440-38-2 T | Arsenic - Total | 7.8 | µg/L | J | I | 0.092 | µg/L | 1 | MD imprecision |
| SW-108 / 09-29-06 | 0610004-05 | 10/18/2006 | 6020A | 7440-38-2 T | Arsenic - Total | 1.2 | µg/L | J | I | 0.092 | µg/L | 1 | MD imprecision |
| OW-303 / 09-29-06 | 0610004-06 | 10/12/2006 | 6020A | 7440-39-3 D | Barium - Dissolved | 17 | µg/L | | | 0.5 | µg/L | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | 10/12/2006 | 6020A | 7440-39-3 D | Barium - Dissolved | 17 | µg/L | | | 0.5 | µg/L | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | 10/12/2006 | 6020A | 7440-39-3 D | Barium - Dissolved | 17 | µg/L | | | 0.5 | µg/L | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/12/2006 | 6020A | 7440-39-3 D | Barium - Dissolved | 11 | µg/L | | | 0.5 | µg/L | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | 10/12/2006 | 6020A | 7440-39-3 D | Barium - Dissolved | 17 | µg/L | | | 0.5 | µg/L | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | 10/12/2006 | 6020A | 7440-39-3 T | Barium - Total | 17 | µg/L | | | 0.5 | µg/L | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | 10/12/2006 | 6020A | 7440-39-3 T | Barium - Total | 17 | µg/L | | | 0.5 | µg/L | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | 10/12/2006 | 6020A | 7440-39-3 T | Barium - Total | 17 | µg/L | | | 0.5 | µg/L | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/12/2006 | 6020A | 7440-39-3 T | Barium - Total | 14 | µg/L | | | 0.5 | µg/L | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | 10/12/2006 | 6020A | 7440-39-3 T | Barium - Total | 18 | µg/L | | | 0.5 | µg/L | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | 10/12/2006 | 6020A | 7440-41-7 D | Beryllium - Dissolved | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | 10/12/2006 | 6020A | 7440-41-7 D | Beryllium - Dissolved | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | 10/12/2006 | 6020A | 7440-41-7 D | Beryllium - Dissolved | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/12/2006 | 6020A | 7440-41-7 D | Beryllium - Dissolved | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | 10/12/2006 | 6020A | 7440-41-7 D | Beryllium - Dissolved | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low; H = High; I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Anal_Date | Anal_Method | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OW-303 / 09-29-06 | 0610004-06 | 10/12/2006 | 6020A | 7440-41-7 T | Beryllium - Total | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | 10/12/2006 | 6020A | 7440-41-7 T | Beryllium - Total | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | 10/12/2006 | 6020A | 7440-41-7 T | Beryllium - Total | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/12/2006 | 6020A | 7440-41-7 T | Beryllium - Total | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | 10/12/2006 | 6020A | 7440-41-7 T | Beryllium - Total | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | 10/12/2006 | 6020A | 7440-43-9 D | Cadmium - Dissolved | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | 10/12/2006 | 6020A | 7440-43-9 D | Cadmium - Dissolved | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | 10/12/2006 | 6020A | 7440-43-9 D | Cadmium - Dissolved | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/12/2006 | 6020A | 7440-43-9 D | Cadmium - Dissolved | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | 10/12/2006 | 6020A | 7440-43-9 D | Cadmium - Dissolved | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | 10/12/2006 | 6020A | 7440-43-9 T | Cadmium - Total | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | 10/12/2006 | 6020A | 7440-43-9 T | Cadmium - Total | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | 10/12/2006 | 6020A | 7440-43-9 T | Cadmium - Total | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/12/2006 | 6020A | 7440-43-9 T | Cadmium - Total | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | 10/12/2006 | 6020A | 7440-43-9 T | Cadmium - Total | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | 10/12/2006 | 6020A | 7440-70-2 D | Calcium - Dissolved | 12000 | µg/L | | | 50 | µg/L | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | 10/12/2006 | 6020A | 7440-70-2 D | Calcium - Dissolved | 12000 | µg/L | | | 50 | µg/L | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | 10/12/2006 | 6020A | 7440-70-2 D | Calcium - Dissolved | 12000 | µg/L | | | 50 | µg/L | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/12/2006 | 6020A | 7440-70-2 D | Calcium - Dissolved | 7800 | µg/L | | | 50 | µg/L | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | 10/12/2006 | 6020A | 7440-70-2 D | Calcium - Dissolved | 12000 | µg/L | | | 50 | µg/L | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | 10/12/2006 | 6020A | 7440-70-2 T | Calcium - Total | 12000 | µg/L | | | 50 | µg/L | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | 10/12/2006 | 6020A | 7440-70-2 T | Calcium - Total | 12000 | µg/L | | | 50 | µg/L | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | 10/12/2006 | 6020A | 7440-70-2 T | Calcium - Total | 12000 | µg/L | | | 50 | µg/L | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/12/2006 | 6020A | 7440-70-2 T | Calcium - Total | 8300 | µg/L | | | 50 | µg/L | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | 10/12/2006 | 6020A | 7440-70-2 T | Calcium - Total | 12000 | µg/L | | | 50 | µg/L | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | 10/12/2006 | 6020A | 7440-47-3 D | Chromium - Dissolved | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | 10/12/2006 | 6020A | 7440-47-3 D | Chromium - Dissolved | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | 10/12/2006 | 6020A | 7440-47-3 D | Chromium - Dissolved | 0.52 | µg/L | | | 0.5 | µg/L | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/12/2006 | 6020A | 7440-47-3 D | Chromium - Dissolved | 1.7 | µg/L | | | 0.5 | µg/L | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | 10/12/2006 | 6020A | 7440-47-3 D | Chromium - Dissolved | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | 10/12/2006 | 6020A | 7440-47-3 T | Chromium - Total | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | 10/12/2006 | 6020A | 7440-47-3 T | Chromium - Total | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | 10/12/2006 | 6020A | 7440-47-3 T | Chromium - Total | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/12/2006 | 6020A | 7440-47-3 T | Chromium - Total | 2.7 | µg/L | | | 0.5 | µg/L | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | 10/12/2006 | 6020A | 7440-47-3 T | Chromium - Total | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | 10/12/2006 | 6020A | 7440-48-4 D | Cobalt - Dissolved | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | 10/12/2006 | 6020A | 7440-48-4 D | Cobalt - Dissolved | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | 10/12/2006 | 6020A | 7440-48-4 D | Cobalt - Dissolved | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/12/2006 | 6020A | 7440-48-4 D | Cobalt - Dissolved | 0.29 | µg/L | | | 0.2 | µg/L | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | 10/12/2006 | 6020A | 7440-48-4 D | Cobalt - Dissolved | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | 10/12/2006 | 6020A | 7440-48-4 T | Cobalt - Total | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | 10/12/2006 | 6020A | 7440-48-4 T | Cobalt - Total | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | 10/12/2006 | 6020A | 7440-48-4 T | Cobalt - Total | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/12/2006 | 6020A | 7440-48-4 T | Cobalt - Total | 0.41 | µg/L | | | 0.2 | µg/L | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | 10/12/2006 | 6020A | 7440-48-4 T | Cobalt - Total | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | 10/12/2006 | 6020A | 7440-50-8 D | Copper - Dissolved | 2.2 | µg/L | | | 1 | µg/L | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | 10/12/2006 | 6020A | 7440-50-8 D | Copper - Dissolved | 1.4 | µg/L | | | 1 | µg/L | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low; H = High; I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Anal_Date | Anal_Method | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SW-105 / 09-29-06 | 0610004-03 | 10/12/2006 | 6020A | 7440-50-8 D | Copper - Dissolved | 1.6 | µg/L | | | 1 | µg/L | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/12/2006 | 6020A | 7440-50-8 D | Copper - Dissolved | 6.4 | µg/L | | | 1 | µg/L | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | 10/12/2006 | 6020A | 7440-50-8 D | Copper - Dissolved | 1.7 | µg/L | | | 1 | µg/L | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | 10/12/2006 | 6020A | 7440-50-8 T | Copper - Total | 1.6 | µg/L | | | 1 | µg/L | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | 10/12/2006 | 6020A | 7440-50-8 T | Copper - Total | 1.5 | µg/L | | | 1 | µg/L | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | 10/12/2006 | 6020A | 7440-50-8 T | Copper - Total | 1.6 | µg/L | | | 1 | µg/L | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/12/2006 | 6020A | 7440-50-8 T | Copper - Total | 9.8 | µg/L | | | 1 | µg/L | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | 10/12/2006 | 6020A | 7440-50-8 T | Copper - Total | 1.6 | µg/L | | | 1 | µg/L | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | 10/12/2006 | 6020A | 7439-89-6 D | Iron - Dissolved | 300 | µg/L | | | 50 | µg/L | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | 10/12/2006 | 6020A | 7439-89-6 D | Iron - Dissolved | 310 | µg/L | | | 50 | µg/L | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | 10/12/2006 | 6020A | 7439-89-6 D | Iron - Dissolved | 320 | µg/L | | | 50 | µg/L | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/12/2006 | 6020A | 7439-89-6 D | Iron - Dissolved | 290 | µg/L | | | 50 | µg/L | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | 10/12/2006 | 6020A | 7439-89-6 D | Iron - Dissolved | 290 | µg/L | | | 50 | µg/L | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | 10/12/2006 | 6020A | 7439-89-6 T | Iron - Total | 520 | µg/L | | | 50 | µg/L | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | 10/12/2006 | 6020A | 7439-89-6 T | Iron - Total | 530 | µg/L | | | 50 | µg/L | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | 10/12/2006 | 6020A | 7439-89-6 T | Iron - Total | 550 | µg/L | | | 50 | µg/L | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/12/2006 | 6020A | 7439-89-6 T | Iron - Total | 550 | µg/L | | | 50 | µg/L | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | 10/12/2006 | 6020A | 7439-89-6 T | Iron - Total | 520 | µg/L | | | 50 | µg/L | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | 10/12/2006 | 6020A | 7439-92-1 D | Lead - Dissolved | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | 10/12/2006 | 6020A | 7439-92-1 D | Lead - Dissolved | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | 10/12/2006 | 6020A | 7439-92-1 D | Lead - Dissolved | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/12/2006 | 6020A | 7439-92-1 D | Lead - Dissolved | 32 | µg/L | | | 0.5 | µg/L | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | 10/12/2006 | 6020A | 7439-92-1 D | Lead - Dissolved | 0.5 | µg/L | U | | 0.5 | µg/L | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | 10/18/2006 | 6020A | 7439-92-1 T | Lead - Total | 0.59 | µg/L | | | 0.5 | µg/L | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | 10/18/2006 | 6020A | 7439-92-1 T | Lead - Total | 0.61 | µg/L | | | 0.5 | µg/L | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | 10/18/2006 | 6020A | 7439-92-1 T | Lead - Total | 0.54 | µg/L | | | 0.5 | µg/L | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/18/2006 | 6020A | 7439-92-1 T | Lead - Total | 45 | µg/L | | | 0.5 | µg/L | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | 10/18/2006 | 6020A | 7439-92-1 T | Lead - Total | 0.52 | µg/L | | | 0.5 | µg/L | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | 10/12/2006 | 6020A | 7439-95-4 D | Magnesium - Dissolved | 3000 | µg/L | | | 10 | µg/L | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | 10/12/2006 | 6020A | 7439-95-4 D | Magnesium - Dissolved | 2900 | µg/L | | | 10 | µg/L | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | 10/12/2006 | 6020A | 7439-95-4 D | Magnesium - Dissolved | 3100 | µg/L | | | 10 | µg/L | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/12/2006 | 6020A | 7439-95-4 D | Magnesium - Dissolved | 970 | µg/L | U | | 10 | µg/L | 1 | Blank action |
| SW-108 / 09-29-06 | 0610004-05 | 10/12/2006 | 6020A | 7439-95-4 D | Magnesium - Dissolved | 3000 | µg/L | | | 10 | µg/L | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | 10/12/2006 | 6020A | 7439-95-4 T | Magnesium - Total | 3100 | µg/L | | | 10 | µg/L | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | 10/12/2006 | 6020A | 7439-95-4 T | Magnesium - Total | 3000 | µg/L | | | 10 | µg/L | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | 10/12/2006 | 6020A | 7439-95-4 T | Magnesium - Total | 3100 | µg/L | | | 10 | µg/L | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/12/2006 | 6020A | 7439-95-4 T | Magnesium - Total | 1100 | µg/L | | | 10 | µg/L | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | 10/12/2006 | 6020A | 7439-95-4 T | Magnesium - Total | 3300 | µg/L | | | 10 | µg/L | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | 10/12/2006 | 6020A | 7439-96-5 D | Manganese - Dissolved | 50 | µg/L | | | 5 | µg/L | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | 10/12/2006 | 6020A | 7439-96-5 D | Manganese - Dissolved | 55 | µg/L | | | 5 | µg/L | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | 10/12/2006 | 6020A | 7439-96-5 D | Manganese - Dissolved | 46 | µg/L | | | 5 | µg/L | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/12/2006 | 6020A | 7439-96-5 D | Manganese - Dissolved | 56 | µg/L | | | 5 | µg/L | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | 10/12/2006 | 6020A | 7439-96-5 D | Manganese - Dissolved | 39 | µg/L | | | 5 | µg/L | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | 10/12/2006 | 6020A | 7439-96-5 T | Manganese - Total | 97 | µg/L | | | 5 | µg/L | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | 10/12/2006 | 6020A | 7439-96-5 T | Manganese - Total | 110 | µg/L | | | 5 | µg/L | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | 10/12/2006 | 6020A | 7439-96-5 T | Manganese - Total | 100 | µg/L | | | 5 | µg/L | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/12/2006 | 6020A | 7439-96-5 T | Manganese - Total | 69 | µg/L | | | 5 | µg/L | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low; H = High; I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Anal_Date | Anal_Method | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SW-108 / 09-29-06 | 0610004-05 | 10/12/2006 | 6020A | 7439-96-5 T | Manganese - Total | 85 | µg/L | | | 5 | µg/L | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | 10/10/2006 | 7470A | 7439-97-6 D | Mercury - Dissolved | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | 10/10/2006 | 7470A | 7439-97-6 D | Mercury - Dissolved | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | 10/10/2006 | 7470A | 7439-97-6 D | Mercury - Dissolved | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/10/2006 | 7470A | 7439-97-6 D | Mercury - Dissolved | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | 10/10/2006 | 7470A | 7439-97-6 D | Mercury - Dissolved | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | 10/10/2006 | 7470A | 7439-97-6 T | Mercury - Total | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | 10/10/2006 | 7470A | 7439-97-6 T | Mercury - Total | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | 10/10/2006 | 7470A | 7439-97-6 T | Mercury - Total | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/10/2006 | 7470A | 7439-97-6 T | Mercury - Total | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | 10/10/2006 | 7470A | 7439-97-6 T | Mercury - Total | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | 10/12/2006 | 6020A | 7440-02-0 D | Nickel - Dissolved | 1.1 | µg/L | | | 0.5 | µg/L | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | 10/12/2006 | 6020A | 7440-02-0 D | Nickel - Dissolved | 1.1 | µg/L | | | 0.5 | µg/L | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | 10/12/2006 | 6020A | 7440-02-0 D | Nickel - Dissolved | 1.2 | µg/L | | | 0.5 | µg/L | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/12/2006 | 6020A | 7440-02-0 D | Nickel - Dissolved | 3.8 | µg/L | | | 0.5 | µg/L | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | 10/12/2006 | 6020A | 7440-02-0 D | Nickel - Dissolved | 1.1 | µg/L | | | 0.5 | µg/L | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | 10/12/2006 | 6020A | 7440-02-0 T | Nickel - Total | 1 | µg/L | | | 0.5 | µg/L | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | 10/12/2006 | 6020A | 7440-02-0 T | Nickel - Total | 1.1 | µg/L | | | 0.5 | µg/L | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | 10/12/2006 | 6020A | 7440-02-0 T | Nickel - Total | 1.1 | µg/L | | | 0.5 | µg/L | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/12/2006 | 6020A | 7440-02-0 T | Nickel - Total | 4.5 | µg/L | | | 0.5 | µg/L | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | 10/12/2006 | 6020A | 7440-02-0 T | Nickel - Total | 1.2 | µg/L | | | 0.5 | µg/L | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | 10/12/2006 | 6020A | 7440-09-7 D | Potassium - Dissolved | 2100 | µg/L | | | 100 | µg/L | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | 10/12/2006 | 6020A | 7440-09-7 D | Potassium - Dissolved | 2100 | µg/L | | | 100 | µg/L | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | 10/12/2006 | 6020A | 7440-09-7 D | Potassium - Dissolved | 2200 | µg/L | | | 100 | µg/L | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/12/2006 | 6020A | 7440-09-7 D | Potassium - Dissolved | 1600 | µg/L | | | 100 | µg/L | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | 10/12/2006 | 6020A | 7440-09-7 D | Potassium - Dissolved | 2100 | µg/L | | | 100 | µg/L | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | 10/12/2006 | 6020A | 7440-09-7 T | Potassium - Total | 2200 | µg/L | | | 100 | µg/L | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | 10/12/2006 | 6020A | 7440-09-7 T | Potassium - Total | 2300 | µg/L | | | 100 | µg/L | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | 10/12/2006 | 6020A | 7440-09-7 T | Potassium - Total | 2300 | µg/L | | | 100 | µg/L | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/12/2006 | 6020A | 7440-09-7 T | Potassium - Total | 1700 | µg/L | | | 100 | µg/L | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | 10/12/2006 | 6020A | 7440-09-7 T | Potassium - Total | 2200 | µg/L | | | 100 | µg/L | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | 10/12/2006 | 6020A | 7782-49-2 D | Selenium - Dissolved | 1 | µg/L | U | | 1 | µg/L | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | 10/12/2006 | 6020A | 7782-49-2 D | Selenium - Dissolved | 1 | µg/L | U | | 1 | µg/L | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | 10/12/2006 | 6020A | 7782-49-2 D | Selenium - Dissolved | 1 | µg/L | U | | 1 | µg/L | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/12/2006 | 6020A | 7782-49-2 D | Selenium - Dissolved | 1 | µg/L | U | | 1 | µg/L | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | 10/12/2006 | 6020A | 7782-49-2 D | Selenium - Dissolved | 1 | µg/L | U | | 1 | µg/L | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | 10/12/2006 | 6020A | 7782-49-2 T | Selenium - Total | 1 | µg/L | U | | 1 | µg/L | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | 10/12/2006 | 6020A | 7782-49-2 T | Selenium - Total | 1 | µg/L | U | | 1 | µg/L | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | 10/12/2006 | 6020A | 7782-49-2 T | Selenium - Total | 1 | µg/L | U | | 1 | µg/L | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/12/2006 | 6020A | 7782-49-2 T | Selenium - Total | 1.1 | µg/L | | | 1 | µg/L | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | 10/12/2006 | 6020A | 7782-49-2 T | Selenium - Total | 1 | µg/L | U | | 1 | µg/L | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | 10/18/2006 | 6020A | 7440-22-4 D | Silver - Dissolved | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | 10/18/2006 | 6020A | 7440-22-4 D | Silver - Dissolved | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | 10/18/2006 | 6020A | 7440-22-4 D | Silver - Dissolved | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/18/2006 | 6020A | 7440-22-4 D | Silver - Dissolved | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | 10/18/2006 | 6020A | 7440-22-4 D | Silver - Dissolved | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | 10/12/2006 | 6020A | 7440-22-4 T | Silver - Total | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low; H = High; I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Anal_Date | Anal_Method | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SW-102 / 09-29-06 | 0610004-02 | 10/12/2006 | 6020A | 7440-22-4 T | Silver - Total | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | 10/12/2006 | 6020A | 7440-22-4 T | Silver - Total | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/12/2006 | 6020A | 7440-22-4 T | Silver - Total | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | 10/12/2006 | 6020A | 7440-22-4 T | Silver - Total | 0.2 | µg/L | U | | 0.2 | µg/L | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | 10/12/2006 | 6020A | 7440-23-5 D | Sodium - Dissolved | 34000 | µg/L | | | 50 | µg/L | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | 10/12/2006 | 6020A | 7440-23-5 D | Sodium - Dissolved | 33000 | µg/L | | | 50 | µg/L | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | 10/12/2006 | 6020A | 7440-23-5 D | Sodium - Dissolved | 36000 | µg/L | | | 50 | µg/L | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/12/2006 | 6020A | 7440-23-5 D | Sodium - Dissolved | 220000 | µg/L | | | 500 | µg/L | 10 | |
| SW-108 / 09-29-06 | 0610004-05 | 10/12/2006 | 6020A | 7440-23-5 D | Sodium - Dissolved | 36000 | µg/L | | | 50 | µg/L | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | 10/12/2006 | 6020A | 7440-23-5 T | Sodium - Total | 36000 | µg/L | | | 50 | µg/L | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | 10/12/2006 | 6020A | 7440-23-5 T | Sodium - Total | 35000 | µg/L | | | 50 | µg/L | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | 10/12/2006 | 6020A | 7440-23-5 T | Sodium - Total | 35000 | µg/L | | | 50 | µg/L | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/12/2006 | 6020A | 7440-23-5 T | Sodium - Total | 250000 | µg/L | | | 500 | µg/L | 10 | |
| SW-108 / 09-29-06 | 0610004-05 | 10/12/2006 | 6020A | 7440-23-5 T | Sodium - Total | 38000 | µg/L | | | 50 | µg/L | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | 10/12/2006 | 6020A | 7440-28-0 D | Thallium - Dissolved | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | 10/12/2006 | 6020A | 7440-28-0 D | Thallium - Dissolved | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | 10/12/2006 | 6020A | 7440-28-0 D | Thallium - Dissolved | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/12/2006 | 6020A | 7440-28-0 D | Thallium - Dissolved | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | 10/12/2006 | 6020A | 7440-28-0 D | Thallium - Dissolved | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | 10/12/2006 | 6020A | 7440-28-0 T | Thallium - Total | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | 10/12/2006 | 6020A | 7440-28-0 T | Thallium - Total | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | 10/12/2006 | 6020A | 7440-28-0 T | Thallium - Total | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/12/2006 | 6020A | 7440-28-0 T | Thallium - Total | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | 10/12/2006 | 6020A | 7440-28-0 T | Thallium - Total | 0.1 | µg/L | U | | 0.1 | µg/L | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | 10/18/2006 | 6020A | 7440-62-2 D | Vanadium - Dissolved | 1 | µg/L | U | | 1 | µg/L | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | 10/18/2006 | 6020A | 7440-62-2 D | Vanadium - Dissolved | 1.3 | µg/L | | | 1 | µg/L | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | 10/18/2006 | 6020A | 7440-62-2 D | Vanadium - Dissolved | 1.2 | µg/L | | | 1 | µg/L | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/18/2006 | 6020A | 7440-62-2 D | Vanadium - Dissolved | 12 | µg/L | | | 1 | µg/L | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | 10/18/2006 | 6020A | 7440-62-2 D | Vanadium - Dissolved | 2.4 | µg/L | | | 1 | µg/L | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | 10/18/2006 | 6020A | 7440-62-2 T | Vanadium - Total | 1 | µg/L | U | | 1 | µg/L | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | 10/18/2006 | 6020A | 7440-62-2 T | Vanadium - Total | 1.8 | µg/L | | | 1 | µg/L | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | 10/18/2006 | 6020A | 7440-62-2 T | Vanadium - Total | 1.7 | µg/L | | | 1 | µg/L | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/18/2006 | 6020A | 7440-62-2 T | Vanadium - Total | 13 | µg/L | | | 1 | µg/L | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | 10/18/2006 | 6020A | 7440-62-2 T | Vanadium - Total | 2.6 | µg/L | | | 1 | µg/L | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | 10/12/2006 | 6020A | 7440-66-6 D | Zinc - Dissolved | 5 | µg/L | U | | 5 | µg/L | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | 10/12/2006 | 6020A | 7440-66-6 D | Zinc - Dissolved | 5 | µg/L | U | | 5 | µg/L | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | 10/12/2006 | 6020A | 7440-66-6 D | Zinc - Dissolved | 5 | µg/L | U | | 5 | µg/L | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/12/2006 | 6020A | 7440-66-6 D | Zinc - Dissolved | 7.1 | µg/L | | | 5 | µg/L | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | 10/12/2006 | 6020A | 7440-66-6 D | Zinc - Dissolved | 5 | µg/L | U | | 5 | µg/L | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | 10/12/2006 | 6020A | 7440-66-6 T | Zinc - Total | 5 | µg/L | U | | 5 | µg/L | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | 10/12/2006 | 6020A | 7440-66-6 T | Zinc - Total | 5 | µg/L | U | | 5 | µg/L | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | 10/12/2006 | 6020A | 7440-66-6 T | Zinc - Total | 5 | µg/L | U | | 5 | µg/L | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/12/2006 | 6020A | 7440-66-6 T | Zinc - Total | 17 | µg/L | | | 5 | µg/L | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | 10/12/2006 | 6020A | 7440-66-6 T | Zinc - Total | 5 | µg/L | U | | 5 | µg/L | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low; H = High; I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Anal_Date | Anal_Method | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SW-102 / 09-29-06 | WW5247-1 | 10/5/2006 | 415.1 | TOC | Total Organic Carbon | 5.5 | mg/L | | | 1 | mg/L | | |
| SW-105 / 09-29-06 | WW5247-2 | 10/5/2006 | 415.1 | TOC | Total Organic Carbon | 5.5 | mg/L | | | 1 | mg/L | | |
| SW-107 / 09-29-06 | WW5247-3 | 10/5/2006 | 415.1 | TOC | Total Organic Carbon | 14 | mg/L | | | 1 | mg/L | | |
| SW-108 / 09-29-06 | WW5247-4 | 10/5/2006 | 415.1 | TOC | Total Organic Carbon | 5.7 | mg/L | | | 1 | mg/L | | |
| OW-303 / 09-29-06 | WW5247-5 | 10/5/2006 | 415.1 | TOC | Total Organic Carbon | 5.7 | mg/L | | | 1 | mg/L | | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low; H = High; I = Indeterminate. See Data Usability Report for details.

Metals + TOC

Data Usability Checklist Review [EPA Region I Tier II-type] – ~~Inorganics & Gases~~
Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase 1B-5

## I. Data Package Completeness

***Phase 1B-5 Work Plan Remedial Investigation Work Plan,* Blackburn & Union Privileges Superfund Site, Walpole Massachusetts, Rev 02, September 21, 2006**

Laboratories: *Alpha Woods Hole Labs (AWHL), Raynham, MA* SDG: BU303 Surface Waters
*Katahdin Lab, Groundwater Analytical Lab, Microseeps*

AWHL ETR #: 0610004

Review the data package for completeness based on EPA Region I and Site QAPP requirements.

- Were all required reporting forms and associated raw data for field samples and QC included in the data package? **Yes / No.**
- Were all sample analyses requested on the Chain-of-Custody performed by the laboratory? **Yes / No.**

If "No" to any of the above questions, document missing information and resubmittal requests in the comment section below.

Tabulate the number and types of samples in this SDG and the QAPP-required data validation level.

| Number and Type of Samples<br>Surface Water | Parameter(s) | Data Validation Level (EPA Region I Tier) |
|---|---|---|
| 5 Total + Dissolved | *TAL Metals (Methods 6020 + 7470A)* | Tier II-type |
| | ~~*Alkalinity (Method 310.1)*~~ | |
| | ~~*Chloride, Nitrate, Sulfate (Method 300.0)*~~ | |
| | ~~*Sulfide (Method 376.2)*~~ | |
| | ~~*Total Dissolved Solids (TDS Method 160.1)*~~ | |
| | ~~*Total Kjeldahl Nitrogen (TKN Method 351.2)*~~ | |
| 5 Surface water samples. | *Total Organic Carbon (TOC Method 415.1)* | Tier I-type |
| | ~~*Gases: Ethane, Ethene, Methane (Microseeps Method AM20GAX)*~~ | |
| | ~~*Ferrous Iron ($Fe^{+2}$ Method 7199 mod)*~~ | |

Comments:
*Note: Site QAPP DQOs do not require a formal data validation report for natural attenuation parameters in groundwater (alkalinity, nitrate, chloride, sulfate, TKN), sulfide, TDS, TOC, gases, or ferrous iron [see QAPP Worksheet #29b and #29c]. These parameters are reviewed herein, if present in this SDG, based on an enhanced Tier I-type review, for completeness, holding time and preservation QC, LCS, MD, FD, and blank contamination, as applicable [see QAPP Worksheets #11b, #23a, #23b, and 24a for applicable QC measures].*
~~***Density & Viscosity reported in this SDG but not required for validation based on project DQOs.***~~ DQC

Data Reviewer: Susan D. Chapnick Date: 12/12/06
Susan D. Chapnick, Principal Scientist
New Environmental Horizons, Inc.

## II. Review of QC Summary (CLP-like) Forms and Additional QA/QC Parameters

### A. Holding Times/Preservation Criteria *[QAPP Worksheet #11b and #12b]*

- Were holding time criteria met for all samples/analyses as indicated below? **Yes / No.**
- Were preservation criteria met for all samples/analyses as indicated below? **Yes / No.**

all samples collected 9/29/06; lab-filtered for dissolved metals 9/29/06 (same day as collection). see pg 22.

Aqueous (Groundwater/Surface Water, as applicable):

| | |
|---|---|
| Metals (except Hg) | 180 days from date of collection, preserved to pH ≤ 2 and 4°± 2° C |
| Mercury | 28 days from date of collection, preserved to pH ≤ 2 and 4°± 2° C |
| ~~Alkalinity~~ | 14 days from date of collection, maintained at 4°± 2° C |
| Chloride | 28 days from date of collection, maintained at 4°± 2° C |
| Nitrate | 48 hours from time of collection, maintained at 4°± 2° C |
| Sulfate | 28 days from date of collection, maintained at 4°± 2° C |
| Sulfide | 7 days from date of collection, preserved to pH ≥ 12 and 4°± 2° C |
| TDS | 7 days from date of collection, maintained at 4°± 2° C |
| TKN | 28 days from date of collection, preserved to pH ≤ 2 and 4°± 2° C |
| TOC | 28 days from date of collection, preserved to pH < 2 and 4°± 2° C |
| ~~Gases~~ | 7 days from date of collection, maintained at 4°± 2° C |
| ~~Ferrous Iron~~ | 48 hours from date of collection, maintained at 4°± 2° C |

Soils/~~Sediments~~[1]:

| | |
|---|---|
| Metals (except Hg) | 180 days from date of collection, maintained at 4°± 2° C |
| Mercury | 28 days from date of collection, maintained at 4°± 2° C |
| TOC | 28 days from date of collection, maintained at 4°± 2° C |

[1] Sediments will be freeze-dried prior to preparation/analysis for total metals if % solids < 75% in "native" sample. Soils and Sediments can be maintained frozen to arrest holding times. If frozen, holding time starts when thawed.

**Actions:** If the holding times were exceeded, estimate (J and UJ) positive and nondetect results. If the holding times were grossly exceeded, estimate (J) positive results and reject (R) nondetect results. If samples were improperly preserved, use professional judgment – may estimate (J and UJ) associated results.

**Holding Time / Preservation Actions**

| Analyte | Holding Time Exceedance | Preservation Issue | Action / Bias | Affected Sample(s) / Comments |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

Comments: Samples received unpreserved for metals were split for Total & Dissolved analyses – Dissolved were filtered + then preserved with nitric acid ($HNO_3$) to pH ≤ 2.
Lab waited minimum of 16 hr after preservation prior to analysis to allow for all metals to come into solution in Total + Dissolved aliquots[2].
See filtration log to verify filtration within 24h for Dissolved metals; pg 22.



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ALPHA - Woods Hole Lab

Preservation and Filtration Log

| Client | ETR | Analyst | Date | time | 0.45 filt. | $HNO_3$ | Vol (ml) | pH<2 |
|---|---|---|---|---|---|---|---|---|
| Sanhea | SH-28R 09-29-06 | NAQ | 9/29/06 | 2109 | NA | 0.5 | MS082206A | <2 |
| | SH-27R | | | | | 0.5 | | |
| | SH-03S | | | | | 1.0 | | |
| | SH-02R | | | | | 1.0 | | |
| SANHEA | SH-28R | NAQ | 9/29/06 | 2109 | N/A | MS082206A | 0.5 | <2 |
| | SH-27R | | | | | | 0.5 | |
| | SH-03S | | | | | | 1.0 | |
| | SH-02R | | | | | | 1.0 | |
| Sanhea | SW102 | JAD | 9/29/06 | 21:02 | ✓ | MS082206A | 0.5 | <2 |
| | SW105 | | | 21:05 | | | | |
| | SW107 | | | 21:09 | | | | |
| | SW108A | | | 21:11 | | | | |
| | SW108B | | | 21:13 | | | | |
| | SW08C | | | 21:20 | | | | |
| | OW303 | | | 21:25 | | | | |
| Filter Blank | | JAD | 9/29/06 | 21:00 | | | 0.5 | |
| Sanhea | SW102 | JAD | 9/29/06 | 21:32 | N/A | MS082206A | 0.5 | <2 |
| | SW105 | | | | | | | |
| | SW107 | | | | | | | |
| | SW108A | | | | | | | |
| | SW108B | | | | | | | |
| | SW08C | | | | | | | |
| | OW303 | | | | | | | |

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SDG 303. Verification of filtration date/time

2a

JAC 12/12/06

**B. Calibration** *[QAPP Worksheet #21 and #24a]*

1. Instrument Calibration

Instrument calibrations were reviewed to ensure that the laboratory followed the correct method procedures.

- Were instrument calibrations performed daily for all methods/instruments used for analysis? **Yes / No.**
- Were the proper number of standards used for each calibration as compliant with SW846 Method requirements? **Yes / No.**
- Were the calibration curves compliant with linearity requirements of the SW846 Method if a linear curve was used ($r \geq 0.995$)? **Yes / No.**

If no to any of the above, list affected samples/analytes and actions in the comment section, below.

2. Initial Calibration Verification (ICV) and Continuing Calibration Verification (CCV) Standards

All ICVs and CCVs were reviewed to assess the accuracy and sensitivity of the results.

- Did all ICVs and CCVs meet the recovery criteria? **Yes / No.** If no, list the outliers and the affected samples in the comment section, below. But no Action – see below

**Actions:** If the ICV/CCV recovery criteria exceeded the defined limits indicated below, estimate (J) associated positive results; no action is required for nondetect results. If ICV/CCV recoveries were below defined QC limits, estimate (J and UJ) associated positive and nondetect results.

Control Limits

| | |
|---|---|
| Metals by ICP or ICP/MS: | 90-110% |
| Mercury by CVAA: | 90-110% |

[ICV/CCV for other parameters: check lab narrative for deviations; not required in summary QC forms]

Comments: one set CCV results for ~~Ar, Pb~~ V outside control limits for V (10/18/06) – reanalyzed OK. V results associated with only acceptable CCVs — No Action required. Also final CCV for V 111% – only associated with the method blank, which was non-detect for V; therefore, no action.

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**B. Calibration (continued)**

2. Low Level Standard analyzed consistent with sample-equivalent reporting or quantitation limit. (QL).

- Were the low-level standards in the calibration curves for inorganic analyses (ICP-MS, ICP-AES, CVAA) analyzed at the correct concentrations to support the laboratory QL? **Yes / No.** (NA) see below.

If no, results reported as non-detects and within 2x the QL may be uncertain.

**Actions:** If No, estimate (UJ) all non-detect data for the affected metal(s) and estimate (J) detected results < 2xQL due to potential uncertainty in the sensitivity of analysis and accuracy at the low end of the calibration curve.

| Analyte | Action / Bias | Affected Sample(s) / Comments |
|---|---|---|
| | | |
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Comments: Low-level std was not analyzed; however, lab included the equivalent of the RL as the low std in the calibration curve. This is considered acceptable to support project sensitivity requirements.

## C. Blank Results

1. Laboratory Blanks *[QAPP Worksheet #9b, 11b, and #24a]*

Laboratory (preparation and calibration) blank results were reviewed to assess the presence of contaminants that ultimately affect the accuracy and sensitivity of the results. Blanks were assessed compared to the project-required quantitation limits (PQLs) listed in Worksheet 9b of the QAPP and to the laboratory QLs.

including Filtration Blank for Dissolved Metals.

- Were all analytes detected in the laboratory blanks at levels less than the PQLs? **Yes / No.** If no, list below the analyte and blank level for the highest detected result above the PQLs.

- Were negative baseline drifts, if observed as negative ICB/CCB or preparation blank results, observed at absolute values less than the PQL? **Yes (No) / NA.** If no, list below the analyte and blank level for the negative result with an absolute value above the PQL.
at MDL

| Analyte | Highest Lab Blank Result (Units) |
|---|---|
| Filtration Blank - Associated with Dissolved Metals only | |
| Lab ID MW101006FB01 | |
| Ca | 130 ug/L |
| Mg | 460 |
| K | 150 |
| Na | 3900 |
| | |
| | |
| | |
| | |
| | |
| As (TOTAL) CCB | 0.099 ug/L |
| As (Dissolved) CCB | -0.11 ug/L |
| | |
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| | |
| | |

Comments:

Arsenic reported + evaluated to MDL.
All other analytes evaluated at RL.



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**C. Blank Results (continued)**

2. Field Blank Results *[QAPP Worksheet #9b, 11b, #22a, and #22b]*

Field blank results were reviewed to assess the presence of contaminants that ultimately affect the accuracy and sensitivity of the sample results.

- Was there a field equipment rinsate blank associated with the samples in this SDG? **Yes / No.** If yes, list the field blank(s) and the associated samples in the table below.

| Field Rinsate Blank Sample ID | Associated Field Sample IDs |
|---|---|
| | |
| | |
| | |
| | |
| | |

- Were all analytes detected in the field equipment rinsate blank(s) at levels less than the PQL? **Yes / No.** If no, list contaminants below.

NOTE: Use the maximum field blank concentration in cases where multiple field blanks are associated with the samples in a given SDG.

**Field Blank ID:** _____

| Analyte | Field Blank Result (Units) |
|---|---|
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| | |

NA for SW samples (see QAPP).



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**C. Blank Results (continued)**

**Actions:** Blank Contamination: Determine the maximum concentration of each analyte based upon a review of all blanks (laboratory blanks and field equipment rinsate blanks). For Water: sample results which are greater than the PQL but less than 5 times the amount found in the associated blank are negated (qualified U) at the level found in the sample. For Soil/Sediment: sample results which are greater than the PQL but less than 5 times the amount found in the associated blanks are qualified "B" to indicate that the analyte was also found in the associated blank(s) – this is the action for non-matrix matched blanks (e.g., aqueous field rinsate blanks associated with soil/sediment samples) -- reference QAPP Worksheet #29c. Data flagged "B" may be biased high. No actions are taken for results greater than 5x the blank level. No actions are taken to qualify field equipment rinsate blank results, unless contamination observed in associated aqueous method blank.

Negative Baseline Drift: Any blank reported with a negative result for which the absolute value was greater than the PQL, are evaluated for this project using the absolute value of the blank result as the rule for action. If the sample result was > PQL but < the absolute value of the blank concentration, estimate the nondetect and detect results (UJ and J). These results may be biased low. No actions are taken for results greater than the absolute value of the blank level (negative baseline drift). The action for negative baseline drift affects all associated field samples and field equipment rinsate blank samples analyzed in the SDG.

| | Analyte | Maximum Blank Concentration (Units) ug/L | Blank Action Level (BAL) 5x (Units) ug/L | Actions/Affected Samples |
|---|---|---|---|---|
| DISSOLVED Metals | Ca | 130 | 650 | NONE - all results > BAL |
| | Mg | 460 | 2300 | (U) - SW-107/09-28-06 |
| | K | 150 | 750 | NONE - all results > BAL |
| | Na | 3900 | 19500 | NONE - all results > BAL |
| | | | | |
| | As | -0.11 | -0.55 | (J) SW-102/09-28-06, SW-105/09-28-06 DW-303/09-28-06 potential low bias but also qualified for MD imprecision therefore, cumulative bias is indeterminate. |
| TOTAL METALS | As | 0.099 ug/L | 0.495 ug/L | None - all results > BAL |



12/12/06

## D. Matrix QC Results

1. Matrix Spike Recoveries *[QAPP Worksheet #11b and #24a]*

Matrix spike (MS) results were reviewed to assess the accuracy of the results relative to the specific sample matrix.

- Were matrix spike (MS) results present for all required analytes at the proper frequency as required by the Site QAPP? **Yes** / **No.** Were matrix spike recovery criteria met? **Yes** / **No.**

**QAPP MS Recovery Criteria:**

Metals and TOC in all matrices: 75-125%

All other parameters: 80-120%

List the affected analytes and actions in the table below.

**Actions:** If the spike recovery was > upper control limit, estimate (J) all positive results. No action is taken for non-detects. If the spike recovery fell within the range of 30-74% for metals or within the range of 30-79% for the other parameters, estimate (UJ or J) all sample results. If the spike recoveries were less than 30% for any parameter, reject (R) the nondetect results as unusable and estimate (J) the positive results for extremely low bias.

If the sample concentration exceeds the spike-added concentration by a factor of 4 or more, no action is taken because the spike level was "swamped-out" by the native concentration in the sample.

**Matrix Spike (MS) Accuracy Action Table**

| Analyte | MS % Recovery | Action | Comments/Affected Samples |
|---|---|---|---|
| Na (DISSOLVED) | 42 | NONE | Sample conc. > 4X spike level |
| | | | |
| | | | |
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| | | | |
| | | | |

**MS Sample ID#:** SH-108/09-29-06



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**D. Matrix QC Results (continued)**

2. Sample/Matrix Duplicate Results *[QAPP Worksheet #11b and #24a]*

Matrix (laboratory) duplicate (MD) results were reviewed to access the precision of the results relative to the specific sample matrix.

- Were matrix duplicate (MD) analyses present for all analytes at the proper frequency as required by the Site QAPP? (Yes) / No. Were criteria as defined below, met for all analytes? **Yes** / (No.)

List the analytes affected and actions in the table below.

Site QAPP Control Limits:

| | |
|---|---|
| Aqueous | RPD ≤ 20% for results > 5x QL<br>difference ± QL for results < 5x QL |
| Soil/Sediment | RPD ≤ 35% for results > 5x QL<br>difference ± 2x QL for results < 5x QL |

**Actions:** Estimate (J and UJ) all results for analytes which do not meet precision criteria.

**Matrix Duplicate (MD) Precision Action Table**

| Analyte | MD RPD | Action | Comments/Affected Samples, |
|---|---|---|---|
| As (Total) | 61 | J | All results - MD imprecision |
| As (Dissolved) | 59 | J | All results - MD imprecision |
| V (Total) | 81 | NONE | Result < 5x QL + meets difference criterion |
| V (Dissolved) | 77 | NONE | ↓ |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

Comments: MD Sample ID #: SH-108 / 09-28-06



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**D. Matrix QC Results (continued)**

3. Field Duplicate Precision: *Worksheet #11b, #22a, and #22b*

Field duplicate sample results were reviewed to assess representativeness of the sample aliquot to the area sampled and the precision of the results relative to field sampling techniques.

- Was a field duplicate pair included in this SDG? **Yes** / **No.** If Yes, identify in the following table.

**Actions:** If field duplicate precision exceeded criteria, below, for any analyte, estimate (J and UJ) positive and non-detected results for the affected analytes in the field duplicate pair only. If severe imprecision was noted in the field duplicate results, qualify the remainder of the associated field sample data based on sound technical judgment.

| | | |
|---|---|---|
| Site QAPP Control Limits: | Aqueous | RPD ≤ 30% for results > 5x QL; difference + 2x QL for results < 5x QL |
| | Soil/Sediment | RPD ≤ 50% for results > 5x QL; difference ± 4x QL for results < 5x QL |

**Field Duplicate (FD) Precision/Representativeness Actions**

Field Duplicate Pair Samples: OW-303/09-29-06 and SW-105/09-29-06

See Page 10a + 10b for field duplicate RPD calculations and Actions

Comments:

FD for both dissolved & total metals + TOC
No FD actions required.



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Field Duplicate Precision Evaluation Worksheet

**SDG: BU303 Surface Water**

Labs: AWHL for metals; Katahdin for TOC.

| Analyte | Units | Sample Result SH-105/09-29-06 | Qual | Field Duplicate Result OW-303/09-29-06 | Qual | Precision RPD* | Action | Comment |
|---|---|---|---|---|---|---|---|---|
| Aluminum - total | ug/L | 50 | U | 50 | U | NC | None | |
| Antimony - total | ug/L | 0.5 | U | 0.5 | U | NC | None | |
| Arsenic - total | ug/L | 0.62 | | 0.61 | | 2 | None | |
| Barium - total | ug/L | 17 | | 17 | | 0 | None | |
| Beryllium - total | ug/L | 0.2 | U | 0.2 | U | NC | None | |
| Cadmium - total | ug/L | 0.1 | U | 0.1 | U | NC | None | |
| Calcium - total | ug/L | 12000 | | 12000 | | 0 | None | |
| Chromium - total | ug/L | 0.5 | U | 0.5 | U | NC | None | |
| Cobalt - total | ug/L | 0.2 | U | 0.2 | U | NC | None | |
| Copper - total | ug/L | 1.6 | | 1.6 | | 0 | None | |
| Iron - total | ug/L | 550 | | 520 | | 6 | None | |
| Lead - total | ug/L | 0.54 | | 0.59 | | 9 | None | |
| Magnesium - total | ug/L | 3100 | | 3100 | | 0 | None | |
| Manganese - total | ug/L | 100 | | 97 | | 3 | None | |
| Mercury - total | ug/L | 0.2 | U | 0.2 | U | NC | None | |
| Nickel - total | ug/L | 1.1 | | 1 | | 10 | None | |
| Potassium - total | ug/L | 2300 | | 2200 | | 4 | None | |
| Selenium - total | ug/L | 1 | U | 1 | U | NC | None | |
| Silver - total | ug/L | 0.2 | U | 0.2 | U | NC | None | |
| Sodium - total | ug/L | 35000 | | 36000 | | 3 | None | |
| Thallium - total | ug/L | 0.1 | U | 0.1 | U | NC | None | |
| Vanadium - total | ug/L | 1.7 | | 1 | U | 200 | None | Result < 5x RL; meets difference criterion |
| Zinc- total | ug/L | 5 | U | 5 | U | NC | None | |
| Total Organic Carbon (TOC) | mg/L | 5.5 | | 5.7 | | 4 | None | |

NC = Not calculated

* RPD criteria for FD precision: if result is > 5xQL, RPD criterion is < ± 30%; if result is < 5xQL, criterion is difference < ± 2xQL.

Date: 12/12/06 Data Reviewer: _____ **New Environmental Horizons, Inc.**

Field Duplicate Precision Evaluation Worksheet

**SDG: BU303 Surface Water**

Labs: AWHL for metals

| Analyte | Units | Sample Result SH-105/09-29-06 | Qual | Field Duplicate Result OW-303/09-29-06 | Qual | Precision RPD* | Action | Comment |
|---|---|---|---|---|---|---|---|---|
| Aluminum - Dissolved | ug/L | 50 | U | 50 | U | NC | None | |
| Antimony - Dissolved | ug/L | 0.5 | U | 0.5 | U | NC | None | |
| Arsenic - Dissolved | ug/L | 0.46 | | 0.52 | | 12 | None | |
| Barium - Dissolved | ug/L | 17 | | 17 | | 0 | None | |
| Beryllium - Dissolved | ug/L | 0.2 | U | 0.2 | U | NC | None | |
| Cadmium - Dissolved | ug/L | 0.1 | U | 0.1 | U | NC | None | |
| Calcium - Dissolved | ug/L | 12000 | | 12000 | | 0 | None | |
| Chromium - Dissolved | ug/L | 0.52 | | 0.5 | U | 200 | None | Result < 5x RL; meets difference criterion |
| Cobalt - Dissolved | ug/L | 0.2 | U | 0.2 | U | 0 | None | |
| Copper - Dissolved | ug/L | 1.6 | | 2.2 | | 32 | None | Result < 5x RL; meets difference criterion |
| Iron - Dissolved | ug/L | 320 | | 300 | | 6 | None | DC 12/12/06 |
| Lead - Dissolved | ug/L | 0.5 | U | 0.5 | U | NC | None | |
| Magnesium - Dissolved | ug/L | 3100 | | 3000 | | 3 | None | |
| Manganese - Dissolved | ug/L | 46 | | 50 | | 8 | None | |
| Mercury - Dissolved | ug/L | 0.2 | U | 0.2 | U | NC | None | |
| Nickel - Dissolved | ug/L | 1.2 | | 1.1 | | 9 | None | |
| Potassium - Dissolved | ug/L | 2200 | | 2100 | | 5 | None | |
| Selenium - Dissolved | ug/L | 1 | U | 1 | U | NC | None | |
| Silver - Dissolved | ug/L | 0.2 | U | 0.2 | U | NC | None | |
| Sodium - Dissolved | ug/L | 36000 | | 34000 | | 6 | None | |
| Thallium - Dissolved | ug/L | 0.1 | U | 0.1 | U | NC | None | |
| Vanadium - Dissolved | ug/L | 1.2 | | 1 | U | 200 | None | Result < 5x RL; meets difference criterion |
| Zinc - Dissolved | ug/L | 5 | U | 5 | U | NC | None | |

NC = Not calculated

* RPD criteria for FD precision: if result is > 5xQL, RPD criterion is < ± 30%; if result is < 5xQL, criterion is difference < ± 2xQL.

Date: 12/12/06 Data Reviewer: _____ New Environmental Horizons, Inc.

## E. Method QC

1. Laboratory Control Sample Recoveries *[QAPP Worksheet #11b and #24a]*

The laboratory control sample (LCS) and/or standard reference material (SRM) recoveries were reviewed to assess the accuracy of the results relative to the laboratory method performance of each step during the preparation, analysis, and reporting of environmental samples for each matrix.

- Was an appropriate (soil, sediment, or water) LCS performed for all analytes at the proper frequency? **Yes / No.**
- Did all analytes meet Site QAPP recovery criteria or 80-120% or vendor control limits for SRM? **Yes / No.**

If no, list the affected analytes and actions in the comment section, below.

**Actions:** If the LCS recovery for any analyte was greater than 120% or the established upper control limit for an SRM, estimate (J) all detected sample results. If the LCS recovery was less than 80% or less than the established lower control limit, estimate (J and UJ) the detected and non-detected results. Use professional judgment if LCS is severely low (< 50%, EPA Region I criterion for total metals), and the MS was out of control, to reject (R) associated results as unusable. Use professional judgment if LCS is out of control and MS is in control, to accept results for acceptable accuracy in the sample matrix.

**Laboratory Control Sample (LCS) Accuracy Action Table**

| Analyte | LCS % Recovery | Action | Comments/Affected Samples |
|---|---|---|---|
| | | | |
| | | | |
| | | | |

Comments:



12/12/06

**E. Method QC (continued)**

2. ICP Method QC - ICP Interference Check Sample Results *[QAPP Worksheet #24a]*

ICP interference check procedures were performed to evaluate and verify the laboratory's interelement and background corrections for ICP-AES analyses and to generally evaluate interferences for isotope abundances on ICP-MS.

- Were analyte levels in the ICSA and ICSAB reported for all metals? **Yes / No**.
- Was the ICSA and ICSAB analyzed at the correct frequency? **Yes / No**.
- Did all analytes meet recovery criteria of 80-120% in the ICSAB solution? **Yes / No**.

If no to any of the above, list the affected samples, analytes, concentrations and actions in the section below.

Comments:

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**E. Method QC (continued)**

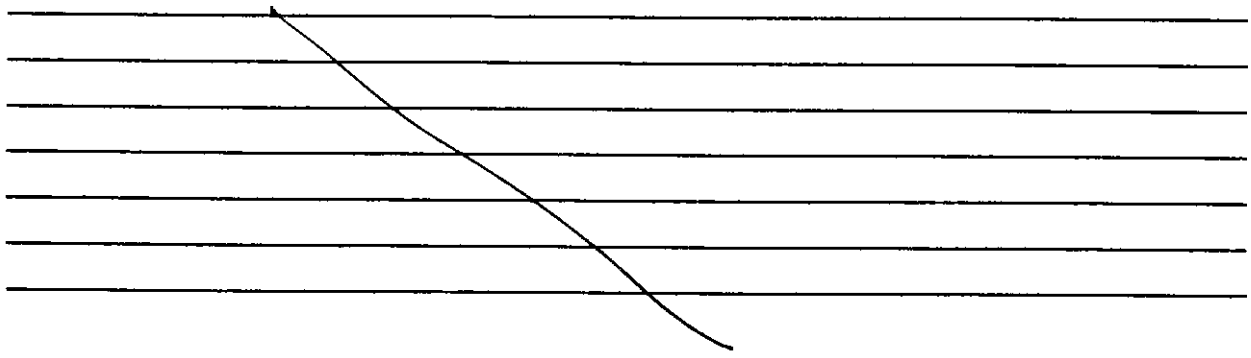
3. ICP-MS Method QC - Internal Standard Recovery Results *[QAPP Worksheet #24a]*

   - Were internal standards added to all samples analyzed by ICP-MS? **Yes / No.**
   - Did internal standards meet recovery criteria of 80-120% for CCVs and 30-120% for field samples as defined in the Site QAPP? **Yes / No.**

   If no, results might be uncertain with either a high or low bias dependent upon the internal standard recovery results. Professional judgment should be used to estimate (J and UJ) all affected field results for low (<30%) recoveries of the internal standards and to estimate detected results (J) for high recoveries of the internal standards. For internal standard recoveries that do not meet criteria in the CCV, professional judgment may be used to estimate (J or UJ) associated field sample results bracketed during analysis by the affected CCV.

   All actions must be described below.

Comments:



12/12/06

**E. Method QC (continued)**

4. ICP Serial Dilution Results *[QAPP Worksheet #24a]*

- Was a field sample used for ICP serial dilution analysis? **Yes** / **No.**
  **Sample ID#:** SH-108/09-29-06
- Did all analytes meet criterion of < 15% Difference (%D) for values that were > 50x QL in the serial dilution results? **Yes** / **No.**

List the affected samples/analytes and actions in the table below.

**Actions:** Estimate (J) all positive results if the %D > 15% for results that are > 50x the QL.

**Serial Dilution Result Actions**

| Analyte | % Difference | Action / Affected Samples |
|---|---|---|
| K (Total) | 14 | remove lab qual "E"; meets QAPP criterion |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

No DV actions required.



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## F. Verification of MDLs/RLs, Linear Ranges, IECs

1. Sample Detection Limits *[QAPP Worksheet #9b]*

Analyte detection limits were reviewed to assess if the sensitivity of the results met the project-specific requirements.

Review Form 10, or equivalent. For this project, Method Detection Limits (MDL) should be performed annually.

- Were current (annual) MDLs present for all analytes and all instruments used for analysis? **Yes** / **No.**
- Were the MDLs and/or QLs compliant with project-specific reporting limit (PQL) requirements as listed in Worksheet #9b of the Site QAPP? **Yes** / **No.** but met PALs (see below).

**Actions:** Non-detected results that do not meet required PQLs may not be usable for specific data uses such as risk assessment.

**Table of Results That Do Not Meet QAPP PQL (Sensitivity) Requirements**

| Analyte | Sample ID # (s) Affected | Highest QL reported ug/L (units) | QAPP PQL (units) ug/L | QAPP PAL (units) ug/L | Reason (% solids; blank action; etc.) | Usability |
|---|---|---|---|---|---|---|
| Ag | all non-detect results ✓ | 0.2 | 0.1 | 0.36 | method limit | Yes <PAL |
| ✓ | all non-detect results | 1 | 0.5 | 3.6 | method limit | Yes <PAL |
| Mg | SW-107/09-28-06 | 970 | 500 | NA | Blank Action | Yes - No PAL in QAPP |

Comments:



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**F. Verification of MDLs/RLs, Linear Ranges, IECs - continued**

**2. ICP Interelement Correction Factors** (For ICP-AES only -- Not required for ICP-MS)

- Review Form 11, or equivalent, ICP-AES Interelement Correction Factors (Annually)
- Were the current (annual) IECs present in the data package? **Yes / No / NA**

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ICP-MS only performed.

**Actions:** If no, use professional judgment to determine the severity of the affect on the results.

**3. ICP-AES and ICP-MS Linear Ranges (Annual)**

- Review Form 12, or equivalent, ICP Linear Ranges are checked daily and updated, at a minimum, annually for this project.
- Were current (annual) linear range data present in the data package? **Yes / No.**

**Actions:** If no, use professional judgment to determine the severity of the affect on the results.

Comments: LR from 4/2005. No Action based on professional judgment that ICP-MS linearity is very stable over time.

**G. Preparation and Analysis Logs**

**1. Preparation Logs**

- Were sample preparation logs present and do they contain all samples/analytes performed in the SDG? **Yes / No.**

**2. Analysis Run Logs**

- Were analysis run logs present for all required samples/methods for this SDG? **Yes / No**
- Was the correct analytical sequence followed for the QC for each method? **Yes / No.**
- Were the calibration standards (*i.e.,* CCVs, CCBs, ICSA, ICSAB, etc.) analyzed at the proper frequency consistent with the methods and the Site QAPP? **Yes / No.**

If no to questions for Form 13 or 14, list the affected samples/analytes and actions in the comment section, below.

Comments: _____



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## H. Additional QA/QC Issues

NA

### 1. Percent Solids

Percent solids data were reviewed to further assess the affect of the sample matrix on result quantitation.

- Review percent solids results for all soil and sediment samples.

  Specific note for Sediments: For this project, all sediment samples were freeze-dried prior to analysis for total metals. The freeze-dried percent solids value used to calculate the total metals results on a dry-weight basis; therefore, the freeze-dried percent solids is used to compare to EPA Region I DV criteria. For TOC, the "as-received" or "native" percent solids is used as sediment aliquots for these parameters were not freeze-dried prior to preparation and analysis.

- Were percent solids > 30% for all soil and sediment samples? **Yes / No**

If no, list affected samples and actions in the table, below.

**Actions:** If percent solids results were > 30%, no actions are required. If percent solids were < 30% but > 10%, use professional judgment to either estimate (UJ) or reject all non-detected results (R) and estimate (J) all detected results. If percent solids were < 10%, use professional judgment to either estimate (UJ) or reject (R) all results. Professional judgment may be used, for example, if data reported are useful to the risk assessors even in low percent solids sediments.

**Percent Solids Action Table**

| Sample ID | % Solids | Action / Comments |
|---|---|---|
| | | |
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12/12/06

**2. Sample Result Verification – Uncertainty Near the Level of Detection**

Detected sample results were reviewed to assess certainty of results near the QLs. Results reported below the lab's QL, down to the IDL or MDL, have uncertainty near this statistically-derived level of detection.

- Were all sample results reported at ≥ QL or PQL? **Yes** (**No**)
- If No, actions to estimate these results, reported between the MDL and the QL, may be taken.

**Action:** Estimate (J) all results < 2x the lab MDL and < the QL that have not been previously qualified "J" due to other QC criteria, due to uncertainty in the accuracy of the quantitation at this low level. Estimate (UJ) the level of detection if the non-detected result is reported down to the MDL (and if not previously qualified due to other QC criteria exceedance) due to the uncertainty in the statistically-derived MDL.

| Analyte | Sample ID# of affected results / matrix | Comments |
|---|---|---|
| As (DISSOLVED) | SW-102/09-29-06 and SW-105/09-29-06 | (J) Uncertain < Calibration range |
| | 12/12/06 | |
| | all samples collected 9/29/06 | |

Comments:
Arsenic reported to MDL to help meet PAL (see QAPP 2006 (addenda) Phase 1B-5 Worksheet #9b). All other results reported ≥ RL, supported by low-level calibration standard.



12/12/06

**III. Review of Overall Data Package Compliance**

Review of the overall data package was performed to determine if the laboratory met all EPA SW846 method and project QAPP requirements.

**Case Narrative Review**

Review the Case Narrative provided with the data package and list all issues of noncompliance or QA/QC exceedances addressed in the case narrative that have not been previously evaluated in the Data Usability Review. For each issue listed, state what qualification to the data has been taken.

Comments:
emailed lab 12/12/06 to verify Dissolved Metals were lab-filtered within 24 hrs of sample receipt. See log pg copy pg 2a of this review.

**Sample result verification through re-calculation from the raw data was not performed, and was not required, for parameters undergoing a Tier II-type review or Tier I-type review.** ***[Reference QAPP Worksheet # 29b and #29c for data validation levels and modifications.]*** As sample result calculation verification was performed for the Tier-III type reviews previously documented for this Site for these media, and no anomalies were noted, it was assumed that the calculations were performed correctly for the remainder of the environmental data.



12/12/06

**Data Summary Key for Data Usability Checklist Review**

J - The associated numerical value is an estimated quantity due to quality control criteria exceedance(s). The value is usable for project decisions as an estimated result. The Data Usability Report discusses the potential bias in estimated results.

U - The analyte was analyzed for, but was not detected. The associated numerical value is the sample-specific quantitation limit. The value is usable for project decisions as a nondetect result at the quantitation limit.

UJ - The analyte was analyzed for, but was not detected. The associated numerical value is the sample reporting/quantitation limit and is an estimated quantity. The value is usable for project decisions as a non-detect result at the estimated reporting limit.

B - The analyte was detected in an associated non-matrix-matched blank. The result is usable for project decisions.

R - Reject data due to severe or cumulative exceedance of quality control criteria. The value is unusable (analyte may or may not be present) for project decisions. Re-sampling and reanalysis is necessary for verification.

## List of Inorganic Data Usability Checklist Review Acronyms

| | | |
|---|---|---|
| CCB | - | Continuing Calibration Blank |
| CCV | - | Continuing Calibration Verification Sample |
| CLP | - | Contract Laboratory Program |
| CRDL | - | Contract Required Detection Limit |
| %D | - | Percent Difference |
| DQO | - | Data Quality Objective |
| EPA | - | Environmental Protection Agency |
| FD | - | Field Duplicate |
| g | - | gram |
| ICB | - | Initial Calibration Blank |
| ICP | - | Inductively Coupled Plasma Spectrophotometry |
| ICP-MS | - | ICP-Mass Spectrometry |
| ICS | - | Interference Check Sample |
| ICV | - | Initial Calibration Verification Sample |
| IDL | - | Instrument Detection Limit |
| IEC | - | Interelement Correction Factor |
| IS | - | Internal Standard (ICP-MS only) |
| Kg | - | kilogram |
| L | - | liter |
| LCS | - | Laboratory Control Sample |
| MD | - | Matrix Duplicate |
| MDL | - | Method Detection Limit |
| mg | - | milligram |
| mg/Kg | - | milligram per kilogram |
| MS | - | Matrix Spike |
| NA | - | Not Applicable |
| ND | - | Non-detect |
| PQL | - | Project Quantitation Limit |
| QA | - | Quality Assurance |
| QAPP | - | Quality Assurance Project Plan |
| QC | - | Quality Control |
| QL | - | Quantitation Limit |
| r | - | correlation coefficient of linear regression curve |
| RB | - | Rinsate Blank (equipment rinsate field blank) |
| RPD | - | Relative Percent Difference |
| SDG | - | Sample Delivery Group |
| SRM | - | Standard Reference Material |
| TAL | - | Target Analyte List |
| µg/Kg | - | micrograms per kilogram |
| µg/L | - | micrograms per liter |

## References

1. *Phase 1A Remedial Investigation*, Blackburn & Union Privileges Superfund Site, Walpole, Massachusetts, November 2000; inclusive of the *Project Operations Plan (POP), Sampling and Analysis Plan (SAP), and Quality Assurance Project Plan (QAPP).*

2. *Phase 1B-2 Remedial Investigation Work Plan*, Blackburn & Union Privileges Superfund Site, Walpole, Massachusetts, June 2003.

3. *Phase 1B-5 Work Plan Remedial Investigation Work Plan,* Blackburn & Union Privileges Superfund Site, Walpole Massachusetts, Rev 02, September 21, 2006

4. *EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses,* EPA Region I, December 1996.

5. *Region I Laboratory Data Validation Functional Guidelines for Evaluating Inorganics Analyses,* EPA Region I, February 1989.

6. *Guidance for Data Useability in Risk Assessment* (Part A), Publication 9285.7-09A, EPA 1992.

7. *Test Methods for Evaluating Solid Waste, Physical Chemical Methods, SW-846*, EPA Office of Solid Waste, Third Edition, Final Update, December 1996.

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*New Environmental Horizons, Inc.*

# DATA USABILITY ASSESSMENT

**Organic Analysis by Method 8260B and Method 8270C**
**EPA Region I Tier II – type review**

| | |
|---|---|
| **Client:** | Sanborn, Head & Associates, Inc., Concord, New Hampshire |
| **Site:** | Blackburn & Union Privileges Superfund Site, Walpole, Massachusetts<br>Phase 1B-5 Remedial Investigation |
| **Laboratory:** | Alpha Woods Hole Labs (AWHL), Raynham, Massachusetts |
| **SDG:** | BU303 |
| **Lab ETR:** | 0610004 |
| **# Samples/Analyses:** | 5 surface waters and 1 trip blank (TB) for forty project-specific Volatile Organic Compounds (VOC)<br>5 surface waters for nineteen project-specific Semivolatile Organic Compounds (SVOC) |
| **Initial Reviewer:** | Dr. Nancy C. Rothman, New Environmental Horizons, Inc. |
| **Senior Reviewer:** | Susan D. Chapnick, New Environmental Horizons, Inc. |
| **Date Completed:** | December 11, 2006 |

An EPA Tier II-type Data Validation/Usability Checklist Review was performed on the data included in this SDG with the following intentions: 1) to determine if the data were generated and reported in accordance with the *Phase 1B-5 Remedial Investigation Work Plan, Blackburn & Union Privileges Superfund Site, Walpole, MA,* prepared by Sanborn, Head & Associates, Inc., Rev. 02, September 21, 2006 (Phase IB-5 Work Plan); USEPA *Test Methods for Evaluating Solid Waste, Physical Chemical Methods, SW-846, Third Edition, Final Update, December 1996 Method 8260B and Method 8270C;* Region I, *EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses,* December 1996; *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review*; Publication EPA A540/R-99/008, October 1999; and *Guidance for Data Useability in Risk Assessment* (Part A), Publication 9285.7-09A, USEPA 1992; 2) to determine if the data met the project data quality objectives for acceptable accuracy, precision, sensitivity; and technical usability; and 3) to update the project database with appropriate data quality qualifiers.

The Data Review Checklists, attached, were completed during this assessment to document the review.

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*Phone: (908) 874-5686 ◊ (781) 643-4294 Fax: (908) 874-4786*
*Email: n.rothman@patmedia.net ◊ s.chapnick@comcast.net*

All results for VOCs and SVOCs in the samples included in this SDG BU303 are usable for project objectives with one exception. The result for 2-chloroethylvinyl ether in sample SW-108 / 09-29-06 was rejected (R) due to less than 10% recovery of this compound in the matrix spike / matrix spike duplicate (MS/MSD) analysis performed on this sample. This result is not usable for project objectives. Several other results have been negated (U) due to blank actions or qualified as estimated (J or UJ) due to quality control criteria exceedance(s). Data users should note the uncertainties in the qualified results as summarized below in Table 1. The qualified (U, J, UJ) and unqualified results are usable for project objectives.

A Laboratory Fortified Blank (LFB), as designated in the original QAPP (2000), was not required for this Phase 1B-5 Remedial Investigation. As compared to previous investigations, the lowest-level initial calibration standards for VOCs and SVOCs were at very low concentrations and the laboratory analyzed full target analyte Laboratory Control samples/Laboratory Control Sample Duplicates (LCS/LCSD). Therefore, the laboratory was not required to perform the LFB analysis.

All non-detect results for VOCs and SVOCs in the surface water samples met Project Action Limits (PALs) with the following exceptions: VOC compounds bromodichloromethane, carbon tetrachloride, chloroform, dibromochloromethane, 1,2-dichloroethane, 1,2-dichloropropane, cis-1,3-dichloropropene, trans-1,3-dichloropropene, 1,1,2,2-tetrachloroethane, tetrachloroethene, trichloroethene, vinyl chloride, and m/p-xylene; and SVOCs benzo(a)pyrene and dibenz(a,h)anthracene. These non-detects did not meet PALs, as expected, due to method limitations. The data user will have to evaluate the usability of these elevated non-detected data on a case-by-case basis to determine if these data can be used for project objectives.

All other quality control information associated with accuracy, precision, sensitivity, and representativeness for the project-specific list of VOCs and SVOCs reported met project criteria for the samples in this SDG with the exceptions in the following table.

**Table 1. Summary of Data Validation/Usability Actions**

| Sample ID | Lab Chemical Name | Qualifier | Bias | Comment |
|---|---|---|---|---|
| SW-108 / 09-29-06 | 2-Chloroethylvinyl ether | R | | Unusable: < 10% MS/MSD recoveries |
| All samples | Bromomethane | UJ | I | Initial Calibration outside criteria |
| SW-107 / 09-29-06 | Benzo[g,h,i]perylene | J | L | Low Calibration verification |
| SW-102 / 09-29-06, SW-105 / 09-29-06, SW-108 / 09-29-06, & OW-303 / 09-29-06 | Benzo[g,h,i]perylene | UJ | I | Negated due to Blank Action + Low Calibration verification |
| SW-102 / 09-29-06, SW-105 / 09-29-06, SW-108 / 09-29-06, & OW-303 / 09-29-06 | bis(2-Ethylhexyl)phthalate, Fluoranthene, Indeno[1,2,3-cd]pyrene, Naphthalene, & Phenanthrene | U | | Negated due to Blank Action |

**Table 1. Summary of Data Validation/Usability Actions** - *continued*

| Sample ID | Lab Chemical Name | Qualifier | Bias | Comment |
|---|---|---|---|---|
| All samples | 2-Methylnaphthalene | J | I | Result uncertain below the calibration range |
| SW-102 / 09-29-06, SW-108 / 09-29-06, & OW-303 / 09-29-06 | Anthracene & Dibenz[a,h]anthracene | J | I | Result uncertain below the calibration range |
| SW-102 / 09-29-06 | Carbazole | J | I | Result uncertain below the calibration range |
| SW-107 / 09-29-06 | Naphthalene | J | I | Result uncertain below the calibration range |
| SW-102 / 09-29-06, SW-105 / 09-29-06, SW-108 / 09-29-06, & OW-303 / 09-29-06 | Acenaphthene, Acenaphthylene, Benz[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Benzo[k]fluoranthene, Chrysene, Fluorene, & Pyrene | J | I | Result uncertain below the calibration range |

*Qualifiers: U = Analyte is not detected; UJ = Non-detect is estimated; J = Result is estimated; R = Result is rejected and is unusable for project decisions.*

*Bias: L = Low; H = High; I = Indeterminate*

The qualified (J, UJ, and U) and unqualified results presented in the validated database, submitted electronically to Sanborn, Head & Associates, Inc. are considered usable for project objectives. The rejected result for 2-chloroethylvinyl ether in sample SW-108 / 09-29-06 is not usable for project decisions.

| Smpl | Lab_ID | Extr_Date | Anal_Date | al_Method | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TB-507 / 09-29-06 | 0610004-01 | | 10/3/2006 | 8260 | 74-87-3 | Chloromethane | 2 | µg/L | U | | 2 | 1 | |
| TB-507 / 09-29-06 | 0610004-01 | | 10/3/2006 | 8260 | 75-01-4 | Vinyl chloride | 0.5 | µg/L | U | | 0.5 | 1 | |
| TB-507 / 09-29-06 | 0610004-01 | | 10/3/2006 | 8260 | 156-60-5 | trans-1,2-Dichloroethene | 2 | µg/L | U | | 2 | 1 | |
| TB-507 / 09-29-06 | 0610004-01 | | 10/3/2006 | 8260 | 75-34-3 | 1,1-Dichloroethane | 2 | µg/L | U | | 2 | 1 | |
| TB-507 / 09-29-06 | 0610004-01 | | 10/3/2006 | 8260 | 108-05-4 | Vinyl acetate | 2 | µg/L | U | | 2 | 1 | |
| TB-507 / 09-29-06 | 0610004-01 | | 10/3/2006 | 8260 | 78-93-3 | 2-Butanone (MEK) | 2 | µg/L | U | | 2 | 1 | |
| TB-507 / 09-29-06 | 0610004-01 | | 10/3/2006 | 8260 | 156-59-2 | cis-1,2-Dichloroethene | 2 | µg/L | U | | 2 | 1 | |
| TB-507 / 09-29-06 | 0610004-01 | | 10/3/2006 | 8260 | 74-97-5 | Bromochloromethane | 2 | µg/L | U | | 2 | 1 | |
| TB-507 / 09-29-06 | 0610004-01 | | 10/3/2006 | 8260 | 67-66-3 | Chloroform | 0.2 | µg/L | U | | 0.2 | 1 | |
| TB-507 / 09-29-06 | 0610004-01 | | 10/3/2006 | 8260 | 71-55-6 | 1,1,1-Trichloroethane | 2 | µg/L | U | | 2 | 1 | |
| TB-507 / 09-29-06 | 0610004-01 | | 10/3/2006 | 8260 | 56-23-5 | Carbon tetrachloride | 2 | µg/L | U | | 2 | 1 | |
| TB-507 / 09-29-06 | 0610004-01 | | 10/3/2006 | 8260 | 71-43-2 | Benzene | 0.2 | µg/L | U | | 0.2 | 1 | |
| TB-507 / 09-29-06 | 0610004-01 | | 10/3/2006 | 8260 | 74-83-9 | Bromomethane | 0.2 | µg/L | UJ | I | 0.2 | 1 | Initial Calibration outside criteria |
| TB-507 / 09-29-06 | 0610004-01 | | 10/3/2006 | 8260 | 107-06-2 | 1,2-Dichloroethane | 0.2 | µg/L | U | | 0.2 | 1 | |
| TB-507 / 09-29-06 | 0610004-01 | | 10/3/2006 | 8260 | 79-01-6 | Trichloroethene | 0.2 | µg/L | U | | 0.2 | 1 | |
| TB-507 / 09-29-06 | 0610004-01 | | 10/3/2006 | 8260 | 78-87-5 | 1,2-Dichloropropane | 0.5 | µg/L | U | | 0.5 | 1 | |
| TB-507 / 09-29-06 | 0610004-01 | | 10/3/2006 | 8260 | 75-27-4 | Bromodichloromethane | 0.2 | µg/L | U | | 0.2 | 1 | |
| TB-507 / 09-29-06 | 0610004-01 | | 10/3/2006 | 8260 | 110-75-8 | 2-Chloroethylvinyl ether | 2 | µg/L | U | | 2 | 1 | |
| TB-507 / 09-29-06 | 0610004-01 | | 10/3/2006 | 8260 | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2 | µg/L | U | | 2 | 1 | |
| TB-507 / 09-29-06 | 0610004-01 | | 10/3/2006 | 8260 | 10061-01-5 | cis-1,3-Dichloropropene | 0.5 | µg/L | U | | 0.5 | 1 | |
| TB-507 / 09-29-06 | 0610004-01 | | 10/3/2006 | 8260 | 108-88-3 | Toluene | 2 | µg/L | U | | 2 | 1 | |
| TB-507 / 09-29-06 | 0610004-01 | | 10/3/2006 | 8260 | 10061-02-6 | trans-1,3-Dichloropropene | 0.5 | µg/L | U | | 0.5 | 1 | |
| TB-507 / 09-29-06 | 0610004-01 | | 10/3/2006 | 8260 | 79-00-5 | 1,1,2-Trichloroethane | 0.2 | µg/L | U | | 0.2 | 1 | |
| TB-507 / 09-29-06 | 0610004-01 | | 10/3/2006 | 8260 | 75-00-3 | Chloroethane | 2 | µg/L | U | | 2 | 1 | |
| TB-507 / 09-29-06 | 0610004-01 | | 10/3/2006 | 8260 | 591-78-6 | 2-Hexanone | 2 | µg/L | U | | 2 | 1 | |
| TB-507 / 09-29-06 | 0610004-01 | | 10/3/2006 | 8260 | 127-18-4 | Tetrachloroethene | 0.2 | µg/L | U | | 0.2 | 1 | |
| TB-507 / 09-29-06 | 0610004-01 | | 10/3/2006 | 8260 | 124-48-1 | Dibromochloromethane | 0.2 | µg/L | U | | 0.2 | 1 | |
| TB-507 / 09-29-06 | 0610004-01 | | 10/3/2006 | 8260 | 108-90-7 | Chlorobenzene | 2 | µg/L | U | | 2 | 1 | |
| TB-507 / 09-29-06 | 0610004-01 | | 10/3/2006 | 8260 | 100-41-4 | Ethylbenzene | 2 | µg/L | U | | 2 | 1 | |
| TB-507 / 09-29-06 | 0610004-01 | | 10/3/2006 | 8260 | 106-42-3/108-38-3 | p/m-Xylene | 4 | µg/L | U | | 4 | 1 | |
| TB-507 / 09-29-06 | 0610004-01 | | 10/3/2006 | 8260 | 95-47-6 | o-Xylene | 2 | µg/L | U | | 2 | 1 | |
| TB-507 / 09-29-06 | 0610004-01 | | 10/3/2006 | 8260 | 100-42-5 | Styrene | 2 | µg/L | U | | 2 | 1 | |
| TB-507 / 09-29-06 | 0610004-01 | | 10/3/2006 | 8260 | 75-25-2 | Bromoform | 0.5 | µg/L | U | | 0.5 | 1 | |
| TB-507 / 09-29-06 | 0610004-01 | | 10/3/2006 | 8260 | 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.2 | µg/L | U | | 0.2 | 1 | |
| TB-507 / 09-29-06 | 0610004-01 | | 10/3/2006 | 8260 | 75-69-4 | Trichlorofluoromethane | 2 | µg/L | U | | 2 | 1 | |
| TB-507 / 09-29-06 | 0610004-01 | | 10/3/2006 | 8260 | 67-64-1 | Acetone | 5 | µg/L | U | | 5 | 1 | |
| TB-507 / 09-29-06 | 0610004-01 | | 10/3/2006 | 8260 | 75-35-4 | 1,1-Dichloroethene | 2 | µg/L | U | | 2 | 1 | |
| TB-507 / 09-29-06 | 0610004-01 | | 10/3/2006 | 8260 | 75-15-0 | Carbon disulfide | 2 | µg/L | U | | 2 | 1 | |
| TB-507 / 09-29-06 | 0610004-01 | | 10/3/2006 | 8260 | 75-09-2 | Methylene chloride | 2 | µg/L | U | | 2 | 1 | |
| TB-507 / 09-29-06 | 0610004-01 | | 10/3/2006 | 8260 | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2 | µg/L | U | | 2 | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | | 10/3/2006 | 8260 | 74-87-3 | Chloromethane | 2 | µg/L | U | | 2 | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | | 10/3/2006 | 8260 | 75-01-4 | Vinyl chloride | 0.5 | µg/L | U | | 0.5 | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | | 10/3/2006 | 8260 | 156-60-5 | trans-1,2-Dichloroethene | 2 | µg/L | U | | 2 | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | | 10/3/2006 | 8260 | 75-34-3 | 1,1-Dichloroethane | 2 | µg/L | U | | 2 | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | | 10/3/2006 | 8260 | 108-05-4 | Vinyl acetate | 2 | µg/L | U | | 2 | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | | 10/3/2006 | 8260 | 78-93-3 | 2-Butanone (MEK) | 2 | µg/L | U | | 2 | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | | 10/3/2006 | 8260 | 156-59-2 | cis-1,2-Dichloroethene | 2 | µg/L | U | | 2 | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | | 10/3/2006 | 8260 | 74-97-5 | Bromochloromethane | 2 | µg/L | U | | 2 | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | | 10/3/2006 | 8260 | 67-66-3 | Chloroform | 0.2 | µg/L | U | | 0.2 | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | | 10/3/2006 | 8260 | 71-55-6 | 1,1,1-Trichloroethane | 2 | µg/L | U | | 2 | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | | 10/3/2006 | 8260 | 56-23-5 | Carbon tetrachloride | 2 | µg/L | U | | 2 | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | | 10/3/2006 | 8260 | 71-43-2 | Benzene | 0.2 | µg/L | U | | 0.2 | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | | 10/3/2006 | 8260 | 74-83-9 | Bromomethane | 0.2 | µg/L | UJ | I | 0.2 | 1 | Initial Calibration outside criteria |
| SW-102 / 09-29-06 | 0610004-02 | | 10/3/2006 | 8260 | 107-06-2 | 1,2-Dichloroethane | 0.2 | µg/L | U | | 0.2 | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | | 10/3/2006 | 8260 | 79-01-6 | Trichloroethene | 0.2 | µg/L | U | | 0.2 | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | | 10/3/2006 | 8260 | 78-87-5 | 1,2-Dichloropropane | 0.5 | µg/L | U | | 0.5 | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low; H = High; I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Extr_Date | Anal_Date | al_Method | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SW-102 / 09-29-06 | 0610004-02 | | 10/3/2006 | 8260 | 75-27-4 | Bromodichloromethane | 0.2 | µg/L | U | | 0.2 | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | | 10/3/2006 | 8260 | 110-75-8 | 2-Chloroethylvinyl ether | 2 | µg/L | U | | 2 | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | | 10/3/2006 | 8260 | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2 | µg/L | U | | 2 | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | | 10/3/2006 | 8260 | 10061-01-5 | cis-1,3-Dichloropropene | 0.5 | µg/L | U | | 0.5 | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | | 10/3/2006 | 8260 | 108-88-3 | Toluene | 2 | µg/L | U | | 2 | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | | 10/3/2006 | 8260 | 10061-02-6 | trans-1,3-Dichloropropene | 0.5 | µg/L | U | | 0.5 | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | | 10/3/2006 | 8260 | 79-00-5 | 1,1,2-Trichloroethane | 0.2 | µg/L | U | | 0.2 | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | | 10/3/2006 | 8260 | 75-00-3 | Chloroethane | 2 | µg/L | U | | 2 | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | | 10/3/2006 | 8260 | 591-78-6 | 2-Hexanone | 2 | µg/L | U | | 2 | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | | 10/3/2006 | 8260 | 127-18-4 | Tetrachloroethene | 0.2 | µg/L | U | | 0.2 | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | | 10/3/2006 | 8260 | 124-48-1 | Dibromochloromethane | 0.2 | µg/L | U | | 0.2 | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | | 10/3/2006 | 8260 | 108-90-7 | Chlorobenzene | 2 | µg/L | U | | 2 | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | | 10/3/2006 | 8260 | 100-41-4 | Ethylbenzene | 2 | µg/L | U | | 2 | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | | 10/3/2006 | 8260 | 106-42-3/108-38-3 | p/m-Xylene | 4 | µg/L | U | | 4 | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | | 10/3/2006 | 8260 | 95-47-6 | o-Xylene | 2 | µg/L | U | | 2 | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | | 10/3/2006 | 8260 | 100-42-5 | Styrene | 2 | µg/L | U | | 2 | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | | 10/3/2006 | 8260 | 75-25-2 | Bromoform | 0.5 | µg/L | U | | 0.5 | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | | 10/3/2006 | 8260 | 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.2 | µg/L | U | | 0.2 | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | | 10/3/2006 | 8260 | 75-69-4 | Trichlorofluoromethane | 2 | µg/L | U | | 2 | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | | 10/3/2006 | 8260 | 67-64-1 | Acetone | 5 | µg/L | U | | 5 | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | | 10/3/2006 | 8260 | 75-35-4 | 1,1-Dichloroethene | 2 | µg/L | U | | 2 | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | | 10/3/2006 | 8260 | 75-15-0 | Carbon disulfide | 2 | µg/L | U | | 2 | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | | 10/3/2006 | 8260 | 75-09-2 | Methylene chloride | 2 | µg/L | U | | 2 | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | | 10/3/2006 | 8260 | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2 | µg/L | U | | 2 | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | | 10/3/2006 | 8260 | 74-87-3 | Chloromethane | 2 | µg/L | U | | 2 | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | | 10/3/2006 | 8260 | 75-01-4 | Vinyl chloride | 0.5 | µg/L | U | | 0.5 | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | | 10/3/2006 | 8260 | 156-60-5 | trans-1,2-Dichloroethene | 2 | µg/L | U | | 2 | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | | 10/3/2006 | 8260 | 75-34-3 | 1,1-Dichloroethane | 2 | µg/L | U | | 2 | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | | 10/3/2006 | 8260 | 108-05-4 | Vinyl acetate | 2 | µg/L | U | | 2 | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | | 10/3/2006 | 8260 | 78-93-3 | 2-Butanone (MEK) | 2 | µg/L | U | | 2 | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | | 10/3/2006 | 8260 | 156-59-2 | cis-1,2-Dichloroethene | 2 | µg/L | U | | 2 | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | | 10/3/2006 | 8260 | 74-97-5 | Bromochloromethane | 2 | µg/L | U | | 2 | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | | 10/3/2006 | 8260 | 67-66-3 | Chloroform | 0.2 | µg/L | U | | 0.2 | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | | 10/3/2006 | 8260 | 71-55-6 | 1,1,1-Trichloroethane | 2 | µg/L | U | | 2 | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | | 10/3/2006 | 8260 | 56-23-5 | Carbon tetrachloride | 2 | µg/L | U | | 2 | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | | 10/3/2006 | 8260 | 71-43-2 | Benzene | 0.2 | µg/L | U | | 0.2 | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | | 10/3/2006 | 8260 | 74-83-9 | Bromomethane | 0.2 | µg/L | UJ | I | 0.2 | 1 | Initial Calibration outside criteria |
| SW-105 / 09-29-06 | 0610004-03 | | 10/3/2006 | 8260 | 107-06-2 | 1,2-Dichloroethane | 0.2 | µg/L | U | | 0.2 | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | | 10/3/2006 | 8260 | 79-01-6 | Trichloroethene | 0.2 | µg/L | U | | 0.2 | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | | 10/3/2006 | 8260 | 78-87-5 | 1,2-Dichloropropane | 0.5 | µg/L | U | | 0.5 | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | | 10/3/2006 | 8260 | 75-27-4 | Bromodichloromethane | 0.2 | µg/L | U | | 0.2 | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | | 10/3/2006 | 8260 | 110-75-8 | 2-Chloroethylvinyl ether | 2 | µg/L | U | | 2 | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | | 10/3/2006 | 8260 | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2 | µg/L | U | | 2 | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | | 10/3/2006 | 8260 | 10061-01-5 | cis-1,3-Dichloropropene | 0.5 | µg/L | U | | 0.5 | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | | 10/3/2006 | 8260 | 108-88-3 | Toluene | 2 | µg/L | U | | 2 | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | | 10/3/2006 | 8260 | 10061-02-6 | trans-1,3-Dichloropropene | 0.5 | µg/L | U | | 0.5 | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | | 10/3/2006 | 8260 | 79-00-5 | 1,1,2-Trichloroethane | 0.2 | µg/L | U | | 0.2 | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | | 10/3/2006 | 8260 | 75-00-3 | Chloroethane | 2 | µg/L | U | | 2 | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | | 10/3/2006 | 8260 | 591-78-6 | 2-Hexanone | 2 | µg/L | U | | 2 | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | | 10/3/2006 | 8260 | 127-18-4 | Tetrachloroethene | 0.2 | µg/L | U | | 0.2 | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | | 10/3/2006 | 8260 | 124-48-1 | Dibromochloromethane | 0.2 | µg/L | U | | 0.2 | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | | 10/3/2006 | 8260 | 108-90-7 | Chlorobenzene | 2 | µg/L | U | | 2 | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | | 10/3/2006 | 8260 | 100-41-4 | Ethylbenzene | 2 | µg/L | U | | 2 | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | | 10/3/2006 | 8260 | 106-42-3/108-38-3 | p/m-Xylene | 4 | µg/L | U | | 4 | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | | 10/3/2006 | 8260 | 95-47-6 | o-Xylene | 2 | µg/L | U | | 2 | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | | 10/3/2006 | 8260 | 100-42-5 | Styrene | 2 | µg/L | U | | 2 | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low; H = High; I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Extr_Date | Anal_Date | al_Method | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SW-105 / 09-29-06 | 0610004-03 | | 10/3/2006 | 8260 | 75-25-2 | Bromoform | 0.5 | µg/L | U | | 0.5 | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | | 10/3/2006 | 8260 | 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.2 | µg/L | U | | 0.2 | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | | 10/3/2006 | 8260 | 75-69-4 | Trichlorofluoromethane | 2 | µg/L | U | | 2 | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | | 10/3/2006 | 8260 | 67-64-1 | Acetone | 5 | µg/L | U | | 5 | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | | 10/3/2006 | 8260 | 75-35-4 | 1,1-Dichloroethene | 2 | µg/L | U | | 2 | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | | 10/3/2006 | 8260 | 75-15-0 | Carbon disulfide | 2 | µg/L | U | | 2 | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | | 10/3/2006 | 8260 | 75-09-2 | Methylene chloride | 2 | µg/L | U | | 2 | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | | 10/3/2006 | 8260 | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2 | µg/L | U | | 2 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | | 10/3/2006 | 8260 | 74-87-3 | Chloromethane | 2 | µg/L | U | | 2 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | | 10/3/2006 | 8260 | 75-01-4 | Vinyl chloride | 0.5 | µg/L | U | | 0.5 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | | 10/3/2006 | 8260 | 156-60-5 | trans-1,2-Dichloroethene | 2 | µg/L | U | | 2 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | | 10/3/2006 | 8260 | 75-34-3 | 1,1-Dichloroethane | 2 | µg/L | U | | 2 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | | 10/3/2006 | 8260 | 108-05-4 | Vinyl acetate | 2 | µg/L | U | | 2 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | | 10/3/2006 | 8260 | 78-93-3 | 2-Butanone (MEK) | 2 | µg/L | U | | 2 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | | 10/3/2006 | 8260 | 156-59-2 | cis-1,2-Dichloroethene | 2 | µg/L | U | | 2 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | | 10/3/2006 | 8260 | 74-97-5 | Bromochloromethane | 2 | µg/L | U | | 2 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | | 10/3/2006 | 8260 | 67-66-3 | Chloroform | 0.2 | µg/L | U | | 0.2 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | | 10/3/2006 | 8260 | 71-55-6 | 1,1,1-Trichloroethane | 2 | µg/L | U | | 2 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | | 10/3/2006 | 8260 | 56-23-5 | Carbon tetrachloride | 2 | µg/L | U | | 2 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | | 10/3/2006 | 8260 | 71-43-2 | Benzene | 0.21 | µg/L | | | 0.2 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | | 10/3/2006 | 8260 | 74-83-9 | Bromomethane | 0.2 | µg/L | UJ | I | 0.2 | 1 | Initial Calibration outside criteria |
| SW-107 / 09-29-06 | 0610004-04 | | 10/3/2006 | 8260 | 107-06-2 | 1,2-Dichloroethane | 0.2 | µg/L | U | | 0.2 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | | 10/3/2006 | 8260 | 79-01-6 | Trichloroethene | 0.2 | µg/L | U | | 0.2 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | | 10/3/2006 | 8260 | 78-87-5 | 1,2-Dichloropropane | 0.5 | µg/L | U | | 0.5 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | | 10/3/2006 | 8260 | 75-27-4 | Bromodichloromethane | 0.2 | µg/L | U | | 0.2 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | | 10/3/2006 | 8260 | 110-75-8 | 2-Chloroethylvinyl ether | 2 | µg/L | U | | 2 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | | 10/3/2006 | 8260 | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2 | µg/L | U | | 2 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | | 10/3/2006 | 8260 | 10061-01-5 | cis-1,3-Dichloropropene | 0.5 | µg/L | U | | 0.5 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | | 10/3/2006 | 8260 | 108-88-3 | Toluene | 2 | µg/L | U | | 2 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | | 10/3/2006 | 8260 | 10061-02-6 | trans-1,3-Dichloropropene | 0.5 | µg/L | U | | 0.5 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | | 10/3/2006 | 8260 | 79-00-5 | 1,1,2-Trichloroethane | 0.2 | µg/L | U | | 0.2 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | | 10/3/2006 | 8260 | 75-00-3 | Chloroethane | 2 | µg/L | U | | 2 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | | 10/3/2006 | 8260 | 591-78-6 | 2-Hexanone | 2 | µg/L | U | | 2 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | | 10/3/2006 | 8260 | 127-18-4 | Tetrachloroethene | 0.2 | µg/L | U | | 0.2 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | | 10/3/2006 | 8260 | 124-48-1 | Dibromochloromethane | 0.2 | µg/L | U | | 0.2 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | | 10/3/2006 | 8260 | 108-90-7 | Chlorobenzene | 2 | µg/L | U | | 2 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | | 10/3/2006 | 8260 | 100-41-4 | Ethylbenzene | 2 | µg/L | U | | 2 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | | 10/3/2006 | 8260 | 106-42-3/108-38-3 | p/m-Xylene | 4 | µg/L | U | | 4 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | | 10/3/2006 | 8260 | 95-47-6 | o-Xylene | 2 | µg/L | U | | 2 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | | 10/3/2006 | 8260 | 100-42-5 | Styrene | 2 | µg/L | U | | 2 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | | 10/3/2006 | 8260 | 75-25-2 | Bromoform | 0.5 | µg/L | U | | 0.5 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | | 10/3/2006 | 8260 | 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.2 | µg/L | U | | 0.2 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | | 10/3/2006 | 8260 | 75-69-4 | Trichlorofluoromethane | 2 | µg/L | U | | 2 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | | 10/3/2006 | 8260 | 67-64-1 | Acetone | 5 | µg/L | U | | 5 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | | 10/3/2006 | 8260 | 75-35-4 | 1,1-Dichloroethene | 2 | µg/L | U | | 2 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | | 10/3/2006 | 8260 | 75-15-0 | Carbon disulfide | 2 | µg/L | U | | 2 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | | 10/3/2006 | 8260 | 75-09-2 | Methylene chloride | 2 | µg/L | U | | 2 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | | 10/3/2006 | 8260 | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2 | µg/L | U | | 2 | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | | 10/3/2006 | 8260 | 74-87-3 | Chloromethane | 2 | µg/L | U | | 2 | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | | 10/3/2006 | 8260 | 75-01-4 | Vinyl chloride | 0.5 | µg/L | U | | 0.5 | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | | 10/3/2006 | 8260 | 156-60-5 | trans-1,2-Dichloroethene | 2 | µg/L | U | | 2 | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | | 10/3/2006 | 8260 | 75-34-3 | 1,1-Dichloroethane | 2 | µg/L | U | | 2 | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | | 10/3/2006 | 8260 | 108-05-4 | Vinyl acetate | 2 | µg/L | U | | 2 | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | | 10/3/2006 | 8260 | 78-93-3 | 2-Butanone (MEK) | 2 | µg/L | U | | 2 | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | | 10/3/2006 | 8260 | 156-59-2 | cis-1,2-Dichloroethene | 2 | µg/L | U | | 2 | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | | 10/3/2006 | 8260 | 74-97-5 | Bromochloromethane | 2 | µg/L | U | | 2 | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low; H = High; I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Extr_Date | Anal_Date | al_Method | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SW-108 / 09-29-06 | 0610004-05 | | 10/3/2006 | 8260 | 67-66-3 | Chloroform | 0.2 | µg/L | U | | 0.2 | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | | 10/3/2006 | 8260 | 71-55-6 | 1,1,1-Trichloroethane | 2 | µg/L | U | | 2 | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | | 10/3/2006 | 8260 | 56-23-5 | Carbon tetrachloride | 2 | µg/L | U | | 2 | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | | 10/3/2006 | 8260 | 71-43-2 | Benzene | 0.2 | µg/L | U | | 0.2 | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | | 10/3/2006 | 8260 | 74-83-9 | Bromomethane | 0.2 | µg/L | UJ | I | 0.2 | 1 | Initial Calibration outside criteria |
| SW-108 / 09-29-06 | 0610004-05 | | 10/3/2006 | 8260 | 107-06-2 | 1,2-Dichloroethane | 0.2 | µg/L | U | | 0.2 | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | | 10/3/2006 | 8260 | 79-01-6 | Trichloroethene | 0.2 | µg/L | U | | 0.2 | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | | 10/3/2006 | 8260 | 78-87-5 | 1,2-Dichloropropane | 0.5 | µg/L | U | | 0.5 | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | | 10/3/2006 | 8260 | 75-27-4 | Bromodichloromethane | 0.2 | µg/L | U | | 0.2 | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | | 10/3/2006 | 8260 | 110-75-8 | 2-Chloroethylvinyl ether | 2 | µg/L | R | | 2 | 1 | Unusable: < 10% MS/MSD recoveries |
| SW-108 / 09-29-06 | 0610004-05 | | 10/3/2006 | 8260 | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2 | µg/L | U | | 2 | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | | 10/3/2006 | 8260 | 10061-01-5 | cis-1,3-Dichloropropene | 0.5 | µg/L | U | | 0.5 | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | | 10/3/2006 | 8260 | 108-88-3 | Toluene | 2 | µg/L | U | | 2 | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | | 10/3/2006 | 8260 | 10061-02-6 | trans-1,3-Dichloropropene | 0.5 | µg/L | U | | 0.5 | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | | 10/3/2006 | 8260 | 79-00-5 | 1,1,2-Trichloroethane | 0.2 | µg/L | U | | 0.2 | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | | 10/3/2006 | 8260 | 75-00-3 | Chloroethane | 2 | µg/L | U | | 2 | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | | 10/3/2006 | 8260 | 591-78-6 | 2-Hexanone | 2 | µg/L | U | | 2 | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | | 10/3/2006 | 8260 | 127-18-4 | Tetrachloroethene | 0.2 | µg/L | U | | 0.2 | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | | 10/3/2006 | 8260 | 124-48-1 | Dibromochloromethane | 0.2 | µg/L | U | | 0.2 | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | | 10/3/2006 | 8260 | 108-90-7 | Chlorobenzene | 2 | µg/L | U | | 2 | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | | 10/3/2006 | 8260 | 100-41-4 | Ethylbenzene | 2 | µg/L | U | | 2 | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | | 10/3/2006 | 8260 | 106-42-3/108-38-3 | p/m-Xylene | 4 | µg/L | U | | 4 | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | | 10/3/2006 | 8260 | 95-47-6 | o-Xylene | 2 | µg/L | U | | 2 | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | | 10/3/2006 | 8260 | 100-42-5 | Styrene | 2 | µg/L | U | | 2 | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | | 10/3/2006 | 8260 | 75-25-2 | Bromoform | 0.5 | µg/L | U | | 0.5 | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | | 10/3/2006 | 8260 | 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.2 | µg/L | U | | 0.2 | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | | 10/3/2006 | 8260 | 75-69-4 | Trichlorofluoromethane | 2 | µg/L | U | | 2 | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | | 10/3/2006 | 8260 | 67-64-1 | Acetone | 5 | µg/L | U | | 5 | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | | 10/3/2006 | 8260 | 75-35-4 | 1,1-Dichloroethene | 2 | µg/L | U | | 2 | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | | 10/3/2006 | 8260 | 75-15-0 | Carbon disulfide | 2 | µg/L | U | | 2 | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | | 10/3/2006 | 8260 | 75-09-2 | Methylene chloride | 2 | µg/L | U | | 2 | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | | 10/3/2006 | 8260 | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2 | µg/L | U | | 2 | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | | 10/3/2006 | 8260 | 74-87-3 | Chloromethane | 2 | µg/L | U | | 2 | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | | 10/3/2006 | 8260 | 75-01-4 | Vinyl chloride | 0.5 | µg/L | U | | 0.5 | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | | 10/3/2006 | 8260 | 156-60-5 | trans-1,2-Dichloroethene | 2 | µg/L | U | | 2 | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | | 10/3/2006 | 8260 | 75-34-3 | 1,1-Dichloroethane | 2 | µg/L | U | | 2 | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | | 10/3/2006 | 8260 | 108-05-4 | Vinyl acetate | 2 | µg/L | U | | 2 | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | | 10/3/2006 | 8260 | 78-93-3 | 2-Butanone (MEK) | 2 | µg/L | U | | 2 | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | | 10/3/2006 | 8260 | 156-59-2 | cis-1,2-Dichloroethene | 2 | µg/L | U | | 2 | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | | 10/3/2006 | 8260 | 74-97-5 | Bromochloromethane | 2 | µg/L | U | | 2 | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | | 10/3/2006 | 8260 | 67-66-3 | Chloroform | 0.2 | µg/L | U | | 0.2 | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | | 10/3/2006 | 8260 | 71-55-6 | 1,1,1-Trichloroethane | 2 | µg/L | U | | 2 | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | | 10/3/2006 | 8260 | 56-23-5 | Carbon tetrachloride | 2 | µg/L | U | | 2 | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | | 10/3/2006 | 8260 | 71-43-2 | Benzene | 0.2 | µg/L | U | | 0.2 | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | | 10/3/2006 | 8260 | 74-83-9 | Bromomethane | 0.2 | µg/L | UJ | I | 0.2 | 1 | Initial Calibration outside criteria |
| OW-303 / 09-29-06 | 0610004-06 | | 10/3/2006 | 8260 | 107-06-2 | 1,2-Dichloroethane | 0.2 | µg/L | U | | 0.2 | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | | 10/3/2006 | 8260 | 79-01-6 | Trichloroethene | 0.2 | µg/L | U | | 0.2 | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | | 10/3/2006 | 8260 | 78-87-5 | 1,2-Dichloropropane | 0.5 | µg/L | U | | 0.5 | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | | 10/3/2006 | 8260 | 75-27-4 | Bromodichloromethane | 0.2 | µg/L | U | | 0.2 | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | | 10/3/2006 | 8260 | 110-75-8 | 2-Chloroethylvinyl ether | 2 | µg/L | U | | 2 | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | | 10/3/2006 | 8260 | 108-10-1 | Methyl isobutyl ketone (MIBK) | 2 | µg/L | U | | 2 | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | | 10/3/2006 | 8260 | 10061-01-5 | cis-1,3-Dichloropropene | 0.5 | µg/L | U | | 0.5 | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | | 10/3/2006 | 8260 | 108-88-3 | Toluene | 2 | µg/L | U | | 2 | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | | 10/3/2006 | 8260 | 10061-02-6 | trans-1,3-Dichloropropene | 0.5 | µg/L | U | | 0.5 | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | | 10/3/2006 | 8260 | 79-00-5 | 1,1,2-Trichloroethane | 0.2 | µg/L | U | | 0.2 | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | | 10/3/2006 | 8260 | 75-00-3 | Chloroethane | 2 | µg/L | U | | 2 | 1 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low; H = High; I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Extr_Date | Anal_Date | al_Method | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OW-303 / 09-29-06 | 0610004-06 | | 10/3/2006 | 8260 | 591-78-6 | 2-Hexanone | 2 | µg/L | U | | 2 | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | | 10/3/2006 | 8260 | 127-18-4 | Tetrachloroethene | 0.2 | µg/L | U | | 0.2 | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | | 10/3/2006 | 8260 | 124-48-1 | Dibromochloromethane | 0.2 | µg/L | U | | 0.2 | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | | 10/3/2006 | 8260 | 108-90-7 | Chlorobenzene | 2 | µg/L | U | | 2 | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | | 10/3/2006 | 8260 | 100-41-4 | Ethylbenzene | 2 | µg/L | U | | 2 | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | | 10/3/2006 | 8260 | 106-42-3/108-38-3 | p/m-Xylene | 4 | µg/L | U | | 4 | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | | 10/3/2006 | 8260 | 95-47-6 | o-Xylene | 2 | µg/L | U | | 2 | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | | 10/3/2006 | 8260 | 100-42-5 | Styrene | 2 | µg/L | U | | 2 | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | | 10/3/2006 | 8260 | 75-25-2 | Bromoform | 0.5 | µg/L | U | | 0.5 | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | | 10/3/2006 | 8260 | 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.2 | µg/L | U | | 0.2 | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | | 10/3/2006 | 8260 | 75-69-4 | Trichlorofluoromethane | 2 | µg/L | U | | 2 | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | | 10/3/2006 | 8260 | 67-64-1 | Acetone | 5 | µg/L | U | | 5 | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | | 10/3/2006 | 8260 | 75-35-4 | 1,1-Dichloroethene | 2 | µg/L | U | | 2 | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | | 10/3/2006 | 8260 | 75-15-0 | Carbon disulfide | 2 | µg/L | U | | 2 | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | | 10/3/2006 | 8260 | 75-09-2 | Methylene chloride | 2 | µg/L | U | | 2 | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | | 10/3/2006 | 8260 | 1634-04-4 | Methyl tert-butyl ether (MTBE) | 2 | µg/L | U | | 2 | 1 | |
| SW-102 / 09-29-06 | 0610004-02 | 10/4/2006 | 10/10/2006 | PAH SIM | 91-20-3 | Naphthalene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SW-102 / 09-29-06 | 0610004-02 | 10/4/2006 | 10/10/2006 | PAH SIM | 91-57-6 | 2-Methylnaphthalene | 1.5 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| SW-102 / 09-29-06 | 0610004-02 | 10/4/2006 | 10/10/2006 | PAH SIM | 129-00-0 | Pyrene | 3.6 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| SW-102 / 09-29-06 | 0610004-02 | 10/4/2006 | 10/10/2006 | PAH SIM | 56-55-3 | Benz[a]anthracene | 1.8 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| SW-102 / 09-29-06 | 0610004-02 | 10/4/2006 | 10/10/2006 | PAH SIM | 218-01-9 | Chrysene | 2.2 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| SW-102 / 09-29-06 | 0610004-02 | 10/4/2006 | 10/10/2006 | PAH SIM | 117-81-7 | bis(2-Ethylhexyl)phthalate | 1400 | ng/L | U | | 1000 | 1 | Negated due to Blank Action |
| SW-102 / 09-29-06 | 0610004-02 | 10/4/2006 | 10/10/2006 | PAH SIM | 205-99-2 | Benzo[b]fluoranthene | 1.6 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| SW-102 / 09-29-06 | 0610004-02 | 10/4/2006 | 10/10/2006 | PAH SIM | 207-08-9 | Benzo[k]fluoranthene | 1.8 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| SW-102 / 09-29-06 | 0610004-02 | 10/4/2006 | 10/10/2006 | PAH SIM | 50-32-8 | Benzo[a]pyrene | 1.7 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| SW-102 / 09-29-06 | 0610004-02 | 10/4/2006 | 10/10/2006 | PAH SIM | 193-39-5 | Indeno[1,2,3-cd]pyrene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SW-102 / 09-29-06 | 0610004-02 | 10/4/2006 | 10/10/2006 | PAH SIM | 53-70-3 | Dibenz[a,h]anthracene | 1.1 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| SW-102 / 09-29-06 | 0610004-02 | 10/4/2006 | 10/10/2006 | PAH SIM | 191-24-2 | Benzo[g,h,i]perylene | 10 | ng/L | UJ | I | 10 | 1 | Negated due to Blank Action + Low Calibration verification |
| SW-102 / 09-29-06 | 0610004-02 | 10/4/2006 | 10/10/2006 | PAH SIM | 208-96-8 | Acenaphthylene | 1.5 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| SW-102 / 09-29-06 | 0610004-02 | 10/4/2006 | 10/10/2006 | PAH SIM | 83-32-9 | Acenaphthene | 3 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| SW-102 / 09-29-06 | 0610004-02 | 10/4/2006 | 10/10/2006 | PAH SIM | 86-73-7 | Fluorene | 1.8 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| SW-102 / 09-29-06 | 0610004-02 | 10/4/2006 | 10/10/2006 | PAH SIM | 85-01-8 | Phenanthrene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SW-102 / 09-29-06 | 0610004-02 | 10/4/2006 | 10/10/2006 | PAH SIM | 120-12-7 | Anthracene | 1.2 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| SW-102 / 09-29-06 | 0610004-02 | 10/4/2006 | 10/10/2006 | PAH SIM | 86-74-8 | Carbazole | 1.1 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| SW-102 / 09-29-06 | 0610004-02 | 10/4/2006 | 10/10/2006 | PAH SIM | 206-44-0 | Fluoranthene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SW-105 / 09-29-06 | 0610004-03 | 10/4/2006 | 10/10/2006 | PAH SIM | 91-20-3 | Naphthalene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SW-105 / 09-29-06 | 0610004-03 | 10/4/2006 | 10/10/2006 | PAH SIM | 91-57-6 | 2-Methylnaphthalene | 1.2 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| SW-105 / 09-29-06 | 0610004-03 | 10/4/2006 | 10/10/2006 | PAH SIM | 129-00-0 | Pyrene | 1.8 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| SW-105 / 09-29-06 | 0610004-03 | 10/4/2006 | 10/10/2006 | PAH SIM | 56-55-3 | Benz[a]anthracene | 1.4 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| SW-105 / 09-29-06 | 0610004-03 | 10/4/2006 | 10/10/2006 | PAH SIM | 218-01-9 | Chrysene | 1.6 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| SW-105 / 09-29-06 | 0610004-03 | 10/4/2006 | 10/10/2006 | PAH SIM | 117-81-7 | bis(2-Ethylhexyl)phthalate | 1000 | ng/L | U | | 1000 | 1 | Negated due to Blank Action |
| SW-105 / 09-29-06 | 0610004-03 | 10/4/2006 | 10/10/2006 | PAH SIM | 205-99-2 | Benzo[b]fluoranthene | 1.4 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| SW-105 / 09-29-06 | 0610004-03 | 10/4/2006 | 10/10/2006 | PAH SIM | 207-08-9 | Benzo[k]fluoranthene | 1.4 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| SW-105 / 09-29-06 | 0610004-03 | 10/4/2006 | 10/10/2006 | PAH SIM | 50-32-8 | Benzo[a]pyrene | 1.1 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| SW-105 / 09-29-06 | 0610004-03 | 10/4/2006 | 10/10/2006 | PAH SIM | 193-39-5 | Indeno[1,2,3-cd]pyrene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SW-105 / 09-29-06 | 0610004-03 | 10/4/2006 | 10/10/2006 | PAH SIM | 53-70-3 | Dibenz[a,h]anthracene | 10 | ng/L | U | | 10 | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | 10/4/2006 | 10/10/2006 | PAH SIM | 191-24-2 | Benzo[g,h,i]perylene | 10 | ng/L | UJ | I | 10 | 1 | Negated due to Blank Action + Low Calibration verification |
| SW-105 / 09-29-06 | 0610004-03 | 10/4/2006 | 10/10/2006 | PAH SIM | 208-96-8 | Acenaphthylene | 1.3 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| SW-105 / 09-29-06 | 0610004-03 | 10/4/2006 | 10/10/2006 | PAH SIM | 83-32-9 | Acenaphthene | 5.2 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| SW-105 / 09-29-06 | 0610004-03 | 10/4/2006 | 10/10/2006 | PAH SIM | 86-73-7 | Fluorene | 2.6 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| SW-105 / 09-29-06 | 0610004-03 | 10/4/2006 | 10/10/2006 | PAH SIM | 85-01-8 | Phenanthrene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SW-105 / 09-29-06 | 0610004-03 | 10/4/2006 | 10/10/2006 | PAH SIM | 120-12-7 | Anthracene | 10 | ng/L | U | | 10 | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | 10/4/2006 | 10/10/2006 | PAH SIM | 86-74-8 | Carbazole | 10 | ng/L | U | | 10 | 1 | |
| SW-105 / 09-29-06 | 0610004-03 | 10/4/2006 | 10/10/2006 | PAH SIM | 206-44-0 | Fluoranthene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SW-107 / 09-29-06 | 0610004-04 | 10/4/2006 | 10/10/2006 | PAH SIM | 91-20-3 | Naphthalene | 9.5 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| SW-107 / 09-29-06 | 0610004-04 | 10/4/2006 | 10/10/2006 | PAH SIM | 91-57-6 | 2-Methylnaphthalene | 9.9 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low; H = High; I = Indeterminate. See Data Usability Report for details.

| Smpl | Lab_ID | Extr_Date | Anal_Date | al_Method | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | DF | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SW-107 / 09-29-06 | 0610004-04 | 10/4/2006 | 10/10/2006 | PAH SIM | 129-00-0 | Pyrene | 280 | ng/L | | | 10 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/4/2006 | 10/10/2006 | PAH SIM | 56-55-3 | Benz[a]anthracene | 89 | ng/L | | | 10 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/4/2006 | 10/10/2006 | PAH SIM | 218-01-9 | Chrysene | 110 | ng/L | | | 10 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/4/2006 | 10/10/2006 | PAH SIM | 117-81-7 | bis(2-Ethylhexyl)phthalate | 1800 | ng/L | | | 1000 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/4/2006 | 10/10/2006 | PAH SIM | 205-99-2 | Benzo[b]fluoranthene | 84 | ng/L | | | 10 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/4/2006 | 10/10/2006 | PAH SIM | 207-08-9 | Benzo[k]fluoranthene | 77 | ng/L | | | 10 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/4/2006 | 10/10/2006 | PAH SIM | 50-32-8 | Benzo[a]pyrene | 90 | ng/L | | | 10 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/4/2006 | 10/10/2006 | PAH SIM | 193-39-5 | Indeno[1,2,3-cd]pyrene | 48 | ng/L | | | 10 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/4/2006 | 10/10/2006 | PAH SIM | 53-70-3 | Dibenz[a,h]anthracene | 17 | ng/L | | | 10 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/4/2006 | 10/10/2006 | PAH SIM | 191-24-2 | Benzo[g,h,i]perylene | 49 | ng/L | J | L | 10 | 1 | Low Calibration verification |
| SW-107 / 09-29-06 | 0610004-04 | 10/4/2006 | 10/10/2006 | PAH SIM | 208-96-8 | Acenaphthylene | 23 | ng/L | | | 10 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/4/2006 | 10/10/2006 | PAH SIM | 83-32-9 | Acenaphthene | 64 | ng/L | | | 10 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/4/2006 | 10/10/2006 | PAH SIM | 86-73-7 | Fluorene | 42 | ng/L | | | 10 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/4/2006 | 10/10/2006 | PAH SIM | 85-01-8 | Phenanthrene | 78 | ng/L | | | 10 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/4/2006 | 10/10/2006 | PAH SIM | 120-12-7 | Anthracene | 21 | ng/L | | | 10 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/4/2006 | 10/10/2006 | PAH SIM | 86-74-8 | Carbazole | 26 | ng/L | | | 10 | 1 | |
| SW-107 / 09-29-06 | 0610004-04 | 10/4/2006 | 10/10/2006 | PAH SIM | 206-44-0 | Fluoranthene | 200 | ng/L | | | 10 | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | 10/4/2006 | 10/10/2006 | PAH SIM | 91-20-3 | Naphthalene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SW-108 / 09-29-06 | 0610004-05 | 10/4/2006 | 10/10/2006 | PAH SIM | 91-57-6 | 2-Methylnaphthalene | 1.4 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| SW-108 / 09-29-06 | 0610004-05 | 10/4/2006 | 10/10/2006 | PAH SIM | 129-00-0 | Pyrene | 2.9 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| SW-108 / 09-29-06 | 0610004-05 | 10/4/2006 | 10/10/2006 | PAH SIM | 56-55-3 | Benz[a]anthracene | 1.5 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| SW-108 / 09-29-06 | 0610004-05 | 10/4/2006 | 10/10/2006 | PAH SIM | 218-01-9 | Chrysene | 1.9 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| SW-108 / 09-29-06 | 0610004-05 | 10/4/2006 | 10/10/2006 | PAH SIM | 117-81-7 | bis(2-Ethylhexyl)phthalate | 1000 | ng/L | U | | 1000 | 1 | Negated due to Blank Action |
| SW-108 / 09-29-06 | 0610004-05 | 10/4/2006 | 10/10/2006 | PAH SIM | 205-99-2 | Benzo[b]fluoranthene | 1.6 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| SW-108 / 09-29-06 | 0610004-05 | 10/4/2006 | 10/10/2006 | PAH SIM | 207-08-9 | Benzo[k]fluoranthene | 2 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| SW-108 / 09-29-06 | 0610004-05 | 10/4/2006 | 10/10/2006 | PAH SIM | 50-32-8 | Benzo[a]pyrene | 1.4 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| SW-108 / 09-29-06 | 0610004-05 | 10/4/2006 | 10/10/2006 | PAH SIM | 193-39-5 | Indeno[1,2,3-cd]pyrene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SW-108 / 09-29-06 | 0610004-05 | 10/4/2006 | 10/10/2006 | PAH SIM | 53-70-3 | Dibenz[a,h]anthracene | 1.1 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| SW-108 / 09-29-06 | 0610004-05 | 10/4/2006 | 10/10/2006 | PAH SIM | 191-24-2 | Benzo[g,h,i]perylene | 10 | ng/L | UJ | I | 10 | 1 | Negated due to Blank Action + Low Calibration verification |
| SW-108 / 09-29-06 | 0610004-05 | 10/4/2006 | 10/10/2006 | PAH SIM | 208-96-8 | Acenaphthylene | 3.4 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| SW-108 / 09-29-06 | 0610004-05 | 10/4/2006 | 10/10/2006 | PAH SIM | 83-32-9 | Acenaphthene | 4.4 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| SW-108 / 09-29-06 | 0610004-05 | 10/4/2006 | 10/10/2006 | PAH SIM | 86-73-7 | Fluorene | 2.6 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| SW-108 / 09-29-06 | 0610004-05 | 10/4/2006 | 10/10/2006 | PAH SIM | 85-01-8 | Phenanthrene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| SW-108 / 09-29-06 | 0610004-05 | 10/4/2006 | 10/10/2006 | PAH SIM | 120-12-7 | Anthracene | 1.2 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| SW-108 / 09-29-06 | 0610004-05 | 10/4/2006 | 10/10/2006 | PAH SIM | 86-74-8 | Carbazole | 10 | ng/L | U | | 10 | 1 | |
| SW-108 / 09-29-06 | 0610004-05 | 10/4/2006 | 10/10/2006 | PAH SIM | 206-44-0 | Fluoranthene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| OW-303 / 09-29-06 | 0610004-06 | 10/4/2006 | 10/10/2006 | PAH SIM | 91-20-3 | Naphthalene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| OW-303 / 09-29-06 | 0610004-06 | 10/4/2006 | 10/10/2006 | PAH SIM | 91-57-6 | 2-Methylnaphthalene | 2.1 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| OW-303 / 09-29-06 | 0610004-06 | 10/4/2006 | 10/10/2006 | PAH SIM | 129-00-0 | Pyrene | 3.8 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| OW-303 / 09-29-06 | 0610004-06 | 10/4/2006 | 10/10/2006 | PAH SIM | 56-55-3 | Benz[a]anthracene | 1.7 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| OW-303 / 09-29-06 | 0610004-06 | 10/4/2006 | 10/10/2006 | PAH SIM | 218-01-9 | Chrysene | 2.1 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| OW-303 / 09-29-06 | 0610004-06 | 10/4/2006 | 10/10/2006 | PAH SIM | 117-81-7 | bis(2-Ethylhexyl)phthalate | 1000 | ng/L | U | | 1000 | 1 | Negated due to Blank Action |
| OW-303 / 09-29-06 | 0610004-06 | 10/4/2006 | 10/10/2006 | PAH SIM | 205-99-2 | Benzo[b]fluoranthene | 1.7 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| OW-303 / 09-29-06 | 0610004-06 | 10/4/2006 | 10/10/2006 | PAH SIM | 207-08-9 | Benzo[k]fluoranthene | 1.9 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| OW-303 / 09-29-06 | 0610004-06 | 10/4/2006 | 10/10/2006 | PAH SIM | 50-32-8 | Benzo[a]pyrene | 1.6 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| OW-303 / 09-29-06 | 0610004-06 | 10/4/2006 | 10/10/2006 | PAH SIM | 193-39-5 | Indeno[1,2,3-cd]pyrene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| OW-303 / 09-29-06 | 0610004-06 | 10/4/2006 | 10/10/2006 | PAH SIM | 53-70-3 | Dibenz[a,h]anthracene | 1.3 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| OW-303 / 09-29-06 | 0610004-06 | 10/4/2006 | 10/10/2006 | PAH SIM | 191-24-2 | Benzo[g,h,i]perylene | 10 | ng/L | UJ | I | 10 | 1 | Negated due to Blank Action + Low Calibration verification |
| OW-303 / 09-29-06 | 0610004-06 | 10/4/2006 | 10/10/2006 | PAH SIM | 208-96-8 | Acenaphthylene | 2.4 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| OW-303 / 09-29-06 | 0610004-06 | 10/4/2006 | 10/10/2006 | PAH SIM | 83-32-9 | Acenaphthene | 6.9 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| OW-303 / 09-29-06 | 0610004-06 | 10/4/2006 | 10/10/2006 | PAH SIM | 86-73-7 | Fluorene | 3.2 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| OW-303 / 09-29-06 | 0610004-06 | 10/4/2006 | 10/10/2006 | PAH SIM | 85-01-8 | Phenanthrene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |
| OW-303 / 09-29-06 | 0610004-06 | 10/4/2006 | 10/10/2006 | PAH SIM | 120-12-7 | Anthracene | 1.3 | ng/L | J | I | 10 | 1 | Result uncertain below the calibration range |
| OW-303 / 09-29-06 | 0610004-06 | 10/4/2006 | 10/10/2006 | PAH SIM | 86-74-8 | Carbazole | 10 | ng/L | U | | 10 | 1 | |
| OW-303 / 09-29-06 | 0610004-06 | 10/4/2006 | 10/10/2006 | PAH SIM | 206-44-0 | Fluoranthene | 10 | ng/L | U | | 10 | 1 | Negated due to Blank Action |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low; H = High; I = Indeterminate. See Data Usability Report for details.

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase IB-5 2006
8260B Data Review Checklist

ETR # 0610004

Lab: AWHL
Date Sampled: 9/29/06
Method of Analysis: 8260B

Lab Project #: BU303
No. Samples: 4 + 1FD + 1TB
Matrix: Surface Water

| | Preservation & HT | Surrogate | LCS | MS | FD W:RPD≤30% Other:RPD≤50% | Tunes ICALs CCALs | IS' | RL & Quant. Correct | Other Issues |
|---|---|---|---|---|---|---|---|---|---|
| All Samples in Project | ✓ | ✓ | ✓ | (R) 2-chloro-ethylvinyl ether | Unable to Assess | US Bromo-methane | ✓ | ✓ | None |
| **Except:** | | | | | | | | | |
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Comments: All Samples were received intact at 4±2°C + all VOCs had verified pH<2 - Samples were analyzed within HT ⇒ No Action required.

All 4 Surrogates (3 QAPP specified + 1,2-Dichloroethane-d4) were recovered within criteria in all Samples + QC ⇒ No Action

Date 12/8/06

Data Reviewer

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase IB-5 2006
8260B Data Review Checklist

Lab: AWHL
Date Sampled: 9/29/06

Lab Project #: BU303
No. Samples: 4 + 1FD + 1TB

Method of Analysis: 8260B
Associated Blanks: MB: VW100306B04
TB: TB-507

Matrix: SW

| Blank ID | Contaminant / Level ug/L | Matrix Related ? | | Action Level / Action | | | Corrected Result |
|---|---|---|---|---|---|---|---|
| VW100306B04 | Methylene chloride 1.3J | Y | | 13 ug/L | | Samples were all ND => No Action | |
| | | | | | | | |
| TB-507/09-29-06 | None | | | | | No Blank Action Required. | |
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**8260B Action Summary: see Worksheet #24b**

HT Actions: waters pH >2 or no HCl: 7d<HT≤14 d, J Aromatic det/R Aromatic NDs; Accept all Non-aromatics;
pH < 2, 14d <HT< 28 d; J Aromatic det/R Aromatic NDs; J Non-aromatic det/J Non-aromatic ND
soil/sediment - 14d <HT< 28 d; J Aromatic det/R Aromatic NDs; J Non-aromatic det/J Non-aromatic ND

Surrogate Actions: Recovery > Criteria, J det/Accept ND; 10%≤ Recovery <Criteria, J det/J NDs; Recovery <10%, J det/R NDs

Blank Actions: Surrogates outside criteria - Use Judgment if isolated or analysis related
Non-Matrix related Blank contamination, BB or EB contaminant in all samples associated with Blank
If contamination in blank(s) exist, if Result < RL, U result at RL; RL<Result<Blank Action, U result at level reported

MS Actions: %Rec<10%, J det/ R NDs; 10% <%Rec<Criteria, J det/ J NDs; %Rec >Criteria, J det/Accept NDs- Unspiked Sample only

LCS Actions: %Rec<10%, J det/ R NDs; 10% <%Rec<Criteria, J det/ J NDs; %Rec >Criteria, J det/Accept NDs for all Batch by Compound

FD Action: Both Conc. ≥ 2xRL, RPD >30%, J det; One result ND, other ≥2 x RL, J det/J NDs; Both Conc. < 2xRL; RPD >30%, LCS OK, Accept data

Date 12/8/06

Data Reviewer M J C. BM

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase IB-5 2006
8260B Data Review Checklist

Lab: AnH L
Date Sampled: 9/29/06
Method of Analysis: 8260B

Lab Project #: BU303
No. Samples 4 + 1 FD + 1 TB
Matrix: SW

Blank Action Continued

| Blank ID | Contaminant / Level | Matrix Related ? | | Action Level / Action | | | Corrected Result |
|---|---|---|---|---|---|---|---|
| | | | | | | No Blank Action Required NCM 12/8/06 | |

Date 12/8/06

Data Reviewer MJC.RM

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase IB-5 2006
8260B Data Review Checklist

Lab: AWHL
Date Sampled: 9/29/06
Method of Analysis: 8260B

Lab Project #: BU303
No. Samples: 4 + 1FD + 1TB
Matrix: SW

Additional Notes:

LCS/LCSD: VW100306LCS02 / VW100306LCSD02 - lab used in-house limits ⇒ Trichlorofluoromethane %Rec at 101% + 103% low - using QAPP criteria (70-130%) - All Targets were recovered within criteria in LCS + LCSD + RPD between LCS + LCSD OK ⇒ No Action Required.

MS/MSD done on SW-108/09-29-06 - using QAPP 70-130% criteria for recov, all results were acceptable except 2-chloroethylvinyl ether %Rec 0 + 0 in MS + MSD

* Action: 2-Chloroethylvinyl ether in SW-108/09-29-06 rejected (R) as unusable - lab indicated that loss of this analyte was due to degradation of the target in the presence of HCl (i.e., acid preserved aqueous samples would not detect this target).

FD pair = SW-105/09-29-06 + DW-303/09-29-06 - Both samples were non-detect for all VOCs ⇒ Unable to assess FD precision based on these results. No Action Required.

Tune: T1092801 (ICAL) T1100301 - All Abundances OK + All Samples were analyzed within 12 hrs. of BFB injects.

ICAL: 0.2 → 50 ug/L ICAL + %RSDs < 30% for all except Bromomethane %RSD = 35.8%

* Action: Bromomethane estimated (UJ) in all Samples due to Initial Calibration being outside of criteria.

Date 12/8/06

Data Reviewer [signature]

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase IB-5 2006
8260B Data Review Checklist

Lab: AWHL
Date Sampled: 9/29/06
Method of Analysis: 8260B

Lab Project #: BU303
No. Samples: 4 + 1FD + 1TB
Matrix: SW

Additional Notes:

CCV : C1100301 - %D ≤ ±25% for all Targets ⇒ All OK - No Action.

IS Areas + RTs were all OK in all samples + QC ⇒ No Action required.

RLs were ≤ PQLs given in Worksheet #9b, Rev 02-Draft, September 21, 2006 - lab analyzed standards at lab laser than reported so non-detects for benzene, bromomethane + 1,1,2-trichloroethane were ≤ PQLs. The non-detects for bromodichloromethane, carbon tetrachloride, chloroform, dibromochloromethane, 1,2-Dichloroethane, 1,2-Dichloropropane, cis- + trans-1,3-Dichloropropene, 1,1,2,2-Tetrachloroethane, tetrachloroethene, trichloroethene, vinyl chloride + m/p-xylene were > PQLs, as expected, due to method limitations.

There were no "J" data reported + narrative did not raise any additional issues not already addressed herein.

Date 12/8/06

Data Reviewer

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase IB-5 2006
8260B Data Review Checklist

| Sample ID | Date Sampled | Field Blank | Trip Blank | Method Blank | LCS | Date Analyzed |
|---|---|---|---|---|---|---|
| TB-507/09-29-06 | 9/29/06 | NA | NA | VW100306B04 | LCS02/LCSD02 | 10/03/06 |
| SW-102/09-29-06 | ↓ | ↓ | TB-507 | ↓ | ↓ | ↓ |
| SW-105/09-29-06 | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ |
| SW-107/09-29-06 | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ |
| SW-108/09-29-06 | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ |
| OW-303/09-29-06 | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ |
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Date 12/8/06

Data Reviewer MJC. RM

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase 1B-5 2006
8270C-SIM Data Review Checklist

ETR # 0610004

Lab: AWHL
Date Sampled: 9/29/06
Method of Analysis: 8270C-SIM

Lab Project #: BU303
No. Samples: 4 + 1 FD
Matrix: Surface Water

| | HT w: 7d other: 14d | Surrogate | LCS | MS | FD w: RPD ≤ 30% other: RPD≤50% | Tunes ICALs CCALs | IS' | RL & Quant. Correct | Other Issues |
|---|---|---|---|---|---|---|---|---|---|
| All Samples in Project | ✓ | ✓ | ✓ | ✓ | Unable to Assess | J/UJ | ✓ | ✓ | Accept |
| **Except:** | | | | | | 1 PAH | | | 4a "J" |
| | | | | | | | | | value |

Comments: Samples were received intact at 4±2°C and were extracted + analyzed within HT ⇒ No Action required.

3 PAH Surrogates used + all were within criteria in all Smpls + QC except 2-Methylnaphthalene-d10 low, at 14%, in Method Blk. No Action required (i.e., this will not affect the Smpl results).

Date 12/11/06

Data Reviewer

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase 1B-5 2006
8270C-SIM Data Review Checklist

Lab: AWHL
Date Sampled: 9/29/06
Lab Project #: BU303
No. Samples: 4 + 1 FD
Method of Analysis: 8270C-SIM
Matrix: SW
Associated Blanks: MB: SW100406B17

| Blank ID | Contaminant / Level | Matrix Related ? | Action Level / Action | Sample ID and result reported | Corrected Result |
|---|---|---|---|---|---|
| SW100406B17 | Naphthalene 1.5J ng/L | Y | 7.5 ng/L | ~~All Samples 3.4JB-39.~~ No 12/8/06 | |
| | | | | SW-107 9.5JB ng/L | 9.5J - Remove B |
| | | | | Other 4 Samples | U at RL |
| | | | | 3.4JB → 5.6JB ng/L | |
| | Phenanthrene 2.0J ng/L | Y | 10 ng/L | SW-107 78B ng/L | No Action - Remove B |
| | | | | Other 4 Samples | U at RL |
| | | | | 4.7JB → 6.3JB ng/L | |

**8270C Action Summary: see Worksheet #24b**

HT Actions: Waters 7d <HT≤ 14 d; J det/ J NDs; HT >14 d, J det/R ND
other Matrices 14d <HT≤ 28 d, J det/ J NDs; HT >28 d, J det/R ND
Analysis 40d < Extract HT ≤ 60d, J det/ J NDs; Extract HT > 60d; J det/ R NDs

Surrogate Actions: 2 BN Recovery > Criteria, J det/Accept ND; 10% ≤ 2-All Surrogates < Criteria, J det/J NDs; Recovery < 10%, J det/R NDs.

Blank Actions: Surrogates outside criteria - Use Judgment if isolated or analysis related
Non-Matrix related Blank contamination, BB or EB contaminant in all samples associated with Blank
Matrix related Blank contamination: Result < RL, U result at RL; RL<Result<Blank Action, U result at level reported

MS Actions: %Rec<10%, J det/ R NDs; 10% ≤%Rec<Criteria, J det/ J NDs; %Rec >Criteria, J det/Accept NDs for Unspiked Sample

LCS Actions: %Rec<10%, J det/ R NDs; 10% ≤%Rec<Criteria, J det/ J NDs; %Rec >Criteria, J det/Accept NDs for all Batch by

FD Action: Both Conc. ≥ 2xRL, %RPD outside, J det; One result ND, other ≥2 x RL, J det/J NDs; Both Conc. < 2xRL; %RPD out, LCS OK, Accept data

ICAL or CCAL Actions: ICAL %RSD > Criteria, J/UJ compound in all samples; CCAL %D > criteria due to loss in instrument sensitivity, J/UJ compound in all associated samples; %D out due to enhanced sensitivity, J only associated detects.

IS Actions: IS Area < criteria, J/UJ all assocaited compounds

%Solids Action: 10% ≤ % soilds ≤ 30%; J det/R ND; %solids < 10% R det/ R NDs

Date 12/11/06

Data Reviewer

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase 1B-5 2006
8270C-SIM Data Review Checklist

Lab: AATL
Date Sampled: 9/29/06
Method of Analysis: 8270C-SIM

Lab Project #: BU303
No. Samples: 4+1FD
Matrix: SW

Blank Action Continued

| Blank ID | Contaminant / Level ug/L | Matrix Related ? | Action Level / Action | Sample ID and result reported | Corrected Result |
|---|---|---|---|---|---|
| SW100406B17 cont'd | Fluoranthene 1.5J | Y | 7.5 ug/L | SW-107 200 B ug/L | No Action - Remove B |
| | | | | Other 4 Samples 4.2JB → 5.3JB ug/L | U at RL |
| | Bis(2-ethylhexyl) phthalate 160J ug/L | Y | 1600 ug/L | SW-107 1800 B ug/L | No Action - Remove B |
| | | | | SW-102 1400 B | 1400U |
| | | | | Other 3 Samples 140JB → 290JB ug/L | U at RL |
| | Indeno(1,2,3-cd) pyrene 1.1J | Y | 5.5 ug/L | SW-107 48 B ug/L | No Action - Remove B |
| | | | | Other 4 Samples 1.2JB → 1.8JB ug/L | U at RL |
| | Benzo(g,h,i)perylene 1.1J | Y | 5.5 ug/L | SW-107 49 B ug/L | No Action - Remove B |
| | | | | Other 4 Samples 1.2JB → 1.7JB ug/L | U at RL |

Date ~~12/12/06~~ 12/11/06

Data Reviewer MJC RJL

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase 1B-5 2006
8270C-SIM Data Review Checklist

Lab: AWHL
Date Sampled: 9/29/06
Method of Analysis: 8270C-SIM

Lab Project #: BU 303
No. Samples: 4 + 1FD
Matrix: SW

Additional Notes:

LCS: SW100406LC02 - % Rec of 17 PAHs + Carbazole + Bis(2-ethylhexyl)phthalate OK ⇒ No Action required.

MS/MSD done on SW-105/09-29-06 - % Rec + RPD's all OK ⇒ Acceptable accuracy + precision for matrix / method of analysis demonstrated ⇒ No Action

FD pair = SW-105/09-29-06 + DW-303/09-29-06 - All results in these 2 samples are either non-detect or reported at a level < RL ⇒ Unable to evaluate FD precision based on these results - No Action required.

Tunes: T4100701 (ICAL) + T4100904 - All Abundances OK + all Samples were analyzed within 12 hrs. of DFTPP Injection - No Action

ICAL 10/7/06 - 7-level ICAL from 10 ⇒ 10000 ng/L - RFs all > 0.05 + % RSD across all Stds ≤ 30% for all Targets ⇒ Valid ICAL - No Action.

CCAL - C4100904 - %D ≤ ± 25% for all except Benzo(g,h,i)perylene %D = 29.1% due to loss in sensitivity on 10/9/06 as compared to sensitivity during ICAL.

* Action: Benzo(g,h,i)perylene reported (UJ + J) with possible low bias (unless other QC issues exist) as a result of the low calibration verification.

Date 12/11/06

Data Reviewer

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase 1B-5 2006
8270C-SIM Data Review Checklist

Lab: AWHL
Date Sampled: 9/29/06
Method of Analysis: 8270C-SIM

Lab Project #: BU303
No. Samples: 4 + 1 FD
Matrix: SW

Additional Notes:

All 5 IS Areas + RTs were in criteria for all Stds + QC => No Action

All RLs were ≤ PQLs + all PALs were met with the exception of Benzo(a) pyrene and Dibenz(a,h)anthracene, due to method limitations, as expected.

49 Results were reported at a level < RL + flagged "J" by lab - these J values were accepted as estimated with indeterminate bias due to uncertainty in quantitation at a level below the calibration rng.

The narrative did not raise any additional issues

Date 12/11/06
Data Reviewer MJC. RM

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase 1B-5 2006
8270C-SIM Data Review Checklist

| Sample ID 060004- | Date Sampled | Field Blank | Method Blank | LCS | Date Extracted | Date Analyzed |
|---|---|---|---|---|---|---|
| SW-102/09-~~29-06~~ 29-06 -02 | 9/29/06 | NA | SW100406B7 | LO2 | 10/04/06 | 10/10/06 |
| SW-105/09-29-06 -03 | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ |
| SW-107/09-29-06 -04 | | | | | | |
| SW-108/09-29-06 -05 | | | | | | |
| DW-303/09-29-06 -04 | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ |
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Date ~~12/12/06~~ 12/6/06

Data Reviewer MJC. RM

2232.00 A

*New Environmental Horizons, Inc.*

# DATA USABILITY ASSESSMENT

**Metals Analysis by Method 6020**
**EPA Region I Tier II – type review**

DEC 19 2006

**Client:** Sanborn, Head & Associates, Inc., Concord, New Hampshire

**Site:** Blackburn & Union Privileges Superfund Site, Walpole, Massachusetts
Phase 1B-5 Remedial Investigation

**Laboratories:** Alpha Woods Hole Labs (AWHL), Raynham, Massachusetts

**SDG:** BU412

**Lab ETR:** 0610091

**# Samples/Analyses:** 13 sediments plus 1 equipment rinseate blank (EB) for Total Metals (arsenic and lead only)

**Initial Reviewer:** Susan D. Chapnick, New Environmental Horizons, Inc.

**Senior Reviewer:** Dr. Nancy C. Rothman, New Environmental Horizons, Inc.

**Date Completed:** December 13, 2006

An EPA Tier II-type Data Validation/Usability Checklist Review was performed on the Total Metals data included in this SDG with the following intentions: 1) to determine if the data were generated and reported in accordance with the *Phase 1B-5 Remedial Investigation Work Plan, Blackburn & Union Privileges Superfund Site, Walpole, MA,* prepared by Sanborn, Head & Associates, Inc., Rev. 02, September 21, 2006 (Phase IB-5 Work Plan); USEPA *Test Methods for Evaluating Solid Waste, Physical Chemical Methods, SW-846, Third Edition, Final Update, December 1996,* Method 6020 (ICP-MS metals); Region I, *EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses,* December 1996; *Region I Laboratory Data Validation Functional Guidelines for Evaluating Inorganics Analyses,* February 1989; and *Guidance for Data Useability in Risk Assessment* (Part A), Publication 9285.7-09A, USEPA 1992; 2) to determine if the data met the project data quality objectives for acceptable accuracy, precision, sensitivity; and technical usability; and 3) to update the project database with appropriate data quality qualifiers.

*34 Pheasant Run Drive, Skillman, NJ 08558 ◊ 2 Farmer's Circle, Arlington, MA 02474*
*Phone: (908) 874-5686 ◊ (781) 643-4294 Fax: (908) 874-4786*
*Email: n.rothman@patmedia.net ◊ s.chapnick@comcast.net*

The Data Review Checklist, attached, was completed during this assessment to document the review.

All results for the project-specific list of Total Metals (arsenic and lead only), in the samples included in this SDG BU412 are usable for project objectives. Data were unchanged as a result of this review, except to correct a laboratory qualification error (see below). The qualified (U) and unqualified results are usable for project objectives.

All sediment results were detected; therefore, all samples included in this SDG met all applicable project action limits (PALs) as listed in QAPP Worksheet #9b (Phase 1B-5 Work Plan, September 2006).

A low-level standard was not analyzed with the Total Metals, as required by the original QAPP (2000). However, the laboratory included a low-level standard in the calibration curve that was equivalent to the RL for each metal (arsenic and lead). This was considered acceptable to support the RL; therefore, no action was taken other than to note this deviation.

The laboratory incorrectly qualified all arsenic data in sediments as affected by matrix interference, based on the serial dilution results. These qualifications were removed during this data usability assessment review, as the results met QAPP criteria at the levels reported. Data users are directed to page 14 of the attached Data Usability Checklist for further details.

All other quality control information associated with accuracy, precision, representativeness, and sensitivity for the Total Metals (arsenic and lead) reported met project criteria for the samples in this SDG.

The qualified (U) and unqualified results presented in the validated database, submitted electronically to Sanborn, Head & Associates, Inc. are considered usable for project objectives.

| Smpl | Lab_ID | Freeze Dried? | Anal_Date | Anal_Method | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | RL_Units | DF | %Solid | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FP-09A / 0-1' / 10-13-06 | 0610091-01 | No | 11/2/2006 | 6020A | 7440-38-2 | Arsenic | 3.5 | mg/Kg dry weight | | | 0.05 | mg/Kg dry weight | 2 | 67.6 | |
| FP-09A / 0-1' / 10-13-06 | 0610091-01 | No | 11/2/2006 | 6020A | 7439-92-1 | Lead | 73 | mg/Kg dry weight | | | 0.05 | mg/Kg dry weight | 2 | 67.6 | |
| FP-09A / 1-3' / 10-13-06 | 0610091-02 | No | 11/2/2006 | 6020A | 7440-38-2 | Arsenic | 0.98 | mg/Kg dry weight | | | 0.046 | mg/Kg dry weight | 2 | 69.8 | |
| FP-09A / 1-3' / 10-13-06 | 0610091-02 | No | 11/2/2006 | 6020A | 7439-92-1 | Lead | 8.5 | mg/Kg dry weight | | | 0.046 | mg/Kg dry weight | 2 | 69.8 | |
| FP-09B / 0-1' / 10-13-06 | 0610091-03 | No | 11/2/2006 | 6020A | 7440-38-2 | Arsenic | 5.5 | mg/Kg dry weight | | | 0.045 | mg/Kg dry weight | 2 | 71.6 | |
| FP-09B / 0-1' / 10-13-06 | 0610091-03 | No | 11/2/2006 | 6020A | 7439-92-1 | Lead | 55 | mg/Kg dry weight | | | 0.045 | mg/Kg dry weight | 2 | 71.6 | |
| FP-09B / 1-3' / 10-13-06 | 0610091-04 | No | 11/2/2006 | 6020A | 7440-38-2 | Arsenic | 1.6 | mg/Kg dry weight | | | 0.042 | mg/Kg dry weight | 2 | 73.7 | |
| FP-09B / 1-3' / 10-13-06 | 0610091-04 | No | 11/2/2006 | 6020A | 7439-92-1 | Lead | 14 | mg/Kg dry weight | | | 0.042 | mg/Kg dry weight | 2 | 73.7 | |
| FP-09C / 0-1' / 10-13-06 | 0610091-05 | No | 11/2/2006 | 6020A | 7440-38-2 | Arsenic | 1.4 | mg/Kg dry weight | | | 0.038 | mg/Kg dry weight | 2 | 88.8 | |
| FP-09C / 0-1' / 10-13-06 | 0610091-05 | No | 11/2/2006 | 6020A | 7439-92-1 | Lead | 21 | mg/Kg dry weight | | | 0.038 | mg/Kg dry weight | 2 | 88.8 | |
| FP-09C / 1-3' / 10-13-06 | 0610091-06 | No | 11/2/2006 | 6020A | 7440-38-2 | Arsenic | 1 | mg/Kg dry weight | | | 0.037 | mg/Kg dry weight | 2 | 84.3 | |
| FP-09C / 1-3' / 10-13-06 | 0610091-06 | No | 11/2/2006 | 6020A | 7439-92-1 | Lead | 8.3 | mg/Kg dry weight | | | 0.037 | mg/Kg dry weight | 2 | 84.3 | |
| FP-09D / 0-1' / 10-13-06 | 0610091-07 | No | 11/2/2006 | 6020A | 7440-38-2 | Arsenic | 14 | mg/Kg dry weight | | | 0.046 | mg/Kg dry weight | 2 | 71.4 | |
| FP-09D / 0-1' / 10-13-06 | 0610091-07 | No | 11/2/2006 | 6020A | 7439-92-1 | Lead | 330 | mg/Kg dry weight | | | 0.046 | mg/Kg dry weight | 2 | 71.4 | |
| FP-09D / 1-3' / 10-13-06 | 0610091-08 | No | 11/2/2006 | 6020A | 7440-38-2 | Arsenic | 9.7 | mg/Kg dry weight | | | 0.044 | mg/Kg dry weight | 2 | 75.2 | |
| FP-09D / 1-3' / 10-13-06 | 0610091-08 | No | 11/2/2006 | 6020A | 7439-92-1 | Lead | 170 | mg/Kg dry weight | | | 0.044 | mg/Kg dry weight | 2 | 75.2 | |
| FP-09E / 0-1' / 10-13-06 | 0610091-09 | No | 11/2/2006 | 6020A | 7440-38-2 | Arsenic | 1.6 | mg/Kg dry weight | | | 0.038 | mg/Kg dry weight | 2 | 85.7 | |
| FP-09E / 0-1' / 10-13-06 | 0610091-09 | No | 11/2/2006 | 6020A | 7439-92-1 | Lead | 38 | mg/Kg dry weight | | | 0.038 | mg/Kg dry weight | 2 | 85.7 | |
| FP-09E / 1-3' / 10-13-06 | 0610091-10 | No | 11/2/2006 | 6020A | 7440-38-2 | Arsenic | 2.3 | mg/Kg dry weight | | | 0.038 | mg/Kg dry weight | 2 | 88.3 | |
| FP-09E / 1-3' / 10-13-06 | 0610091-10 | No | 11/2/2006 | 6020A | 7439-92-1 | Lead | 62 | mg/Kg dry weight | | | 0.038 | mg/Kg dry weight | 2 | 88.3 | |
| FP-09F / 0-1' / 10-13-06 | 0610091-11 | No | 11/2/2006 | 6020A | 7440-38-2 | Arsenic | 1.8 | mg/Kg dry weight | | | 0.035 | mg/Kg dry weight | 2 | 89.9 | |
| FP-09F / 0-1' / 10-13-06 | 0610091-11 | No | 11/2/2006 | 6020A | 7439-92-1 | Lead | 68 | mg/Kg dry weight | | | 0.035 | mg/Kg dry weight | 2 | 89.9 | |
| FP-09F / 1-3' / 10-13-06 | 0610091-12 | No | 11/2/2006 | 6020A | 7440-38-2 | Arsenic | 3.6 | mg/Kg dry weight | | | 0.037 | mg/Kg dry weight | 2 | 87.8 | |
| FP-09F / 1-3' / 10-13-06 | 0610091-12 | No | 11/2/2006 | 6020A | 7439-92-1 | Lead | 340 | mg/Kg dry weight | | | 0.037 | mg/Kg dry weight | 2 | 87.8 | |
| OW-412 / 0-1' / 10-13-06 | 0610091-13 | No | 11/2/2006 | 6020A | 7440-38-2 | Arsenic | 2.2 | mg/Kg dry weight | | | 0.038 | mg/Kg dry weight | 2 | 89.7 | |
| OW-412 / 0-1' / 10-13-06 | 0610091-13 | No | 11/2/2006 | 6020A | 7439-92-1 | Lead | 95 | mg/Kg dry weight | | | 0.038 | mg/Kg dry weight | 2 | 89.7 | |
| OW-412A / 10-13-06 | 0610091-14 | No | 11/2/2006 | 6020A | 7440-38-2 | Arsenic | 1 | µg/L | U | | 1 | µg/L | 2 | | |
| OW-412A / 10-13-06 | 0610091-14 | No | 11/2/2006 | 6020A | 7439-92-1 | Lead | 1 | µg/L | U | | 1 | µg/L | 2 | | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low; H = High; I = Indeterminate. See Data Usability Report for details.

## I. Data Package Completeness

***Phase 1B-5 Work Plan Remedial Investigation Work Plan,* Blackburn & Union Privileges Superfund Site, Walpole Massachusetts, Rev 02, September 21, 2006**

Laboratories: *Alpha Woods Hole Labs (AWHL), Raynham, MA* SDG: BU412 Sediment
AWHL ETR #: 610091

Review the data package for completeness based on EPA Region I and Site QAPP requirements.

- Were all required reporting forms and associated raw data for field samples and QC included in the data package? **Yes / No.**
- Were all sample analyses requested on the Chain-of-Custody performed by the laboratory? **Yes / No.**

If "No" to any of the above questions, document missing information and resubmittal requests in the comment section below.

Tabulate the number and types of samples in this SDG and the QAPP-required data validation level.

| Number and Type of Samples | Parameter(s) | Data Validation Level (EPA Region I Tier) |
|---|---|---|
| 13 Sediments + 1 EB | *Total Metals – Arsenic & Lead only (Method 6020)* | |

Comments:
EB = Equipment Rinsate Blank

Data Reviewer: _____ Date: 12/12/06

Susan D. Chapnick, Principal Scientist
New Environmental Horizons, Inc.

## II. Review of QC Summary (CLP-like) Forms and Additional QA/QC Parameters

### A. Holding Times/Preservation Criteria *[QAPP Worksheet #11b and #12b]*

- Were holding time criteria met for all samples/analyses as indicated below? **Yes** / **No**.
- Were preservation criteria met for all samples/analyses as indicated below? **Yes/No**.

Soils/Sediments[1]:

| | |
|---|---|
| Metals (except Hg) | 180 days from date of collection, maintained at 4°± 2° C |
| Mercury | 28 days from date of collection, maintained at 4°± 2° C |
| TOC | 28 days from date of collection, maintained at 4°± 2° C |

[1] Sediments will be freeze-dried prior to preparation/analysis for total metals if % solids < 75% in "native" sample. Soils and Sediments can be maintained frozen to arrest holding times. If frozen, holding time starts when thawed.

**Actions:** If the holding times were exceeded, estimate (J and UJ) positive and nondetect results. If the holding times were grossly exceeded, estimate (J) positive results and reject (R) nondetect results. If samples were improperly preserved, use professional judgment – may estimate (J and UJ) associated results.

**Holding Time / Preservation Actions**

| Analyte | Holding Time Exceedance | Preservation Issue | Action / Bias | Affected Sample(s) / Comments |
|---|---|---|---|---|
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Comments:_____

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12/12/06

**B. Calibration** *[QAPP Worksheet #21 and #24a]*

1. Instrument Calibration

Instrument calibrations were reviewed to ensure that the laboratory followed the correct method procedures.

- Were instrument calibrations performed daily for all methods/instruments used for analysis? **Yes / No.**
- Were the proper number of standards used for each calibration as compliant with SW846 Method requirements? **Yes / No.**
- Were the calibration curves compliant with linearity requirements of the SW846 Method if a linear curve was used ($r \geq 0.995$)? **Yes / No.**

If no to any of the above, list affected samples/analytes and actions in the comment section, below.

2. Initial Calibration Verification (ICV) and Continuing Calibration Verification (CCV) Standards

All ICVs and CCVs were reviewed to assess the accuracy and sensitivity of the results.

- Did all ICVs and CCVs meet the recovery criteria? **Yes / No**. If no, list the outliers and the affected samples in the comment section, below.

**Actions:** If the ICV/CCV recovery criteria exceeded the defined limits indicated below, estimate (J) associated positive results; no action is required for nondetect results. If ICV/CCV recoveries were below defined QC limits, estimate (J and UJ) associated positive and nondetect results.

Control Limits

| | |
|---|---|
| Metals by ICP or ICP/MS: | 90-110% |
| Mercury by CVAA: | 90-110% |

[ICV/CCV for other parameters: check lab narrative for deviations; not required in summary QC forms]

Comments:_____



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**B. Calibration (continued)**

2. Low Level Standard analyzed consistent with sample-equivalent reporting or quantitation limit. (QL).

- Were the low-level standards in the calibration curves for inorganic analyses (ICP-MS, ICP-AES, CVAA) analyzed at the correct concentrations to support the laboratory QL? **Yes / No.** NA all below.

If no, results reported as non-detects and within 2x the QL may be uncertain.

**Actions:** If No, estimate (UJ) all non-detect data for the affected metal(s) and estimate (J) detected results < 2xQL due to potential uncertainty in the sensitivity of analysis and accuracy at the low end of the calibration curve.

| Analyte | Action / Bias | Affected Sample(s) / Comments |
|---|---|---|
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Comments:

The lab did not analyze a low-level std after calibration. Instead they analyzed a low std in the calibration curve at a level equivalent (on-instrument) to the RL. This is considered acceptable to support project sensitivity requirements.

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## C. Blank Results

1. Laboratory Blanks *[QAPP Worksheet #9b, 11b, and #24a]*

Laboratory (preparation and calibration) blank results were reviewed to assess the presence of contaminants that ultimately affect the accuracy and sensitivity of the results. Blanks were assessed compared to the project-required quantitation limits (PQLs) listed in Worksheet 9b of the QAPP and to the laboratory QLs.

- Were all analytes detected in the laboratory blanks at levels less than the PQLs? **Yes / No.** If no, list below the analyte and blank level for the highest detected result above the PQLs.
- Were negative baseline drifts, if observed as negative ICB/CCB or preparation blank results, observed at absolute values less than the PQL? **Yes / No / NA.** If no, list below the analyte and blank level for the negative result with an absolute value above the PQL.

| Analyte | Highest Lab Blank Result (Units) |
|---|---|
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Comments:



12/12/06

**C. Blank Results (continued)**

2. Field Blank Results *[QAPP Worksheet #9b, 11b, #22a, and #22b]*

Field blank results were reviewed to assess the presence of contaminants that ultimately affect the accuracy and sensitivity of the sample results.

- Was there a field equipment rinsate blank associated with the samples in this SDG? **Yes** / **No.** If yes, list the field blank(s) and the associated samples in the table below.

| Field Rinsate Blank Sample ID | Associated Field Sample IDs |
|---|---|
| OW-412A/10-13-06 | All sediments in this SDG BU412 |
| | |
| | |
| | |
| | |

- Were all analytes detected in the field equipment rinsate blank(s) at levels less than the PQL? **Yes** / **No.** If no, list contaminants below.

NOTE: Use the maximum field blank concentration in cases where multiple field blanks are associated with the samples in a given SDG.

**Field Blank ID:** _____

| Analyte | Field Blank Result (Units) |
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**C. Blank Results (continued)**

**Actions:** Blank Contamination: Determine the maximum concentration of each analyte based upon a review of all blanks (laboratory blanks and field equipment rinsate blanks). For Water: sample results which are greater than the PQL but less than 5 times the amount found in the associated blank are negated (qualified U) at the level found in the sample. For Soil/Sediment: sample results which are greater than the PQL but less than 5 times the amount found in the associated blanks are qualified "B" to indicate that the analyte was also found in the associated blank(s) – this is the action for non-matrix matched blanks (e.g., aqueous field rinsate blanks associated with soil/sediment samples) -- reference QAPP Worksheet #29c. Data flagged "B" may be biased high. No actions are taken for results greater than 5x the blank level. No actions are taken to qualify field equipment rinsate blank results, unless contamination observed in associated aqueous method blank.

Negative Baseline Drift: Any blank reported with a negative result for which the absolute value was greater than the PQL, are evaluated for this project using the absolute value of the blank result as the rule for action. If the sample result was > PQL but < the absolute value of the blank concentration, estimate the nondetect and detect results (UJ and J). These results may be biased low. No actions are taken for results greater than the absolute value of the blank level (negative baseline drift). The action for negative baseline drift affects all associated field samples and field equipment rinsate blank samples analyzed in the SDG.

NO BLANK ACTIONS Required

| Analyte | Maximum Blank Concentration (Units) | Blank Action Level (Units) | Actions/Affected Samples |
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12/12/06

## D. Matrix QC Results

1. Matrix Spike Recoveries *[QAPP Worksheet #11b and #24a]*

Matrix spike (MS) results were reviewed to assess the accuracy of the results relative to the specific sample matrix.

- Were matrix spike (MS) results present for all required analytes at the proper frequency as required by the Site QAPP? **Yes / No.** Were matrix spike recovery criteria met? **Yes / No.**

**QAPP MS Recovery Criteria:**

Metals and TOC in all matrices: 75-125%

All other parameters: 80-120%

List the affected analytes and actions in the table below.

**Actions:** If the spike recovery was > upper control limit, estimate (J) all positive results. No action is taken for non-detects. If the spike recovery fell within the range of 30-74% for metals or within the range of 30-79% for the other parameters, estimate (UJ or J) all sample results. If the spike recoveries were less than 30% for any parameter, reject (R) the nondetect results as unusable and estimate (J) the positive results for extremely low bias.

If the sample concentration exceeds the spike-added concentration by a factor of 4 or more, no action is taken because the spike level was "swamped-out" by the native concentration in the sample.

**Matrix Spike (MS) Accuracy Action Table**

| Analyte | MS % Recovery | Action | Comments/Affected Samples |
|---|---|---|---|
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**MS Sample ID#:** FP-09E/0-1'(10-13-06)



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**D. Matrix QC Results (continued)**

2. Sample/Matrix Duplicate Results *[QAPP Worksheet #11b and #24a]*

Matrix (laboratory) duplicate (MD) results were reviewed to access the precision of the results relative to the specific sample matrix.

- Were matrix duplicate (MD) analyses present for all analytes at the proper frequency as required by the Site QAPP? **Yes / No.** Were criteria as defined below, met for all analytes? **Yes / No.**

List the analytes affected and actions in the table below.

Site QAPP Control Limits: Soil/Sediment — RPD ≤ 35% for results > 5x QL; difference ± 2x QL for results < 5x QL

**Actions:** Estimate (J and UJ) all results for analytes which do not meet precision criteria.

**Matrix Duplicate (MD) Precision Action Table**

| Analyte | MD RPD | Action | Comments/Affected Samples |
|---|---|---|---|
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Comments: MD Sample ID #: FP-09E/0-1' (10-13-06)



12/12/06

**D. Matrix QC Results (continued)**

3. Field Duplicate Precision: *Worksheet #11b, #22a, and #22b*

Field duplicate sample results were reviewed to assess representativeness of the sample aliquot to the area sampled and the precision of the results relative to field sampling techniques.

- Was a field duplicate pair included in this SDG? **Yes** / **No.** If Yes, identify in the following table.

**Actions:** If field duplicate precision exceeded criteria, below, for any analyte, estimate (J and UJ) positive and non-detected results for the affected analytes in the field duplicate pair only. If severe imprecision was noted in the field duplicate results, qualify the remainder of the associated field sample data based on sound technical judgment.

Site QAPP Control Limits:

| | |
|---|---|
| Soil/Sediment | RPD ≤ 50% for results > 5x QL;<br>difference ± 4x QL for results < 5x QL |

**Field Duplicate (FD) Precision/Representativeness Actions**

Field Duplicate Pair Samples: FP-09F/0-1'/10-13-06 and OW-412/0-1/10-13-06

See Page 10a for field duplicate RPD calculations and Actions

Comments:

No FD Actions required.



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Field Duplicate Precision Evaluation Worksheet

**SDG: BU412 Sediment**

Labs: AWHL for metals (arsenic & lead only)

| Analyte | Units | Sample Result FP-09F/0-1'/ 10-43-06 | Qual | Field Duplicate Result OW-412/0-1'/ 10-13-06 | Qual | Precision RPD* | Action | Comment |
|---|---|---|---|---|---|---|---|---|
| Arsenic - total | ug/L | 1.8 | | 2.2 | | 20 | None | |
| Lead - total | ug/L | 68 | | 95 | | 33 | None | |

NC = Not calculated

* RPD criteria for FD precision: if result is > 5xQL, RPD criterion is < ± 50%; if result is < 5xQL, criterion is difference < ± 4xQL.

Date: 12/12/06

Data Reviewer: _____

**New Environmental Horizons, Inc.**

## E. Method QC

1. Laboratory Control Sample Recoveries *[QAPP Worksheet #11b and #24a]*

The laboratory control sample (LCS) and/or standard reference material (SRM) recoveries were reviewed to assess the accuracy of the results relative to the laboratory method performance of each step during the preparation, analysis, and reporting of environmental samples for each matrix.

- Was an appropriate (soil, sediment, or water) LCS performed for all analytes at the proper frequency? **Yes / No.**
- Did all analytes meet Site QAPP recovery criteria or 80-120% or vendor control limits for SRM? **Yes / No.**

If no, list the affected analytes and actions in the comment section, below.

**Actions:** If the LCS recovery for any analyte was greater than 120% or the established upper control limit for an SRM, estimate (J) all detected sample results. If the LCS recovery was less than 80% or less than the established lower control limit, estimate (J and UJ) the detected and non-detected results. Use professional judgment if LCS is severely low (< 50%, EPA Region I criterion for total metals), and the MS was out of control, to reject (R) associated results as unusable. Use professional judgment if LCS is out of control and MS is in control, to accept results for acceptable accuracy in the sample matrix.

**Laboratory Control Sample (LCS) Accuracy Action Table**

| Analyte | LCS % Recovery | Action | Comments/Affected Samples |
|---|---|---|---|
| | | | |
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Comments:

12/12/06

**E. Method QC (continued)**

2. ICP Method QC - ICP Interference Check Sample Results *[QAPP Worksheet #24a]*

ICP interference check procedures were performed to evaluate and verify the laboratory's interelement and background corrections for ICP-AES analyses and to generally evaluate interferences for isotope abundances on ICP-MS.

- Were analyte levels in the ICSA and ICSAB reported for all metals? **Yes / No**. required (As + Pb only)
- Was the ICSA and ICSAB analyzed at the correct frequency? **Yes / No**.
- Did all analytes meet recovery criteria of 80-120% in the ICSAB solution? **Yes / No**.

If no to any of the above, list the affected samples, analytes, concentrations and actions in the section below.

Comments:

12/12/06

**E. Method QC (continued)**

3. ICP-MS Method QC - Internal Standard Recovery Results *[QAPP Worksheet #24a]*

   - Were internal standards added to all samples analyzed by ICP-MS? **Yes / No.**
   - Did internal standards meet recovery criteria of 80-120% for CCVs and 30-120% for field samples as defined in the Site QAPP? **Yes / No.**

   If no, results might be uncertain with either a high or low bias dependent upon the internal standard recovery results. Professional judgment should be used to estimate (J and UJ) all affected field results for low (<30%) recoveries of the internal standards and to estimate detected results (J) for high recoveries of the internal standards. For internal standard recoveries that do not meet criteria in the CCV, professional judgment may be used to estimate (J or UJ) associated field sample results bracketed during analysis by the affected CCV.

   All actions must be described below.

Comments:

12/12/06

**E. Method QC (continued)**

4. ICP Serial Dilution Results *[QAPP Worksheet #24a]*

- Was a field sample used for ICP serial dilution analysis? (Yes) / No. but see below.
  **Sample ID#:** FP-09E/0-1'(10-13-06)
- Did all analytes meet criterion of < 15% Difference (%D) for values that were > 50x QL in the serial dilution results? (Yes) / No.

List the affected samples/analytes and actions in the table below.

**Actions:** Estimate (J) all positive results if the %D > 15% for results that are > 50x the QL.

**Serial Dilution Result Actions**

| Analyte | % Difference | Action / Affected Samples |
|---|---|---|
| Arsenic | 16 | Lab qualified results "E" to indicate matrix effect based on % diff. of serial dilution. Removed lab qualifier during DV - because meets QAPP criterion because Arsenic value of 1.6 mg/kg is < 50X QL; therefore, no action required. * |
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* As: sample-specific QL = 0.036 mg/kg
50 x QL = 50 x 0.036 = 1.9 mg/kg.
Sample result is < 1.9 mg/kg.
Therefore serial dilution result % diff. Not Applicable for DV actions.



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## F. Verification of MDLs/RLs, Linear Ranges, IECs

1. Sample Detection Limits *[QAPP Worksheet #9b]*

Analyte detection limits were reviewed to assess if the sensitivity of the results met the project-specific requirements.

Review Form 10, or equivalent. For this project, Method Detection Limits (MDL) should be performed annually.

- ~~Were~~ current (annual) MDLs present for all analytes and all instruments used for analysis? (Yes) / No.
- Were the MDLs and/or QLs compliant with project-specific reporting limit (PQL) requirements as listed in Worksheet #9b of the Site QAPP? (Yes) / No. All results detected.

**Actions:** Non-detected results that do not meet required PQLs may not be usable for specific data uses such as risk assessment.

**Table of Results That Do Not Meet QAPP PQL (Sensitivity) Requirements**

| Analyte | Sample ID # (s) Affected | Highest QL reported (units) | QAPP PQL (units) | QAPP PAL (units) | Reason (% solids; blank action; etc.) | Usability |
|---|---|---|---|---|---|---|
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Comments:



12/12/06

**F. Verification of MDLs/RLs, Linear Ranges, IECs - continued**

**2. ICP Interelement Correction Factors** (For ICP-AES only – Not required for ICP-MS)

- Review Form 11, or equivalent, ICP-AES Interelement Correction Factors (Annually)
- Were the current (annual) IECs present in the data package? **Yes / No (NA)**

**Actions:** If no, use professional judgment to determine the severity of the affect on the results.

**3. ICP-AES and ICP-MS Linear Ranges (Annual)**

- Review Form 12, or equivalent, ICP Linear Ranges are checked daily and updated, at a minimum, annually for this project.
- Were current (annual) linear range data present in the data package? **Yes (No.)**

**Actions:** If no, use professional judgment to determine the severity of the affect on the results.

Comments: LR analysis date 4/2005 – outside of annual requirement. No action taken based on professional judgment because ICP-MS Linearity is generally stable over time.

**G. Preparation and Analysis Logs**

**1. Preparation Logs**

- Were sample preparation logs present and do they contain all samples/analytes performed in the SDG? **Yes / No.**

**2. Analysis Run Logs**

- Were analysis run logs present for all required samples/methods for this SDG? **(Yes) No**
- Was the correct analytical sequence followed for the QC for each method? **(Yes) / No.**
- Were the calibration standards (*i.e.*, CCVs, CCBs, ICSA, ICSAB, etc.) analyzed at the proper frequency consistent with the methods and the Site QAPP? **(Yes) / No.**

If no to questions for Form 13 or 14, list the affected samples/analytes and actions in the comment section, below.

Comments: _____

_____

## H. Additional QA/QC Issues

### 1. Percent Solids

Percent solids data were reviewed to further assess the affect of the sample matrix on result quantitation.

- Review percent solids results for all soil and sediment samples.

  Specific note for Sediments: For this project, all sediment samples were freeze-dried prior to analysis for total metals. The freeze-dried percent solids value used to calculate the total metals results on a dry-weight basis; therefore, the freeze-dried percent solids is used to compare to EPA Region I DV criteria. For TOC, the "as-received" or "native" percent solids is used as sediment aliquots for these parameters were not freeze-dried prior to preparation and analysis.

- Were percent solids > 30% for all soil and sediment samples? **Yes** / **No**

If no, list affected samples and actions in the table, below.

**Actions:** If percent solids results were > 30%, no actions are required. If percent solids were < 30% but > 10%, use professional judgment to either estimate (UJ) or reject all non-detected results (R) and estimate (J) all detected results. If percent solids were < 10%, use professional judgment to either estimate (UJ) or reject (R) all results. Professional judgment may be used, for example, if data reported are useful to the risk assessors even in low percent solids sediments.

**Percent Solids Action Table**

| Sample ID | % Solids | Action / Comments |
|---|---|---|
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No freeze drying performed or required to meet project objectives; all % solids > 50%.



12/12/06

**2. Sample Result Verification – Uncertainty Near the Level of Detection**

Detected sample results were reviewed to assess certainty of results near the QLs. Results reported below the lab's QL, down to the IDL or MDL, have uncertainty near this statistically-derived level of detection.

- Were all sample results reported at ≥ QL or PQL? **Yes** / **No**
- If No, actions to estimate these results, reported between the MDL and the QL, may be taken.

**Action:** Estimate (J) all results < 2x the lab MDL and < the QL that have not been previously qualified "J" due to other QC criteria, due to uncertainty in the accuracy of the quantitation at this low level. Estimate (UJ) the level of detection if the non-detected result is reported down to the MDL (and if not previously qualified due to other QC criteria exceedance) due to the uncertainty in the statistically-derived MDL.

| Analyte | Sample ID# of affected results / matrix | Comments |
|---|---|---|
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Comments:



12/12/06

**III. Review of Overall Data Package Compliance**

Review of the overall data package was performed to determine if the laboratory met all EPA SW846 method and project QAPP requirements.

**Case Narrative Review**

Review the Case Narrative provided with the data package and list all issues of noncompliance or QA/QC exceedances addressed in the case narrative that have not been previously evaluated in the Data Usability Review. For each issue listed, state what qualification to the data has been taken.

Comments: No further issues noted.

**Sample result verification through re-calculation from the raw data was not performed, and was not required, for parameters undergoing a Tier II-type review or Tier I-type review.** ***[Reference QAPP Worksheet # 29b and #29c for data validation levels and modifications.]*** As sample result calculation verification was performed for the Tier-III type reviews previously documented for this Site for these media, and no anomalies were noted, it was assumed that the calculations were performed correctly for the remainder of the environmental data.

12/12/06

## Data Summary Key for Data Usability Checklist Review

J - The associated numerical value is an estimated quantity due to quality control criteria exceedance(s). The value is usable for project decisions as an estimated result. The Data Usability Report discusses the potential bias in estimated results.

U - The analyte was analyzed for, but was not detected. The associated numerical value is the sample-specific quantitation limit. The value is usable for project decisions as a nondetect result at the quantitation limit.

UJ - The analyte was analyzed for, but was not detected. The associated numerical value is the sample reporting/quantitation limit and is an estimated quantity. The value is usable for project decisions as a non-detect result at the estimated reporting limit.

B - The analyte was detected in an associated non-matrix-matched blank. The result is usable for project decisions.

R - Reject data due to severe or cumulative exceedance of quality control criteria. The value is unusable (analyte may or may not be present) for project decisions. Re-sampling and reanalysis is necessary for verification.

## List of Inorganic Data Usability Checklist Review Acronyms

| | | |
|---|---|---|
| CCB | - | Continuing Calibration Blank |
| CCV | - | Continuing Calibration Verification Sample |
| CLP | - | Contract Laboratory Program |
| CRDL | - | Contract Required Detection Limit |
| %D | - | Percent Difference |
| DQO | - | Data Quality Objective |
| EPA | - | Environmental Protection Agency |
| FD | - | Field Duplicate |
| g | - | gram |
| ICB | - | Initial Calibration Blank |
| ICP | - | Inductively Coupled Plasma Spectrophotometry |
| ICP-MS | - | ICP-Mass Spectrometry |
| ICS | - | Interference Check Sample |
| ICV | - | Initial Calibration Verification Sample |
| IDL | - | Instrument Detection Limit |
| IEC | - | Interelement Correction Factor |
| IS | - | Internal Standard (ICP-MS only) |
| Kg | - | kilogram |
| L | - | liter |
| LCS | - | Laboratory Control Sample |
| MD | - | Matrix Duplicate |
| MDL | - | Method Detection Limit |
| mg | - | milligram |
| mg/Kg | - | milligram per kilogram |
| MS | - | Matrix Spike |
| NA | - | Not Applicable |
| ND | - | Non-detect |
| PQL | - | Project Quantitation Limit |
| QA | - | Quality Assurance |
| QAPP | - | Quality Assurance Project Plan |
| QC | - | Quality Control |
| QL | - | Quantitation Limit |
| r | - | correlation coefficient of linear regression curve |
| RB | - | Rinsate Blank (equipment rinsate field blank) |
| RPD | - | Relative Percent Difference |
| SDG | - | Sample Delivery Group |
| SRM | - | Standard Reference Material |
| TAL | - | Target Analyte List |
| µg/Kg | - | micrograms per kilogram |
| µg/L | - | micrograms per liter |

## References

1. *Phase 1A Remedial Investigation*, Blackburn & Union Privileges Superfund Site, Walpole, Massachusetts, November 2000; inclusive of the *Project Operations Plan (POP), Sampling and Analysis Plan (SAP), and Quality Assurance Project Plan (QAPP).*

2. *Phase 1B-2 Remedial Investigation Work Plan*, Blackburn & Union Privileges Superfund Site, Walpole, Massachusetts, June 2003.

3. *Phase 1B-5 Work Plan Remedial Investigation Work Plan,* Blackburn & Union Privileges Superfund Site, Walpole Massachusetts, Rev 02, September 21, 2006

4. *EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses,* EPA Region I, December 1996.

5. *Region I Laboratory Data Validation Functional Guidelines for Evaluating Inorganics Analyses,* EPA Region I, February 1989.

6. *Guidance for Data Useability in Risk Assessment* (Part A), Publication 9285.7-09A, EPA 1992.

7. *Test Methods for Evaluating Solid Waste, Physical Chemical Methods, SW-846*, EPA Office of Solid Waste, Third Edition, Final Update, December 1996.

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*New Environmental Horizons, Inc.*

# DATA USABILITY ASSESSMENT

**Organic Analysis by Method 8270C**
**EPA Region I Tier II – type review**

| | |
|---|---|
| **Client:** | Sanborn, Head & Associates, Inc., Concord, New Hampshire |
| **Site:** | Blackburn & Union Privileges Superfund Site, Walpole, Massachusetts<br>Phase 1B-5 Remedial Investigation |
| **Laboratory:** | Alpha Woods Hole Labs (AWHL), Raynham, Massachusetts |
| **SDG:** | BU412 |
| **Lab ETR:** | 0610091 |
| **# Samples/Analyses:** | 13 sediment samples + 1 equipment blank (EB) for seventeen project-specific Semivolatile Organic Compounds (SVOC) |
| **Initial Reviewer:** | Dr. Nancy C. Rothman, New Environmental Horizons, Inc. |
| **Senior Reviewer:** | Susan D. Chapnick, New Environmental Horizons, Inc. |
| **Date Completed:** | December 11, 2006 |

An EPA Tier II-type Data Validation/Usability Checklist Review was performed on the data included in this SDG with the following intentions: 1) to determine if the data were generated and reported in accordance with the *Phase 1B-5 Remedial Investigation Work Plan, Blackburn & Union Privileges Superfund Site, Walpole, MA,* prepared by Sanborn, Head & Associates, Inc., Rev. 02, September 21, 2006 (Phase IB-5 Work Plan); USEPA *Test Methods for Evaluating Solid Waste, Physical Chemical Methods, SW-846, Third Edition, Final Update, December 1996 Method 8270C;* Region I, *EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses,* December 1996; *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review*; Publication EPA A540/R-99/008, October 1999; and *Guidance for Data Useability in Risk Assessment* (Part A), Publication 9285.7-09A, USEPA 1992; 2) to determine if the data met the project data quality objectives for acceptable accuracy, precision, sensitivity; and technical usability; and 3) to update the project database with appropriate data quality qualifiers.

The Data Review Checklists, attached, were completed during this assessment to document the review.

All results for SVOCs in the samples included in this SDG BU412 are usable for project objectives. Several results have been negated (U) due to blank actions or qualified as estimated (J) due to quality

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control criteria exceedance(s). Data users should note the uncertainties in the qualified results as summarized below in Table 1. The qualified (U and J) and unqualified results are usable for project objectives.

A Laboratory Fortified Blank (LFB), as designated in the original QAPP (2000), was not required for this Phase 1B-5 Remedial Investigation. As compared to previous investigations, the lowest-level initial calibration standards for SVOCs were at very low concentrations and the laboratory analyzed full target analyte Laboratory Control samples/Laboratory Control Sample Duplicates (LCS/LCSD). Therefore, the laboratory was not required to perform the LFB analysis.

All non-detect results for SVOCs in the sediment samples met Project Action Limits (PALs); therefore, the sensitivity of the analyses was acceptable for the samples within this SDG.

The equipment blank, OW-412A / 10-13-06, reported various low-level detects; however, blank action to qualify the sediment data was not taken, based on technical judgment, since the non-matrix matched equipment blank data were orders of magnitude less than the data for the sediment samples (*i.e.,* the equipment blank was reported in ng/L or ppt units while the sediments were in µg/Kg or ppb units).

During the initial extraction of the sediments, sample FP-09C / 0-1' / 10-13-06 was lost during extraction. This sample was re-extracted outside of holding time; therefore, SVOCs may have been lost prior to analysis leading to qualification of all data as estimated (J) with a possible low bias in this one sample.

All other quality control information associated with accuracy, precision, sensitivity, and representativeness for the project-specific list of SVOCs reported met project criteria for the samples in this SDG with the exceptions in the following table.

**Table 1. Summary of Data Validation/Usability Actions**

| Sample ID | Lab Chemical Name | Qualifier | Bias | Comment |
|---|---|---|---|---|
| FP-09C / 0-1' / 10-13-06 | All SVOCs | J | L | Extracted outside of Holding Time |
| FP-09F / 0-1' / 10-13-06 & OW-412 / 0-1' / 10-13-06 | Benzo[k]fluoranthene, Benzo[a]pyrene, Indeno[1,2,3-cd]pyrene, Dibenz[a,h]anthracene, Benzo[g,h,i]perylene, & Acenaphthylene | J | I | FD imprecision |
| FP-09E / 0-1' / 10-13-06 | Chrysene, Benzo[b]fluoranthene, Benzo[k]fluoranthene, Benzo[a]pyrene, Indeno[1,2,3-cd]pyrene, Fluoranthene, Pyrene, & Benz[a]anthracene | J | L | Low MS/MSD recoveries |
| FP-09E / 0-1' / 10-13-06 | Benzo[g,h,i]perylene | J | I | Low MS/MSD recoveries + MS/MSD imprecision |

**Table 1. Summary of Data Validation/Usability Actions** - *continued*

| Sample ID | Lab Chemical Name | Qualifier | Bias | Comment |
|---|---|---|---|---|
| OW-412A / 10-13-06 | Naphthalene, 2-Methylnaphthalene, Indeno[1,2,3-cd]pyrene, Benzo[g,h,i]perylene, Acenaphthylene, Acenaphthene, Fluorene, Phenanthrene, & Fluoranthene | U | | Negated due to Blank Action |
| FP-09A / 1-3' / 10-13-06, FP-09B / 1-3' / 10-13-06, FP-09C / 1-3' / 10-13-06, & FP-09F / 1-3' / 10-13-06 | Acenaphthene | J | I | Result uncertain below the calibration range |
| FP-09A / 1-3' / 10-13-06, FP-09B / 1-3' / 10-13-06, FP-09C / 1-3' / 10-13-06, & OW-412A / 10-13-06 | Anthracene | J | I | Result uncertain below the calibration range |
| FP-09A / 1-3' / 10-13-06, FP-09B / 1-3' / 10-13-06, & FP-09C / 1-3' / 10-13-06 | 2-Methylnaphthalene & Acenaphthylene | J | I | Result uncertain below the calibration range |
| FP-09A / 1-3' / 10-13-06, & FP-09C / 1-3' / 10-13-06 | Benz[a]anthracene, Benzo[g,h,i]perylene, & Indeno[1,2,3-cd]pyrene | J | I | Result uncertain below the calibration range |
| FP-09A / 1-3' / 10-13-06, FP-09C / 1-3' / 10-13-06, & OW-412A / 10-13-06 | Benzo[a]pyrene & Benzo[k]fluoranthene | J | I | Result uncertain below the calibration range |
| FP-09C / 1-3' / 10-13-06 & OW-412A / 10-13-06 | Dibenz[a,h]anthracene | J | I | Result uncertain below the calibration range |
| FP-09A / 1-3' / 10-13-06 & FP-09B / 1-3' / 10-13-06 | Fluorene | J | I | Result uncertain below the calibration range |
| FP-09A / 1-3' / 10-13-06, FP-09B / 1-3' / 10-13-06, & FP-09C / 1-3' / 10-13-06 | Naphthalene | J | I | Result uncertain below the calibration range |
| OW-412A / 10-13-06 | Pyrene | J | I | Result uncertain below the calibration range |

*Qualifiers: U = Analyte is not detected; UJ = Non-detect is estimated; J = Result is estimated; R = Result is rejected and is unusable for project decisions.*

*Bias: L = Low; H = High; I = Indeterminate*

The qualified (J and U) and unqualified results presented in the validated database, submitted electronically to Sanborn, Head & Associates, Inc. are considered usable for project objectives.

| ID | Smpl | Lab_ID | Freeze Dried? | Extr_Date | Anal_Date | al_Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | DF | %Solid | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 29 | FP-09A / 0-1' / 10-13-06 | 0610091-01 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 91-20-3 | Naphthalene | 34 | µg/Kg dry wt | | | 5.7 | 1 | 67.6 | |
| 30 | FP-09A / 0-1' / 10-13-06 | 0610091-01 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 91-57-6 | 2-Methylnaphthalene | 36 | µg/Kg dry wt | | | 5.7 | 1 | 67.6 | |
| 31 | FP-09A / 0-1' / 10-13-06 | 0610091-01 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 218-01-9 | Chrysene | 260 | µg/Kg dry wt | | | 5.7 | 1 | 67.6 | |
| 32 | FP-09A / 0-1' / 10-13-06 | 0610091-01 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 240 | µg/Kg dry wt | | | 5.7 | 1 | 67.6 | |
| 33 | FP-09A / 0-1' / 10-13-06 | 0610091-01 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 170 | µg/Kg dry wt | | | 5.7 | 1 | 67.6 | |
| 34 | FP-09A / 0-1' / 10-13-06 | 0610091-01 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 50-32-8 | Benzo[a]pyrene | 140 | µg/Kg dry wt | | | 5.7 | 1 | 67.6 | |
| 35 | FP-09A / 0-1' / 10-13-06 | 0610091-01 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 98 | µg/Kg dry wt | | | 5.7 | 1 | 67.6 | |
| 36 | FP-09A / 0-1' / 10-13-06 | 0610091-01 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 40 | µg/Kg dry wt | | | 5.7 | 1 | 67.6 | |
| 37 | FP-09A / 0-1' / 10-13-06 | 0610091-01 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 86 | µg/Kg dry wt | | | 5.7 | 1 | 67.6 | |
| 38 | FP-09A / 0-1' / 10-13-06 | 0610091-01 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 208-96-8 | Acenaphthylene | 21 | µg/Kg dry wt | | | 5.7 | 1 | 67.6 | |
| 39 | FP-09A / 0-1' / 10-13-06 | 0610091-01 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 83-32-9 | Acenaphthene | 8.9 | µg/Kg dry wt | | | 5.7 | 1 | 67.6 | |
| 40 | FP-09A / 0-1' / 10-13-06 | 0610091-01 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 86-73-7 | Fluorene | 13 | µg/Kg dry wt | | | 5.7 | 1 | 67.6 | |
| 41 | FP-09A / 0-1' / 10-13-06 | 0610091-01 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 85-01-8 | Phenanthrene | 210 | µg/Kg dry wt | | | 5.7 | 1 | 67.6 | |
| 42 | FP-09A / 0-1' / 10-13-06 | 0610091-01 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 120-12-7 | Anthracene | 32 | µg/Kg dry wt | | | 5.7 | 1 | 67.6 | |
| 43 | FP-09A / 0-1' / 10-13-06 | 0610091-01 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 206-44-0 | Fluoranthene | 420 | µg/Kg dry wt | | | 5.7 | 1 | 67.6 | |
| 44 | FP-09A / 0-1' / 10-13-06 | 0610091-01 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 129-00-0 | Pyrene | 310 | µg/Kg dry wt | | | 5.7 | 1 | 67.6 | |
| 45 | FP-09A / 0-1' / 10-13-06 | 0610091-01 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 56-55-3 | Benz[a]anthracene | 190 | µg/Kg dry wt | | | 5.7 | 1 | 67.6 | |
| 46 | FP-09A / 1-3' / 10-13-06 | 0610091-02 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 91-20-3 | Naphthalene | 1.4 | µg/Kg dry wt | J | I | 5.3 | 1 | 69.8 | Result uncertain below the calibration range |
| 47 | FP-09A / 1-3' / 10-13-06 | 0610091-02 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 91-57-6 | 2-Methylnaphthalene | 1.3 | µg/Kg dry wt | J | I | 5.3 | 1 | 69.8 | Result uncertain below the calibration range |
| 48 | FP-09A / 1-3' / 10-13-06 | 0610091-02 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 218-01-9 | Chrysene | 6.9 | µg/Kg dry wt | | | 5.3 | 1 | 69.8 | |
| 49 | FP-09A / 1-3' / 10-13-06 | 0610091-02 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 6.5 | µg/Kg dry wt | | | 5.3 | 1 | 69.8 | |
| 50 | FP-09A / 1-3' / 10-13-06 | 0610091-02 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 2.8 | µg/Kg dry wt | J | I | 5.3 | 1 | 69.8 | Result uncertain below the calibration range |
| 51 | FP-09A / 1-3' / 10-13-06 | 0610091-02 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 50-32-8 | Benzo[a]pyrene | 3.4 | µg/Kg dry wt | J | I | 5.3 | 1 | 69.8 | Result uncertain below the calibration range |
| 52 | FP-09A / 1-3' / 10-13-06 | 0610091-02 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 3.3 | µg/Kg dry wt | J | I | 5.3 | 1 | 69.8 | Result uncertain below the calibration range |
| 53 | FP-09A / 1-3' / 10-13-06 | 0610091-02 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 5.3 | µg/Kg dry wt | U | | 5.3 | 1 | 69.8 | |
| 54 | FP-09A / 1-3' / 10-13-06 | 0610091-02 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 3.5 | µg/Kg dry wt | J | I | 5.3 | 1 | 69.8 | Result uncertain below the calibration range |
| 55 | FP-09A / 1-3' / 10-13-06 | 0610091-02 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 208-96-8 | Acenaphthylene | 0.8 | µg/Kg dry wt | J | I | 5.3 | 1 | 69.8 | Result uncertain below the calibration range |
| 56 | FP-09A / 1-3' / 10-13-06 | 0610091-02 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 83-32-9 | Acenaphthene | 0.68 | µg/Kg dry wt | J | I | 5.3 | 1 | 69.8 | Result uncertain below the calibration range |
| 57 | FP-09A / 1-3' / 10-13-06 | 0610091-02 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 86-73-7 | Fluorene | 0.75 | µg/Kg dry wt | J | I | 5.3 | 1 | 69.8 | Result uncertain below the calibration range |
| 58 | FP-09A / 1-3' / 10-13-06 | 0610091-02 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 85-01-8 | Phenanthrene | 6.2 | µg/Kg dry wt | | | 5.3 | 1 | 69.8 | |
| 59 | FP-09A / 1-3' / 10-13-06 | 0610091-02 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 120-12-7 | Anthracene | 1.5 | µg/Kg dry wt | J | I | 5.3 | 1 | 69.8 | Result uncertain below the calibration range |
| 60 | FP-09A / 1-3' / 10-13-06 | 0610091-02 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 206-44-0 | Fluoranthene | 9.4 | µg/Kg dry wt | | | 5.3 | 1 | 69.8 | |
| 61 | FP-09A / 1-3' / 10-13-06 | 0610091-02 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 129-00-0 | Pyrene | 7.6 | µg/Kg dry wt | | | 5.3 | 1 | 69.8 | |
| 62 | FP-09A / 1-3' / 10-13-06 | 0610091-02 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 56-55-3 | Benz[a]anthracene | 4.8 | µg/Kg dry wt | J | I | 5.3 | 1 | 69.8 | Result uncertain below the calibration range |
| 63 | FP-09B / 0-1' / 10-13-06 | 0610091-03 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 91-20-3 | Naphthalene | 23 | µg/Kg dry wt | | | 5.2 | 1 | 71.6 | |
| 64 | FP-09B / 0-1' / 10-13-06 | 0610091-03 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 91-57-6 | 2-Methylnaphthalene | 21 | µg/Kg dry wt | | | 5.2 | 1 | 71.6 | |
| 65 | FP-09B / 0-1' / 10-13-06 | 0610091-03 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 218-01-9 | Chrysene | 180 | µg/Kg dry wt | | | 5.2 | 1 | 71.6 | |
| 66 | FP-09B / 0-1' / 10-13-06 | 0610091-03 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 160 | µg/Kg dry wt | | | 5.2 | 1 | 71.6 | |
| 67 | FP-09B / 0-1' / 10-13-06 | 0610091-03 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 120 | µg/Kg dry wt | | | 5.2 | 1 | 71.6 | |
| 68 | FP-09B / 0-1' / 10-13-06 | 0610091-03 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 50-32-8 | Benzo[a]pyrene | 90 | µg/Kg dry wt | | | 5.2 | 1 | 71.6 | |
| 69 | FP-09B / 0-1' / 10-13-06 | 0610091-03 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 72 | µg/Kg dry wt | | | 5.2 | 1 | 71.6 | |
| 70 | FP-09B / 0-1' / 10-13-06 | 0610091-03 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 31 | µg/Kg dry wt | | | 5.2 | 1 | 71.6 | |
| 71 | FP-09B / 0-1' / 10-13-06 | 0610091-03 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 65 | µg/Kg dry wt | | | 5.2 | 1 | 71.6 | |
| 72 | FP-09B / 0-1' / 10-13-06 | 0610091-03 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 208-96-8 | Acenaphthylene | 8.7 | µg/Kg dry wt | | | 5.2 | 1 | 71.6 | |
| 73 | FP-09B / 0-1' / 10-13-06 | 0610091-03 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 83-32-9 | Acenaphthene | 6.6 | µg/Kg dry wt | | | 5.2 | 1 | 71.6 | |
| 74 | FP-09B / 0-1' / 10-13-06 | 0610091-03 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 86-73-7 | Fluorene | 8 | µg/Kg dry wt | | | 5.2 | 1 | 71.6 | |
| 75 | FP-09B / 0-1' / 10-13-06 | 0610091-03 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 85-01-8 | Phenanthrene | 130 | µg/Kg dry wt | | | 5.2 | 1 | 71.6 | |
| 76 | FP-09B / 0-1' / 10-13-06 | 0610091-03 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 120-12-7 | Anthracene | 19 | µg/Kg dry wt | | | 5.2 | 1 | 71.6 | |
| 77 | FP-09B / 0-1' / 10-13-06 | 0610091-03 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 206-44-0 | Fluoranthene | 280 | µg/Kg dry wt | | | 5.2 | 1 | 71.6 | |
| 78 | FP-09B / 0-1' / 10-13-06 | 0610091-03 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 129-00-0 | Pyrene | 210 | µg/Kg dry wt | | | 5.2 | 1 | 71.6 | |
| 79 | FP-09B / 0-1' / 10-13-06 | 0610091-03 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 56-55-3 | Benz[a]anthracene | 130 | µg/Kg dry wt | | | 5.2 | 1 | 71.6 | |
| 80 | FP-09B / 1-3' / 10-13-06 | 0610091-04 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 91-20-3 | Naphthalene | 2.3 | µg/Kg dry wt | J | I | 5.1 | 1 | 73.7 | Result uncertain below the calibration range |
| 81 | FP-09B / 1-3' / 10-13-06 | 0610091-04 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 91-57-6 | 2-Methylnaphthalene | 1.8 | µg/Kg dry wt | J | I | 5.1 | 1 | 73.7 | Result uncertain below the calibration range |
| 82 | FP-09B / 1-3' / 10-13-06 | 0610091-04 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 218-01-9 | Chrysene | 23 | µg/Kg dry wt | | | 5.1 | 1 | 73.7 | |
| 83 | FP-09B / 1-3' / 10-13-06 | 0610091-04 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 20 | µg/Kg dry wt | | | 5.1 | 1 | 73.7 | |
| 84 | FP-09B / 1-3' / 10-13-06 | 0610091-04 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 12 | µg/Kg dry wt | | | 5.1 | 1 | 73.7 | |
| 85 | FP-09B / 1-3' / 10-13-06 | 0610091-04 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 50-32-8 | Benzo[a]pyrene | 13 | µg/Kg dry wt | | | 5.1 | 1 | 73.7 | |
| 86 | FP-09B / 1-3' / 10-13-06 | 0610091-04 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 13 | µg/Kg dry wt | | | 5.1 | 1 | 73.7 | |
| 87 | FP-09B / 1-3' / 10-13-06 | 0610091-04 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 5.2 | µg/Kg dry wt | | | 5.1 | 1 | 73.7 | |
| 88 | FP-09B / 1-3' / 10-13-06 | 0610091-04 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 14 | µg/Kg dry wt | | | 5.1 | 1 | 73.7 | |
| 89 | FP-09B / 1-3' / 10-13-06 | 0610091-04 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 208-96-8 | Acenaphthylene | 1.2 | µg/Kg dry wt | J | I | 5.1 | 1 | 73.7 | Result uncertain below the calibration range |
| 90 | FP-09B / 1-3' / 10-13-06 | 0610091-04 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 83-32-9 | Acenaphthene | 0.6 | µg/Kg dry wt | J | I | 5.1 | 1 | 73.7 | Result uncertain below the calibration range |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low; H = High; I = Indeterminate. See Data Usability Report for details.

| ID | Smpl | Lab_ID | Freeze Dried? | Extr_Date | Anal_Date | al_Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | DF | %Solid | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 91 | FP-09B / 1-3' / 10-13-06 | 0610091-04 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 86-73-7 | Fluorene | 0.8 | µg/Kg dry wt | J | I | 5.1 | 1 | 73.7 | Result uncertain below the calibration range |
| 92 | FP-09B / 1-3' / 10-13-06 | 0610091-04 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 85-01-8 | Phenanthrene | 13 | µg/Kg dry wt | | | 5.1 | 1 | 73.7 | |
| 93 | FP-09B / 1-3' / 10-13-06 | 0610091-04 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 120-12-7 | Anthracene | 2.4 | µg/Kg dry wt | J | I | 5.1 | 1 | 73.7 | Result uncertain below the calibration range |
| 94 | FP-09B / 1-3' / 10-13-06 | 0610091-04 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 206-44-0 | Fluoranthene | 33 | µg/Kg dry wt | | | 5.1 | 1 | 73.7 | |
| 95 | FP-09B / 1-3' / 10-13-06 | 0610091-04 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 129-00-0 | Pyrene | 26 | µg/Kg dry wt | | | 5.1 | 1 | 73.7 | |
| 96 | FP-09B / 1-3' / 10-13-06 | 0610091-04 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 56-55-3 | Benz[a]anthracene | 16 | µg/Kg dry wt | | | 5.1 | 1 | 73.7 | |
| 98 | FP-09C / 0-1' / 10-13-06 | 0610091-05 | No | 11/13/2006 | 11/16/2006 | PAH SIM | SVOCs | 91-57-6 | 2-Methylnaphthalene | 9.4 | µg/Kg dry wt | J | L | 4.2 | 1 | 88.8 | Extracted outside of Holding Time |
| 99 | FP-09C / 0-1' / 10-13-06 | 0610091-05 | No | 11/13/2006 | 11/16/2006 | PAH SIM | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 58 | µg/Kg dry wt | J | L | 4.2 | 1 | 88.8 | Extracted outside of Holding Time |
| 100 | FP-09C / 0-1' / 10-13-06 | 0610091-05 | No | 11/13/2006 | 11/16/2006 | PAH SIM | SVOCs | 129-00-0 | Pyrene | 69 | µg/Kg dry wt | J | L | 4.2 | 1 | 88.8 | Extracted outside of Holding Time |
| 101 | FP-09C / 0-1' / 10-13-06 | 0610091-05 | No | 11/13/2006 | 11/16/2006 | PAH SIM | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 9.9 | µg/Kg dry wt | J | L | 4.2 | 1 | 88.8 | Extracted outside of Holding Time |
| 103 | FP-09C / 0-1' / 10-13-06 | 0610091-05 | No | 11/13/2006 | 11/16/2006 | PAH SIM | SVOCs | 206-44-0 | Fluoranthene | 69 | µg/Kg dry wt | J | L | 4.2 | 1 | 88.8 | Extracted outside of Holding Time |
| 104 | FP-09C / 0-1' / 10-13-06 | 0610091-05 | No | 11/13/2006 | 11/16/2006 | PAH SIM | SVOCs | 91-20-3 | Naphthalene | 6.5 | µg/Kg dry wt | J | L | 4.2 | 1 | 88.8 | Extracted outside of Holding Time |
| 105 | FP-09C / 0-1' / 10-13-06 | 0610091-05 | No | 11/13/2006 | 11/16/2006 | PAH SIM | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 27 | µg/Kg dry wt | J | L | 4.2 | 1 | 88.8 | Extracted outside of Holding Time |
| 106 | FP-09C / 0-1' / 10-13-06 | 0610091-05 | No | 11/13/2006 | 11/16/2006 | PAH SIM | SVOCs | 85-01-8 | Phenanthrene | 43 | µg/Kg dry wt | J | L | 4.2 | 1 | 88.8 | Extracted outside of Holding Time |
| 107 | FP-09C / 0-1' / 10-13-06 | 0610091-05 | No | 11/13/2006 | 11/16/2006 | PAH SIM | SVOCs | 218-01-9 | Chrysene | 49 | µg/Kg dry wt | J | L | 4.2 | 1 | 88.8 | Extracted outside of Holding Time |
| 111 | FP-09C / 0-1' / 10-13-06 | 0610091-05 | No | 11/13/2006 | 11/16/2006 | PAH SIM | SVOCs | 86-73-7 | Fluorene | 2.3 | µg/Kg dry wt | J | L | 4.2 | 1 | 88.8 | Extracted outside of Holding Time |
| 113 | FP-09C / 0-1' / 10-13-06 | 0610091-05 | No | 11/13/2006 | 11/16/2006 | PAH SIM | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 26 | µg/Kg dry wt | J | L | 4.2 | 1 | 88.8 | Extracted outside of Holding Time |
| 114 | FP-09C / 0-1' / 10-13-06 | 0610091-05 | No | 11/13/2006 | 11/16/2006 | PAH SIM | SVOCs | 120-12-7 | Anthracene | 5.8 | µg/Kg dry wt | J | L | 4.2 | 1 | 88.8 | Extracted outside of Holding Time |
| 115 | FP-09C / 0-1' / 10-13-06 | 0610091-05 | No | 11/13/2006 | 11/16/2006 | PAH SIM | SVOCs | 56-55-3 | Benz[a]anthracene | 36 | µg/Kg dry wt | J | L | 4.2 | 1 | 88.8 | Extracted outside of Holding Time |
| 116 | FP-09C / 0-1' / 10-13-06 | 0610091-05 | No | 11/13/2006 | 11/16/2006 | PAH SIM | SVOCs | 83-32-9 | Acenaphthene | 1.9 | µg/Kg dry wt | J | L | 4.2 | 1 | 88.8 | Extracted outside of Holding Time |
| 117 | FP-09C / 0-1' / 10-13-06 | 0610091-05 | No | 11/13/2006 | 11/16/2006 | PAH SIM | SVOCs | 208-96-8 | Acenaphthylene | 3.4 | µg/Kg dry wt | J | L | 4.2 | 1 | 88.8 | Extracted outside of Holding Time |
| 121 | FP-09C / 0-1' / 10-13-06 | 0610091-05 | No | 11/13/2006 | 11/16/2006 | PAH SIM | SVOCs | 50-32-8 | Benzo[a]pyrene | 37 | µg/Kg dry wt | J | L | 4.2 | 1 | 88.8 | Extracted outside of Holding Time |
| 124 | FP-09C / 0-1' / 10-13-06 | 0610091-05 | No | 11/13/2006 | 11/16/2006 | PAH SIM | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 28 | µg/Kg dry wt | J | L | 4.2 | 1 | 88.8 | Extracted outside of Holding Time |
| 126 | FP-09C / 1-3' / 10-13-06 | 0610091-06 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 91-20-3 | Naphthalene | 1.4 | µg/Kg dry wt | J | I | 4.4 | 1 | 84.3 | Result uncertain below the calibration range |
| 127 | FP-09C / 1-3' / 10-13-06 | 0610091-06 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 91-57-6 | 2-Methylnaphthalene | 1.5 | µg/Kg dry wt | J | I | 4.4 | 1 | 84.3 | Result uncertain below the calibration range |
| 128 | FP-09C / 1-3' / 10-13-06 | 0610091-06 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 218-01-9 | Chrysene | 6.9 | µg/Kg dry wt | | | 4.4 | 1 | 84.3 | |
| 129 | FP-09C / 1-3' / 10-13-06 | 0610091-06 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 6.1 | µg/Kg dry wt | | | 4.4 | 1 | 84.3 | |
| 130 | FP-09C / 1-3' / 10-13-06 | 0610091-06 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 3.8 | µg/Kg dry wt | J | I | 4.4 | 1 | 84.3 | Result uncertain below the calibration range |
| 131 | FP-09C / 1-3' / 10-13-06 | 0610091-06 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 50-32-8 | Benzo[a]pyrene | 3.7 | µg/Kg dry wt | J | I | 4.4 | 1 | 84.3 | Result uncertain below the calibration range |
| 132 | FP-09C / 1-3' / 10-13-06 | 0610091-06 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 4 | µg/Kg dry wt | J | I | 4.4 | 1 | 84.3 | Result uncertain below the calibration range |
| 133 | FP-09C / 1-3' / 10-13-06 | 0610091-06 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 1.3 | µg/Kg dry wt | J | I | 4.4 | 1 | 84.3 | Result uncertain below the calibration range |
| 134 | FP-09C / 1-3' / 10-13-06 | 0610091-06 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 4.1 | µg/Kg dry wt | J | I | 4.4 | 1 | 84.3 | Result uncertain below the calibration range |
| 135 | FP-09C / 1-3' / 10-13-06 | 0610091-06 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 208-96-8 | Acenaphthylene | 0.84 | µg/Kg dry wt | J | I | 4.4 | 1 | 84.3 | Result uncertain below the calibration range |
| 136 | FP-09C / 1-3' / 10-13-06 | 0610091-06 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 83-32-9 | Acenaphthene | 0.86 | µg/Kg dry wt | J | I | 4.4 | 1 | 84.3 | Result uncertain below the calibration range |
| 137 | FP-09C / 1-3' / 10-13-06 | 0610091-06 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 86-73-7 | Fluorene | 4.4 | µg/Kg dry wt | U | | 4.4 | 1 | 84.3 | |
| 138 | FP-09C / 1-3' / 10-13-06 | 0610091-06 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 85-01-8 | Phenanthrene | 4.9 | µg/Kg dry wt | | | 4.4 | 1 | 84.3 | |
| 139 | FP-09C / 1-3' / 10-13-06 | 0610091-06 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 120-12-7 | Anthracene | 0.74 | µg/Kg dry wt | J | I | 4.4 | 1 | 84.3 | Result uncertain below the calibration range |
| 140 | FP-09C / 1-3' / 10-13-06 | 0610091-06 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 206-44-0 | Fluoranthene | 10 | µg/Kg dry wt | | | 4.4 | 1 | 84.3 | |
| 141 | FP-09C / 1-3' / 10-13-06 | 0610091-06 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 129-00-0 | Pyrene | 7.9 | µg/Kg dry wt | | | 4.4 | 1 | 84.3 | |
| 142 | FP-09C / 1-3' / 10-13-06 | 0610091-06 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 56-55-3 | Benz[a]anthracene | 4.3 | µg/Kg dry wt | J | I | 4.4 | 1 | 84.3 | Result uncertain below the calibration range |
| 143 | FP-09D / 0-1' / 10-13-06 | 0610091-07 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 91-20-3 | Naphthalene | 41 | µg/Kg dry wt | | | 5.3 | 1 | 71.4 | |
| 144 | FP-09D / 0-1' / 10-13-06 | 0610091-07 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 91-57-6 | 2-Methylnaphthalene | 50 | µg/Kg dry wt | | | 5.3 | 1 | 71.4 | |
| 145 | FP-09D / 0-1' / 10-13-06 | 0610091-07 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 218-01-9 | Chrysene | 500 | µg/Kg dry wt | | | 5.3 | 1 | 71.4 | |
| 146 | FP-09D / 0-1' / 10-13-06 | 0610091-07 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 440 | µg/Kg dry wt | | | 5.3 | 1 | 71.4 | |
| 147 | FP-09D / 0-1' / 10-13-06 | 0610091-07 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 320 | µg/Kg dry wt | | | 5.3 | 1 | 71.4 | |
| 148 | FP-09D / 0-1' / 10-13-06 | 0610091-07 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 50-32-8 | Benzo[a]pyrene | 280 | µg/Kg dry wt | | | 5.3 | 1 | 71.4 | |
| 149 | FP-09D / 0-1' / 10-13-06 | 0610091-07 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 170 | µg/Kg dry wt | | | 5.3 | 1 | 71.4 | |
| 150 | FP-09D / 0-1' / 10-13-06 | 0610091-07 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 72 | µg/Kg dry wt | | | 5.3 | 1 | 71.4 | |
| 151 | FP-09D / 0-1' / 10-13-06 | 0610091-07 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 150 | µg/Kg dry wt | | | 5.3 | 1 | 71.4 | |
| 152 | FP-09D / 0-1' / 10-13-06 | 0610091-07 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 208-96-8 | Acenaphthylene | 21 | µg/Kg dry wt | | | 5.3 | 1 | 71.4 | |
| 153 | FP-09D / 0-1' / 10-13-06 | 0610091-07 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 83-32-9 | Acenaphthene | 31 | µg/Kg dry wt | | | 5.3 | 1 | 71.4 | |
| 154 | FP-09D / 0-1' / 10-13-06 | 0610091-07 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 86-73-7 | Fluorene | 34 | µg/Kg dry wt | | | 5.3 | 1 | 71.4 | |
| 155 | FP-09D / 0-1' / 10-13-06 | 0610091-07 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 85-01-8 | Phenanthrene | 460 | µg/Kg dry wt | | | 5.3 | 1 | 71.4 | |
| 156 | FP-09D / 0-1' / 10-13-06 | 0610091-07 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 120-12-7 | Anthracene | 90 | µg/Kg dry wt | | | 5.3 | 1 | 71.4 | |
| 157 | FP-09D / 0-1' / 10-13-06 | 0610091-07 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 206-44-0 | Fluoranthene | 730 | µg/Kg dry wt | | | 5.3 | 1 | 71.4 | |
| 158 | FP-09D / 0-1' / 10-13-06 | 0610091-07 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 129-00-0 | Pyrene | 600 | µg/Kg dry wt | | | 5.3 | 1 | 71.4 | |
| 159 | FP-09D / 0-1' / 10-13-06 | 0610091-07 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 56-55-3 | Benz[a]anthracene | 370 | µg/Kg dry wt | | | 5.3 | 1 | 71.4 | |
| 160 | FP-09D / 1-3' / 10-13-06 | 0610091-08 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 91-20-3 | Naphthalene | 20 | µg/Kg dry wt | | | 4.9 | 1 | 75.2 | |
| 161 | FP-09D / 1-3' / 10-13-06 | 0610091-08 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 91-57-6 | 2-Methylnaphthalene | 18 | µg/Kg dry wt | | | 4.9 | 1 | 75.2 | |
| 162 | FP-09D / 1-3' / 10-13-06 | 0610091-08 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 218-01-9 | Chrysene | 180 | µg/Kg dry wt | | | 4.9 | 1 | 75.2 | |
| 163 | FP-09D / 1-3' / 10-13-06 | 0610091-08 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 150 | µg/Kg dry wt | | | 4.9 | 1 | 75.2 | |
| 164 | FP-09D / 1-3' / 10-13-06 | 0610091-08 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 110 | µg/Kg dry wt | | | 4.9 | 1 | 75.2 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low; H = High; I = Indeterminate. See Data Usability Report for details.

| ID | Smpl | Lab_ID | Freeze Dried? | Extr_Date | Anal_Date | al_Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | DF | %Solid | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 165 | FP-09D / 1-3' / 10-13-06 | 0610091-08 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 50-32-8 | Benzo[a]pyrene | 91 | µg/Kg dry wt | | | 4.9 | 1 | 75.2 | |
| 166 | FP-09D / 1-3' / 10-13-06 | 0610091-08 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 65 | µg/Kg dry wt | | | 4.9 | 1 | 75.2 | |
| 167 | FP-09D / 1-3' / 10-13-06 | 0610091-08 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 30 | µg/Kg dry wt | | | 4.9 | 1 | 75.2 | |
| 168 | FP-09D / 1-3' / 10-13-06 | 0610091-08 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 59 | µg/Kg dry wt | | | 4.9 | 1 | 75.2 | |
| 169 | FP-09D / 1-3' / 10-13-06 | 0610091-08 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 208-96-8 | Acenaphthylene | 7.2 | µg/Kg dry wt | | | 4.9 | 1 | 75.2 | |
| 170 | FP-09D / 1-3' / 10-13-06 | 0610091-08 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 83-32-9 | Acenaphthene | 5.3 | µg/Kg dry wt | | | 4.9 | 1 | 75.2 | |
| 171 | FP-09D / 1-3' / 10-13-06 | 0610091-08 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 86-73-7 | Fluorene | 8.1 | µg/Kg dry wt | | | 4.9 | 1 | 75.2 | |
| 172 | FP-09D / 1-3' / 10-13-06 | 0610091-08 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 85-01-8 | Phenanthrene | 150 | µg/Kg dry wt | | | 4.9 | 1 | 75.2 | |
| 173 | FP-09D / 1-3' / 10-13-06 | 0610091-08 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 120-12-7 | Anthracene | 32 | µg/Kg dry wt | | | 4.9 | 1 | 75.2 | |
| 174 | FP-09D / 1-3' / 10-13-06 | 0610091-08 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 206-44-0 | Fluoranthene | 290 | µg/Kg dry wt | | | 4.9 | 1 | 75.2 | |
| 175 | FP-09D / 1-3' / 10-13-06 | 0610091-08 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 129-00-0 | Pyrene | 190 | µg/Kg dry wt | | | 4.9 | 1 | 75.2 | |
| 176 | FP-09D / 1-3' / 10-13-06 | 0610091-08 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 56-55-3 | Benz[a]anthracene | 130 | µg/Kg dry wt | | | 4.9 | 1 | 75.2 | |
| 177 | FP-09E / 0-1' / 10-13-06 | 0610091-09 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 91-20-3 | Naphthalene | 16 | µg/Kg dry wt | | | 4.4 | 1 | 85.7 | |
| 178 | FP-09E / 0-1' / 10-13-06 | 0610091-09 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 91-57-6 | 2-Methylnaphthalene | 32 | µg/Kg dry wt | | | 4.4 | 1 | 85.7 | |
| 179 | FP-09E / 0-1' / 10-13-06 | 0610091-09 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 218-01-9 | Chrysene | 800 | µg/Kg dry wt | J | L | 4.4 | 1 | 85.7 | Low MS/MSD recoveries |
| 180 | FP-09E / 0-1' / 10-13-06 | 0610091-09 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 730 | µg/Kg dry wt | J | L | 4.4 | 1 | 85.7 | Low MS/MSD recoveries |
| 181 | FP-09E / 0-1' / 10-13-06 | 0610091-09 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 610 | µg/Kg dry wt | J | L | 4.4 | 1 | 85.7 | Low MS/MSD recoveries |
| 182 | FP-09E / 0-1' / 10-13-06 | 0610091-09 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 50-32-8 | Benzo[a]pyrene | 520 | µg/Kg dry wt | J | L | 4.4 | 1 | 85.7 | Low MS/MSD recoveries |
| 183 | FP-09E / 0-1' / 10-13-06 | 0610091-09 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 350 | µg/Kg dry wt | J | L | 4.4 | 1 | 85.7 | Low MS/MSD recoveries |
| 184 | FP-09E / 0-1' / 10-13-06 | 0610091-09 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 130 | µg/Kg dry wt | | | 4.4 | 1 | 85.7 | |
| 185 | FP-09E / 0-1' / 10-13-06 | 0610091-09 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 320 | µg/Kg dry wt | J | I | 4.4 | 1 | 85.7 | Low MS/MSD recoveries + MS/MSD imprecision |
| 186 | FP-09E / 0-1' / 10-13-06 | 0610091-09 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 208-96-8 | Acenaphthylene | 11 | µg/Kg dry wt | | | 4.4 | 1 | 85.7 | |
| 187 | FP-09E / 0-1' / 10-13-06 | 0610091-09 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 83-32-9 | Acenaphthene | 6.8 | µg/Kg dry wt | | | 4.4 | 1 | 85.7 | |
| 188 | FP-09E / 0-1' / 10-13-06 | 0610091-09 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 86-73-7 | Fluorene | 9 | µg/Kg dry wt | | | 4.4 | 1 | 85.7 | |
| 189 | FP-09E / 0-1' / 10-13-06 | 0610091-09 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 85-01-8 | Phenanthrene | 300 | µg/Kg dry wt | | | 4.4 | 1 | 85.7 | |
| 190 | FP-09E / 0-1' / 10-13-06 | 0610091-09 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 120-12-7 | Anthracene | 54 | µg/Kg dry wt | | | 4.4 | 1 | 85.7 | |
| 191 | FP-09E / 0-1' / 10-13-06 | 0610091-09 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 206-44-0 | Fluoranthene | 1300 | µg/Kg dry wt | J | L | 4.4 | 1 | 85.7 | Low MS/MSD recoveries |
| 192 | FP-09E / 0-1' / 10-13-06 | 0610091-09 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 129-00-0 | Pyrene | 990 | µg/Kg dry wt | J | L | 4.4 | 1 | 85.7 | Low MS/MSD recoveries |
| 193 | FP-09E / 0-1' / 10-13-06 | 0610091-09 | No | 10/27/2006 | 11/11/2006 | PAH SIM | SVOCs | 56-55-3 | Benz[a]anthracene | 700 | µg/Kg dry wt | J | L | 4.4 | 1 | 85.7 | Low MS/MSD recoveries |
| 194 | FP-09E / 1-3' / 10-13-06 | 0610091-10 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 91-20-3 | Naphthalene | 76 | µg/Kg dry wt | | | 4 | 1 | 88.3 | |
| 195 | FP-09E / 1-3' / 10-13-06 | 0610091-10 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 91-57-6 | 2-Methylnaphthalene | 170 | µg/Kg dry wt | | | 4 | 1 | 88.3 | |
| 196 | FP-09E / 1-3' / 10-13-06 | 0610091-10 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 218-01-9 | Chrysene | 250 | µg/Kg dry wt | | | 4 | 1 | 88.3 | |
| 197 | FP-09E / 1-3' / 10-13-06 | 0610091-10 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 200 | µg/Kg dry wt | | | 4 | 1 | 88.3 | |
| 198 | FP-09E / 1-3' / 10-13-06 | 0610091-10 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 170 | µg/Kg dry wt | | | 4 | 1 | 88.3 | |
| 199 | FP-09E / 1-3' / 10-13-06 | 0610091-10 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 50-32-8 | Benzo[a]pyrene | 140 | µg/Kg dry wt | | | 4 | 1 | 88.3 | |
| 200 | FP-09E / 1-3' / 10-13-06 | 0610091-10 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 79 | µg/Kg dry wt | | | 4 | 1 | 88.3 | |
| 201 | FP-09E / 1-3' / 10-13-06 | 0610091-10 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 32 | µg/Kg dry wt | | | 4 | 1 | 88.3 | |
| 202 | FP-09E / 1-3' / 10-13-06 | 0610091-10 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 68 | µg/Kg dry wt | | | 4 | 1 | 88.3 | |
| 203 | FP-09E / 1-3' / 10-13-06 | 0610091-10 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 208-96-8 | Acenaphthylene | 17 | µg/Kg dry wt | | | 4 | 1 | 88.3 | |
| 204 | FP-09E / 1-3' / 10-13-06 | 0610091-10 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 83-32-9 | Acenaphthene | 5.6 | µg/Kg dry wt | | | 4 | 1 | 88.3 | |
| 205 | FP-09E / 1-3' / 10-13-06 | 0610091-10 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 86-73-7 | Fluorene | 19 | µg/Kg dry wt | | | 4 | 1 | 88.3 | |
| 206 | FP-09E / 1-3' / 10-13-06 | 0610091-10 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 85-01-8 | Phenanthrene | 240 | µg/Kg dry wt | | | 4 | 1 | 88.3 | |
| 207 | FP-09E / 1-3' / 10-13-06 | 0610091-10 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 120-12-7 | Anthracene | 32 | µg/Kg dry wt | | | 4 | 1 | 88.3 | |
| 208 | FP-09E / 1-3' / 10-13-06 | 0610091-10 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 206-44-0 | Fluoranthene | 340 | µg/Kg dry wt | | | 4 | 1 | 88.3 | |
| 209 | FP-09E / 1-3' / 10-13-06 | 0610091-10 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 129-00-0 | Pyrene | 270 | µg/Kg dry wt | | | 4 | 1 | 88.3 | |
| 210 | FP-09E / 1-3' / 10-13-06 | 0610091-10 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 56-55-3 | Benz[a]anthracene | 170 | µg/Kg dry wt | | | 4 | 1 | 88.3 | |
| 211 | FP-09F / 0-1' / 10-13-06 | 0610091-11 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 91-20-3 | Naphthalene | 38 | µg/Kg dry wt | | | 4.1 | 1 | 89.9 | |
| 212 | FP-09F / 0-1' / 10-13-06 | 0610091-11 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 91-57-6 | 2-Methylnaphthalene | 66 | µg/Kg dry wt | | | 4.1 | 1 | 89.9 | |
| 213 | FP-09F / 0-1' / 10-13-06 | 0610091-11 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 218-01-9 | Chrysene | 180 | µg/Kg dry wt | | | 4.1 | 1 | 89.9 | |
| 214 | FP-09F / 0-1' / 10-13-06 | 0610091-11 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 160 | µg/Kg dry wt | | | 4.1 | 1 | 89.9 | |
| 215 | FP-09F / 0-1' / 10-13-06 | 0610091-11 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 120 | µg/Kg dry wt | J | I | 4.1 | 1 | 89.9 | FD imprecision |
| 216 | FP-09F / 0-1' / 10-13-06 | 0610091-11 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 50-32-8 | Benzo[a]pyrene | 100 | µg/Kg dry wt | J | I | 4.1 | 1 | 89.9 | FD imprecision |
| 217 | FP-09F / 0-1' / 10-13-06 | 0610091-11 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 58 | µg/Kg dry wt | J | I | 4.1 | 1 | 89.9 | FD imprecision |
| 218 | FP-09F / 0-1' / 10-13-06 | 0610091-11 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 24 | µg/Kg dry wt | J | I | 4.1 | 1 | 89.9 | FD imprecision |
| 219 | FP-09F / 0-1' / 10-13-06 | 0610091-11 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 57 | µg/Kg dry wt | J | I | 4.1 | 1 | 89.9 | FD imprecision |
| 220 | FP-09F / 0-1' / 10-13-06 | 0610091-11 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 208-96-8 | Acenaphthylene | 31 | µg/Kg dry wt | J | I | 4.1 | 1 | 89.9 | FD imprecision |
| 221 | FP-09F / 0-1' / 10-13-06 | 0610091-11 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 83-32-9 | Acenaphthene | 4.3 | µg/Kg dry wt | | | 4.1 | 1 | 89.9 | |
| 222 | FP-09F / 0-1' / 10-13-06 | 0610091-11 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 86-73-7 | Fluorene | 11 | µg/Kg dry wt | | | 4.1 | 1 | 89.9 | |
| 223 | FP-09F / 0-1' / 10-13-06 | 0610091-11 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 85-01-8 | Phenanthrene | 170 | µg/Kg dry wt | | | 4.1 | 1 | 89.9 | |
| 224 | FP-09F / 0-1' / 10-13-06 | 0610091-11 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 120-12-7 | Anthracene | 23 | µg/Kg dry wt | | | 4.1 | 1 | 89.9 | |
| 225 | FP-09F / 0-1' / 10-13-06 | 0610091-11 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 206-44-0 | Fluoranthene | 230 | µg/Kg dry wt | | | 4.1 | 1 | 89.9 | |
| 226 | FP-09F / 0-1' / 10-13-06 | 0610091-11 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 129-00-0 | Pyrene | 210 | µg/Kg dry wt | | | 4.1 | 1 | 89.9 | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low; H = High; I = Indeterminate. See Data Usability Report for details.

| ID | Smpl | Lab_ID | Freeze Dried? | Extr_Date | Anal_Date | al_Method | Class | CAS | Analyte | Val_Res | Val_Units | Val_Qual | Bias | RL | DF | %Solid | Res_Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 227 | FP-09F / 0-1' / 10-13-06 | 0610091-11 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 56-55-3 | Benz[a]anthracene | 120 | µg/Kg dry wt | | | 4.1 | 1 | 89.9 | |
| 228 | FP-09F / 1-3' / 10-13-06 | 0610091-12 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 91-20-3 | Naphthalene | 26 | µg/Kg dry wt | | | 4.2 | 1 | 87.8 | |
| 229 | FP-09F / 1-3' / 10-13-06 | 0610091-12 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 91-57-6 | 2-Methylnaphthalene | 50 | µg/Kg dry wt | | | 4.2 | 1 | 87.8 | |
| 230 | FP-09F / 1-3' / 10-13-06 | 0610091-12 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 218-01-9 | Chrysene | 110 | µg/Kg dry wt | | | 4.2 | 1 | 87.8 | |
| 231 | FP-09F / 1-3' / 10-13-06 | 0610091-12 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 94 | µg/Kg dry wt | | | 4.2 | 1 | 87.8 | |
| 232 | FP-09F / 1-3' / 10-13-06 | 0610091-12 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 42 | µg/Kg dry wt | | | 4.2 | 1 | 87.8 | |
| 233 | FP-09F / 1-3' / 10-13-06 | 0610091-12 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 50-32-8 | Benzo[a]pyrene | 34 | µg/Kg dry wt | | | 4.2 | 1 | 87.8 | |
| 234 | FP-09F / 1-3' / 10-13-06 | 0610091-12 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 22 | µg/Kg dry wt | | | 4.2 | 1 | 87.8 | |
| 235 | FP-09F / 1-3' / 10-13-06 | 0610091-12 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 11 | µg/Kg dry wt | | | 4.2 | 1 | 87.8 | |
| 236 | FP-09F / 1-3' / 10-13-06 | 0610091-12 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 18 | µg/Kg dry wt | | | 4.2 | 1 | 87.8 | |
| 237 | FP-09F / 1-3' / 10-13-06 | 0610091-12 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 208-96-8 | Acenaphthylene | 9.5 | µg/Kg dry wt | | | 4.2 | 1 | 87.8 | |
| 238 | FP-09F / 1-3' / 10-13-06 | 0610091-12 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 83-32-9 | Acenaphthene | 2 | µg/Kg dry wt | J | I | 4.2 | 1 | 87.8 | Result uncertain below the calibration range |
| 239 | FP-09F / 1-3' / 10-13-06 | 0610091-12 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 86-73-7 | Fluorene | 9.5 | µg/Kg dry wt | | | 4.2 | 1 | 87.8 | |
| 240 | FP-09F / 1-3' / 10-13-06 | 0610091-12 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 85-01-8 | Phenanthrene | 120 | µg/Kg dry wt | | | 4.2 | 1 | 87.8 | |
| 241 | FP-09F / 1-3' / 10-13-06 | 0610091-12 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 120-12-7 | Anthracene | 10 | µg/Kg dry wt | | | 4.2 | 1 | 87.8 | |
| 242 | FP-09F / 1-3' / 10-13-06 | 0610091-12 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 206-44-0 | Fluoranthene | 130 | µg/Kg dry wt | | | 4.2 | 1 | 87.8 | |
| 243 | FP-09F / 1-3' / 10-13-06 | 0610091-12 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 129-00-0 | Pyrene | 100 | µg/Kg dry wt | | | 4.2 | 1 | 87.8 | |
| 244 | FP-09F / 1-3' / 10-13-06 | 0610091-12 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 56-55-3 | Benz[a]anthracene | 57 | µg/Kg dry wt | | | 4.2 | 1 | 87.8 | |
| 245 | OW-412 / 0-1' / 10-13-06 | 0610091-13 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 91-20-3 | Naphthalene | 33 | µg/Kg dry wt | | | 4.1 | 1 | 89.7 | |
| 246 | OW-412 / 0-1' / 10-13-06 | 0610091-13 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 91-57-6 | 2-Methylnaphthalene | 60 | µg/Kg dry wt | | | 4.1 | 1 | 89.7 | |
| 247 | OW-412 / 0-1' / 10-13-06 | 0610091-13 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 218-01-9 | Chrysene | 120 | µg/Kg dry wt | | | 4.1 | 1 | 89.7 | |
| 248 | OW-412 / 0-1' / 10-13-06 | 0610091-13 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 100 | µg/Kg dry wt | | | 4.1 | 1 | 89.7 | |
| 249 | OW-412 / 0-1' / 10-13-06 | 0610091-13 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 68 | µg/Kg dry wt | J | I | 4.1 | 1 | 89.7 | FD imprecision |
| 250 | OW-412 / 0-1' / 10-13-06 | 0610091-13 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 50-32-8 | Benzo[a]pyrene | 53 | µg/Kg dry wt | J | I | 4.1 | 1 | 89.7 | FD imprecision |
| 251 | OW-412 / 0-1' / 10-13-06 | 0610091-13 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 29 | µg/Kg dry wt | J | I | 4.1 | 1 | 89.7 | FD imprecision |
| 252 | OW-412 / 0-1' / 10-13-06 | 0610091-13 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 13 | µg/Kg dry wt | J | I | 4.1 | 1 | 89.7 | FD imprecision |
| 253 | OW-412 / 0-1' / 10-13-06 | 0610091-13 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 29 | µg/Kg dry wt | J | I | 4.1 | 1 | 89.7 | FD imprecision |
| 254 | OW-412 / 0-1' / 10-13-06 | 0610091-13 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 208-96-8 | Acenaphthylene | 17 | µg/Kg dry wt | J | I | 4.1 | 1 | 89.7 | FD imprecision |
| 255 | OW-412 / 0-1' / 10-13-06 | 0610091-13 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 83-32-9 | Acenaphthene | 4.3 | µg/Kg dry wt | | | 4.1 | 1 | 89.7 | |
| 256 | OW-412 / 0-1' / 10-13-06 | 0610091-13 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 86-73-7 | Fluorene | 8.2 | µg/Kg dry wt | | | 4.1 | 1 | 89.7 | |
| 257 | OW-412 / 0-1' / 10-13-06 | 0610091-13 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 85-01-8 | Phenanthrene | 110 | µg/Kg dry wt | | | 4.1 | 1 | 89.7 | |
| 258 | OW-412 / 0-1' / 10-13-06 | 0610091-13 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 120-12-7 | Anthracene | 14 | µg/Kg dry wt | | | 4.1 | 1 | 89.7 | |
| 259 | OW-412 / 0-1' / 10-13-06 | 0610091-13 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 206-44-0 | Fluoranthene | 190 | µg/Kg dry wt | | | 4.1 | 1 | 89.7 | |
| 260 | OW-412 / 0-1' / 10-13-06 | 0610091-13 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 129-00-0 | Pyrene | 150 | µg/Kg dry wt | | | 4.1 | 1 | 89.7 | |
| 261 | OW-412 / 0-1' / 10-13-06 | 0610091-13 | No | 10/27/2006 | 11/12/2006 | PAH SIM | SVOCs | 56-55-3 | Benz[a]anthracene | 77 | µg/Kg dry wt | | | 4.1 | 1 | 89.7 | |
| 262 | OW-412A / 10-13-06 | 0610091-14 | No | 10/19/2006 | 10/23/2006 | PAH SIM | SVOCs | 91-20-3 | Naphthalene | 10 | ng/L | U | | 10 | 1 | | Negated due to Blank Action |
| 263 | OW-412A / 10-13-06 | 0610091-14 | No | 10/19/2006 | 10/23/2006 | PAH SIM | SVOCs | 91-57-6 | 2-Methylnaphthalene | 10 | ng/L | U | | 10 | 1 | | Negated due to Blank Action |
| 264 | OW-412A / 10-13-06 | 0610091-14 | No | 10/19/2006 | 10/23/2006 | PAH SIM | SVOCs | 218-01-9 | Chrysene | 10 | ng/L | U | | 10 | 1 | | |
| 265 | OW-412A / 10-13-06 | 0610091-14 | No | 10/19/2006 | 10/23/2006 | PAH SIM | SVOCs | 205-99-2 | Benzo[b]fluoranthene | 10 | ng/L | U | | 10 | 1 | | |
| 266 | OW-412A / 10-13-06 | 0610091-14 | No | 10/19/2006 | 10/23/2006 | PAH SIM | SVOCs | 207-08-9 | Benzo[k]fluoranthene | 1.2 | ng/L | J | I | 10 | 1 | | Result uncertain below the calibration range |
| 267 | OW-412A / 10-13-06 | 0610091-14 | No | 10/19/2006 | 10/23/2006 | PAH SIM | SVOCs | 50-32-8 | Benzo[a]pyrene | 1.1 | ng/L | J | I | 10 | 1 | | Result uncertain below the calibration range |
| 268 | OW-412A / 10-13-06 | 0610091-14 | No | 10/19/2006 | 10/23/2006 | PAH SIM | SVOCs | 193-39-5 | Indeno[1,2,3-cd]pyrene | 10 | ng/L | U | | 10 | 1 | | Negated due to Blank Action |
| 269 | OW-412A / 10-13-06 | 0610091-14 | No | 10/19/2006 | 10/23/2006 | PAH SIM | SVOCs | 53-70-3 | Dibenz[a,h]anthracene | 1.9 | ng/L | J | I | 10 | 1 | | Result uncertain below the calibration range |
| 270 | OW-412A / 10-13-06 | 0610091-14 | No | 10/19/2006 | 10/23/2006 | PAH SIM | SVOCs | 191-24-2 | Benzo[g,h,i]perylene | 10 | ng/L | U | | 10 | 1 | | Negated due to Blank Action |
| 271 | OW-412A / 10-13-06 | 0610091-14 | No | 10/19/2006 | 10/23/2006 | PAH SIM | SVOCs | 208-96-8 | Acenaphthylene | 10 | ng/L | U | | 10 | 1 | | Negated due to Blank Action |
| 272 | OW-412A / 10-13-06 | 0610091-14 | No | 10/19/2006 | 10/23/2006 | PAH SIM | SVOCs | 83-32-9 | Acenaphthene | 10 | ng/L | U | | 10 | 1 | | Negated due to Blank Action |
| 273 | OW-412A / 10-13-06 | 0610091-14 | No | 10/19/2006 | 10/23/2006 | PAH SIM | SVOCs | 86-73-7 | Fluorene | 10 | ng/L | U | | 10 | 1 | | Negated due to Blank Action |
| 274 | OW-412A / 10-13-06 | 0610091-14 | No | 10/19/2006 | 10/23/2006 | PAH SIM | SVOCs | 85-01-8 | Phenanthrene | 10 | ng/L | U | | 10 | 1 | | Negated due to Blank Action |
| 275 | OW-412A / 10-13-06 | 0610091-14 | No | 10/19/2006 | 10/23/2006 | PAH SIM | SVOCs | 120-12-7 | Anthracene | 1.2 | ng/L | J | I | 10 | 1 | | Result uncertain below the calibration range |
| 276 | OW-412A / 10-13-06 | 0610091-14 | No | 10/19/2006 | 10/23/2006 | PAH SIM | SVOCs | 206-44-0 | Fluoranthene | 10 | ng/L | U | | 10 | 1 | | Negated due to Blank Action |
| 277 | OW-412A / 10-13-06 | 0610091-14 | No | 10/19/2006 | 10/23/2006 | PAH SIM | SVOCs | 129-00-0 | Pyrene | 1.3 | ng/L | J | I | 10 | 1 | | Result uncertain below the calibration range |
| 278 | OW-412A / 10-13-06 | 0610091-14 | No | 10/19/2006 | 10/23/2006 | PAH SIM | SVOCs | 56-55-3 | Benz[a]anthracene | 10 | ng/L | U | | 10 | 1 | | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected and unusable.
Bias: L = Low; H = High; I = Indeterminate. See Data Usability Report for details.

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase 1B-5 2006
8270C-SIM Data Review Checklist

ETR# 0610091

Lab: AWHL
Date Sampled: 10/13/06
Method of Analysis: 8270C-SIM

Lab Project #: BU412
No. Samples: 12+1FD+1EB
Matrix: Sediment

| | HT w: 7d other: 14d | Surrogate | LCS | MS | FD w: RPD ≤ 30% other: RPD≤50% | Tunes ICALs CCALs | IS' | RL & Quant. Correct | Other Issues |
|---|---|---|---|---|---|---|---|---|---|
| All Samples in Project | ✓ | ✓ | ✓ | | J & Results - see pg 4 | ✓ | | | |
| **Except:** | | | | | | | | | |
| FP-09C/0-1'/10-13-06 | J All | | | | | | | | |
| FP-09E/0-1'/10-13-06 | | | | J & Targets see pg. 4 | | | | | |
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Comments: Samples were received intact at 4±2°C & no COC issues noted.

During the final extraction steps for the sediments, sample FP-09C/0-1'/10-13-06 (0610091-05) was lost during vitrifying process (lab error) so sample was re-extracted on 11/13/06 (>28 days from sample collection). Since all PAHs were detected, no rejection of data required. All other samples were extracted & analyzed within HT ⇒ No flags.

* Action: All results in FP-09C/0-1'/10-13-06 estimated (J) & may be biased low due to extraction outside HT.

Date 12/11/06

Data Reviewer

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase 1B-5 2006
8270C-SIM Data Review Checklist

Lab: Anth
Date Sampled: 10/13/06
Lab Project #: BU412
No. Samples: 12 + 1FD + 1EB
Method of Analysis: 8270C-SIM
Matrix: Sediment
Associated Blanks: MBs: SS102706B12, SS111306BU7 & SW101906B18
EB: OW-412A/10-13-06

| Blank ID | Contaminant / Level | Matrix Related ? | Action Level / Action | Sample ID and result reported | Corrected Result |
|---|---|---|---|---|---|
| SW101906B18 | Naphthalene 2.1J ng/L | Y | 10.5 ng/L | OW-412A 3.7JB ng/L | 10U |
| | 2-methylnaphthalene 1.5J ng/L | Y | 7.5 ng/L | OW-412A 1.6JB ng/L | 10U |
| | Acenaphthylene 1.1J ng/L | Y | 5.5 ng/L | OW-412A 1.6JB ng/L | 10U |
| | Acenaphthene 1.6J ng/L | Y | 8 ng/L | OW-412A 1.7JB ng/L | 10U |
| | Fluorene 1.5J ng/L | Y | 7.5 ng/L | OW-412A 1.8JB ng/L | 10U |
| | Phenanthrene 3.5J ng/L | Y | 17.5 ng/L | OW-412A 5.7JB ng/L | 10U |
| | Fluoranthene 1.5J ng/L | Y | 7.5 ng/L | OW-412A 2.8JB ng/L | 10U |

**8270C Action Summary: see Worksheet #24b**

| | | |
|---|---|---|
| HT Actions: | Waters | 7d <HT≤ 14 d; J det/ J NDs; HT >14 d, J det/R ND |
| | other Matrices | 14d <HT≤ 28 d, J det/ J NDs; HT >28 d, J det/R ND |
| | Analysis | 40d < Extract HT ≤ 60d, J det/ J NDs; Extract HT > 60d; J det/ R NDs |
| Surrogate Actions: | | 2 BN Recovery > Criteria, J det/Accept ND; 10% ≤ 2-All Surrogates < Criteria, J det/J NDs; Recovery < 10%, J det/R NDs. |
| Blank Actions: | | Surrogates outside criteria - Use Judgment if isolated or analysis related<br>Non-Matrix related Blank contamination, BB or EB contaminant in all samples associated with Blank<br>Matrix related Blank contamination: Result < RL, U result at RL; RL<Result<Blank Action, U result at level reported |
| MS Actions: | | %Rec<10%, J det/ R NDs; 10% ≤%Rec<Criteria, J det/ J NDs; %Rec >Criteria, J det/Accept NDs for Unspiked Sample |
| LCS Actions: | | %Rec<10%, J det/ R NDs; 10% ≤%Rec<Criteria, J det/ J NDs; %Rec >Criteria, J det/Accept NDs for all Batch by |
| FD Action: | | Both Conc. ≥ 2xRL, %RPD outside, J det; One result ND, other ≥2 x RL, J det/J NDs; Both Conc. < 2xRL; %RPD out, LCS OK, Accept data |
| ICAL or CCAL Actions: | | ICAL %RSD > Criteria, J/UJ compound in all samples; CCAL %D > criteria due to loss in instrument sensitivity, J/UJ compound in all associated samples; %D out due to enhanced sensitivity, J only associated detects. |
| IS Actions: | | IS Area < criteria, J/UJ all assocaited compounds |
| %Solids Action: | | 10% ≤ % soilds ≤ 30%; J det/R ND; %solids < 10% R det/ R NDs |

Date 12/11/06
Data Reviewer

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase 1B-5 2006
8270C-SIM Data Review Checklist

Lab: ANHL
Date Sampled: 10/13/06
Method of Analysis: 8270C-SIM

Lab Project #: BU412
No. Samples: 12 + 1FD + 1EB
Matrix: Sediment

Blank Action Continued

| Blank ID | Contaminant / Level | Matrix Related ? | Action Level / Action | Sample ID and result reported | Corrected Result |
|---|---|---|---|---|---|
| SW101906B18 cont'd | Indeno(1,2,3-cd)pyrene 1.1J ng/L | Y | 5.5 ng/L | OW-412A 2.3JB ng/L | 10U |
| | Benzo(ghi)perylene 1.3J ng/L | Y | 6.5 ng/L | OW-412A 2.6JB ng/L | 10U |
| SS102706B12 | None | | | No Blank Action Rqmt. | |
| SS111306B07 | None | | | No Blk Actn Rqmt. | |
| OW-412A/10-13-06 | 5 PAHs not reqd due to Blk Actn at 1.1J → 1.9J ng/L | | | Associated Sediments reported in ng/kg (100DX limit in EB) ⇒ No Actn taken to qualify Sed. data based on EB results. | |

Date 12/11/06
Data Reviewer MJC, RK

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase 1B-5 2006
8270C-SIM Data Review Checklist

Lab: AWAL
Date Sampled: 10/3/06
Method of Analysis: 8270C-SIM

Lab Project #: BU 412
No. Samples: 12 + 1FD + 1EB
Matrix: Sediment

Additional Notes:

3 PAH Surrogates were recovered within criteria for all samples + QC ⇒ No Action

LCS/LCSD: SW101906LCS06/SW101906LCSD06 - %Rec + RPDs all OK ⇒ No Action
SS102706LCS10/SS102706LCSD10 - %Rec + RPDs OK ⇒ No Action Required
SS111306LCS05/SS111306LCSD05 - %Rec + RPDs OK

MS/MSD done on FP-09E/0-1'/10-13-06 - Level of Spike acceptable for matrix (i.e. all Targets were ≤ level of Spike in MS + MSD) - %Rec + RPDs OK for all except:

| | | | |
|---|---|---|---|
| Fluoranthene | 0% (MS) | + 0% (MSD) | RPD OK |
| Pyrene | 0% (MS) | + 0% (MSD) | |
| Benz(a)anthracene | 19% (MS) | + 0% (MSD) | |
| Chrysene | 13% | + 0% | |
| Benzo(b)fluoranthene | 20% | + 8% | |
| Benzo(k)fluoranthene | 38% | + 24% | |
| Benz(a)pyrene | 25% | + 2% | RPD = 37% Out |
| Indeno(1,2,3-cd)pyrene | 35% | + 21% | |
| Benzo(ghi)perylene | 26% | + 14% | |

∴ 9 Targets had low MS + MSD %Rec + 1 Target also had MS/MSD imprecision

*Action: 9 Targets listed above estimated (J) in FP-09E/0-1'/10-13-06 - Bias possibly Low except for Benzo(a)pyrene where bias considered indeterminate due to MS/MSD imprecision

FD pair = FP-09F/0-1'/10-13-06 + OW-412/0-1'/10-13-06 - Comparison shown on page 4A. FD precision was acceptable for 11 out of 17 Targets (i.e. RPD < 50%) - Precision unacceptable for 6 PAHs.
*Action: Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)anthracene, Benzo(ghi)perylene + Acenaphthylene estimated (J) in the FD pair with Indeterminate bias due to FD imprecision.

Date 12/11/06
Data Reviewer C. RM

Field Duplicate Precision Evaluation Worksheet

Lab: AWHL
Date Sampled: 10/13/06
Method of Analysis: 8270C-SIM

Lab Project #: BU412
No. Samples 12 + 1FD + 1EB
Matrix: Sediment

| Compound | Sample Result FP-09F / 0-1' / 10-13-06 | Sample Result FP-09F / 0-1' / 10-13-06 | Duplicate Result OW-412 / 0-1' / 10-13-06 | Duplicate Result OW-412 / 0-1' / 10-13-06 | | RPD | Action |
|---|---|---|---|---|---|---|---|
| Sample QL (SQL) | | 4.1 ug/Kg | | 4.1 ug/Kg | | | |
| Naphthalene | 38 | > 2 x SQL | 33 | > 2 x SQL | | 14 | No Action |
| 2-Methylnaphthalene | 66 | > 2 x SQL | 60 | > 2 x SQL | | 10 | No Action |
| Chrysene | 180 | > 2 x SQL | 120 | > 2 x SQL | | 40 | No Action |
| Benzo[b]fluoranthene | 160 | > 2 x SQL | 100 | > 2 x SQL | | 46 | No Action |
| Benzo[k]fluoranthene | 120 | > 2 x SQL | 68 | > 2 x SQL | | 55 | J Both |
| Benzo[a]pyrene | 100 | > 2 x SQL | 53 | > 2 x SQL | | 61 | J Both |
| Indeno[1,2,3-cd]pyrene | 58 | > 2 x SQL | 29 | > 2 x SQL | | 67 | J Both |
| Dibenz[a,h]anthracene | 24 | > 2 x SQL | 13 | > 2 x SQL | | 59 | J Both |
| Benzo[g,h,i]perylene | 57 | > 2 x SQL | 29 | > 2 x SQL | | 65 | J Both |
| Acenaphthylene | 31 | > 2 x SQL | 17 | > 2 x SQL | | 58 | J Both |
| Acenaphthene | 4.3 | > SQL but < 2X SQL | 4.3 | > SQL but < 2X SQL | | 0 | No Action |
| Fluorene | 11 | > 2 x SQL | 8.2 | > 2 x SQL | | 29 | No Action |
| Phenanthrene | 170 | > 2 x SQL | 110 | > 2 x SQL | | 43 | No Action |
| Anthracene | 23 | > 2 x SQL | 14 | > 2 x SQL | | 49 | No Action |
| Fluoranthene | 230 | > 2 x SQL | 190 | > 2 x SQL | | 19 | No Action |
| Pyrene | 210 | > 2 x SQL | 150 | > 2 x SQL | | 33 | No Action |
| Benz[a]anthracene | 120 | > 2 x SQL | 77 | > 2 x SQL | | 44 | No Action |

Date 12/11/06

Data Reviewer [signature]

page 4A

New Environmental Horizons, Inc.

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase 1B-5 2006
8270C-SIM Data Review Checklist

Lab: ANHL
Date Sampled: 10/13/06
Method of Analysis: 8270C-SIM

Lab Project #: BU412
No. Samples: 12 + 1FD + 1EB
Matrix: Sediment

Additional Notes:
MS/MSD + FD results are an indication that sample heterogeneity may be affecting the results for these samples.

Tunes: T4100701 (Water ICAL), T4102302, T4110601 (Solid ICAL), T4111102 + T4111602 - All Abundances OK + All samples were analyzed within 12 hrs. of DFTPP injection ⇒ No Action

ICALs: 10/07/06 ICAL - 10 ⇒ 10000 mg/L Water - %RSD + RFs all OK ⇒ No Action
11/06/06 ICAL - 10 ⇒ 10000 mg/L Solid - %RSD + RFs all OK ⇒ No Action

CCVs: C4102302, C4111103, C4111601 - %D ≤ ±25% for all + RFs all OK ⇒ No Action

All 5 ISs Areas + RTs were in criteria for all samples + QC ⇒ No Action.

34 PAHs in Sed + EB were reported at a level < RL + flagged J - these J data were accepted as estimates with indeterminate bias due to uncertainty in quantitation at a level below the calibration range.

All %Solids were > 30% ⇒ No Action - None of the sediments underwent freeze-drying prior to analysis and RLs achieved were ≤ PQLs given in Worksheet #9b. All RLs were ≤ PALs given in Worksheet #9b (02-Draft, September 21, 2006) ⇒ all data are considered usable as reported. Sediments had 17 PAHs reported as targets as required by QAPP.

Narrative did not raise any issues not already addressed.

Date 12/11/06
Data Reviewer [signature]

Blackburn & Union Privileges Superfund Site, Walpole, MA
Phase 1B-5 2006
8270C-SIM Data Review Checklist

| Sample ID | Date Sampled | Field Blank | Method Blank | LCS | Date Extracted | Date Analyzed |
|---|---|---|---|---|---|---|
| FP-09A/0-1'/10-13-06 -01 | 10/13/06 | OW-412A | SS102706B12 | LCS10/LCSD10 | 10/27/06 | 11/11/06 |
| FP-09A/1-3'/10-13-06 -02 | | | | | | |
| FP-09B/0-1'/10-13-06 -03 | | | | | | |
| FP-09B/1-3'/10-13-06 -04 | | | | | | |
| FP-09C/0-1'/10-13-06 -05 | | | SS111306B07 | LCS05/LCSD05 | 11/13/06 | 11/16/06 |
| FP-09C/1-3'/10-13-06 -06 | | | SS102706B12 | LCS10/LCSD10 | 10/27/06 | 11/11/06 |
| FP-09D/0-1'/10-13-06 -07 | | | | | | |
| FP-09D/1-3'/10-13-06 -08 | | | | | | |
| FP-09E/0-1'/10-13-06 -09 | | | | | | |
| FP-09E/1-3'/10-13-06 -10 | | | | | | 11/12/06 |
| FP-09F/0-1'/10-13-06 -11 | | | | | | |
| FP-09F/1-3'/10-13-06 -12 | | | | | | |
| OW-412/0-1'/10-13-06 -13 | | | | | | |
| OW-412A/10-13-06 -14 | | NA | SW101906B18 | LCS06/LCSD06 | 10/19/06 | 10/23/06 |
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Date 12/11/06

Data Reviewer

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# Data Usability Review

## Organic Analysis by Methods TO-15 and APH

### EPA Region I Tier III – type review

**Client:** Sanborn, Head & Associates, Inc., Concord, New Hampshire

**Site:** Blackburn & Union Privileges Superfund Site, Walpole, Massachusetts
Phase 1B-4 Remedial Investigation

**Laboratory:** Alpha Woods Hole Labs (AWHL), Westborough, Massachusetts

**SDG:** BU1001

**Lab ETR:** L0612699 & L0612717

**# of samples/Analyses:** 11 soil vapor samples and 1 ambient air sample for forty project-specific Volatile Organic Compounds (VOC)

**Initial Reviewer:** Dr. Nancy C. Rothman, New Environmental Horizons, Inc. NCR

**Senior Reviewer:** Susan D. Chapnick, New Environmental Horizons, Inc.

**Date Completed:** October 18, 2006
**revised:** **November 6, 2006**

***This report was revised on November 6, 2006 following receipt of reprocessed data for this SDG. Revisions to the data changed some of the values reported initially for some detected compounds. See Section 5 of this report for further details on the reissue.***

EPA Tier III-type Data Usability Review was performed on the data included in this SDG with the following intentions: 1) to determine if the data were generated and reported in accordance with the *Phase 1B-4 Remedial Investigation Work Plan, Blackburn & Union Privileges Superfund Site, Walpole, MA,* prepared by Sanborn, Head & Associates, Inc., July 2006 (Phase IB-4 Work Plan); Compendium Method TO-15, *Determination of Volatile Organic Compounds (VOCs) in Air Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS)*, January 1999, EPA/625/R-96/010b; *Method for the Determination of Air-Phase Petroleum Hydrocarbons (APH), Public Draft Comment,*. MADEP, February 2000; Region I, *EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses,* December 1996; *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review*; Publication EPA A540/R-99/008, October 1999; and *Guidance for Data Useability in Risk Assessment* (Part A), Publication 9285.7-09A, USEPA 1992; 2) to determine if the data met the project data quality objectives for acceptable accuracy, precision, sensitivity;

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and technical usability; and 3) to update the project database with validated results and appropriate data validation qualifiers.

The Data Usability Report consists of three parts:

- This Data Usability Report letter summarizing the actions taken;
- The spreadsheet of validated sample results with validation qualifiers and comments added based on actions taken; and
- The Data Validation Checklist to document the Tier III-type validation. This Checklist is an integral part of the validation report as it contains comprehensive details of all quality control (QC) reviewed, the acceptance criteria used, and the professional judgment and actions taken.

**Data Usability Report Summary**

During the Tier III-type data usability review of VOCs, several results were estimated (J) due to QC issues. Table 1 summarizes the actions taken during this Data Validation review. No results were rejected in this SDG. NEH generated a validated data spreadsheet based on the electronic project database file received from AWHL for this SDG. All data were considered acceptable compared to the Measurement Performance Criteria (MPCs) defined in Worksheet #11, 24a, and 24b of the Phase IB-4 Work Plan, with the understanding of the potential uncertainty (bias) in the qualified results.

Table 1. Summary of Data Validation/Usability Actions

| Field Sample ID | Analyte | Qualifier | Bias | Validation Comments |
|---|---|---|---|---|
| SV-03/09-07-06 | 1,3-Dichlorobenzene | J | I | High Continuing Calibration recovery + High LCS recovery + Result uncertain at a level below the calibration range |
| SV-06/09-07-06 | 1,1,1-Trichloroethane | J | I | Result uncertain at a level below the calibration range |
| SV-05/09-07-06 | 2-Butanone | J | I | Result uncertain at a level below the calibration range |
| OW-1001/09-07-06, SV-01/09-07-06, & SV-02/09-07-06 | 2-Methylnaphthalene | J | I | Result uncertain at a level below the calibration range |
| AA-01/09-07-06, OW-1001/09-07-06, SV-01/09-07-06, SV-02/09-07-06 & SV-05/09-07-06 | Acetone | J | I | Result uncertain at a level below the calibration range |
| SV-02/09-07-06, SV-05/09-07-06, & SV-09/09-06-06 | Benzene | J | I | Result uncertain at a level below the calibration range |
| OW-1001/09-07-06 & SV-01/09-07-06 | Bromodichloromethane | J | I | Result uncertain at a level below the calibration range |
| SV-01/09-07-06 | Chloroform | J | I | Result uncertain at a level below the calibration range |
| SV-01/09-07-06 & SV-02/09-07-06 | Ethyl Alcohol | J | I | Result uncertain at a level below the calibration range |
| SV-08/09-06-06 | Ethylbenzene | J | I | Result uncertain at a level below the calibration range |
| SV-05/09-07-06 | Heptane | J | I | Result uncertain at a level below the calibration range |

Table 1. Summary of Data Validation/Usability Actions - continued

| Field Sample ID | Analyte | Qualifier | Bias | Validation Comments |
|---|---|---|---|---|
| SV-02/09-07-06, SV-05/09-07-06, SV-07/09-06-06, & SV-09/09-06-06 | Methylene Chloride | J | I | Result uncertain at a level below the calibration range |
| SV-03/09-07-06, SV-05/09-07-06, SV-07/09-06-06, & SV-10/09-06-06 | Naphthalene | J | I | Result uncertain at a level below the calibration range |
| SV-02/09-07-06, SV-03/09-07-06, SV-04/09-07-06, SV-05/09-07-06, & SV-09/09-06-06 | n-Hexane | J | I | Result uncertain at a level below the calibration range |
| SV-01/09-07-06 & SV-10/09-06-06 | o-Xylene | J | I | Result uncertain at a level below the calibration range |
| OW-1001/09-07-06 & SV-01/09-07-06 | p/m-Xylene | J | I | Result uncertain at a level below the calibration range |
| SV-06/09-07-06 & SV-08/09-06-06 | Tetrachloroethene | J | I | Result uncertain at a level below the calibration range |
| SV-05/09-07-06 & SV-06/09-07-06 | Tetrahydrofuran | J | I | Result uncertain at a level below the calibration range |
| SV-02/09-07-06 & SV-09/09-06-06 | Trichloroethene | J | I | Result uncertain at a level below the calibration range |
| SV-04/09-07-06 & SV-06/09-07-06 | Trichlorofluoromethane | J | I | Result uncertain at a level below the calibration range |

*Qualifiers: U = Analyte is not detected at the Quantitation Limit (QL). UJ = Non-detect is estimated. J = Result is estimated. R = Result is rejected and is unusable for project decisions.*

*Bias: L = Low; H = High; I = Indeterminate*

The following sections document the QC reviewed and the issues that required action or affected the data certainty in terms of the project data quality objectives (DQO) of accuracy, precision, representativeness, comparability, and sensitivity. The DQO of completeness will be evaluated after all Phase 1B data are generated.

**1. Technical Issues Affecting Accuracy**

*Holding times, calibration criteria, laboratory control sample recoveries and other method-specific QC sample results were reviewed to evaluate the accuracy of the environmental results. All qualifications in this Section are listed in Table 1.*

The accuracy for 1,3-dichlorobenzene in sample SV-03/09-07-06 was compromised due to high recovery of this compound in the associated Laboratory Control Sample (LCS). The result for 1,3-dichlorobenzene in this one sample was estimated (J) with overall indeterminate bias due to other QC issues.

The accuracy for 46 results (for compounds 1,3-dichlorobenzene, 1,1,1-trichloroethane, 2-butanone, 2-methylnapthalene, acetone, benzene, bromodichloromethane, chloroform, ethyl alcohol, ethylbenzene, heptane, methylene chloride, naphthalene, n-hexane, o-xylene, p/m-xylene, tetrachloroethene,

tetrahydrofuran, trichloroethene, and trichlorofluoromethane) in all samples was compromised due to reporting of results at concentrations below the accurate instrument calibration range. The affected results, as listed in Table 1, were qualified as estimated (J) and are considered to be of indeterminate bias.

**2. Technical Issues Affecting Precision and Representativeness**

*The relative percent difference (RPD) between laboratory duplicates(LD) and field duplicate(FD) pair results were evaluated to assess precision and representativeness of the environmental data. All qualifications in this Section are listed in Table 1.*

The Laboratory Duplicate for the TO-15 analysis was performed on a sample not associated with this SDG; therefore, these results were not evaluated herein (*i.e.*, batch QC performed). The APH LD was performed on sample SV-09/09-06-06 and the precision for naphthalene and 2-methylnaphthalene was acceptable. These results are an indication of acceptable laboratory precision for soil vapor analysis.

The field duplicate pair for this SDG was SV-01/09-07-06 and OW-1001/09-07-06. FD precision was acceptable for all twelve detected VOCs in these samples. These results are an indication of acceptable precision and representativeness of the results in the soil vapor samples for VOCs.

**3. Technical Issues Affecting Sensitivity**

*Blank contamination in method blanks, field blanks, and initial and continuing calibration blanks, along with an evaluation of the achievement of the project quantitation limits were reviewed to assess sensitivity of the results. All qualifications in this Section are listed in Table 1.*

Sensitivity of results as compared to either the project quantitation limit (PQL) or, if that was exceeded, the project action limit (PAL) defined in Phase 1B-4 Work Plan Worksheets # 9b, was acceptable for all VOCs with the exception of: 1,1,2,2-tetrachloroethane, 1,1,2-trichloroethane, 1,2-dichloroethane, bromodichloromethane, carbon tetrachloride, chloroform, and dibromochloromethane in all samples, as expected, due to method limitations; 1,2-dichloropropane and benzene in sample SV-02/09-07-06 due to dilution (dilution factor (DF)=2) made for sample analysis; and 1,2-dichloropropane, benzene, bromomethane, cis-1,3-dichloropropene, tetrachloroethene, trans-1,3-dichloropropene, and vinyl chloride in samples SV-01/09-07-06 and OW-1001/09-07-06 due to dilutions made (DF=10) for sample analysis to ensure that all detects were reported within the calibration range of the instrument. The data users will need to determine the usability of the non-detected results for the compounds which exceed the PALs.

The continuing calibration associated with sample SV-03/09-07-06 did not meet Region I DV criteria (%D > - 25%) for 1,3-dichlorobenzene. The result for this compound in this one sample was estimated (J) with overall indeterminate bias due to other QC issues.

There were no field blanks collected with these samples as they were not required in the Phase 1B-4 Work Plan.

**4. Additional Technical and QA/QC Issues**

*A review of method compliance, an evaluation of method modifications, and other QA/QC issues were made to evaluate the comparability of the data generated for the project uses.*

The laboratory performed two analyses on each canister received: TO-15 and APH. The APH analysis was only performed to report naphthalene and 2-methylnaphthalene as required in the Phase 1B-4 Work

Plan. This data usability review was done on both methods of analysis for the two projects reported by the laboratory for SDG BU1001.

The laboratory reported results for 26 compounds in addition to the 40 requested in Worksheet #9b. The extra compounds were as follows: 1,1,2-trichloro-1,2,2-trifluoroethane; 1,2,4-trichlorobenzene; 1,2,4-trimethylbenzene; 1,2-dibromoethane; 1,2-dichloro-1,1,2,2-tetrafluoroethane; 1,2-dichlorobenzene; 1,3,5-trimethylbenzene; 1,3-butadiene; 1,3-dichlorobenzene; 1,4-dichlorobenzene; 1,4-dioxane; 2,2,4-trimethylpentane; 3-chloropropene; 4-ethyltoluene, benzyl chloride; cyclohexane; dichlorodifluoro-methane; ethyl acetate; ethyl alcohol; heptane; hexachlorobutadiene; iso-propyl alcohol; n-hexane; propylene; tetrahydrofuran; and vinyl bromide. The data user will need to reconcile reporting of these extra compounds with project objectives. All compounds reported were included in the validation performed herein.

Calculation verification was performed for VOCs on one sample to evaluate the sensitivity (reporting limit of non-detected results) and accuracy (detected results) of the data. The reporting limits and results checked were verified to be accurate.

## 5. Summary of Completeness, Documentation, and Chain-of-Custody Issues

The laboratory data package was complete and compliant including a narrative, sample results, QC summary forms, Chain-of-Custody (COC) documentation, and all raw data for preparation and analysis of these samples, with the following exception. The raw data for the 0.1 ppbV and 1.0 ppbV Initial Calibration standard was missing from both data packages. A laboratory resubmittal was requested on 10/09/06 and the resubmittal was received by NEH on 10/18/06.

All samples were received at the laboratory in good condition and there were no COC or field/laboratory canister vacuum discrepancies noted.

***On October 19, 2006 after the validated data for this SDG were sent to SHA, it was determined that sample SV-02/09-07-06 was missing a result for one compound: 1,1,2-trichloroethane. During the laboratory evaluation of how and why this compound was not reported, the laboratory determined that there was a sample processing error whereby the incorrect Initial Calibration file was used to process samples. On November 6, 2006, NEH received the reprocessed data and the values for detected results for benzene, ethylbenzene, n-hexane, o-xylene, styrene, and tetrachloroethene were lowered as compared to the initially reported results for these compounds. In addition, previously detected results for tetrahydrofuran in sample SV-08/09-06-06, 2-butanone in SV-05/09-07-06, and bromodichloromethane in samples SV-01/09-07-06 and OW-1001/09-07-06 were non-detect after reprocessing of the data. The validated spreadsheet of results was revised and reissued on November 6, 2006.***

| Sample Name | Collection Date | Sample Matrix | Laboratory Name | Laboratory Sample Identification Number | Extraction Date | Analysis Date | Analysis Method Number | Analyte Name | Analyte CAS Number | Lab Result Value | Lab Result Units | Lab Qualifier | DV Result Value | DV Result Units | DV Qualifier | Sample Specific Reporting Limit | Dilution Factor | Bias | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | 1,1,1-TRICHLOROETHANE | 71-55-6 | ND | ug/m3 | U | 2.72 | ug/m3 | U | 2.72 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | 1,1,2,2-TETRACHLOROETHANE | 79-34-5 | ND | ug/m3 | U | 3.43 | ug/m3 | U | 3.43 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 76-13-1 | ND | ug/m3 | U | 3.83 | ug/m3 | U | 3.83 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | 1,1,2-TRICHLOROETHANE | 79-00-5 | ND | ug/m3 | U | 2.72 | ug/m3 | U | 2.72 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | 1,1-DICHLOROETHANE | 75-34-3 | ND | ug/m3 | U | 2.02 | ug/m3 | U | 2.02 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | 1,1-DICHLOROETHENE | 75-35-4 | ND | ug/m3 | U | 1.98 | ug/m3 | U | 1.98 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | 1,2,4-TRICHLOROBENZENE | 120-82-1 | ND | ug/m3 | U | 3.71 | ug/m3 | U | 3.71 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | 1,2,4-TRIMETHYLBENZENE | 95-63-6 | 17 | ug/m3 | | 17 | ug/m3 | | 2.46 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | 1,2-DIBROMOETHANE | 106-93-4 | ND | ug/m3 | U | 3.84 | ug/m3 | U | 3.84 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | 1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE | 76-14-2 | ND | ug/m3 | U | 3.49 | ug/m3 | U | 3.49 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | 1,2-DICHLOROBENZENE | 95-50-1 | ND | ug/m3 | U | 3 | ug/m3 | U | 3 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | 1,2-DICHLOROETHANE | 107-06-2 | ND | ug/m3 | U | 2.02 | ug/m3 | U | 2.02 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | 1,2-DICHLOROPROPANE | 78-87-5 | ND | ug/m3 | U | 2.31 | ug/m3 | U | 2.31 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | 1,3,5-TRIMETHYLBENZENE | 108-67-8 | 4.8 | ug/m3 | | 4.8 | ug/m3 | | 2.46 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | 1,3-BUTADIENE | 106-99-0 | ND | ug/m3 | U | 1.1 | ug/m3 | U | 1.1 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | 1,3-DICHLOROBENZENE | 541-73-1 | ND | ug/m3 | U | 3 | ug/m3 | U | 3 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | 1,4-DICHLOROBENZENE | 106-46-7 | ND | ug/m3 | U | 3 | ug/m3 | U | 3 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | 1,4-DIOXANE | 123-91-1 | ND | ug/m3 | U | 3.6 | ug/m3 | U | 3.6 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | 2,2,4-TRIMETHYLPENTANE | 540-84-1 | ND | ug/m3 | U | 2.33 | ug/m3 | U | 2.33 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | 2-BUTANONE | 78-93-3 | 7.55 | ug/m3 | | 7.55 | ug/m3 | | 1.47 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | 2-HEXANONE | 591-78-6 | ND | ug/m3 | U | 2.05 | ug/m3 | U | 2.05 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9112006 | 9112006 | DRAFT 1 | 2-METHYLNAPHTHALENE | 91-57-6 | 17.8 | ug/m3 | | 17.8 | ug/m3 | | 8 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | 3-CHLOROPROPENE | 107-05-1 | ND | ug/m3 | U | 1.56 | ug/m3 | U | 1.56 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | 4-ETHYLTOLUENE | 622-96-8 | ND | ug/m3 | U | 2.46 | ug/m3 | U | 2.46 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | 4-METHYL-2-PENTANONE | 108-10-1 | 7.12 | ug/m3 | | 7.12 | ug/m3 | | 2.05 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | ACETONE | 67-64-1 | 98.8 | ug/m3 | | 98.8 | ug/m3 | | 4.75 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | BENZENE | 71-43-2 | 1.15 | ug/m3 | J | 1.15 | ug/m3 | J | 1.6 | 1 | I | Result uncertain at a level below the calibration range |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | BENZYL CHLORIDE | 100-44-7 | ND | ug/m3 | U | 2.59 | ug/m3 | U | 2.59 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | BROMODICHLOROMETHANE | 75-27-4 | ND | ug/m3 | U | 3.35 | ug/m3 | U | 3.35 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | BROMOFORM | 75-25-2 | ND | ug/m3 | U | 5.16 | ug/m3 | U | 5.16 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | BROMOMETHANE | 74-83-9 | ND | ug/m3 | U | 1.94 | ug/m3 | U | 1.94 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | CARBON DISULFIDE | 75-15-0 | 10.5 | ug/m3 | | 10.5 | ug/m3 | | 1.56 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | CARBON TETRACHLORIDE | 56-23-5 | ND | ug/m3 | U | 3.14 | ug/m3 | U | 3.14 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | CHLOROBENZENE | 108-90-7 | ND | ug/m3 | U | 2.3 | ug/m3 | U | 2.3 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | CHLOROETHANE | 75-00-3 | ND | ug/m3 | U | 1.32 | ug/m3 | U | 1.32 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | CHLOROFORM | 67-66-3 | ND | ug/m3 | U | 2.44 | ug/m3 | U | 2.44 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | CHLOROMETHANE | 74-87-3 | ND | ug/m3 | U | 1.03 | ug/m3 | U | 1.03 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | CIS-1,2-DICHLOROETHENE | 156-59-2 | ND | ug/m3 | U | 1.98 | ug/m3 | U | 1.98 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | CIS-1,3-DICHLOROPROPENE | 10061-01-5 | ND | ug/m3 | U | 2.27 | ug/m3 | U | 2.27 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | CYCLOHEXANE | 110-82-7 | ND | ug/m3 | U | 1.72 | ug/m3 | U | 1.72 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | DIBROMOCHLOROMETHANE | 124-48-1 | ND | ug/m3 | U | 4.26 | ug/m3 | U | 4.26 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | DICHLORODIFLUOROMETHANE | 75-71-8 | ND | ug/m3 | U | 4.94 | ug/m3 | U | 4.94 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | ETHYL ACETATE | 141-78-6 | ND | ug/m3 | U | 1.8 | ug/m3 | U | 1.8 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | ETHYL ALCOHOL | 64-17-5 | 40.6 | ug/m3 | | 40.6 | ug/m3 | | 3.76 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | ETHYLBENZENE | 100-41-4 | 3 | ug/m3 | | 3 | ug/m3 | | 2.17 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | HEPTANE | 142-82-5 | ND | ug/m3 | U | 2.05 | ug/m3 | U | 2.05 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | HEXACHLOROBUTADIENE | 87-68-3 | ND | ug/m3 | U | 5.33 | ug/m3 | U | 5.33 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | ISO-PROPYL ALCOHOL | 67-63-0 | 3.15 | ug/m3 | | 3.15 | ug/m3 | | 1.23 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | METHYL TERT BUTYL ETHER | 1634-04-4 | ND | ug/m3 | U | 1.8 | ug/m3 | U | 1.8 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | METHYLENE CHLORIDE | 75-09-2 | 2.42 | ug/m3 | J | 2.42 | ug/m3 | J | 3.47 | 1 | I | Result uncertain at a level below the calibration range |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | N-HEXANE | 110-54-3 | 1.65 | ug/m3 | J | 1.65 | ug/m3 | J | 3.52 | 1 | I | Result uncertain at a level below the calibration range |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9112006 | 9112006 | DRAFT 1 | NAPHTHALENE | 91-20-3 | 6.55 | ug/m3 | | 6.55 | ug/m3 | | 2 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | O-XYLENE | 95-47-6 | 6.77 | ug/m3 | | 6.77 | ug/m3 | | 2.17 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | P/M-XYLENE | 106-42-3/1 | 6.88 | ug/m3 | | 6.88 | ug/m3 | | 4.34 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | PROPYLENE | 115-07-1 | ND | ug/m3 | U | 1.72 | ug/m3 | U | 1.72 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | STYRENE | 100-42-5 | 9.58 | ug/m3 | | 9.58 | ug/m3 | | 2.13 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | TETRACHLOROETHENE | 127-18-4 | ND | ug/m3 | U | 3.39 | ug/m3 | U | 3.39 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | TETRAHYDROFURAN | 109-99-9 | ND | ug/m3 | U | 1.47 | ug/m3 | U | 1.47 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | TOLUENE | 108-88-3 | 8.62 | ug/m3 | | 8.62 | ug/m3 | | 1.88 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | TRANS-1,2-DICHLOROETHENE | 156-60-5 | ND | ug/m3 | U | 1.98 | ug/m3 | U | 1.98 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | TRANS-1,3-DICHLOROPROPENE | 10061-02-6 | ND | ug/m3 | U | 2.27 | ug/m3 | U | 2.27 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | TRICHLOROETHENE | 79-01-6 | 2.1 | ug/m3 | J | 2.1 | ug/m3 | J | 2.68 | 1 | I | Result uncertain at a level below the calibration range |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | TRICHLOROFLUOROMETHANE | 75-69-4 | 4.17 | ug/m3 | | 4.17 | ug/m3 | | 2.81 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | VINYL ACETATE | 108-05-4 | ND | ug/m3 | U | 1.76 | ug/m3 | U | 1.76 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | VINYL BROMIDE | 593-60-2 | ND | ug/m3 | U | 2.18 | ug/m3 | U | 2.18 | 1 | | |
| SV-09/09-06-06 | 9062006 | AIR | AWHL | L0612699-01 | 9132006 | 9132006 | TO-15 | VINYL CHLORIDE | 75-01-4 | ND | ug/m3 | U | 1.28 | ug/m3 | U | 1.28 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | 1,1,1-TRICHLOROETHANE | 71-55-6 | ND | ug/m3 | U | 2.72 | ug/m3 | U | 2.72 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | 1,1,2,2-TETRACHLOROETHANE | 79-34-5 | ND | ug/m3 | U | 3.43 | ug/m3 | U | 3.43 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 76-13-1 | ND | ug/m3 | U | 3.83 | ug/m3 | U | 3.83 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | 1,1,2-TRICHLOROETHANE | 79-00-5 | ND | ug/m3 | U | 2.72 | ug/m3 | U | 2.72 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | 1,1-DICHLOROETHANE | 75-34-3 | ND | ug/m3 | U | 2.02 | ug/m3 | U | 2.02 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | 1,1-DICHLOROETHENE | 75-35-4 | ND | ug/m3 | U | 1.98 | ug/m3 | U | 1.98 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | 1,2,4-TRICHLOROBENZENE | 120-82-1 | ND | ug/m3 | U | 3.71 | ug/m3 | U | 3.71 | 1 | | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected.
Bias: L = Low; H = High; I = Indeterminate.

| Sample Name | Collection Date | Sample Matrix | Laboratory Name | Laboratory Sample Identification Number | Extraction Date | Analysis Date | Analysis Method Number | Analyte Name | Analyte CAS Number | Lab Result Value | Lab Result Units | Lab Qualifier | DV Result Value | DV Result Units | DV Qualifier | Sample Specific Reporting Limit | Dilution Factor | Bias | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | 1,2,4-TRIMETHYLBENZENE | 95-63-6 | ND | ug/m3 | U | 2.46 | ug/m3 | U | 2.46 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | 1,2-DIBROMOETHANE | 106-93-4 | ND | ug/m3 | U | 3.84 | ug/m3 | U | 3.84 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | 1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE | 76-14-2 | ND | ug/m3 | U | 3.49 | ug/m3 | U | 3.49 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | 1,2-DICHLOROBENZENE | 95-50-1 | ND | ug/m3 | U | 3 | ug/m3 | U | 3 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | 1,2-DICHLOROETHANE | 107-06-2 | ND | ug/m3 | U | 2.02 | ug/m3 | U | 2.02 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | 1,2-DICHLOROPROPANE | 78-87-5 | ND | ug/m3 | U | 2.31 | ug/m3 | U | 2.31 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | 1,3,5-TRIMETHYLBENZENE | 108-67-8 | ND | ug/m3 | U | 2.46 | ug/m3 | U | 2.46 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | 1,3-BUTADIENE | 106-99-0 | ND | ug/m3 | U | 1.1 | ug/m3 | U | 1.1 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | 1,3-DICHLOROBENZENE | 541-73-1 | ND | ug/m3 | U | 3 | ug/m3 | U | 3 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | 1,4-DICHLOROBENZENE | 106-46-7 | ND | ug/m3 | U | 3 | ug/m3 | U | 3 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | 1,4-DIOXANE | 123-91-1 | ND | ug/m3 | U | 3.6 | ug/m3 | U | 3.6 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | 2,2,4-TRIMETHYLPENTANE | 540-84-1 | ND | ug/m3 | U | 2.33 | ug/m3 | U | 2.33 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | 2-BUTANONE | 78-93-3 | 15 | ug/m3 | | 15 | ug/m3 | | 1.47 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | 2-HEXANONE | 591-78-6 | ND | ug/m3 | U | 2.05 | ug/m3 | U | 2.05 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9112006 | 9112006 | DRAFT 1 | 2-METHYLNAPHTHALENE | 91-57-6 | ND | ug/m3 | U | 8 | ug/m3 | U | 8 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | 3-CHLOROPROPENE | 107-05-1 | ND | ug/m3 | U | 1.56 | ug/m3 | U | 1.56 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | 4-ETHYLTOLUENE | 622-96-8 | ND | ug/m3 | U | 2.46 | ug/m3 | U | 2.46 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | 4-METHYL-2-PENTANONE | 108-10-1 | ND | ug/m3 | U | 2.05 | ug/m3 | U | 2.05 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | ACETONE | 67-64-1 | 98.1 | ug/m3 | | 98.1 | ug/m3 | | 4.75 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | BENZENE | 71-43-2 | 9.9 | ug/m3 | | 9.9 | ug/m3 | | 1.6 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | BENZYL CHLORIDE | 100-44-7 | ND | ug/m3 | U | 2.59 | ug/m3 | U | 2.59 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | BROMODICHLOROMETHANE | 75-27-4 | ND | ug/m3 | U | 3.35 | ug/m3 | U | 3.35 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | BROMOFORM | 75-25-2 | ND | ug/m3 | U | 5.16 | ug/m3 | U | 5.16 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | BROMOMETHANE | 74-83-9 | ND | ug/m3 | U | 1.94 | ug/m3 | U | 1.94 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | CARBON DISULFIDE | 75-15-0 | 7 | ug/m3 | | 7 | ug/m3 | | 1.56 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | CARBON TETRACHLORIDE | 56-23-5 | ND | ug/m3 | U | 3.14 | ug/m3 | U | 3.14 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | CHLOROBENZENE | 108-90-7 | ND | ug/m3 | U | 2.3 | ug/m3 | U | 2.3 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | CHLOROETHANE | 75-00-3 | ND | ug/m3 | U | 1.32 | ug/m3 | U | 1.32 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | CHLOROFORM | 67-66-3 | ND | ug/m3 | U | 2.44 | ug/m3 | U | 2.44 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | CHLOROMETHANE | 74-87-3 | ND | ug/m3 | U | 1.03 | ug/m3 | U | 1.03 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | CIS-1,2-DICHLOROETHENE | 156-59-2 | ND | ug/m3 | U | 1.98 | ug/m3 | U | 1.98 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | CIS-1,3-DICHLOROPROPENE | 10061-01-5 | ND | ug/m3 | U | 2.27 | ug/m3 | U | 2.27 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | CYCLOHEXANE | 110-82-7 | ND | ug/m3 | U | 1.72 | ug/m3 | U | 1.72 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | DIBROMOCHLOROMETHANE | 124-48-1 | ND | ug/m3 | U | 4.26 | ug/m3 | U | 4.26 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | DICHLORODIFLUOROMETHANE | 75-71-8 | ND | ug/m3 | U | 4.94 | ug/m3 | U | 4.94 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | ETHYL ACETATE | 141-78-6 | ND | ug/m3 | U | 1.8 | ug/m3 | U | 1.8 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | ETHYL ALCOHOL | 64-17-5 | 8.38 | ug/m3 | | 8.38 | ug/m3 | | 3.76 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | ETHYLBENZENE | 100-41-4 | ND | ug/m3 | U | 2.17 | ug/m3 | U | 2.17 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | HEPTANE | 142-82-5 | ND | ug/m3 | U | 2.05 | ug/m3 | U | 2.05 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | HEXACHLOROBUTADIENE | 87-68-3 | ND | ug/m3 | U | 5.33 | ug/m3 | U | 5.33 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | ISO-PROPYL ALCOHOL | 67-63-0 | 2.71 | ug/m3 | | 2.71 | ug/m3 | | 1.23 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | METHYL TERT BUTYL ETHER | 1634-04-4 | ND | ug/m3 | U | 1.8 | ug/m3 | U | 1.8 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | METHYLENE CHLORIDE | 75-09-2 | 4.02 | ug/m3 | | 4.02 | ug/m3 | | 3.47 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | N-HEXANE | 110-54-3 | 6.47 | ug/m3 | | 6.47 | ug/m3 | | 3.52 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9112006 | 9112006 | DRAFT 1 | NAPHTHALENE | 91-20-3 | 0.69 | ug/m3 | J | 0.69 | ug/m3 | J | 2 | 1 | I | Result uncertain at a level below the calibration range |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | O-XYLENE | 95-47-6 | 1.88 | ug/m3 | J | 1.88 | ug/m3 | J | 2.17 | 1 | I | Result uncertain at a level below the calibration range |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | P/M-XYLENE | 106-42-3/1 | ND | ug/m3 | U | 4.34 | ug/m3 | U | 4.34 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | PROPYLENE | 115-07-1 | ND | ug/m3 | U | 1.72 | ug/m3 | U | 1.72 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | STYRENE | 100-42-5 | ND | ug/m3 | U | 2.13 | ug/m3 | U | 2.13 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | TETRACHLOROETHENE | 127-18-4 | 24.7 | ug/m3 | | 24.7 | ug/m3 | | 3.39 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | TETRAHYDROFURAN | 109-99-9 | 1.97 | ug/m3 | | 1.97 | ug/m3 | | 1.47 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | TOLUENE | 108-88-3 | 9.41 | ug/m3 | | 9.41 | ug/m3 | | 1.88 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | TRANS-1,2-DICHLOROETHENE | 156-60-5 | ND | ug/m3 | U | 1.98 | ug/m3 | U | 1.98 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | TRANS-1,3-DICHLOROPROPENE | 10061-02-6 | ND | ug/m3 | U | 2.27 | ug/m3 | U | 2.27 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | TRICHLOROETHENE | 79-01-6 | 4.23 | ug/m3 | | 4.23 | ug/m3 | | 2.68 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | TRICHLOROFLUOROMETHANE | 75-69-4 | 3.04 | ug/m3 | | 3.04 | ug/m3 | | 2.81 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | VINYL ACETATE | 108-05-4 | ND | ug/m3 | U | 1.76 | ug/m3 | U | 1.76 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | VINYL BROMIDE | 593-60-2 | ND | ug/m3 | U | 2.18 | ug/m3 | U | 2.18 | 1 | | |
| SV-10/09-06-06 | 9062006 | AIR | AWHL | L0612699-02 | 9132006 | 9132006 | TO-15 | VINYL CHLORIDE | 75-01-4 | ND | ug/m3 | U | 1.28 | ug/m3 | U | 1.28 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | 1,1,1-TRICHLOROETHANE | 71-55-6 | ND | ug/m3 | U | 2.72 | ug/m3 | U | 2.72 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | 1,1,2,2-TETRACHLOROETHANE | 79-34-5 | ND | ug/m3 | U | 3.43 | ug/m3 | U | 3.43 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 76-13-1 | ND | ug/m3 | U | 3.83 | ug/m3 | U | 3.83 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | 1,1,2-TRICHLOROETHANE | 79-00-5 | ND | ug/m3 | U | 2.72 | ug/m3 | U | 2.72 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | 1,1-DICHLOROETHANE | 75-34-3 | ND | ug/m3 | U | 2.02 | ug/m3 | U | 2.02 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | 1,1-DICHLOROETHENE | 75-35-4 | ND | ug/m3 | U | 1.98 | ug/m3 | U | 1.98 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | 1,2,4-TRICHLOROBENZENE | 120-82-1 | ND | ug/m3 | U | 3.71 | ug/m3 | U | 3.71 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | 1,2,4-TRIMETHYLBENZENE | 95-63-6 | ND | ug/m3 | U | 2.46 | ug/m3 | U | 2.46 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | 1,2-DIBROMOETHANE | 106-93-4 | ND | ug/m3 | U | 3.84 | ug/m3 | U | 3.84 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | 1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE | 76-14-2 | ND | ug/m3 | U | 3.49 | ug/m3 | U | 3.49 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | 1,2-DICHLOROBENZENE | 95-50-1 | ND | ug/m3 | U | 3 | ug/m3 | U | 3 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | 1,2-DICHLOROETHANE | 107-06-2 | ND | ug/m3 | U | 2.02 | ug/m3 | U | 2.02 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | 1,2-DICHLOROPROPANE | 78-87-5 | ND | ug/m3 | U | 2.31 | ug/m3 | U | 2.31 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | 1,3,5-TRIMETHYLBENZENE | 108-67-8 | ND | ug/m3 | U | 2.46 | ug/m3 | U | 2.46 | 1 | | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected.
Bias: L = Low; H = High; I = Indeterminate.

| Sample Name | Collection Date | Sample Matrix | Laboratory Name | Laboratory Sample Identification Number | Extraction Date | Analysis Date | Analysis Method Number | Analyte Name | Analyte CAS Number | Lab Result Value | Lab Result Units | Lab Qualifier | DV Result Value | DV Result Units | DV Qualifier | Sample Specific Reporting Limit | Dilution Factor | Bias | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | 1,3-BUTADIENE | 106-99-0 | ND | ug/m3 | U | 1.1 | ug/m3 | U | 1.1 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | 1,3-DICHLOROBENZENE | 541-73-1 | ND | ug/m3 | U | 3 | ug/m3 | U | 3 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | 1,4-DICHLOROBENZENE | 106-46-7 | ND | ug/m3 | U | 3 | ug/m3 | U | 3 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | 1,4-DIOXANE | 123-91-1 | ND | ug/m3 | U | 3.6 | ug/m3 | U | 3.6 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | 2,2,4-TRIMETHYLPENTANE | 540-84-1 | ND | ug/m3 | U | 2.33 | ug/m3 | U | 2.33 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | 2-BUTANONE | 78-93-3 | 2.37 | ug/m3 | | 2.37 | ug/m3 | | 1.47 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | 2-HEXANONE | 591-78-6 | ND | ug/m3 | U | 2.05 | ug/m3 | U | 2.05 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9112006 | 9112006 | DRAFT 1 | 2-METHYLNAPHTHALENE | 91-57-6 | ND | ug/m3 | U | 8 | ug/m3 | U | 8 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | 3-CHLOROPROPENE | 107-05-1 | ND | ug/m3 | U | 1.56 | ug/m3 | U | 1.56 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | 4-ETHYLTOLUENE | 622-96-8 | ND | ug/m3 | U | 2.46 | ug/m3 | U | 2.46 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | 4-METHYL-2-PENTANONE | 108-10-1 | ND | ug/m3 | U | 2.05 | ug/m3 | U | 2.05 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | ACETONE | 67-64-1 | 76.1 | ug/m3 | | 76.1 | ug/m3 | | 4.75 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | BENZENE | 71-43-2 | 12.9 | ug/m3 | | 12.9 | ug/m3 | | 1.6 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | BENZYL CHLORIDE | 100-44-7 | ND | ug/m3 | U | 2.59 | ug/m3 | U | 2.59 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | BROMODICHLOROMETHANE | 75-27-4 | ND | ug/m3 | U | 3.35 | ug/m3 | U | 3.35 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | BROMOFORM | 75-25-2 | ND | ug/m3 | U | 5.16 | ug/m3 | U | 5.16 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | BROMOMETHANE | 74-83-9 | ND | ug/m3 | U | 1.94 | ug/m3 | U | 1.94 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | CARBON DISULFIDE | 75-15-0 | 2.89 | ug/m3 | | 2.89 | ug/m3 | | 1.56 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | CARBON TETRACHLORIDE | 56-23-5 | ND | ug/m3 | U | 3.14 | ug/m3 | U | 3.14 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | CHLOROBENZENE | 108-90-7 | ND | ug/m3 | U | 2.3 | ug/m3 | U | 2.3 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | CHLOROETHANE | 75-00-3 | ND | ug/m3 | U | 1.32 | ug/m3 | U | 1.32 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | CHLOROFORM | 67-66-3 | ND | ug/m3 | U | 2.44 | ug/m3 | U | 2.44 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | CHLOROMETHANE | 74-87-3 | ND | ug/m3 | U | 1.03 | ug/m3 | U | 1.03 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | CIS-1,2-DICHLOROETHENE | 156-59-2 | ND | ug/m3 | U | 1.98 | ug/m3 | U | 1.98 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | CIS-1,3-DICHLOROPROPENE | 10061-01-5 | ND | ug/m3 | U | 2.27 | ug/m3 | U | 2.27 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | CYCLOHEXANE | 110-82-7 | 8.89 | ug/m3 | | 8.89 | ug/m3 | | 1.72 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | DIBROMOCHLOROMETHANE | 124-48-1 | ND | ug/m3 | U | 4.26 | ug/m3 | U | 4.26 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | DICHLORODIFLUOROMETHANE | 75-71-8 | ND | ug/m3 | U | 4.94 | ug/m3 | U | 4.94 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | ETHYL ACETATE | 141-78-6 | ND | ug/m3 | U | 1.8 | ug/m3 | U | 1.8 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | ETHYL ALCOHOL | 64-17-5 | 12.1 | ug/m3 | | 12.1 | ug/m3 | | 3.76 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | ETHYLBENZENE | 100-41-4 | ND | ug/m3 | U | 2.17 | ug/m3 | U | 2.17 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | HEPTANE | 142-82-5 | ND | ug/m3 | U | 2.05 | ug/m3 | U | 2.05 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | HEXACHLOROBUTADIENE | 87-68-3 | ND | ug/m3 | U | 5.33 | ug/m3 | U | 5.33 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | ISO-PROPYL ALCOHOL | 67-63-0 | ND | ug/m3 | U | 1.23 | ug/m3 | U | 1.23 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | METHYL TERT BUTYL ETHER | 1634-04-4 | ND | ug/m3 | U | 1.8 | ug/m3 | U | 1.8 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | METHYLENE CHLORIDE | 75-09-2 | 2.75 | ug/m3 | J | 2.75 | ug/m3 | J | 3.47 | 1 | I | Result uncertain at a level below the calibration range |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | N-HEXANE | 110-54-3 | 4.87 | ug/m3 | | 4.87 | ug/m3 | | 3.52 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9112006 | 9112006 | DRAFT 1 | NAPHTHALENE | 91-20-3 | 1.19 | ug/m3 | J | 1.19 | ug/m3 | J | 2 | 1 | I | Result uncertain at a level below the calibration range |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | O-XYLENE | 95-47-6 | ND | ug/m3 | U | 2.17 | ug/m3 | U | 2.17 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | P/M-XYLENE | 106-42-3/1 | ND | ug/m3 | U | 4.34 | ug/m3 | U | 4.34 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | PROPYLENE | 115-07-1 | ND | ug/m3 | U | 1.72 | ug/m3 | U | 1.72 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | STYRENE | 100-42-5 | ND | ug/m3 | U | 2.13 | ug/m3 | U | 2.13 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | TETRACHLOROETHENE | 127-18-4 | ND | ug/m3 | U | 3.39 | ug/m3 | U | 3.39 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | TETRAHYDROFURAN | 109-99-9 | 1.61 | ug/m3 | | 1.61 | ug/m3 | | 1.47 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | TOLUENE | 108-88-3 | 5.2 | ug/m3 | | 5.2 | ug/m3 | | 1.88 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | TRANS-1,2-DICHLOROETHENE | 156-60-5 | ND | ug/m3 | U | 1.98 | ug/m3 | U | 1.98 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | TRANS-1,3-DICHLOROPROPENE | 10061-02-6 | ND | ug/m3 | U | 2.27 | ug/m3 | U | 2.27 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | TRICHLOROETHENE | 79-01-6 | 49.8 | ug/m3 | | 49.8 | ug/m3 | | 2.68 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | TRICHLOROFLUOROMETHANE | 75-69-4 | ND | ug/m3 | U | 2.81 | ug/m3 | U | 2.81 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | VINYL ACETATE | 108-05-4 | ND | ug/m3 | U | 1.76 | ug/m3 | U | 1.76 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | VINYL BROMIDE | 593-60-2 | ND | ug/m3 | U | 2.18 | ug/m3 | U | 2.18 | 1 | | |
| SV-07/09-06-06 | 9062006 | AIR | AWHL | L0612699-03 | 9132006 | 9132006 | TO-15 | VINYL CHLORIDE | 75-01-4 | ND | ug/m3 | U | 1.28 | ug/m3 | U | 1.28 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | 1,1,1-TRICHLOROETHANE | 71-55-6 | ND | ug/m3 | U | 2.72 | ug/m3 | U | 2.72 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | 1,1,2,2-TETRACHLOROETHANE | 79-34-5 | ND | ug/m3 | U | 3.43 | ug/m3 | U | 3.43 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 76-13-1 | ND | ug/m3 | U | 3.83 | ug/m3 | U | 3.83 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | 1,1,2-TRICHLOROETHANE | 79-00-5 | ND | ug/m3 | U | 2.72 | ug/m3 | U | 2.72 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | 1,1-DICHLOROETHANE | 75-34-3 | ND | ug/m3 | U | 2.02 | ug/m3 | U | 2.02 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | 1,1-DICHLOROETHENE | 75-35-4 | ND | ug/m3 | U | 1.98 | ug/m3 | U | 1.98 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | 1,2,4-TRICHLOROBENZENE | 120-82-1 | ND | ug/m3 | U | 3.71 | ug/m3 | U | 3.71 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | 1,2,4-TRIMETHYLBENZENE | 95-63-6 | ND | ug/m3 | U | 2.46 | ug/m3 | U | 2.46 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | 1,2-DIBROMOETHANE | 106-93-4 | ND | ug/m3 | U | 3.84 | ug/m3 | U | 3.84 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | 1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE | 76-14-2 | ND | ug/m3 | U | 3.49 | ug/m3 | U | 3.49 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | 1,2-DICHLOROBENZENE | 95-50-1 | ND | ug/m3 | U | 3 | ug/m3 | U | 3 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | 1,2-DICHLOROETHANE | 107-06-2 | ND | ug/m3 | U | 2.02 | ug/m3 | U | 2.02 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | 1,2-DICHLOROPROPANE | 78-87-5 | ND | ug/m3 | U | 2.31 | ug/m3 | U | 2.31 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | 1,3,5-TRIMETHYLBENZENE | 108-67-8 | 5.71 | ug/m3 | | 5.71 | ug/m3 | | 2.46 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | 1,3-BUTADIENE | 106-99-0 | ND | ug/m3 | U | 1.1 | ug/m3 | U | 1.1 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | 1,3-DICHLOROBENZENE | 541-73-1 | ND | ug/m3 | U | 3 | ug/m3 | U | 3 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | 1,4-DICHLOROBENZENE | 106-46-7 | ND | ug/m3 | U | 3 | ug/m3 | U | 3 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | 1,4-DIOXANE | 123-91-1 | ND | ug/m3 | U | 3.6 | ug/m3 | U | 3.6 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | 2,2,4-TRIMETHYLPENTANE | 540-84-1 | ND | ug/m3 | U | 2.33 | ug/m3 | U | 2.33 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | 2-BUTANONE | 78-93-3 | 11.8 | ug/m3 | | 11.8 | ug/m3 | | 1.47 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | 2-HEXANONE | 591-78-6 | ND | ug/m3 | U | 2.05 | ug/m3 | U | 2.05 | 1 | | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected.
Bias: L = Low; H = High; I = Indeterminate.

| Sample Name | Collection Date | Sample Matrix | Laboratory Name | Laboratory Sample Identification Number | Extraction Date | Analysis Date | Analysis Method Number | Analyte Name | Analyte CAS Number | Lab Result Value | Lab Result Units | Lab Qualifier | DV Result Value | DV Result Units | DV Qualifier | Sample Specific Reporting Limit | Dilution Factor | Bias | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9112006 | 9112006 | DRAFT 1 | 2-METHYLNAPHTHALENE | 91-57-6 | ND | ug/m3 | U | 8 | ug/m3 | U | 8 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | 3-CHLOROPROPENE | 107-05-1 | ND | ug/m3 | U | 1.56 | ug/m3 | U | 1.56 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | 4-ETHYLTOLUENE | 622-96-8 | ND | ug/m3 | U | 2.46 | ug/m3 | U | 2.46 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | 4-METHYL-2-PENTANONE | 108-10-1 | 3.04 | ug/m3 | | 3.04 | ug/m3 | | 2.05 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | ACETONE | 67-64-1 | 83.2 | ug/m3 | | 83.2 | ug/m3 | | 4.75 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | BENZENE | 71-43-2 | 5.27 | ug/m3 | | 5.27 | ug/m3 | | 1.6 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | BENZYL CHLORIDE | 100-44-7 | ND | ug/m3 | U | 2.59 | ug/m3 | U | 2.59 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | BROMODICHLOROMETHANE | 75-27-4 | ND | ug/m3 | U | 3.35 | ug/m3 | U | 3.35 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | BROMOFORM | 75-25-2 | ND | ug/m3 | U | 5.16 | ug/m3 | U | 5.16 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | BROMOMETHANE | 74-83-9 | ND | ug/m3 | U | 1.94 | ug/m3 | U | 1.94 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | CARBON DISULFIDE | 75-15-0 | 16 | ug/m3 | | 16 | ug/m3 | | 1.56 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | CARBON TETRACHLORIDE | 56-23-5 | 3.48 | ug/m3 | | 3.48 | ug/m3 | | 3.14 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | CHLOROBENZENE | 108-90-7 | ND | ug/m3 | U | 2.3 | ug/m3 | U | 2.3 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | CHLOROETHANE | 75-00-3 | ND | ug/m3 | U | 1.32 | ug/m3 | U | 1.32 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | CHLOROFORM | 67-66-3 | ND | ug/m3 | U | 2.44 | ug/m3 | U | 2.44 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | CHLOROMETHANE | 74-87-3 | ND | ug/m3 | U | 1.03 | ug/m3 | U | 1.03 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | CIS-1,2-DICHLOROETHENE | 156-59-2 | ND | ug/m3 | U | 1.98 | ug/m3 | U | 1.98 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | CIS-1,3-DICHLOROPROPENE | 10061-01-5 | ND | ug/m3 | U | 2.27 | ug/m3 | U | 2.27 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | CYCLOHEXANE | 110-82-7 | ND | ug/m3 | U | 1.72 | ug/m3 | U | 1.72 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | DIBROMOCHLOROMETHANE | 124-48-1 | ND | ug/m3 | U | 4.26 | ug/m3 | U | 4.26 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | DICHLORODIFLUOROMETHANE | 75-71-8 | ND | ug/m3 | U | 4.94 | ug/m3 | U | 4.94 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | ETHYL ACETATE | 141-78-6 | ND | ug/m3 | U | 1.8 | ug/m3 | U | 1.8 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | ETHYL ALCOHOL | 64-17-5 | 169 | ug/m3 | | 169 | ug/m3 | | 3.76 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | ETHYLBENZENE | 100-41-4 | 1.91 | ug/m3 | J | 1.91 | ug/m3 | J | 2.17 | 1 | I | Result uncertain at a level below the calibration range |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | HEPTANE | 142-82-5 | 11.5 | ug/m3 | | 11.5 | ug/m3 | | 2.05 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | HEXACHLOROBUTADIENE | 87-68-3 | ND | ug/m3 | U | 5.33 | ug/m3 | U | 5.33 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | ISO-PROPYL ALCOHOL | 67-63-0 | ND | ug/m3 | U | 1.23 | ug/m3 | U | 1.23 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | METHYL TERT BUTYL ETHER | 1634-04-4 | ND | ug/m3 | U | 1.8 | ug/m3 | U | 1.8 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | METHYLENE CHLORIDE | 75-09-2 | 97.2 | ug/m3 | | 97.2 | ug/m3 | | 3.47 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | N-HEXANE | 110-54-3 | 4.72 | ug/m3 | | 4.72 | ug/m3 | | 3.52 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9112006 | 9112006 | DRAFT 1 | NAPHTHALENE | 91-20-3 | ND | ug/m3 | U | 2 | ug/m3 | U | 2 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | O-XYLENE | 95-47-6 | 5.17 | ug/m3 | | 5.17 | ug/m3 | | 2.17 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | P/M-XYLENE | 106-42-3/1 | 7.14 | ug/m3 | | 7.14 | ug/m3 | | 4.34 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | PROPYLENE | 115-07-1 | ND | ug/m3 | U | 1.72 | ug/m3 | U | 1.72 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | STYRENE | 100-42-5 | ND | ug/m3 | U | 2.13 | ug/m3 | U | 2.13 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | TETRACHLOROETHENE | 127-18-4 | 2.02 | ug/m3 | J | 2.02 | ug/m3 | J | 3.39 | 1 | I | Result uncertain at a level below the calibration range |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | TETRAHYDROFURAN | 109-99-9 | ND | ug/m3 | U | 1.47 | ug/m3 | U | 1.47 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | TOLUENE | 108-88-3 | 9.48 | ug/m3 | | 9.48 | ug/m3 | | 1.88 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | TRANS-1,2-DICHLOROETHENE | 156-60-5 | ND | ug/m3 | U | 1.98 | ug/m3 | U | 1.98 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | TRANS-1,3-DICHLOROPROPENE | 10061-02-6 | ND | ug/m3 | U | 2.27 | ug/m3 | U | 2.27 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | TRICHLOROETHENE | 79-01-6 | 16.6 | ug/m3 | | 16.6 | ug/m3 | | 2.68 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | TRICHLOROFLUOROMETHANE | 75-69-4 | ND | ug/m3 | U | 2.81 | ug/m3 | U | 2.81 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | VINYL ACETATE | 108-05-4 | ND | ug/m3 | U | 1.76 | ug/m3 | U | 1.76 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | VINYL BROMIDE | 593-60-2 | ND | ug/m3 | U | 2.18 | ug/m3 | U | 2.18 | 1 | | |
| SV-08/09-06-06 | 9062006 | AIR | AWHL | L0612699-04 | 9132006 | 9132006 | TO-15 | VINYL CHLORIDE | 75-01-4 | ND | ug/m3 | U | 1.28 | ug/m3 | U | 1.28 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | 1,1,1-TRICHLOROETHANE | 71-55-6 | 1.75 | ug/m3 | J | 1.75 | ug/m3 | J | 2.72 | 1 | I | Result uncertain at a level below the calibration range |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | 1,1,2,2-TETRACHLOROETHANE | 79-34-5 | ND | ug/m3 | U | 3.43 | ug/m3 | U | 3.43 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 76-13-1 | ND | ug/m3 | U | 3.83 | ug/m3 | U | 3.83 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | 1,1,2-TRICHLOROETHANE | 79-00-5 | ND | ug/m3 | U | 2.72 | ug/m3 | U | 2.72 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | 1,1-DICHLOROETHANE | 75-34-3 | ND | ug/m3 | U | 2.02 | ug/m3 | U | 2.02 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | 1,1-DICHLOROETHENE | 75-35-4 | ND | ug/m3 | U | 1.98 | ug/m3 | U | 1.98 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | 1,2,4-TRICHLOROBENZENE | 120-82-1 | ND | ug/m3 | U | 3.71 | ug/m3 | U | 3.71 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | 1,2,4-TRIMETHYLBENZENE | 95-63-6 | 33.8 | ug/m3 | | 33.8 | ug/m3 | | 2.46 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | 1,2-DIBROMOETHANE | 106-93-4 | ND | ug/m3 | U | 3.84 | ug/m3 | U | 3.84 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | 1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE | 76-14-2 | ND | ug/m3 | U | 3.49 | ug/m3 | U | 3.49 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | 1,2-DICHLOROBENZENE | 95-50-1 | ND | ug/m3 | U | 3 | ug/m3 | U | 3 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | 1,2-DICHLOROETHANE | 107-06-2 | ND | ug/m3 | U | 2.02 | ug/m3 | U | 2.02 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | 1,2-DICHLOROPROPANE | 78-87-5 | ND | ug/m3 | U | 2.31 | ug/m3 | U | 2.31 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | 1,3,5-TRIMETHYLBENZENE | 108-67-8 | 9.63 | ug/m3 | | 9.63 | ug/m3 | | 2.46 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | 1,3-BUTADIENE | 106-99-0 | ND | ug/m3 | U | 1.1 | ug/m3 | U | 1.1 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | 1,3-DICHLOROBENZENE | 541-73-1 | ND | ug/m3 | U | 3 | ug/m3 | U | 3 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | 1,4-DICHLOROBENZENE | 106-46-7 | ND | ug/m3 | U | 3 | ug/m3 | U | 3 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | 1,4-DIOXANE | 123-91-1 | ND | ug/m3 | U | 3.6 | ug/m3 | U | 3.6 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | 2,2,4-TRIMETHYLPENTANE | 540-84-1 | ND | ug/m3 | U | 2.33 | ug/m3 | U | 2.33 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | 2-BUTANONE | 78-93-3 | 3.32 | ug/m3 | | 3.32 | ug/m3 | | 1.47 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | 2-HEXANONE | 591-78-6 | ND | ug/m3 | U | 2.05 | ug/m3 | U | 2.05 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9112006 | 9112006 | DRAFT 1 | 2-METHYLNAPHTHALENE | 91-57-6 | ND | ug/m3 | U | 8 | ug/m3 | U | 8 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | 3-CHLOROPROPENE | 107-05-1 | ND | ug/m3 | U | 1.56 | ug/m3 | U | 1.56 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | 4-ETHYLTOLUENE | 622-96-8 | 10.5 | ug/m3 | | 10.5 | ug/m3 | | 2.46 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | 4-METHYL-2-PENTANONE | 108-10-1 | ND | ug/m3 | U | 2.05 | ug/m3 | U | 2.05 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | ACETONE | 67-64-1 | 22.8 | ug/m3 | | 22.8 | ug/m3 | | 4.75 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | BENZENE | 71-43-2 | 5.84 | ug/m3 | | 5.84 | ug/m3 | | 1.6 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | BENZYL CHLORIDE | 100-44-7 | ND | ug/m3 | U | 2.59 | ug/m3 | U | 2.59 | 1 | | |

| Sample Name | Collection Date | Sample Matrix | Laboratory Name | Laboratory Sample Identification Number | Extraction Date | Analysis Date | Analysis Method Number | Analyte Name | Analyte CAS Number | Lab Result Value | Lab Result Units | Lab Qualifier | DV Result Value | DV Result Units | DV Qualifier | Sample Specific Reporting Limit | Dilution Factor | Bias | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | BROMODICHLOROMETHANE | 75-27-4 | ND | ug/m3 | U | 3.35 | ug/m3 | U | 3.35 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | BROMOFORM | 75-25-2 | ND | ug/m3 | U | 5.16 | ug/m3 | U | 5.16 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | BROMOMETHANE | 74-83-9 | ND | ug/m3 | U | 1.94 | ug/m3 | U | 1.94 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | CARBON DISULFIDE | 75-15-0 | 2.86 | ug/m3 | | 2.86 | ug/m3 | | 1.56 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | CARBON TETRACHLORIDE | 56-23-5 | ND | ug/m3 | U | 3.14 | ug/m3 | U | 3.14 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | CHLOROBENZENE | 108-90-7 | ND | ug/m3 | U | 2.3 | ug/m3 | U | 2.3 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | CHLOROETHANE | 75-00-3 | ND | ug/m3 | U | 1.32 | ug/m3 | U | 1.32 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | CHLOROFORM | 67-66-3 | ND | ug/m3 | U | 2.44 | ug/m3 | U | 2.44 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | CHLOROMETHANE | 74-87-3 | ND | ug/m3 | U | 1.03 | ug/m3 | U | 1.03 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | CIS-1,2-DICHLOROETHENE | 156-59-2 | ND | ug/m3 | U | 1.98 | ug/m3 | U | 1.98 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | CIS-1,3-DICHLOROPROPENE | 10061-01-5 | ND | ug/m3 | U | 2.27 | ug/m3 | U | 2.27 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | CYCLOHEXANE | 110-82-7 | ND | ug/m3 | U | 1.72 | ug/m3 | U | 1.72 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | DIBROMOCHLOROMETHANE | 124-48-1 | ND | ug/m3 | U | 4.26 | ug/m3 | U | 4.26 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | DICHLORODIFLUOROMETHANE | 75-71-8 | ND | ug/m3 | U | 4.94 | ug/m3 | U | 4.94 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | ETHYL ACETATE | 141-78-6 | ND | ug/m3 | U | 1.8 | ug/m3 | U | 1.8 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | ETHYL ALCOHOL | 64-17-5 | 5.03 | ug/m3 | | 5.03 | ug/m3 | | 3.76 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | ETHYLBENZENE | 100-41-4 | 24.3 | ug/m3 | | 24.3 | ug/m3 | | 2.17 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | HEPTANE | 142-82-5 | 2.24 | ug/m3 | | 2.24 | ug/m3 | | 2.05 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | HEXACHLOROBUTADIENE | 87-68-3 | ND | ug/m3 | U | 5.33 | ug/m3 | U | 5.33 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | ISO-PROPYL ALCOHOL | 67-63-0 | ND | ug/m3 | U | 1.23 | ug/m3 | U | 1.23 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | METHYL TERT BUTYL ETHER | 1634-04-4 | ND | ug/m3 | U | 1.8 | ug/m3 | U | 1.8 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | METHYLENE CHLORIDE | 75-09-2 | 5.7 | ug/m3 | | 5.7 | ug/m3 | | 3.47 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | N-HEXANE | 110-54-3 | 7.79 | ug/m3 | | 7.79 | ug/m3 | | 3.52 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9112006 | 9112006 | DRAFT 1 | NAPHTHALENE | 91-20-3 | 2.04 | ug/m3 | | 2.04 | ug/m3 | | 2 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | O-XYLENE | 95-47-6 | 27.3 | ug/m3 | | 27.3 | ug/m3 | | 2.17 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | P/M-XYLENE | 106-42-3/1 | 90.9 | ug/m3 | | 90.9 | ug/m3 | | 4.34 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | PROPYLENE | 115-07-1 | ND | ug/m3 | U | 1.72 | ug/m3 | U | 1.72 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | STYRENE | 100-42-5 | ND | ug/m3 | U | 2.13 | ug/m3 | U | 2.13 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | TETRACHLOROETHENE | 127-18-4 | 2.95 | ug/m3 | J | 2.95 | ug/m3 | J | 3.39 | 1 | I | Result uncertain at a level below the calibration range |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | TETRAHYDROFURAN | 109-99-9 | 1 | ug/m3 | J | 1 | ug/m3 | J | 1.47 | 1 | I | Result uncertain at a level below the calibration range |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | TOLUENE | 108-88-3 | 105 | ug/m3 | | 105 | ug/m3 | | 1.88 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | TRANS-1,2-DICHLOROETHENE | 156-60-5 | ND | ug/m3 | U | 1.98 | ug/m3 | U | 1.98 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | TRANS-1,3-DICHLOROPROPENE | 10061-02-6 | ND | ug/m3 | U | 2.27 | ug/m3 | U | 2.27 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | TRICHLOROETHENE | 79-01-6 | 33.2 | ug/m3 | | 33.2 | ug/m3 | | 2.68 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | TRICHLOROFLUOROMETHANE | 75-69-4 | 2.64 | ug/m3 | J | 2.64 | ug/m3 | J | 2.81 | 1 | I | Result uncertain at a level below the calibration range |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | VINYL ACETATE | 108-05-4 | ND | ug/m3 | U | 1.76 | ug/m3 | U | 1.76 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | VINYL BROMIDE | 593-60-2 | ND | ug/m3 | U | 2.18 | ug/m3 | U | 2.18 | 1 | | |
| SV-06/09-07-06 | 9072006 | AIR | AWHL | L0612717-01 | 9142006 | 9132006 | TO-15 | VINYL CHLORIDE | 75-01-4 | ND | ug/m3 | U | 1.28 | ug/m3 | U | 1.28 | 1 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | 1,1,1-TRICHLOROETHANE | 71-55-6 | ND | ug/m3 | U | 5.45 | ug/m3 | U | 5.45 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | 1,1,2,2-TETRACHLOROETHANE | 79-34-5 | ND | ug/m3 | U | 6.86 | ug/m3 | U | 6.86 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 76-13-1 | ND | ug/m3 | U | 7.66 | ug/m3 | U | 7.66 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | 1,1,2-TRICHLOROETHANE | 79-00-5 | ND | ug/m3 | U | 5.45 | ug/m3 | U | 5.45 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | 1,1-DICHLOROETHANE | 75-34-3 | ND | ug/m3 | U | 4.04 | ug/m3 | U | 4.04 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | 1,1-DICHLOROETHENE | 75-35-4 | ND | ug/m3 | U | 3.96 | ug/m3 | U | 3.96 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | 1,2,4-TRICHLOROBENZENE | 120-82-1 | ND | ug/m3 | U | 7.42 | ug/m3 | U | 7.42 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | 1,2,4-TRIMETHYLBENZENE | 95-63-6 | 35.9 | ug/m3 | | 35.9 | ug/m3 | | 4.91 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | 1,2-DIBROMOETHANE | 106-93-4 | ND | ug/m3 | U | 7.68 | ug/m3 | U | 7.68 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | 1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE | 76-14-2 | ND | ug/m3 | U | 6.98 | ug/m3 | U | 6.98 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | 1,2-DICHLOROBENZENE | 95-50-1 | ND | ug/m3 | U | 6.01 | ug/m3 | U | 6.01 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | 1,2-DICHLOROETHANE | 107-06-2 | ND | ug/m3 | U | 4.04 | ug/m3 | U | 4.04 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | 1,2-DICHLOROPROPANE | 78-87-5 | ND | ug/m3 | U | 4.62 | ug/m3 | U | 4.62 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | 1,3,5-TRIMETHYLBENZENE | 108-67-8 | 10.2 | ug/m3 | | 10.2 | ug/m3 | | 4.91 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | 1,3-BUTADIENE | 106-99-0 | ND | ug/m3 | U | 2.21 | ug/m3 | U | 2.21 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | 1,3-DICHLOROBENZENE | 541-73-1 | ND | ug/m3 | U | 6.01 | ug/m3 | U | 6.01 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | 1,4-DICHLOROBENZENE | 106-46-7 | ND | ug/m3 | U | 6.01 | ug/m3 | U | 6.01 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | 1,4-DIOXANE | 123-91-1 | ND | ug/m3 | U | 7.2 | ug/m3 | U | 7.2 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | 2,2,4-TRIMETHYLPENTANE | 540-84-1 | ND | ug/m3 | U | 4.67 | ug/m3 | U | 4.67 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | 2-BUTANONE | 78-93-3 | ND | ug/m3 | U | 2.95 | ug/m3 | U | 2.95 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | 2-HEXANONE | 591-78-6 | ND | ug/m3 | U | 4.09 | ug/m3 | U | 4.09 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9112006 | 9112006 | DRAFT 1 | 2-METHYLNAPHTHALENE | 91-57-6 | 4.19 | ug/m3 | J | 4.19 | ug/m3 | J | 8 | 1 | I | Result uncertain at a level below the calibration range |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | 3-CHLOROPROPENE | 107-05-1 | ND | ug/m3 | U | 3.13 | ug/m3 | U | 3.13 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | 4-ETHYLTOLUENE | 622-96-8 | 9.27 | ug/m3 | | 9.27 | ug/m3 | | 4.91 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | 4-METHYL-2-PENTANONE | 108-10-1 | ND | ug/m3 | U | 4.09 | ug/m3 | U | 4.09 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | ACETONE | 67-64-1 | 4.06 | ug/m3 | J | 4.06 | ug/m3 | J | 9.49 | 2 | I | Result uncertain at a level below the calibration range |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | BENZENE | 71-43-2 | 1.54 | ug/m3 | J | 1.54 | ug/m3 | J | 3.19 | 2 | I | Result uncertain at a level below the calibration range |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | BENZYL CHLORIDE | 100-44-7 | ND | ug/m3 | U | 5.17 | ug/m3 | U | 5.17 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | BROMODICHLOROMETHANE | 75-27-4 | ND | ug/m3 | U | 6.7 | ug/m3 | U | 6.7 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | BROMOFORM | 75-25-2 | ND | ug/m3 | U | 10.3 | ug/m3 | U | 10.3 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | BROMOMETHANE | 74-83-9 | ND | ug/m3 | U | 3.88 | ug/m3 | U | 3.88 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | CARBON DISULFIDE | 75-15-0 | ND | ug/m3 | U | 3.11 | ug/m3 | U | 3.11 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | CARBON TETRACHLORIDE | 56-23-5 | ND | ug/m3 | U | 6.29 | ug/m3 | U | 6.29 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | CHLOROBENZENE | 108-90-7 | ND | ug/m3 | U | 4.6 | ug/m3 | U | 4.6 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | CHLOROETHANE | 75-00-3 | ND | ug/m3 | U | 2.64 | ug/m3 | U | 2.64 | 2 | | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected.
Bias: L = Low; H = High; I = Indeterminate.

| Sample Name | Collection Date | Sample Matrix | Laboratory Name | Laboratory Sample Identification Number | Extraction Date | Analysis Date | Analysis Method Number | Analyte Name | Analyte CAS Number | Lab Result Value | Lab Result Units | Lab Qualifier | DV Result Value | DV Result Units | DV Qualifier | Sample Specific Reporting Limit | Dilution Factor | Bias | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | CHLOROFORM | 67-66-3 | ND | ug/m3 | U | 4.88 | ug/m3 | U | 4.88 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | CHLOROMETHANE | 74-87-3 | ND | ug/m3 | U | 2.06 | ug/m3 | U | 2.06 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | CIS-1,2-DICHLOROETHENE | 156-59-2 | ND | ug/m3 | U | 3.96 | ug/m3 | U | 3.96 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | CIS-1,3-DICHLOROPROPENE | 10061-01-5 | ND | ug/m3 | U | 4.53 | ug/m3 | U | 4.53 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | CYCLOHEXANE | 110-82-7 | ND | ug/m3 | U | 3.44 | ug/m3 | U | 3.44 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | DIBROMOCHLOROMETHANE | 124-48-1 | ND | ug/m3 | U | 8.51 | ug/m3 | U | 8.51 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | DICHLORODIFLUOROMETHANE | 75-71-8 | ND | ug/m3 | U | 9.88 | ug/m3 | U | 9.88 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | ETHYL ACETATE | 141-78-6 | ND | ug/m3 | U | 3.6 | ug/m3 | U | 3.6 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | ETHYL ALCOHOL | 64-17-5 | 4.39 | ug/m3 | J | 4.39 | ug/m3 | J | 7.53 | 2 | I | Result uncertain at a level below the calibration range |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | ETHYLBENZENE | 100-41-4 | 15.8 | ug/m3 | | 15.8 | ug/m3 | | 4.34 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | HEPTANE | 142-82-5 | ND | ug/m3 | U | 4.1 | ug/m3 | U | 4.1 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | HEXACHLOROBUTADIENE | 87-68-3 | ND | ug/m3 | U | 10.6 | ug/m3 | U | 10.6 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | ISO-PROPYL ALCOHOL | 67-63-0 | ND | ug/m3 | U | 2.46 | ug/m3 | U | 2.46 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | METHYL TERT BUTYL ETHER | 1634-04-4 | ND | ug/m3 | U | 3.6 | ug/m3 | U | 3.6 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | METHYLENE CHLORIDE | 75-09-2 | 4.52 | ug/m3 | J | 4.52 | ug/m3 | J | 6.94 | 2 | I | Result uncertain at a level below the calibration range |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | N-HEXANE | 110-54-3 | 5.23 | ug/m3 | J | 5.23 | ug/m3 | J | 7.04 | 2 | I | Result uncertain at a level below the calibration range |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9112006 | 9112006 | DRAFT 1 | NAPHTHALENE | 91-20-3 | 10.9 | ug/m3 | | 10.9 | ug/m3 | | 2 | 1 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | O-XYLENE | 95-47-6 | 24.3 | ug/m3 | | 24.3 | ug/m3 | | 4.34 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | P/M-XYLENE | 106-42-3/1 | 66.4 | ug/m3 | | 66.4 | ug/m3 | | 8.68 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | PROPYLENE | 115-07-1 | ND | ug/m3 | U | 3.44 | ug/m3 | U | 3.44 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | STYRENE | 100-42-5 | ND | ug/m3 | U | 4.26 | ug/m3 | U | 4.26 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | TETRACHLOROETHENE | 127-18-4 | ND | ug/m3 | U | 6.78 | ug/m3 | U | 6.78 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | TETRAHYDROFURAN | 109-99-9 | ND | ug/m3 | U | 2.95 | ug/m3 | U | 2.95 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | TOLUENE | 108-88-3 | 63 | ug/m3 | | 63 | ug/m3 | | 3.76 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | TRANS-1,2-DICHLOROETHENE | 156-60-5 | ND | ug/m3 | U | 3.96 | ug/m3 | U | 3.96 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | TRANS-1,3-DICHLOROPROPENE | 10061-02-6 | ND | ug/m3 | U | 4.53 | ug/m3 | U | 4.53 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | TRICHLOROETHENE | 79-01-6 | 2.7 | ug/m3 | J | 2.7 | ug/m3 | J | 5.37 | 2 | I | Result uncertain at a level below the calibration range |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | TRICHLOROFLUOROMETHANE | 75-69-4 | ND | ug/m3 | U | 5.61 | ug/m3 | U | 5.61 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | VINYL ACETATE | 108-05-4 | ND | ug/m3 | U | 3.52 | ug/m3 | U | 3.52 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | VINYL BROMIDE | 593-60-2 | ND | ug/m3 | U | 4.37 | ug/m3 | U | 4.37 | 2 | | |
| SV-02/09-07-06 | 9072006 | AIR | AWHL | L0612717-02 | 9142006 | 9132006 | TO-15 | VINYL CHLORIDE | 75-01-4 | ND | ug/m3 | U | 2.55 | ug/m3 | U | 2.55 | 2 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | 1,1,1-TRICHLOROETHANE | 71-55-6 | ND | ug/m3 | U | 2.72 | ug/m3 | U | 2.72 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | 1,1,2,2-TETRACHLOROETHANE | 79-34-5 | ND | ug/m3 | U | 3.43 | ug/m3 | U | 3.43 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 76-13-1 | ND | ug/m3 | U | 3.83 | ug/m3 | U | 3.83 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | 1,1,2-TRICHLOROETHANE | 79-00-5 | ND | ug/m3 | U | 2.72 | ug/m3 | U | 2.72 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | 1,1-DICHLOROETHANE | 75-34-3 | ND | ug/m3 | U | 2.02 | ug/m3 | U | 2.02 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | 1,1-DICHLOROETHENE | 75-35-4 | ND | ug/m3 | U | 1.98 | ug/m3 | U | 1.98 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | 1,2,4-TRICHLOROBENZENE | 120-82-1 | ND | ug/m3 | U | 3.71 | ug/m3 | U | 3.71 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | 1,2,4-TRIMETHYLBENZENE | 95-63-6 | ND | ug/m3 | U | 2.46 | ug/m3 | U | 2.46 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | 1,2-DIBROMOETHANE | 106-93-4 | ND | ug/m3 | U | 3.84 | ug/m3 | U | 3.84 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | 1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE | 76-14-2 | ND | ug/m3 | U | 3.49 | ug/m3 | U | 3.49 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | 1,2-DICHLOROBENZENE | 95-50-1 | ND | ug/m3 | U | 3 | ug/m3 | U | 3 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | 1,2-DICHLOROETHANE | 107-06-2 | ND | ug/m3 | U | 2.02 | ug/m3 | U | 2.02 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | 1,2-DICHLOROPROPANE | 78-87-5 | ND | ug/m3 | U | 2.31 | ug/m3 | U | 2.31 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | 1,3,5-TRIMETHYLBENZENE | 108-67-8 | 3.07 | ug/m3 | | 3.07 | ug/m3 | | 2.46 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | 1,3-BUTADIENE | 106-99-0 | ND | ug/m3 | U | 1.1 | ug/m3 | U | 1.1 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | 1,3-DICHLOROBENZENE | 541-73-1 | 2.06 | ug/m3 | J | 2.06 | ug/m3 | J | 3 | 1 | I | High Continuing Calibration recovery + High LCS recovery + Result uncertain at a level below the calibration range |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | 1,4-DICHLOROBENZENE | 106-46-7 | ND | ug/m3 | U | 3 | ug/m3 | U | 3 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | 1,4-DIOXANE | 123-91-1 | ND | ug/m3 | U | 3.6 | ug/m3 | U | 3.6 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | 2,2,4-TRIMETHYLPENTANE | 540-84-1 | ND | ug/m3 | U | 2.33 | ug/m3 | U | 2.33 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | 2-BUTANONE | 78-93-3 | ND | ug/m3 | U | 1.47 | ug/m3 | U | 1.47 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | 2-HEXANONE | 591-78-6 | ND | ug/m3 | U | 2.05 | ug/m3 | U | 2.05 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9122006 | 9112006 | DRAFT 1 | 2-METHYLNAPHTHALENE | 91-57-6 | ND | ug/m3 | U | 8 | ug/m3 | U | 8 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | 3-CHLOROPROPENE | 107-05-1 | ND | ug/m3 | U | 1.56 | ug/m3 | U | 1.56 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | 4-ETHYLTOLUENE | 622-96-8 | 2.65 | ug/m3 | | 2.65 | ug/m3 | | 2.46 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | 4-METHYL-2-PENTANONE | 108-10-1 | ND | ug/m3 | U | 2.05 | ug/m3 | U | 2.05 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | ACETONE | 67-64-1 | 4.89 | ug/m3 | | 4.89 | ug/m3 | | 4.75 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | BENZENE | 71-43-2 | 2.12 | ug/m3 | | 2.12 | ug/m3 | | 1.6 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | BENZYL CHLORIDE | 100-44-7 | ND | ug/m3 | U | 2.59 | ug/m3 | U | 2.59 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | BROMODICHLOROMETHANE | 75-27-4 | ND | ug/m3 | U | 3.35 | ug/m3 | U | 3.35 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | BROMOFORM | 75-25-2 | ND | ug/m3 | U | 5.16 | ug/m3 | U | 5.16 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | BROMOMETHANE | 74-83-9 | ND | ug/m3 | U | 1.94 | ug/m3 | U | 1.94 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | CARBON DISULFIDE | 75-15-0 | ND | ug/m3 | U | 1.56 | ug/m3 | U | 1.56 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | CARBON TETRACHLORIDE | 56-23-5 | ND | ug/m3 | U | 3.14 | ug/m3 | U | 3.14 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | CHLOROBENZENE | 108-90-7 | ND | ug/m3 | U | 2.3 | ug/m3 | U | 2.3 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | CHLOROETHANE | 75-00-3 | ND | ug/m3 | U | 1.32 | ug/m3 | U | 1.32 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | CHLOROFORM | 67-66-3 | ND | ug/m3 | U | 2.44 | ug/m3 | U | 2.44 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | CHLOROMETHANE | 74-87-3 | ND | ug/m3 | U | 1.03 | ug/m3 | U | 1.03 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | CIS-1,2-DICHLOROETHENE | 156-59-2 | ND | ug/m3 | U | 1.98 | ug/m3 | U | 1.98 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | CIS-1,3-DICHLOROPROPENE | 10061-01-5 | ND | ug/m3 | U | 2.27 | ug/m3 | U | 2.27 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | CYCLOHEXANE | 110-82-7 | ND | ug/m3 | U | 1.72 | ug/m3 | U | 1.72 | 1 | | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected.
Bias: L = Low; H = High; I = Indeterminate.

| Sample Name | Collection Date | Sample Matrix | Laboratory Name | Laboratory Sample Identification Number | Extraction Date | Analysis Date | Analysis Method Number | Analyte Name | Analyte CAS Number | Lab Result Value | Lab Result Units | Lab Qualifier | DV Result Value | DV Result Units | DV Qualifier | Sample Specific Reporting Limit | Dilution Factor | Bias | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | DIBROMOCHLOROMETHANE | 124-48-1 | ND | ug/m3 | U | 4.26 | ug/m3 | U | 4.26 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | DICHLORODIFLUOROMETHANE | 75-71-8 | ND | ug/m3 | U | 4.94 | ug/m3 | U | 4.94 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | ETHYL ACETATE | 141-78-6 | ND | ug/m3 | U | 1.8 | ug/m3 | U | 1.8 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | ETHYL ALCOHOL | 64-17-5 | 4.81 | ug/m3 | | 4.81 | ug/m3 | | 3.76 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | ETHYLBENZENE | 100-41-4 | 5 | ug/m3 | | 5 | ug/m3 | | 2.17 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | HEPTANE | 142-82-5 | ND | ug/m3 | U | 2.05 | ug/m3 | U | 2.05 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | HEXACHLOROBUTADIENE | 87-68-3 | ND | ug/m3 | U | 5.33 | ug/m3 | U | 5.33 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | ISO-PROPYL ALCOHOL | 67-63-0 | ND | ug/m3 | U | 1.23 | ug/m3 | U | 1.23 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | METHYL TERT BUTYL ETHER | 1634-04-4 | ND | ug/m3 | U | 1.8 | ug/m3 | U | 1.8 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | METHYLENE CHLORIDE | 75-09-2 | ND | ug/m3 | U | 3.47 | ug/m3 | U | 3.47 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | N-HEXANE | 110-54-3 | 0.994 | ug/m3 | J | 0.994 | ug/m3 | J | 3.52 | 1 | I | Result uncertain at a level below the calibration range |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9122006 | 9112006 | DRAFT 1 | NAPHTHALENE | 91-20-3 | 1.56 | ug/m3 | J | 1.56 | ug/m3 | J | 2 | 1 | I | Result uncertain at a level below the calibration range |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | O-XYLENE | 95-47-6 | 8.45 | ug/m3 | | 8.45 | ug/m3 | | 2.17 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | P/M-XYLENE | 106-42-3/1 | 18.6 | ug/m3 | | 18.6 | ug/m3 | | 4.34 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | PROPYLENE | 115-07-1 | ND | ug/m3 | U | 1.72 | ug/m3 | U | 1.72 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | STYRENE | 100-42-5 | ND | ug/m3 | U | 2.13 | ug/m3 | U | 2.13 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | TETRACHLOROETHENE | 127-18-4 | ND | ug/m3 | U | 3.39 | ug/m3 | U | 3.39 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | TETRAHYDROFURAN | 109-99-9 | 1.53 | ug/m3 | | 1.53 | ug/m3 | | 1.47 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | TOLUENE | 108-88-3 | 26.2 | ug/m3 | | 26.2 | ug/m3 | | 1.88 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | TRANS-1,2-DICHLOROETHENE | 156-60-5 | ND | ug/m3 | U | 1.98 | ug/m3 | U | 1.98 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | TRANS-1,3-DICHLOROPROPENE | 10061-02-6 | ND | ug/m3 | U | 2.27 | ug/m3 | U | 2.27 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | TRICHLOROETHENE | 79-01-6 | 4.02 | ug/m3 | | 4.02 | ug/m3 | | 2.68 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | TRICHLOROFLUOROMETHANE | 75-69-4 | ND | ug/m3 | U | 2.81 | ug/m3 | U | 2.81 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | VINYL ACETATE | 108-05-4 | ND | ug/m3 | U | 1.76 | ug/m3 | U | 1.76 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | VINYL BROMIDE | 593-60-2 | ND | ug/m3 | U | 2.18 | ug/m3 | U | 2.18 | 1 | | |
| SV-03/09-07-06 | 9072006 | AIR | AWHL | L0612717-03 | 9142006 | 9132006 | TO-15 | VINYL CHLORIDE | 75-01-4 | ND | ug/m3 | U | 1.28 | ug/m3 | U | 1.28 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | 1,1,1-TRICHLOROETHANE | 71-55-6 | ND | ug/m3 | U | 2.72 | ug/m3 | U | 2.72 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | 1,1,2,2-TETRACHLOROETHANE | 79-34-5 | ND | ug/m3 | U | 3.43 | ug/m3 | U | 3.43 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 76-13-1 | ND | ug/m3 | U | 3.83 | ug/m3 | U | 3.83 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | 1,1,2-TRICHLOROETHANE | 79-00-5 | ND | ug/m3 | U | 2.72 | ug/m3 | U | 2.72 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | 1,1-DICHLOROETHANE | 75-34-3 | ND | ug/m3 | U | 2.02 | ug/m3 | U | 2.02 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | 1,1-DICHLOROETHENE | 75-35-4 | ND | ug/m3 | U | 1.98 | ug/m3 | U | 1.98 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | 1,2,4-TRICHLOROBENZENE | 120-82-1 | ND | ug/m3 | U | 3.71 | ug/m3 | U | 3.71 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | 1,2,4-TRIMETHYLBENZENE | 95-63-6 | ND | ug/m3 | U | 2.46 | ug/m3 | U | 2.46 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | 1,2-DIBROMOETHANE | 106-93-4 | ND | ug/m3 | U | 3.84 | ug/m3 | U | 3.84 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | 1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE | 76-14-2 | ND | ug/m3 | U | 3.49 | ug/m3 | U | 3.49 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | 1,2-DICHLOROBENZENE | 95-50-1 | ND | ug/m3 | U | 3 | ug/m3 | U | 3 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | 1,2-DICHLOROETHANE | 107-06-2 | ND | ug/m3 | U | 2.02 | ug/m3 | U | 2.02 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | 1,2-DICHLOROPROPANE | 78-87-5 | ND | ug/m3 | U | 2.31 | ug/m3 | U | 2.31 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | 1,3,5-TRIMETHYLBENZENE | 108-67-8 | 2.49 | ug/m3 | | 2.49 | ug/m3 | | 2.46 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | 1,3-BUTADIENE | 106-99-0 | ND | ug/m3 | U | 1.1 | ug/m3 | U | 1.1 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | 1,3-DICHLOROBENZENE | 541-73-1 | ND | ug/m3 | U | 3 | ug/m3 | U | 3 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | 1,4-DICHLOROBENZENE | 106-46-7 | ND | ug/m3 | U | 3 | ug/m3 | U | 3 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | 1,4-DIOXANE | 123-91-1 | ND | ug/m3 | U | 3.6 | ug/m3 | U | 3.6 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | 2,2,4-TRIMETHYLPENTANE | 540-84-1 | ND | ug/m3 | U | 2.33 | ug/m3 | U | 2.33 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | 2-BUTANONE | 78-93-3 | ND | ug/m3 | U | 1.47 | ug/m3 | U | 1.47 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | 2-HEXANONE | 591-78-6 | ND | ug/m3 | U | 2.05 | ug/m3 | U | 2.05 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9122006 | 9112006 | DRAFT 1 | 2-METHYLNAPHTHALENE | 91-57-6 | ND | ug/m3 | U | 8 | ug/m3 | U | 8 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | 3-CHLOROPROPENE | 107-05-1 | ND | ug/m3 | U | 1.56 | ug/m3 | U | 1.56 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | 4-ETHYLTOLUENE | 622-96-8 | ND | ug/m3 | U | 2.46 | ug/m3 | U | 2.46 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | 4-METHYL-2-PENTANONE | 108-10-1 | ND | ug/m3 | U | 2.05 | ug/m3 | U | 2.05 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | ACETONE | 67-64-1 | 10.8 | ug/m3 | | 10.8 | ug/m3 | | 4.75 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | BENZENE | 71-43-2 | ND | ug/m3 | U | 1.6 | ug/m3 | U | 1.6 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | BENZYL CHLORIDE | 100-44-7 | ND | ug/m3 | U | 2.59 | ug/m3 | U | 2.59 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | BROMODICHLOROMETHANE | 75-27-4 | ND | ug/m3 | U | 3.35 | ug/m3 | U | 3.35 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | BROMOFORM | 75-25-2 | ND | ug/m3 | U | 5.16 | ug/m3 | U | 5.16 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | BROMOMETHANE | 74-83-9 | ND | ug/m3 | U | 1.94 | ug/m3 | U | 1.94 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | CARBON DISULFIDE | 75-15-0 | ND | ug/m3 | U | 1.56 | ug/m3 | U | 1.56 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | CARBON TETRACHLORIDE | 56-23-5 | ND | ug/m3 | U | 3.14 | ug/m3 | U | 3.14 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | CHLOROBENZENE | 108-90-7 | ND | ug/m3 | U | 2.3 | ug/m3 | U | 2.3 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | CHLOROETHANE | 75-00-3 | ND | ug/m3 | U | 1.32 | ug/m3 | U | 1.32 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | CHLOROFORM | 67-66-3 | ND | ug/m3 | U | 2.44 | ug/m3 | U | 2.44 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | CHLOROMETHANE | 74-87-3 | ND | ug/m3 | U | 1.03 | ug/m3 | U | 1.03 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | CIS-1,2-DICHLOROETHENE | 156-59-2 | ND | ug/m3 | U | 1.98 | ug/m3 | U | 1.98 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | CIS-1,3-DICHLOROPROPENE | 10061-01-5 | ND | ug/m3 | U | 2.27 | ug/m3 | U | 2.27 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | CYCLOHEXANE | 110-82-7 | ND | ug/m3 | U | 1.72 | ug/m3 | U | 1.72 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | DIBROMOCHLOROMETHANE | 124-48-1 | ND | ug/m3 | U | 4.26 | ug/m3 | U | 4.26 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | DICHLORODIFLUOROMETHANE | 75-71-8 | ND | ug/m3 | U | 4.94 | ug/m3 | U | 4.94 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | ETHYL ACETATE | 141-78-6 | ND | ug/m3 | U | 1.8 | ug/m3 | U | 1.8 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | ETHYL ALCOHOL | 64-17-5 | 4.4 | ug/m3 | | 4.4 | ug/m3 | | 3.76 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | ETHYLBENZENE | 100-41-4 | 4.7 | ug/m3 | | 4.7 | ug/m3 | | 2.17 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | HEPTANE | 142-82-5 | ND | ug/m3 | U | 2.05 | ug/m3 | U | 2.05 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | HEXACHLOROBUTADIENE | 87-68-3 | ND | ug/m3 | U | 5.33 | ug/m3 | U | 5.33 | 1 | | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected.
Bias: L = Low; H = High; I = Indeterminate.

| Sample Name | Collection Date | Sample Matrix | Laboratory Name | Laboratory Sample Identification Number | Extraction Date | Analysis Date | Analysis Method Number | Analyte Name | Analyte CAS Number | Lab Result Value | Lab Result Units | Lab Qualifier | DV Result Value | DV Result Units | DV Qualifier | Sample Specific Reporting Limit | Dilution Factor | Bias | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | ISO-PROPYL ALCOHOL | 67-63-0 | ND | ug/m3 | U | 1.23 | ug/m3 | U | 1.23 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | METHYL TERT BUTYL ETHER | 1634-04-4 | ND | ug/m3 | U | 1.8 | ug/m3 | U | 1.8 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | METHYLENE CHLORIDE | 75-09-2 | 39 | ug/m3 | | 39 | ug/m3 | | 3.47 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | N-HEXANE | 110-54-3 | 1.54 | ug/m3 | J | 1.54 | ug/m3 | J | 3.52 | 1 | I | Result uncertain at a level below the calibration range |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9122006 | 9112006 | DRAFT 1 | NAPHTHALENE | 91-20-3 | ND | ug/m3 | U | 2 | ug/m3 | U | 2 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | O-XYLENE | 95-47-6 | 5.46 | ug/m3 | | 5.46 | ug/m3 | | 2.17 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | P/M-XYLENE | 106-42-3/1 | 16.2 | ug/m3 | | 16.2 | ug/m3 | | 4.34 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | PROPYLENE | 115-07-1 | ND | ug/m3 | U | 1.72 | ug/m3 | U | 1.72 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | STYRENE | 100-42-5 | ND | ug/m3 | U | 2.13 | ug/m3 | U | 2.13 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | TETRACHLOROETHENE | 127-18-4 | ND | ug/m3 | U | 3.39 | ug/m3 | U | 3.39 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | TETRAHYDROFURAN | 109-99-9 | ND | ug/m3 | U | 1.47 | ug/m3 | U | 1.47 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | TOLUENE | 108-88-3 | 9.39 | ug/m3 | | 9.39 | ug/m3 | | 1.88 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | TRANS-1,2-DICHLOROETHENE | 156-60-5 | ND | ug/m3 | U | 1.98 | ug/m3 | U | 1.98 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | TRANS-1,3-DICHLOROPROPENE | 10061-02-6 | ND | ug/m3 | U | 2.27 | ug/m3 | U | 2.27 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | TRICHLOROETHENE | 79-01-6 | ND | ug/m3 | U | 2.68 | ug/m3 | U | 2.68 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | TRICHLOROFLUOROMETHANE | 75-69-4 | 2.55 | ug/m3 | J | 2.55 | ug/m3 | J | 2.81 | 1 | I | Result uncertain at a level below the calibration range |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | VINYL ACETATE | 108-05-4 | ND | ug/m3 | U | 1.76 | ug/m3 | U | 1.76 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | VINYL BROMIDE | 593-60-2 | ND | ug/m3 | U | 2.18 | ug/m3 | U | 2.18 | 1 | | |
| SV-04/09-07-06 | 9072006 | AIR | AWHL | L0612717-04 | 9142006 | 9132006 | TO-15 | VINYL CHLORIDE | 75-01-4 | ND | ug/m3 | U | 1.28 | ug/m3 | U | 1.28 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | 1,1,1-TRICHLOROETHANE | 71-55-6 | ND | ug/m3 | U | 2.72 | ug/m3 | U | 2.72 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | 1,1,2,2-TETRACHLOROETHANE | 79-34-5 | ND | ug/m3 | U | 3.43 | ug/m3 | U | 3.43 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 76-13-1 | ND | ug/m3 | U | 3.83 | ug/m3 | U | 3.83 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | 1,1,2-TRICHLOROETHANE | 79-00-5 | ND | ug/m3 | U | 2.72 | ug/m3 | U | 2.72 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | 1,1-DICHLOROETHANE | 75-34-3 | ND | ug/m3 | U | 2.02 | ug/m3 | U | 2.02 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | 1,1-DICHLOROETHENE | 75-35-4 | ND | ug/m3 | U | 1.98 | ug/m3 | U | 1.98 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | 1,2,4-TRICHLOROBENZENE | 120-82-1 | ND | ug/m3 | U | 3.71 | ug/m3 | U | 3.71 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | 1,2,4-TRIMETHYLBENZENE | 95-63-6 | ND | ug/m3 | U | 2.46 | ug/m3 | U | 2.46 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | 1,2-DIBROMOETHANE | 106-93-4 | ND | ug/m3 | U | 3.84 | ug/m3 | U | 3.84 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | 1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE | 76-14-2 | ND | ug/m3 | U | 3.49 | ug/m3 | U | 3.49 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | 1,2-DICHLOROBENZENE | 95-50-1 | ND | ug/m3 | U | 3 | ug/m3 | U | 3 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | 1,2-DICHLOROETHANE | 107-06-2 | ND | ug/m3 | U | 2.02 | ug/m3 | U | 2.02 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | 1,2-DICHLOROPROPANE | 78-87-5 | ND | ug/m3 | U | 2.31 | ug/m3 | U | 2.31 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | 1,3,5-TRIMETHYLBENZENE | 108-67-8 | 5.81 | ug/m3 | | 5.81 | ug/m3 | | 2.46 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | 1,3-BUTADIENE | 106-99-0 | ND | ug/m3 | U | 1.1 | ug/m3 | U | 1.1 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | 1,3-DICHLOROBENZENE | 541-73-1 | ND | ug/m3 | U | 3 | ug/m3 | U | 3 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | 1,4-DICHLOROBENZENE | 106-46-7 | ND | ug/m3 | U | 3 | ug/m3 | U | 3 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | 1,4-DIOXANE | 123-91-1 | ND | ug/m3 | U | 3.6 | ug/m3 | U | 3.6 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | 2,2,4-TRIMETHYLPENTANE | 540-84-1 | ND | ug/m3 | U | 2.33 | ug/m3 | U | 2.33 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | 2-BUTANONE | 78-93-3 | ND | ug/m3 | U | 1.47 | ug/m3 | U | 1.47 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | 2-HEXANONE | 591-78-6 | ND | ug/m3 | U | 2.05 | ug/m3 | U | 2.05 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9122006 | 9112006 | DRAFT 1 | 2-METHYLNAPHTHALENE | 91-57-6 | ND | ug/m3 | U | 8 | ug/m3 | U | 8 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | 3-CHLOROPROPENE | 107-05-1 | ND | ug/m3 | U | 1.56 | ug/m3 | U | 1.56 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | 4-ETHYLTOLUENE | 622-96-8 | 4.33 | ug/m3 | | 4.33 | ug/m3 | | 2.46 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | 4-METHYL-2-PENTANONE | 108-10-1 | ND | ug/m3 | U | 2.05 | ug/m3 | U | 2.05 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | ACETONE | 67-64-1 | 4.38 | ug/m3 | J | 4.38 | ug/m3 | J | 4.75 | 1 | I | Result uncertain at a level below the calibration range |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | BENZENE | 71-43-2 | 1.08 | ug/m3 | J | 1.08 | ug/m3 | J | 1.6 | 1 | I | Result uncertain at a level below the calibration range |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | BENZYL CHLORIDE | 100-44-7 | ND | ug/m3 | U | 2.59 | ug/m3 | U | 2.59 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | BROMODICHLOROMETHANE | 75-27-4 | ND | ug/m3 | U | 3.35 | ug/m3 | U | 3.35 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | BROMOFORM | 75-25-2 | ND | ug/m3 | U | 5.16 | ug/m3 | U | 5.16 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | BROMOMETHANE | 74-83-9 | ND | ug/m3 | U | 1.94 | ug/m3 | U | 1.94 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | CARBON DISULFIDE | 75-15-0 | ND | ug/m3 | U | 1.56 | ug/m3 | U | 1.56 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | CARBON TETRACHLORIDE | 56-23-5 | ND | ug/m3 | U | 3.14 | ug/m3 | U | 3.14 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | CHLOROBENZENE | 108-90-7 | ND | ug/m3 | U | 2.3 | ug/m3 | U | 2.3 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | CHLOROETHANE | 75-00-3 | ND | ug/m3 | U | 1.32 | ug/m3 | U | 1.32 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | CHLOROFORM | 67-66-3 | ND | ug/m3 | U | 2.44 | ug/m3 | U | 2.44 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | CHLOROMETHANE | 74-87-3 | ND | ug/m3 | U | 1.03 | ug/m3 | U | 1.03 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | CIS-1,2-DICHLOROETHENE | 156-59-2 | ND | ug/m3 | U | 1.98 | ug/m3 | U | 1.98 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | CIS-1,3-DICHLOROPROPENE | 10061-01-5 | ND | ug/m3 | U | 2.27 | ug/m3 | U | 2.27 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | CYCLOHEXANE | 110-82-7 | ND | ug/m3 | U | 1.72 | ug/m3 | U | 1.72 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | DIBROMOCHLOROMETHANE | 124-48-1 | ND | ug/m3 | U | 4.26 | ug/m3 | U | 4.26 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | DICHLORODIFLUOROMETHANE | 75-71-8 | ND | ug/m3 | U | 4.94 | ug/m3 | U | 4.94 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | ETHYL ACETATE | 141-78-6 | ND | ug/m3 | U | 1.8 | ug/m3 | U | 1.8 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | ETHYL ALCOHOL | 64-17-5 | 4.83 | ug/m3 | | 4.83 | ug/m3 | | 3.76 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | ETHYLBENZENE | 100-41-4 | 8.95 | ug/m3 | | 8.95 | ug/m3 | | 2.17 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | HEPTANE | 142-82-5 | 1.05 | ug/m3 | J | 1.05 | ug/m3 | J | 2.05 | 1 | I | Result uncertain at a level below the calibration range |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | HEXACHLOROBUTADIENE | 87-68-3 | ND | ug/m3 | U | 5.33 | ug/m3 | U | 5.33 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | ISO-PROPYL ALCOHOL | 67-63-0 | ND | ug/m3 | U | 1.23 | ug/m3 | U | 1.23 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | METHYL TERT BUTYL ETHER | 1634-04-4 | ND | ug/m3 | U | 1.8 | ug/m3 | U | 1.8 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | METHYLENE CHLORIDE | 75-09-2 | 2.41 | ug/m3 | J | 2.41 | ug/m3 | J | 3.47 | 1 | I | Result uncertain at a level below the calibration range |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | N-HEXANE | 110-54-3 | 2.21 | ug/m3 | J | 2.21 | ug/m3 | J | 3.52 | 1 | I | Result uncertain at a level below the calibration range |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9122006 | 9112006 | DRAFT 1 | NAPHTHALENE | 91-20-3 | 1.96 | ug/m3 | J | 1.96 | ug/m3 | J | 2 | 1 | I | Result uncertain at a level below the calibration range |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | O-XYLENE | 95-47-6 | 13.1 | ug/m3 | | 13.1 | ug/m3 | | 2.17 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | P/M-XYLENE | 106-42-3/1 | 35.9 | ug/m3 | | 35.9 | ug/m3 | | 4.34 | 1 | | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected.
Bias: L = Low; H = High; I = Indeterminate.

| Sample Name | Collection Date | Sample Matrix | Laboratory Name | Laboratory Sample Identification Number | Extraction Date | Analysis Date | Analysis Method Number | Analyte Name | Analyte CAS Number | Lab Result Value | Lab Result Units | Lab Qualifier | DV Result Value | DV Result Units | DV Qualifier | Sample Specific Reporting Limit | Dilution Factor | Bias | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | PROPYLENE | 115-07-1 | ND | ug/m3 | U | 1.72 | ug/m3 | U | 1.72 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | STYRENE | 100-42-5 | ND | ug/m3 | U | 2.13 | ug/m3 | U | 2.13 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | TETRACHLOROETHENE | 127-18-4 | ND | ug/m3 | U | 3.39 | ug/m3 | U | 3.39 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | TETRAHYDROFURAN | 109-99-9 | 1.23 | ug/m3 | J | 1.23 | ug/m3 | J | 1.47 | 1 | I | Result uncertain at a level below the calibration range |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | TOLUENE | 108-88-3 | 28.9 | ug/m3 | | 28.9 | ug/m3 | | 1.88 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | TRANS-1,2-DICHLOROETHENE | 156-60-5 | ND | ug/m3 | U | 1.98 | ug/m3 | U | 1.98 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | TRANS-1,3-DICHLOROPROPENE | 10061-02-6 | ND | ug/m3 | U | 2.27 | ug/m3 | U | 2.27 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | TRICHLOROETHENE | 79-01-6 | ND | ug/m3 | U | 2.68 | ug/m3 | U | 2.68 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | TRICHLOROFLUOROMETHANE | 75-69-4 | 32.8 | ug/m3 | | 32.8 | ug/m3 | | 2.81 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | VINYL ACETATE | 108-05-4 | ND | ug/m3 | U | 1.76 | ug/m3 | U | 1.76 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | VINYL BROMIDE | 593-60-2 | ND | ug/m3 | U | 2.18 | ug/m3 | U | 2.18 | 1 | | |
| SV-05/09-07-06 | 9072006 | AIR | AWHL | L0612717-05 | 9142006 | 9132006 | TO-15 | VINYL CHLORIDE | 75-01-4 | ND | ug/m3 | U | 1.28 | ug/m3 | U | 1.28 | 1 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | 1,1,1-TRICHLOROETHANE | 71-55-6 | ND | ug/m3 | U | 27.2 | ug/m3 | U | 27.2 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | 1,1,2,2-TETRACHLOROETHANE | 79-34-5 | ND | ug/m3 | U | 34.3 | ug/m3 | U | 34.3 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 76-13-1 | ND | ug/m3 | U | 38.3 | ug/m3 | U | 38.3 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | 1,1,2-TRICHLOROETHANE | 79-00-5 | ND | ug/m3 | U | 27.2 | ug/m3 | U | 27.2 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | 1,1-DICHLOROETHANE | 75-34-3 | ND | ug/m3 | U | 20.2 | ug/m3 | U | 20.2 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | 1,1-DICHLOROETHENE | 75-35-4 | ND | ug/m3 | U | 19.8 | ug/m3 | U | 19.8 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | 1,2,4-TRICHLOROBENZENE | 120-82-1 | ND | ug/m3 | U | 37.1 | ug/m3 | U | 37.1 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | 1,2,4-TRIMETHYLBENZENE | 95-63-6 | ND | ug/m3 | U | 24.6 | ug/m3 | U | 24.6 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | 1,2-DIBROMOETHANE | 106-93-4 | ND | ug/m3 | U | 38.4 | ug/m3 | U | 38.4 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | 1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE | 76-14-2 | ND | ug/m3 | U | 34.9 | ug/m3 | U | 34.9 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | 1,2-DICHLOROBENZENE | 95-50-1 | ND | ug/m3 | U | 30 | ug/m3 | U | 30 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | 1,2-DICHLOROETHANE | 107-06-2 | ND | ug/m3 | U | 20.2 | ug/m3 | U | 20.2 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | 1,2-DICHLOROPROPANE | 78-87-5 | ND | ug/m3 | U | 23.1 | ug/m3 | U | 23.1 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | 1,3,5-TRIMETHYLBENZENE | 108-67-8 | 28.4 | ug/m3 | | 28.4 | ug/m3 | | 24.6 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | 1,3-BUTADIENE | 106-99-0 | ND | ug/m3 | U | 11 | ug/m3 | U | 11 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | 1,3-DICHLOROBENZENE | 541-73-1 | ND | ug/m3 | U | 30 | ug/m3 | U | 30 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | 1,4-DICHLOROBENZENE | 106-46-7 | ND | ug/m3 | U | 30 | ug/m3 | U | 30 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | 1,4-DIOXANE | 123-91-1 | ND | ug/m3 | U | 36 | ug/m3 | U | 36 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | 2,2,4-TRIMETHYLPENTANE | 540-84-1 | ND | ug/m3 | U | 23.3 | ug/m3 | U | 23.3 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | 2-BUTANONE | 78-93-3 | ND | ug/m3 | U | 14.7 | ug/m3 | U | 14.7 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | 2-HEXANONE | 591-78-6 | ND | ug/m3 | U | 20.5 | ug/m3 | U | 20.5 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9122006 | 9112006 | DRAFT 1 | 2-METHYLNAPHTHALENE | 91-57-6 | 2.3 | ug/m3 | J | 2.3 | ug/m3 | J | 8 | 1 | I | Result uncertain at a level below the calibration range |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | 3-CHLOROPROPENE | 107-05-1 | ND | ug/m3 | U | 15.6 | ug/m3 | U | 15.6 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | 4-ETHYLTOLUENE | 622-96-8 | ND | ug/m3 | U | 24.6 | ug/m3 | U | 24.6 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | 4-METHYL-2-PENTANONE | 108-10-1 | ND | ug/m3 | U | 20.5 | ug/m3 | U | 20.5 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | ACETONE | 67-64-1 | 11.1 | ug/m3 | J | 11.1 | ug/m3 | J | 47.5 | 10 | I | Result uncertain at a level below the calibration range |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | BENZENE | 71-43-2 | ND | ug/m3 | U | 16 | ug/m3 | U | 16 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | BENZYL CHLORIDE | 100-44-7 | ND | ug/m3 | U | 25.9 | ug/m3 | U | 25.9 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | BROMODICHLOROMETHANE | 75-27-4 | ND | ug/m3 | U | 33.5 | ug/m3 | U | 33.5 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | BROMOFORM | 75-25-2 | ND | ug/m3 | U | 51.6 | ug/m3 | U | 51.6 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | BROMOMETHANE | 74-83-9 | ND | ug/m3 | U | 19.4 | ug/m3 | U | 19.4 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | CARBON DISULFIDE | 75-15-0 | ND | ug/m3 | U | 15.6 | ug/m3 | U | 15.6 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | CARBON TETRACHLORIDE | 56-23-5 | ND | ug/m3 | U | 31.4 | ug/m3 | U | 31.4 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | CHLOROBENZENE | 108-90-7 | ND | ug/m3 | U | 23 | ug/m3 | U | 23 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | CHLOROETHANE | 75-00-3 | ND | ug/m3 | U | 13.2 | ug/m3 | U | 13.2 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | CHLOROFORM | 67-66-3 | 12.3 | ug/m3 | J | 12.3 | ug/m3 | J | 24.4 | 10 | I | Result uncertain at a level below the calibration range |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | CHLOROMETHANE | 74-87-3 | ND | ug/m3 | U | 10.3 | ug/m3 | U | 10.3 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | CIS-1,2-DICHLOROETHENE | 156-59-2 | 40 | ug/m3 | | 40 | ug/m3 | | 19.8 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | CIS-1,3-DICHLOROPROPENE | 10061-01-5 | ND | ug/m3 | U | 22.7 | ug/m3 | U | 22.7 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | CYCLOHEXANE | 110-82-7 | ND | ug/m3 | U | 17.2 | ug/m3 | U | 17.2 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | DIBROMOCHLOROMETHANE | 124-48-1 | ND | ug/m3 | U | 42.6 | ug/m3 | U | 42.6 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | DICHLORODIFLUOROMETHANE | 75-71-8 | ND | ug/m3 | U | 49.4 | ug/m3 | U | 49.4 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | ETHYL ACETATE | 141-78-6 | ND | ug/m3 | U | 18 | ug/m3 | U | 18 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | ETHYL ALCOHOL | 64-17-5 | 12.8 | ug/m3 | J | 12.8 | ug/m3 | J | 37.6 | 10 | I | Result uncertain at a level below the calibration range |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | ETHYLBENZENE | 100-41-4 | ND | ug/m3 | U | 21.7 | ug/m3 | U | 21.7 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | HEPTANE | 142-82-5 | ND | ug/m3 | U | 20.5 | ug/m3 | U | 20.5 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | HEXACHLOROBUTADIENE | 87-68-3 | ND | ug/m3 | U | 53.3 | ug/m3 | U | 53.3 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | ISO-PROPYL ALCOHOL | 67-63-0 | ND | ug/m3 | U | 12.3 | ug/m3 | U | 12.3 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | METHYL TERT BUTYL ETHER | 1634-04-4 | ND | ug/m3 | U | 18 | ug/m3 | U | 18 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | METHYLENE CHLORIDE | 75-09-2 | ND | ug/m3 | U | 34.7 | ug/m3 | U | 34.7 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | N-HEXANE | 110-54-3 | ND | ug/m3 | U | 35.2 | ug/m3 | U | 35.2 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9122006 | 9112006 | DRAFT 1 | NAPHTHALENE | 91-20-3 | 7.15 | ug/m3 | | 7.15 | ug/m3 | | 2 | 1 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | O-XYLENE | 95-47-6 | 9.54 | ug/m3 | J | 9.54 | ug/m3 | J | 21.7 | 10 | I | Result uncertain at a level below the calibration range |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | P/M-XYLENE | 106-42-3/1 | 16.9 | ug/m3 | J | 16.9 | ug/m3 | J | 43.4 | 10 | I | Result uncertain at a level below the calibration range |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | PROPYLENE | 115-07-1 | ND | ug/m3 | U | 17.2 | ug/m3 | U | 17.2 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | STYRENE | 100-42-5 | ND | ug/m3 | U | 21.3 | ug/m3 | U | 21.3 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | TETRACHLOROETHENE | 127-18-4 | ND | ug/m3 | U | 33.9 | ug/m3 | U | 33.9 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | TETRAHYDROFURAN | 109-99-9 | ND | ug/m3 | U | 14.7 | ug/m3 | U | 14.7 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | TOLUENE | 108-88-3 | 74.2 | ug/m3 | | 74.2 | ug/m3 | | 18.8 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | TRANS-1,2-DICHLOROETHENE | 156-60-5 | ND | ug/m3 | U | 19.8 | ug/m3 | U | 19.8 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | TRANS-1,3-DICHLOROPROPENE | 10061-02-6 | ND | ug/m3 | U | 22.7 | ug/m3 | U | 22.7 | 10 | | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected.
Bias: L = Low; H = High; I = Indeterminate.

| Sample Name | Collection Date | Sample Matrix | Laboratory Name | Laboratory Sample Identification Number | Extraction Date | Analysis Date | Analysis Method Number | Analyte Name | Analyte CAS Number | Lab Result Value | Lab Result Units | Lab Qualifier | DV Result Value | DV Result Units | DV Qualifier | Sample Specific Reporting Limit | Dilution Factor | Bias | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | TRICHLOROETHENE | 79-01-6 | 3860 | ug/m3 | | 3860 | ug/m3 | | 26.8 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | TRICHLOROFLUOROMETHANE | 75-69-4 | ND | ug/m3 | U | 28.1 | ug/m3 | U | 28.1 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | VINYL ACETATE | 108-05-4 | ND | ug/m3 | U | 17.6 | ug/m3 | U | 17.6 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | VINYL BROMIDE | 593-60-2 | ND | ug/m3 | U | 21.8 | ug/m3 | U | 21.8 | 10 | | |
| SV-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-06 | 9142006 | 9132006 | TO-15 | VINYL CHLORIDE | 75-01-4 | ND | ug/m3 | U | 12.8 | ug/m3 | U | 12.8 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | 1,1,1-TRICHLOROETHANE | 71-55-6 | ND | ug/m3 | U | 27.2 | ug/m3 | U | 27.2 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | 1,1,2,2-TETRACHLOROETHANE | 79-34-5 | ND | ug/m3 | U | 34.3 | ug/m3 | U | 34.3 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 76-13-1 | ND | ug/m3 | U | 38.3 | ug/m3 | U | 38.3 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | 1,1,2-TRICHLOROETHANE | 79-00-5 | ND | ug/m3 | U | 27.2 | ug/m3 | U | 27.2 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | 1,1-DICHLOROETHANE | 75-34-3 | ND | ug/m3 | U | 20.2 | ug/m3 | U | 20.2 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | 1,1-DICHLOROETHENE | 75-35-4 | ND | ug/m3 | U | 19.8 | ug/m3 | U | 19.8 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | 1,2,4-TRICHLOROBENZENE | 120-82-1 | ND | ug/m3 | U | 37.1 | ug/m3 | U | 37.1 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | 1,2,4-TRIMETHYLBENZENE | 95-63-6 | ND | ug/m3 | U | 24.6 | ug/m3 | U | 24.6 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | 1,2-DIBROMOETHANE | 106-93-4 | ND | ug/m3 | U | 38.4 | ug/m3 | U | 38.4 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | 1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE | 76-14-2 | ND | ug/m3 | U | 34.9 | ug/m3 | U | 34.9 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | 1,2-DICHLOROBENZENE | 95-50-1 | ND | ug/m3 | U | 30 | ug/m3 | U | 30 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | 1,2-DICHLOROETHANE | 107-06-2 | ND | ug/m3 | U | 20.2 | ug/m3 | U | 20.2 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | 1,2-DICHLOROPROPANE | 78-87-5 | ND | ug/m3 | U | 23.1 | ug/m3 | U | 23.1 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | 1,3,5-TRIMETHYLBENZENE | 108-67-8 | 25.3 | ug/m3 | | 25.3 | ug/m3 | | 24.6 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | 1,3-BUTADIENE | 106-99-0 | ND | ug/m3 | U | 11 | ug/m3 | U | 11 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | 1,3-DICHLOROBENZENE | 541-73-1 | ND | ug/m3 | U | 30 | ug/m3 | U | 30 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | 1,4-DICHLOROBENZENE | 106-46-7 | ND | ug/m3 | U | 30 | ug/m3 | U | 30 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | 1,4-DIOXANE | 123-91-1 | ND | ug/m3 | U | 36 | ug/m3 | U | 36 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | 2,2,4-TRIMETHYLPENTANE | 540-84-1 | ND | ug/m3 | U | 23.3 | ug/m3 | U | 23.3 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | 2-BUTANONE | 78-93-3 | ND | ug/m3 | U | 14.7 | ug/m3 | U | 14.7 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | 2-HEXANONE | 591-78-6 | ND | ug/m3 | U | 20.5 | ug/m3 | U | 20.5 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9122006 | 9112006 | DRAFT 1 | 2-METHYLNAPHTHALENE | 91-57-6 | 2.32 | ug/m3 | J | 2.32 | ug/m3 | J | 8 | 1 | I | Result uncertain at a level below the calibration range |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | 3-CHLOROPROPENE | 107-05-1 | ND | ug/m3 | U | 15.6 | ug/m3 | U | 15.6 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | 4-ETHYLTOLUENE | 622-96-8 | ND | ug/m3 | U | 24.6 | ug/m3 | U | 24.6 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | 4-METHYL-2-PENTANONE | 108-10-1 | ND | ug/m3 | U | 20.5 | ug/m3 | U | 20.5 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | ACETONE | 67-64-1 | 8.07 | ug/m3 | J | 8.07 | ug/m3 | J | 47.5 | 10 | I | Result uncertain at a level below the calibration range |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | BENZENE | 71-43-2 | ND | ug/m3 | U | 16 | ug/m3 | U | 16 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | BENZYL CHLORIDE | 100-44-7 | ND | ug/m3 | U | 25.9 | ug/m3 | U | 25.9 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | BROMODICHLOROMETHANE | 75-27-4 | ND | ug/m3 | U | 33.5 | ug/m3 | U | 33.5 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | BROMOFORM | 75-25-2 | ND | ug/m3 | U | 51.6 | ug/m3 | U | 51.6 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | BROMOMETHANE | 74-83-9 | ND | ug/m3 | U | 19.4 | ug/m3 | U | 19.4 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | CARBON DISULFIDE | 75-15-0 | ND | ug/m3 | U | 15.6 | ug/m3 | U | 15.6 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | CARBON TETRACHLORIDE | 56-23-5 | ND | ug/m3 | U | 31.4 | ug/m3 | U | 31.4 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | CHLOROBENZENE | 108-90-7 | ND | ug/m3 | U | 23 | ug/m3 | U | 23 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | CHLOROETHANE | 75-00-3 | ND | ug/m3 | U | 13.2 | ug/m3 | U | 13.2 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | CHLOROFORM | 67-66-3 | ND | ug/m3 | U | 24.4 | ug/m3 | U | 24.4 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | CHLOROMETHANE | 74-87-3 | ND | ug/m3 | U | 10.3 | ug/m3 | U | 10.3 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | CIS-1,2-DICHLOROETHENE | 156-59-2 | 38.8 | ug/m3 | | 38.8 | ug/m3 | | 19.8 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | CIS-1,3-DICHLOROPROPENE | 10061-01-5 | ND | ug/m3 | U | 22.7 | ug/m3 | U | 22.7 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | CYCLOHEXANE | 110-82-7 | ND | ug/m3 | U | 17.2 | ug/m3 | U | 17.2 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | DIBROMOCHLOROMETHANE | 124-48-1 | ND | ug/m3 | U | 42.6 | ug/m3 | U | 42.6 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | DICHLORODIFLUOROMETHANE | 75-71-8 | ND | ug/m3 | U | 49.4 | ug/m3 | U | 49.4 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | ETHYL ACETATE | 141-78-6 | ND | ug/m3 | U | 18 | ug/m3 | U | 18 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | ETHYL ALCOHOL | 64-17-5 | ND | ug/m3 | U | 37.6 | ug/m3 | U | 37.6 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | ETHYLBENZENE | 100-41-4 | ND | ug/m3 | U | 21.7 | ug/m3 | U | 21.7 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | HEPTANE | 142-82-5 | ND | ug/m3 | U | 20.5 | ug/m3 | U | 20.5 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | HEXACHLOROBUTADIENE | 87-68-3 | ND | ug/m3 | U | 53.3 | ug/m3 | U | 53.3 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | ISO-PROPYL ALCOHOL | 67-63-0 | ND | ug/m3 | U | 12.3 | ug/m3 | U | 12.3 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | METHYL TERT BUTYL ETHER | 1634-04-4 | ND | ug/m3 | U | 18 | ug/m3 | U | 18 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | METHYLENE CHLORIDE | 75-09-2 | ND | ug/m3 | U | 34.7 | ug/m3 | U | 34.7 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | N-HEXANE | 110-54-3 | ND | ug/m3 | U | 35.2 | ug/m3 | U | 35.2 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9122006 | 9112006 | DRAFT 1 | NAPHTHALENE | 91-20-3 | 8.31 | ug/m3 | | 8.31 | ug/m3 | | 2 | 1 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | O-XYLENE | 95-47-6 | ND | ug/m3 | U | 21.7 | ug/m3 | U | 21.7 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | P/M-XYLENE | 106-42-3/1 | 12.9 | ug/m3 | J | 12.9 | ug/m3 | J | 43.4 | 10 | I | Result uncertain at a level below the calibration range |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | PROPYLENE | 115-07-1 | ND | ug/m3 | U | 17.2 | ug/m3 | U | 17.2 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | STYRENE | 100-42-5 | ND | ug/m3 | U | 21.3 | ug/m3 | U | 21.3 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | TETRACHLOROETHENE | 127-18-4 | ND | ug/m3 | U | 33.9 | ug/m3 | U | 33.9 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | TETRAHYDROFURAN | 109-99-9 | ND | ug/m3 | U | 14.7 | ug/m3 | U | 14.7 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | TOLUENE | 108-88-3 | 55.7 | ug/m3 | | 55.7 | ug/m3 | | 18.8 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | TRANS-1,2-DICHLOROETHENE | 156-60-5 | ND | ug/m3 | U | 19.8 | ug/m3 | U | 19.8 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | TRANS-1,3-DICHLOROPROPENE | 10061-02-6 | ND | ug/m3 | U | 22.7 | ug/m3 | U | 22.7 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | TRICHLOROETHENE | 79-01-6 | 3840 | ug/m3 | | 3840 | ug/m3 | | 26.8 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | TRICHLOROFLUOROMETHANE | 75-69-4 | ND | ug/m3 | U | 28.1 | ug/m3 | U | 28.1 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | VINYL ACETATE | 108-05-4 | ND | ug/m3 | U | 17.6 | ug/m3 | U | 17.6 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | VINYL BROMIDE | 593-60-2 | ND | ug/m3 | U | 21.8 | ug/m3 | U | 21.8 | 10 | | |
| OW-1001/09-07- | 9072006 | AIR | AWHL | L0612717-07 | 9142006 | 9132006 | TO-15 | VINYL CHLORIDE | 75-01-4 | ND | ug/m3 | U | 12.8 | ug/m3 | U | 12.8 | 10 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | 1,1,1-TRICHLOROETHANE | 71-55-6 | ND | ug/m3 | U | 2.72 | ug/m3 | U | 2.72 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | 1,1,2,2-TETRACHLOROETHANE | 79-34-5 | ND | ug/m3 | U | 3.43 | ug/m3 | U | 3.43 | 1 | | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected.
Bias: L = Low; H = High; I = Indeterminate.

| Sample Name | Collection Date | Sample Matrix | Laboratory Name | Laboratory Sample Identification Number | Extraction Date | Analysis Date | Analysis Method Number | Analyte Name | Analyte CAS Number | Lab Result Value | Lab Result Units | Lab Qualifier | DV Result Value | DV Result Units | DV Qualifier | Sample Specific Reporting Limit | Dilution Factor | Bias | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 76-13-1 | ND | ug/m3 | U | 3.83 | ug/m3 | U | 3.83 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | 1,1,2-TRICHLOROETHANE | 79-00-5 | ND | ug/m3 | U | 2.72 | ug/m3 | U | 2.72 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | 1,1-DICHLOROETHANE | 75-34-3 | ND | ug/m3 | U | 2.02 | ug/m3 | U | 2.02 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | 1,1-DICHLOROETHENE | 75-35-4 | ND | ug/m3 | U | 1.98 | ug/m3 | U | 1.98 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | 1,2,4-TRICHLOROBENZENE | 120-82-1 | ND | ug/m3 | U | 3.71 | ug/m3 | U | 3.71 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | 1,2,4-TRIMETHYLBENZENE | 95-63-6 | ND | ug/m3 | U | 2.46 | ug/m3 | U | 2.46 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | 1,2-DIBROMOETHANE | 106-93-4 | ND | ug/m3 | U | 3.84 | ug/m3 | U | 3.84 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | 1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE | 76-14-2 | ND | ug/m3 | U | 3.49 | ug/m3 | U | 3.49 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | 1,2-DICHLOROBENZENE | 95-50-1 | ND | ug/m3 | U | 3 | ug/m3 | U | 3 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | 1,2-DICHLOROETHANE | 107-06-2 | ND | ug/m3 | U | 2.02 | ug/m3 | U | 2.02 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | 1,2-DICHLOROPROPANE | 78-87-5 | ND | ug/m3 | U | 2.31 | ug/m3 | U | 2.31 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | 1,3,5-TRIMETHYLBENZENE | 108-67-8 | ND | ug/m3 | U | 2.46 | ug/m3 | U | 2.46 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | 1,3-BUTADIENE | 106-99-0 | ND | ug/m3 | U | 1.1 | ug/m3 | U | 1.1 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | 1,3-DICHLOROBENZENE | 541-73-1 | ND | ug/m3 | U | 3 | ug/m3 | U | 3 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | 1,4-DICHLOROBENZENE | 106-46-7 | ND | ug/m3 | U | 3 | ug/m3 | U | 3 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | 1,4-DIOXANE | 123-91-1 | ND | ug/m3 | U | 3.6 | ug/m3 | U | 3.6 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | 2,2,4-TRIMETHYLPENTANE | 540-84-1 | ND | ug/m3 | U | 2.33 | ug/m3 | U | 2.33 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | 2-BUTANONE | 78-93-3 | ND | ug/m3 | U | 1.47 | ug/m3 | U | 1.47 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | 2-HEXANONE | 591-78-6 | ND | ug/m3 | U | 2.05 | ug/m3 | U | 2.05 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9122006 | 9112006 | DRAFT 1 | 2-METHYLNAPHTHALENE | 91-57-6 | ND | ug/m3 | U | 8 | ug/m3 | U | 8 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | 3-CHLOROPROPENE | 107-05-1 | ND | ug/m3 | U | 1.56 | ug/m3 | U | 1.56 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | 4-ETHYLTOLUENE | 622-96-8 | ND | ug/m3 | U | 2.46 | ug/m3 | U | 2.46 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | 4-METHYL-2-PENTANONE | 108-10-1 | ND | ug/m3 | U | 2.05 | ug/m3 | U | 2.05 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | ACETONE | 67-64-1 | 1.39 | ug/m3 | J | 1.39 | ug/m3 | J | 4.75 | 1 | I | Result uncertain at a level below the calibration range |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | BENZENE | 71-43-2 | ND | ug/m3 | U | 1.6 | ug/m3 | U | 1.6 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | BENZYL CHLORIDE | 100-44-7 | ND | ug/m3 | U | 2.59 | ug/m3 | U | 2.59 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | BROMODICHLOROMETHANE | 75-27-4 | ND | ug/m3 | U | 3.35 | ug/m3 | U | 3.35 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | BROMOFORM | 75-25-2 | ND | ug/m3 | U | 5.16 | ug/m3 | U | 5.16 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | BROMOMETHANE | 74-83-9 | ND | ug/m3 | U | 1.94 | ug/m3 | U | 1.94 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | CARBON DISULFIDE | 75-15-0 | ND | ug/m3 | U | 1.56 | ug/m3 | U | 1.56 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | CARBON TETRACHLORIDE | 56-23-5 | ND | ug/m3 | U | 3.14 | ug/m3 | U | 3.14 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | CHLOROBENZENE | 108-90-7 | ND | ug/m3 | U | 2.3 | ug/m3 | U | 2.3 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | CHLOROETHANE | 75-00-3 | ND | ug/m3 | U | 1.32 | ug/m3 | U | 1.32 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | CHLOROFORM | 67-66-3 | ND | ug/m3 | U | 2.44 | ug/m3 | U | 2.44 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | CHLOROMETHANE | 74-87-3 | ND | ug/m3 | U | 1.03 | ug/m3 | U | 1.03 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | CIS-1,2-DICHLOROETHENE | 156-59-2 | ND | ug/m3 | U | 1.98 | ug/m3 | U | 1.98 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | CIS-1,3-DICHLOROPROPENE | 10061-01-5 | ND | ug/m3 | U | 2.27 | ug/m3 | U | 2.27 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | CYCLOHEXANE | 110-82-7 | ND | ug/m3 | U | 1.72 | ug/m3 | U | 1.72 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | DIBROMOCHLOROMETHANE | 124-48-1 | ND | ug/m3 | U | 4.26 | ug/m3 | U | 4.26 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | DICHLORODIFLUOROMETHANE | 75-71-8 | ND | ug/m3 | U | 4.94 | ug/m3 | U | 4.94 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | ETHYL ACETATE | 141-78-6 | ND | ug/m3 | U | 1.8 | ug/m3 | U | 1.8 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | ETHYL ALCOHOL | 64-17-5 | ND | ug/m3 | U | 3.76 | ug/m3 | U | 3.76 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | ETHYLBENZENE | 100-41-4 | ND | ug/m3 | U | 2.17 | ug/m3 | U | 2.17 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | HEPTANE | 142-82-5 | ND | ug/m3 | U | 2.05 | ug/m3 | U | 2.05 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | HEXACHLOROBUTADIENE | 87-68-3 | ND | ug/m3 | U | 5.33 | ug/m3 | U | 5.33 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | ISO-PROPYL ALCOHOL | 67-63-0 | ND | ug/m3 | U | 1.23 | ug/m3 | U | 1.23 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | METHYL TERT BUTYL ETHER | 1634-04-4 | ND | ug/m3 | U | 1.8 | ug/m3 | U | 1.8 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | METHYLENE CHLORIDE | 75-09-2 | 12.5 | ug/m3 | | 12.5 | ug/m3 | | 3.47 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | N-HEXANE | 110-54-3 | ND | ug/m3 | U | 3.52 | ug/m3 | U | 3.52 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9122006 | 9112006 | DRAFT 1 | NAPHTHALENE | 91-20-3 | ND | ug/m3 | U | 2 | ug/m3 | U | 2 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | O-XYLENE | 95-47-6 | ND | ug/m3 | U | 2.17 | ug/m3 | U | 2.17 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | P/M-XYLENE | 106-42-3/1 | ND | ug/m3 | U | 4.34 | ug/m3 | U | 4.34 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | PROPYLENE | 115-07-1 | ND | ug/m3 | U | 1.72 | ug/m3 | U | 1.72 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | STYRENE | 100-42-5 | ND | ug/m3 | U | 2.13 | ug/m3 | U | 2.13 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | TETRACHLOROETHENE | 127-18-4 | ND | ug/m3 | U | 3.39 | ug/m3 | U | 3.39 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | TETRAHYDROFURAN | 109-99-9 | ND | ug/m3 | U | 1.47 | ug/m3 | U | 1.47 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | TOLUENE | 108-88-3 | ND | ug/m3 | U | 1.88 | ug/m3 | U | 1.88 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | TRANS-1,2-DICHLOROETHENE | 156-60-5 | ND | ug/m3 | U | 1.98 | ug/m3 | U | 1.98 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | TRANS-1,3-DICHLOROPROPENE | 10061-02-6 | ND | ug/m3 | U | 2.27 | ug/m3 | U | 2.27 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | TRICHLOROETHENE | 79-01-6 | ND | ug/m3 | U | 2.68 | ug/m3 | U | 2.68 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | TRICHLOROFLUOROMETHANE | 75-69-4 | ND | ug/m3 | U | 2.81 | ug/m3 | U | 2.81 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | VINYL ACETATE | 108-05-4 | ND | ug/m3 | U | 1.76 | ug/m3 | U | 1.76 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | VINYL BROMIDE | 593-60-2 | ND | ug/m3 | U | 2.18 | ug/m3 | U | 2.18 | 1 | | |
| AA-01/09-07-06 | 9072006 | AIR | AWHL | L0612717-08 | 9142006 | 9132006 | TO-15 | VINYL CHLORIDE | 75-01-4 | ND | ug/m3 | U | 1.28 | ug/m3 | U | 1.28 | 1 | | |

U = analyte is non-detect; UJ = non-detect is estimated; J = result is estimated; R = result is rejected.
Bias: L = Low; H = High; I = Indeterminate.

## II. Data Package Completeness

BU1001

The Data package reviewed was identified as follows: L0612699 + L0612717

Were all required reporting forms and associated raw data included in the data package? **Yes** / (**No**)

Was the data accompanied by a Data Review Checklist / Project Narrative explaining any non-compliance issues with the analyses? (**Yes**) / **No**.

Were all sample analyses requested on the Chain-of-Custody performed by the laboratory? (**Yes**) / **No**.

Were there any Chain-of-custody deviations noted? (e.g., labeling discrepancy between SUMMA canisters, obvious problems with canisters, etc.) **Yes** / (**No**) Was a "Sample Discrepancy Report" Issued? **Yes / No** (NA)

**ACTION**: If the initial Pressure (vacuum) in the field of a canister is < 25" Hg, of pressure of a canister upon receipt at the lab is > 15" Hg, or the receipt pressure measured at AWHL is > ± 5" Hg from the final pressure recorded for the canister in the field (as it appears on the COC), estimate all results (J and UJ).

Comments:

Initial Calibrations for TO-15 were not complete - see pg TO-15-1A of this checklist for resubmittal request.

Tier III - type DV done on 2 Projects L0612699 + L0612717 - These were supposed to be combined into a single project but lab split them into 2 -

Resubmittal of Calibration data received 10/18/06

On 10/19/06, SHA determined that Sample SV-02105-07-06 was missing a result for 1,1,2-trichloroethane. Lab asked (see TO15-1B) to report this Compound. During lab's review, they determined that Samples were not processed with the correct calibration file => on November 6, 2006, all data re-issued. Several results for benzene, ethylbenzene, n-hexane, O-xylene, Styrene + tetrachloroethene lowered in revised data + some trace data for 2-butanone, tetrahydrofuran + bromodichloromethane non-detect in revised data.



Database + report revised on 11/6/06.

**Nancy C. Rothman, Ph.D.**

**From:** "Nancy C. Rothman, Ph.D." <n.rothman@patmedia.net>
**To:** "Denise McLaughlin" <dmclaughlin@alphalab.com>
**Cc:** "Susan D Chapnick" <s.chapnick@comcast.net>; "Kelly Dubois" <kdubois@sanbornhead.com>; "Brad Green" <bgreen@sanbornhead.com>
**Sent:** Thursday, October 19, 2006 11:52 AM
**Subject:** SHA Project 1B-4 TO-15 Resubmittal

Denise:

When Kelly Dubois (SHA) went to upload the validated data into a spreadsheet for their client, she found that sample SV-02/09-07-06 (your lab sample ID L0612717-02) was missing a result for the target compound 1,1,2-trichloroethane. I looked at the raw data for this sample and this compound, which should be compound #45 on the GC/MS quantitation report, is missing. Please have the laboratory investigate this and please reissue the data for this sample (revised quantitation report and data sheet) as soon as possible. We do not need a revised EDD.

Thanks
Nancy

**********
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TO-15 - 1B

*New Environmental Horizons, Inc.*

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# DATA USABILITY ASSESSMENT

**Organic Analysis by Methods TO-15 and APH**
**EPA Region I Tier III – type review**

**Client:** Sanborn, Head & Associates, Inc., Concord, New Hampshire

**Site:** Blackburn & Union Privileges Superfund Site, Walpole, Massachusetts
Phase 1B-4 Remedial Investigation

**Laboratory:** Alpha Woods Hole Labs (AWHL), Westborough, Massachusetts

**SDG:** BU1001

**Lab ETR:** L0612699 & L0612717

**# of samples/Analyses:** 11 soil vapor samples and 1 ambient air sample for forty project-specific Volatile Organic Compounds (VOC)

**Initial Reviewer:** Dr. Nancy C. Rothman, New Environmental Horizons, Inc. NCR

**Senior Reviewer:** Susan D. Chapnick, New Environmental Horizons, Inc.

**Date Completed:** October 18, 2006

An EPA Tier III-type Data Validation/Usability Review was performed on the data included in this SDG with the following intentions: 1) to determine if the data were generated and reported in accordance with the *Phase 1B-4 Remedial Investigation Work Plan, Blackburn & Union Privileges Superfund Site, Walpole, MA,* prepared by Sanborn, Head & Associates, Inc., July 2006 (Phase IB-4 Work Plan); Compendium Method TO-15, *Determination of Volatile Organic Compounds (VOCs) in Air Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS)*, January 1999, EPA/625/R-96/010b; *Method for the Determination of Air-Phase Petroleum Hydrocarbons (APH), Public Draft Comment,*. MADEP, February 2000; Region I, *EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses,* December 1996; *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review*; Publication EPA A540/R-99/008, October 1999; and *Guidance for Data Useability in Risk Assessment* (Part A), Publication 9285.7-09A, USEPA 1992; 2) to determine if the data met the project data quality objectives for acceptable accuracy, precision, sensitivity; and technical usability; and 3) to update the project database with validated results and appropriate data validation qualifiers.

*34 Pheasant Run Drive, Skillman, NJ 08558 ◊ 2 Farmer's Circle, Arlington, MA 02474*
*Phone: (908) 874-5686 ◊ (781) 643-4294 Fax: (908) 874-4786*
*Email: n.rothman@patmedia.net ◊ s.chapnick@comcast.net*

The Data Usability Report consists of three parts:

- This Data Usability Report letter summarizing the actions taken;
- The spreadsheet of validated sample results with validation qualifiers and comments added based on actions taken; and
- The Data Validation Checklist to document the Tier III-type validation. This Checklist is an integral part of the validation report as it contains comprehensive details of all quality control (QC) reviewed, the acceptance criteria used, and the professional judgment and actions taken.

**Data Usability Report Summary**

During the Tier III-type data usability review of VOCs, several results were estimated (J) due to QC issues. Table 1 summarizes the actions taken during this Data Validation review. No results were rejected in this SDG. NEH generated a validated data spreadsheet based on the electronic project database file received from AWHL for this SDG. All data were considered acceptable compared to the Measurement Performance Criteria (MPCs) defined in Worksheet #11, 24a, and 24b of the Phase IB-4 Work Plan, with the understanding of the potential uncertainty (bias) in the qualified results.

Table 1. Summary of Data Validation/Usability Actions

| Field Sample ID | Analyte | Qualifier | Bias | Validation Comments |
|---|---|---|---|---|
| SV-03/09-07-06 | 1,3-Dichlorobenzene | J | I | High Continuing Calibration recovery + High LCS recovery + Result uncertain at a level below the calibration range |
| SV-06/09-07-06 | 1,1,1-Trichloroethane | J | I | Result uncertain at a level below the calibration range |
| SV-05/09-07-06 | 2-Butanone | J | I | Result uncertain at a level below the calibration range |
| OW-1001/09-07-06, SV-01/09-07-06, & SV-02/09-07-06 | 2-Methylnaphthalene | J | I | Result uncertain at a level below the calibration range |
| AA-01/09-07-06, OW-1001/09-07-06, SV-01/09-07-06, SV-02/09-07-06 & SV-05/09-07-06 | Acetone | J | I | Result uncertain at a level below the calibration range |
| SV-02/09-07-06, SV-05/09-07-06, & SV-09/09-06-06 | Benzene | J | I | Result uncertain at a level below the calibration range |
| OW-1001/09-07-06 & SV-01/09-07-06 | Bromodichloromethane | J | I | Result uncertain at a level below the calibration range |
| SV-01/09-07-06 | Chloroform | J | I | Result uncertain at a level below the calibration range |
| SV-01/09-07-06 & SV-02/09-07-06 | Ethyl Alcohol | J | I | Result uncertain at a level below the calibration range |
| SV-08/09-06-06 | Ethylbenzene | J | I | Result uncertain at a level below the calibration range |
| SV-05/09-07-06 | Heptane | J | I | Result uncertain at a level below the calibration range |
| SV-02/09-07-06, SV-05/09-07-06, SV-07/09-06-06, & SV-09/09-06-06 | Methylene Chloride | J | I | Result uncertain at a level below the calibration range |

Table 1. Summary of Data Validation/Usability Actions - continued

| Field Sample ID | Analyte | Qualifier | Bias | Validation Comments |
|---|---|---|---|---|
| SV-03/09-07-06, SV-05/09-07-06, SV-07/09-06-06, & SV-10/09-06-06 | Naphthalene | J | I | Result uncertain at a level below the calibration range |
| SV-02/09-07-06, SV-03/09-07-06, SV-04/09-07-06, SV-05/09-07-06, & SV-09/09-06-06 | n-Hexane | J | I | Result uncertain at a level below the calibration range |
| SV-01/09-07-06 & SV-10/09-06-06 | o-Xylene | J | I | Result uncertain at a level below the calibration range |
| OW-1001/09-07-06 & SV-01/09-07-06 | p/m-Xylene | J | I | Result uncertain at a level below the calibration range |
| SV-06/09-07-06 & SV-08/09-06-06 | Tetrachloroethene | J | I | Result uncertain at a level below the calibration range |
| SV-05/09-07-06 & SV-06/09-07-06 | Tetrahydrofuran | J | I | Result uncertain at a level below the calibration range |
| SV-02/09-07-06 & SV-09/09-06-06 | Trichloroethene | J | I | Result uncertain at a level below the calibration range |
| SV-04/09-07-06 & SV-06/09-07-06 | Trichlorofluoromethane | J | I | Result uncertain at a level below the calibration range |

*Qualifiers: U = Analyte is not detected at the Quantitation Limit (QL). UJ = Non-detect is estimated. J = Result is estimated. R = Result is rejected and is unusable for project decisions.*

*Bias: L = Low; H = High; I = Indeterminate*

The following sections document the QC reviewed and the issues that required action or affected the data certainty in terms of the project data quality objectives (DQO) of accuracy, precision, representativeness, comparability, and sensitivity. The DQO of completeness will be evaluated after all Phase 1B data are generated.

**1. Technical Issues Affecting Accuracy**

*Holding times, calibration criteria, laboratory control sample recoveries and other method-specific QC sample results were reviewed to evaluate the accuracy of the environmental results. All qualifications in this Section are listed in Table 1.*

The accuracy for 1,3-dichlorobenzene in sample SV-03/09-07-06 was compromised due to high recovery of this compound in the associated Laboratory Control Sample (LCS). The result for 1,3-dichlorobenzene in this one sample was estimated (J) with overall indeterminate bias due to other QC issues.

The accuracy for 46 results (for compounds 1,3-dichlorobenzene, 1,1,1-trichloroethane, 2-butanone, 2-methylnapthalene, acetone, benzene, bromodichloromethane, chloroform, ethyl alcohol, ethylbenzene, heptane, methylene chloride, naphthalene, n-hexane, o-xylene, p/m-xylene, tetrachloroethene, tetrahydrofuran, trichloroethene, and trichlorofluoromethane) was compromised due to reporting of results at concentrations below the accurate instrument calibration range. The affected results, as listed in Table 1, were qualified as estimated (J) and are considered to be of indeterminate bias.

**2. Technical Issues Affecting Precision and Representativeness**

*The relative percent difference (RPD) between laboratory duplicates and field duplicate pair results were evaluated to assess precision and representativeness of the environmental data. All qualifications in this Section are listed in Table 1.*

The Laboratory Duplicate (LD) for the TO-15 analysis was performed on a sample not associated with this SDG; therefore, these results were not evaluated herein (*i.e.*, batch QC performed). The APH LD was performed on sample SV-09/09-06-06 and the precision for naphthalene and 2-methylnaphthalene was acceptable. These results are an indication of acceptable laboratory precision for soil vapor analysis.

The field duplicate (FD) pair for this SDG was SV-01/09-07-06 and OW-1001/09-07-06. FD precision was acceptable for all twelve detected VOCs in these samples. These results are an indication of acceptable precision and representativeness of the results in the soil vapor samples for VOCs.

**3. Technical Issues Affecting Sensitivity**

*Blank contamination in method blanks, field blanks, and initial and continuing calibration blanks, along with an evaluation of the achievement of the project quantitation limits were reviewed to assess sensitivity of the results. All qualifications in this Section are listed in Table 1.*

Sensitivity of results as compared to either the project quantitation limit (PQL) or, if that was exceeded, the project action limit (PAL) defined in Phase 1B-4 Work Plan Worksheets # 9b, was acceptable for all VOCs with the exception of: 1,1,2,2-tetrachloroethane, 1,1,2-trichloroethane, 1,2-dichloroethane, bromodichloromethane, carbon tetrachloride, chloroform, and dibromochloromethane in all samples, as expected, due to method limitations; 1,2-dichloropropane and benzene in sample SV-02/09-07-06 due to dilution (dilution factor (DF)=2) made for sample analysis; and 1,2-dichloropropane, benzene, bromomethane, cis-1,3-dichloropropene, tetrachloroethene, trans-1,3-dichloropropene, and vinyl chloride in samples SV-01/09-07-06 and OW-1001/09-07-06 due to dilutions made (DF=10) for sample analysis to ensure that all detects were reported within the calibration range of the instrument. The data users will need to determine the usability of the non-detected results for the compounds which exceed the PALs.

The continuing calibration associated with sample SV-03/09-07-06 did not meet Region I DV criteria (%D > - 25%) for 1,3-dichlorobenzene. The result for this compound in this one sample was estimated (J) with overall indeterminate bias due to other QC issues.

There were no field blanks collected with these samples as they were not required in the Phase 1B-4 Work Plan.

**4. Additional Technical and QA/QC Issues**

*A review of method compliance, an evaluation of method modifications, and other QA/QC issues were made to evaluate the comparability of the data generated for the project uses.*

The laboratory performed two analyses on each canister received: TO-15 and APH. The APH analysis was only performed to report naphthalene and 2-methylnaphthalene as required in the Phase 1B-4 Work Plan. This data usability review was done on both methods of analysis for the two projects reported by the laboratory for SDG BU1001.

The laboratory reported results for 26 compounds in addition to the 40 requested in Worksheet #9b. The extra compounds were as follows: 1,1,2-trichloro-1,2,2-trifluoroethane; 1,2,4-trichlorobenzene; 1,2,4-trimethylbenzene; 1,2-dibromoethane; 1,2-dichloro-1,1,2,2-tetrafluoroethane; 1,2-dichlorobenzene; 1,3,5-trimethylbenzene; 1,3-butadiene; 1,3-dichlorobenzene; 1,4-dichlorobenzene; 1,4-dioxane; 2,2,4-trimethylpentane; 3-chloropropene; 4-ethyltoluene, benzyl chloride; cyclohexane; dichlorodifluoro-methane; ethyl acetate; ethyl alcohol; heptane; hexachlorobutadiene; iso-propyl alcohol; n-hexane; propylene; tetrahydrofuran; and vinyl bromide. The data user will need to reconcile reporting of these extra compounds with project objectives. All compounds reported were included in the validation performed herein.

The ambient air sample results were non-detected for all VOCs with the exception of low-level results for acetone and methylene chloride. The data users will evaluate potential contribution of ambient air in the Phase IB-4 RI report.

Calculation verification was performed for VOCs on one sample to evaluate the sensitivity (reporting limit of non-detected results) and accuracy (detected results) of the data. The reporting limits and results checked were verified to be accurate.

## 5. Summary of Completeness, Documentation, and Chain-of-Custody Issues

The laboratory data package was complete and compliant including a narrative, sample results, QC summary forms, Chain-of-Custody (COC) documentation, and all raw data for preparation and analysis of these samples, with the following exception. The raw data for the 0.1 ppbV and 1.0 ppbV Initial Calibration standard was missing from both data packages. A laboratory resubmittal was requested on 10/09/06 and the resubmittal was received by NEH on 10/18/06.

All samples were received at the laboratory in good condition and there were no COC or field/laboratory canister vacuum discrepancies noted.

## II. Data Package Completeness

BU1001

The Data package reviewed was identified as follows: L0612699 + L0612717

Were all required reporting forms and associated raw data included in the data package? **Yes** / **(No)**

Was the data accompanied by a Data Review Checklist / Project Narrative explaining any non-compliance issues with the analyses? **(Yes)** / **No**.

Were all sample analyses requested on the Chain-of-Custody performed by the laboratory? **(Yes)** / **No**.

Were there any Chain-of-custody deviations noted? (e.g., labeling discrepancy between SUMMA canisters, obvious problems with canisters, etc.) **Yes** / **(No)** Was a "Sample Discrepancy Report" Issued? **Yes / No** (NA)

**ACTION**: If the initial Pressure (vacuum) in the field of a canister is < 25" Hg, of pressure of a canister upon receipt at the lab is > 15" Hg, or the receipt pressure measured at AWHL is > ± 5" Hg from the final pressure recorded for the canister in the field (as it appears on the COC), estimate all results (J and UJ).

Comments:

Initial Calibrations for TO-15 were not complete - see pg TO-15-1A of this checklist for resubmittal request.

Tier III - type DV done on 2 Projects L0612699 + L0612717 - These were supposed to be combined into a single project but lab split them into 2 -

Resubmittal of Calibration data received 10/18/06

**Nancy C. Rothman, Ph.D.**

**From:** "Nancy C. Rothman, Ph.D." <n.rothman@patmedia.net>
**To:** "Denise McLaughlin" <dmclaughlin@alphalab.com>
**Cc:** "Susan D Chapnick" <s.chapnick@comcast.net>; "Kelly Dubois" <kdubois@sanbornhead.com>; "Brad Green" <bgreen@sanbornhead.com>
**Sent:** Monday, October 09, 2006 1:02 PM
**Subject:** Resubmittal Request for L0612699 & L0612717 Blackburn Phase 1B-4

Denise:

In performing the Tier III-type Data Validation of the TO-15 air work AWHL recently performed for Blackburn & Union Privileges Superfund Site, Phase 1B-4, I found that 2 sets of initial calibrations are missing from the data packages (Projects L0612699 & L0612717). The Initial Calibration summaries for most of the targets of interest show a 0.1 ppbV and a 1.0 ppbV standard as part of the calibrations but raw data is missing for these standards. For example, I was trying to recalculate the RRF for Trichloroethene and realized that the 0.1 ppbV standard in the data package does not report this compound and the 1.0 ppbV standard in the package is missing all of the quantitation information. Please resubmit the 0.1 ppbV and 1.0 ppbV initial calibration standards from 9/13/06 electronically to SHA and to me.

Thanks
Nancy
**********

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TO-15-1A

**Case Narrative Review**

1. Review the Case Narrative provided with the data package. Were there any issues addressed in the case narrative that were not addressed in the Data Usability Checklist? **Yes** / (**No**) Was the narrative complete? (**Yes**) / **No**. If modifications to the TO-15 method were made, did AWHL clearly identify them in the project? (**Yes**) / **No**

Comments:

Lab SOP followed - part of Phase 1B-4 QAPP ⇒ Any lab-specific modifications addressed in the SOP.

No issues not addressed in Narrative -

## III. Review of Volatile Air Data

1. Canister Condition

The quality control related to preparation of the canisters prior to sampling are reviewed to ensure the accuracy of the reported results.

Does the laboratory indicate that the canisters were cleaned prior to being shipped to the field for analysis? (Yes) / No Was the cleanliness of the canisters verified by analysis? **Yes / No** Were the canisters leak checked by the laboratory prior to shipment to the field? **Yes / No** Was data presented in the data package to verify these results or did the laboratory indicate these canister conditions in their narrative? **Data present / Narrative certification** (SOP)

Were there any anomalies noted in the field sampling records about the SUMMA canister conditions? **Yes** / (No) If yes, list issues below.

**Action**: If there is no indication about how the canisters were prepared, contact the laboratory for documentation. If there were issues noted in the field sampling logs or on the COC about the canister conditions, action may be required to qualify sample data as estimated (J or UJ) or, if issues are deemed severe enough, data may require rejection (R). Professional judgment is required in data qualification.

Comments:

The lab SOP for cleaning + certification of canisters is Alpha SOP/17-05 & TO-15 SOP indicates all records of cleaning maintained in lab at lab. Raw data for cleaning was not contained in data package - OK

Canisters were received in acceptable condition at the field (Vacuum >25" Hg) + field final vacuum (written on COC) + lab Canister log (sent as pdf to NEH, see page TO-15-3A) indicates that Field final + lab receipt vacuums were within reasonable agreement (< ± 5" Hg difference) ⇒ No issues with canisters.

2.7L Canisters used per QAPP.

# Alpha Woods Hole Labs
## 2.7L Canister Log

H8

TO15 APH-QC

TO-15-3A

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 123 | 8/15/06 | -29.4 | ~~29169~~ 29389 | 8/24/06 | GEO | 8/30/06 | 12074.3 | -20.0 |
| 2 | 380 | | -29.4 | 29389 | 8/24/06 | GEO | 8/30/06 | 12074.4 | -28.9 |
| 3 | 333 | | -29.4 | 29169 | 8/24/06 | SANBORN | 9/8/06 | 12717.7 | -3.5 |
| 4 | 254 | | -29.4 | | | | | 2717.5 | -3.3 |
| 5 | 172 | | -29.4 | | | | 9-6-06 | 12699.3 | -3.6 |
| 6 | 366 | | -29.4 | | | | 9-6-06 | 12699.2 | -4.5 |
| 7 | 112 | | -29.4 | | | | 9/8/06 | 2717.8 | -5.3 |
| 8 | 369 | | -29.4 | | | | 9-6-06 | 12699.1 | -5.0 |
| 9 | 364 | | -29.4 | | | | 9/8/06 | 2717.4 | -2.9 |
| 10 | 320 | | -29.4 | | | | | 2717.6 | -3.3 |
| 11 | 133 | | -29.4 | | | | | 2717.2 | -2.9 |
| 12 | 231 | | -29.4 | | | | | 2717.1 | -3.3 |
| 13 | 211 | | -29.4 | | | | 9-6-06 | 12699.4 | -3.9 |
| 14 | 222 | | -29.4 | | | | 9/8/06 | 2717.3 | -5.0 |
| 15 | 394 | | -29.4 | 29377 | 8/24/06 | SANBORN | | 12073.2 | -0.3 |
| 16 | 395 | | -29.4 | | | | | 10273.3 | -2.1 |
| 17 | 108 | | -29.4 | | | | | 12073.4 | -1.5 |
| 18 | 1066 | | -29.4 | | | | | 12073.1 | -29.0 |

Can Cleaner # 2

Shelf # 4

Final Pressure., mTorr 39

Initials: [signature]

| | TO-15 | APH |
|---|---|---|
| Canister QC Data File: | 0821T020 | 0817A07.d |
| | Air Lab 1 | Air Lab 5 |

Form No.: 03-10

2. Holding Times

Holding times are reviewed to ensure the accuracy of the reported results. The table on the following page (Table 2a) was completed to document the holding times and QC association for the samples.

Were the samples analyzed within 14 days of sample receipt (AWHL SOP 17/0-1)? **Yes** / **No**. If no, list below the affected samples and the number of days outside of holding time.

**Action**: If 14 days < HT ≤ 28days, estimate detects and non-detects (J and UJ); if HT > 28days, estimate (J) detects and reject (R) non-detects, or use professional judgment.

Comments:
Samples were all analyzed by TO-15 & APH within 14 days of collection ⇒ HT met - No Action

Table 2a. Holding Time and Associated QC Table

Sample Matrix: Air

| | Sample ID | Date Sampled | Field Blanks | Method Blank | LCS | Date Analyzed | DF |
|---|---|---|---|---|---|---|---|
| LD612699-01 | SV-09/09-06-06 | 9/6/06 | N A | WG253289-2 | WG253289-1 | 9/13/06 | 1 |
| -02 | SV-10/09-06-06 | ↓ | ↓ | ↓ | ↓ | ↓ | 1 |
| -03 | SV-07/09-06-06 | | | | | | 1 |
| -04 | SV-08/09-06-06 | ↓ | ↓ | ↓ | ↓ | ↓ | 1 |
| LD612717-01 | SV-06/09-07-06 | 9/7/06 | | WG253281-2 | WG253284 | 9/14/06 | 1 |
| -02 | SV-02/09-07-06 | | | | | | 2 |
| -03 | SV-03/09-07-06 | | | | | | 1 |
| -04 | SV-04/09-07-06 | | | | | | 1 |
| -05 | SV-05/09-07-06 | | | | | | 1 |
| -06 | SV-01/09-07-06 | | | | | | 10 |
| -07 | DW-1001/09-07-06 | | | | | | 10 |
| -08 | AA-01/09-07-06 | ↓ | ↓ | ↓ | ↓ | ↓ | 1 |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | APH performed on all | samples on | 9/11/06 | - MB = WG | 252926 | -2 | |
| | | | | LCS = WG | 252926 | -1 | |

3. GC/MS Instrument Performance Check

The BFB instrument performance checks (tunes) are reviewed to assess the accuracy and sensitivity of the results relative to instrument performance.

Review the tune summaries for BFB

Were all SW-846 8260B defined mass calibration and ion abundance criteria met for the BFB analyses (per AWHL modification of TO-15 method)? (Yes) / No. If no, list below the tune and affected samples.

BFB MASS INTENSITY CRITERIA PER SW-846 METHOD 8260B

| m/z | Required Intensity (relative abundance) |
|---|---|
| 50 | 15 to 40% of m/z 95 |
| 75 | 30 to 60% of m/z 95 |
| 95 | Base peak, 100% relative abundance |
| 96 | 5 to 9% of m/z 95 |
| 173 | Less than 2% of m/z 174 |
| 174 | Greater than 50% of m/z 95 |
| 175 | 5 to 9% of m/z 174 |
| 176 | Greater than 95% but less than 101% of m/z 174 |
| 177 | 5 to 9% of m/z 176 |

Review the raw data for one tune. Did the laboratory obtain the BFB mass spectrum in a straight-forward manner (e.g., average of three scans centered across the BFB peak with background subtraction from a scan within 20 scans prior to the BFB scan)? (Yes) / No. If no, list below the method used to obtain the mass spectrum and the affected samples.

Were all samples (including QC) analyzed within 24 hours of an acceptable tune? (Yes) / No. If no, list below the affected samples.

**Action:** If the mass assignment criteria were not met reject (R) all associated data. Use professional judgment to qualify data acquired outside of tune time.

Comments:
BFB 9/13/06 @ 13.44 Tune criteria used = criteria shown above - slightly different (e.g. 175 m/z in lab data had 4-9% Abundance relative to m/z 174). Criteria listed above was met for the tune.

BFB 9/11/06 @ 11:05 am used for APH - This criteria used by lab was the same as given above.

Abundances were met for all samples

4. Initial Calibration

The initial calibration (ICAL) data are reviewed to determine if the standards were compliant with the method protocols.

Review the Initial Calibration Data Summary. Check and recalculate the RRFs, avg. RRF and %RSD for at least one volatile analyte across the ICAL. Does the avg. RRF and %RSD check back to the raw data? **Yes / No.**

Were at least five concentration levels of each compound analyzed during the initial calibration? **Yes / No (see Worksheet #9b for project-specific list of VOCs)** Were all calibration standards analyzed within 24 hours of BFB tune? **Yes / No**

Were retention times for each target analyte stable across the calibration (i.e., within ± 0.06 RRT units of the mean RT for each compound)? **Yes / No**

Did the initial calibration meet %RSD criteria of ≤ 30% for all project target analytes and surrogates? **Yes / No** If no, was linear or quadratic fit applied to the calibration resulting in a correlation coefficient > 0.99? **Yes / No** . Was the average %RSD across all analytes ≤ 30%? **Yes / No** NA

**Action:** If the %RSD >30% and/or $r^2 < 0.99$, qualify positive and non-detected results as estimated (J and UJ). Sound technical judgment should be used in qualification of the data. The results for each sample associated with ICAL should be evaluated to determine if a result reported would be impacted by the mis-calibration.

ICAL Check: Compound Checked Trichloroethene

| | | | Level 1 | Level 2 | Level 3 | Level 4 | Level 5 | Avg. RRF | %RSD | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20 | 50 | Concentration | 0.1 | 0.5 | 1.0 | 5 | 10 | | | 80 | 100 |
| 383628 | 1069587 | Response Cpd | | 7276 | | 87354 | 176209 | | | 1891972 | 2341558 |
| 10 | 10 | Conc, IS | | 10 | | 10 | 10 | | | 10 | 10 |
| 669972 | 755569 | Response IS | | 572713 | | 477433 | 617366 | | | ~~617366~~ | 968336 |
| 0.2863 | 0.2831 | RRF | | 0.2541 | | 0.3659 | 0.2854 | ~~0.2845~~ | ~~14%~~ | 860519 0.2748 | 0.2418 |

Nov 10/18/06 - See 7A

ICAL TO-15 9/13/06; APH 9/1/06, 0.1, 0.5, 1, 5, 10, 20, 50, 80 + 100 ppbV
APH 0.4, 0.8, 4, 20, 50, 80 + 100 ppbV - %RSD < 30% for 2-methylnaphthalene. Naphthalene %RSD = 35.12 so quadratic fit done with $r^2$ = 0.996 => OK

Acetone - linear regression w/ $r^2$ = 0.998, MeCl2 - linear w/ $r^2$ = 0.997, MTBE quadratic w/ $r^2$ = 0.999, vinyl acetate linear reg. with $r^2$ = 0.999; Benzene linear reg. $r^2$ = 1.0 Toluene Quad fit w/ $r^2$ = 0.999; 2-Hexanone quad fit w/ $r^2$ > 0.998; Dibromochloromethane quad fit w/ $r^2$ > 0.999; Ethylbenzene, m/p-xylene, bromoform $r^2$ > 0.996 Quad fits; styrene, o-xylene + 1,1,2,2-tetrachloroethane quad fits with $r^2$ > 0.995.

TO-15 - 7 *New Environmental Horizons, Inc.*

See page TO-15-7A + TO-15-1A for Resubmittal

0.1 ppbv + 1.0 ppbv Restandards received 10/18/04

| Conc. | 0.1 | 1.0 | Avg. RRF | % RSD |
|---|---|---|---|---|
| Resp. Cpd | 3007 | 16942 | All Lab | — |
| Resp. IS | 892576 | 449735 | — | — |
| Conc. IS | 10 | 10 | — | — |
| RRF | 0.3369 | 0.3767 | 0.3006 ✓ | 16% ✓ |

ICAL was verified once these 2 extra standards were received -

No Action Required

5. Continuing Calibration Check

The continuing calibration (CCAL or CCV) data are reviewed to determine if the standards were contractually compliant.

Review the Continuing Calibrations and Summaries. Check and recalculate the RRF and %Recovery (%Rec) for at least one of the target volatile compounds in one of the CCALs. Does the RRF and %Rec check back to the raw data? **Yes / No.**

Was a continuing calibration check performed every 24 hours following tuning verification of the instrument? **Yes / No.** If no, list below all the affected samples.

Were the target analytes recovered within the expected retention time window based upon the initial calibration (i.e., drift of instrument was acceptable)? **Yes / No.**

Did the continuing calibrations meet criteria for verification of %Rec 70-130% for all compounds? **Yes / No**

**Action:** If a %Rec is outside of 70-130%, this compound should be checked in each sample.
**Non-detects**: If the CCAL indicates the system had enhanced detection of the compound on the day of CCAL as compared in the ICAL, and the compound is non-detect in the associated samples, no action is required. If the CCAL indicates a loss in instrument sensitivity on day of analysis for detection of a compound, estimate (UJ) the result with possible low bias.
**Detects:** If CCAL %Rec shows loss in instrument sensitivity, estimated (J) result with possible low bias. If CCAL %Rec shows increase in instrument sensitivity, estimated (J) result with possible high bias.

APH 9/1/06

see next page -

CCAL Check: Standard ID 0911a01.D Compound Checked Naphthalene

APHSTD 020

| Responses | RRF | avg. RRF ICAL | % Rec |
|---|---|---|---|
| Cpd: 143533Z 1@104.77 | | | |
| IS: 11038314 C 10 | | | |

TO-15 CCV - 9/15/06 - %D ≤ ±30% (70-130% Rec) for all but MTBE %Drift = -38.3% due to enhanced sensitivity during CCAL as compared to ICAL + 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1,2-Dichlorobenzene + 1,2,4-Trichlorobenzene had %D or %Drift > -30% (e.g. -41%, -48%) - All due to enhanced detection to compounds in CCAL.

* Action: 1,3-Dichlorobenzene in SV-03/09-07-06 qualified as estimated (J) with overall indeterminate bias due to other QC issues.

All other samples reported ND for these compounds ⇒ No Action for enhanced sensitivity to detection.

Continued on page TO-15 - ~~8~~ 9 Nov 10/11/06

APH CCALs: 9/11/06 - naphthalene & 2-methylnaphthalene %D < ± 30% =>
APH CCAL OK => No Action.

20 ppbV Naphthalene std => mwt = 128.19 ; DF = 1

$$mg/m^3 = \frac{20 \times 128.19}{24.47} = 104.77$$

Is Amt. given in mg/m³ => Need to Calc. RRF using mg/m³

Naphthalene done by Quadratic fit => CCV check using RRFs not valid.

Instead RRF for TO-15 Chloroethane checked.

Resp. chloroethane in CCAL (9/13/06) - 117403 @ 10 ppbV
IS Resp (Bromodichloromethane) was 485083 @ 10 ppbV

$$\therefore RRF = \frac{117403 \times 10}{485083 \times 10} = 0.2420$$

ICAL $\overline{RRF}$ = 0.24519

%D = 1.29 % ✓

6. Laboratory Method and Field Equipment Blank Results

Laboratory method and field blank (equipment blanks) results are reviewed to assess the presence of contaminants, which affect the accuracy and sensitivity of the results. See Table 2a. where the Holding Time and Associated QC Table was completed for the samples within this SDG.

Were equipment blanks (EB) associated with the samples received at the lab? **Yes** / (**No.**)

Was each sample analysis associated with an appropriate method blank? (**Yes**) / **No.** Was there a method blank for each 24-hour tune? (**Yes**) / **No** If no, list below affected samples.

Review the reporting forms for each method and equipment blank. Were any target compounds in the blanks detected? **Yes** / (**No.**)

**NOTE: Ambient Air samples are evaluated as field samples and are not used in this assessment to associate with soil vapor samples to determine if blank action is warranted based on the "background" of the ambient air.**

**Action:** - Blanks should not contain contaminants above the RL. The Blank Action Level is defined as five times the level seen in the blanks on a sample-specific basis (i.e., all dilutions for a sample analysis taken into consideration). The following actions should be taken if conditions warrant :

***Method Blank Evaluation***

1. If the reported result in a sample is below the reporting limit (sample < RL) and if the method blank contains a result above the sample-equivalent level reported, the result in the sample should be negated (U) and raised to the sample-specific RL for that sample
2. If the sample result is between the reporting limit and the blank Action Level for the method blank (RL < sample < Action Level), the result for the sample is negated (U) at the level found in the sample.
3. If the sample result is greater than the RL and the blank Action Level, no action is taken.

***Equipment Blank Evaluation***

1. If the reported result in a sample is below the blank Action Level, the result should be qualified (EB) to indicate that the results may be biased high (false positive).

Comments:
Blanks evaluated:

MB : WG253289-2 (TO15)
WG252926-2 (APH)

6. Laboratory and Field Blank Results - continued

| Blank ID | Contaminant / Level | Action Level | Sample/Reported Result | Corrected Result |
|---|---|---|---|---|
| | | | | |
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| | | | | |
| | | | No Blank Action | |
| | | | Required. | |
| | | | NM 10/11/06 | |
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7. Internal Standards

Internal Standard Responses

Review the Internal Standard (IS) Summary information.

Was the Retention Time for the IS' within ± 0.30 min of the corresponding IS in the associated CCAL? (Yes) / No. Were the Area Counts for each IS within 50% to 140% of the Areas from the associated CCAL? (Yes) / No

**Action**: Action is taken on only those compounds associated with a specific IS. If 20% < IS Response < 60% compared to IS in CCAL, estimate all associated compound results (J and UJ) with possible low bias. If the IS response is > 140%, estimate (J) positive results with possible high bias, no action required for non-detects. If the IS response is < 20% relative to CCAL, estimate detects (J) and reject (R ) non-detect.

Comment:

3 IS Area + RTs were all in criteria for all Samples in TO-15 + APH ⇒ No Action required.

8. Laboratory Control Sample Analysis

The Laboratory Control Samples (LCS and LCSD) are reviewed to assess the accuracy of the results relative to the analytical procedure.

Review the raw data and recovery information for the LCS and LCSD.

Did the laboratory perform a LCS/LCSD daily prior to sample analysis (at least once per every 24-hour tune)? (**Yes**) / **No**. If no, list below the affected samples.

Were the LCS recoveries within 70-130% for all targets? **Yes** / (**No**) Were the RPDs for all targets between the LCS/LCSD ≤ 25% for results > 5 x QL?. **Yes / No** (NA)

**Action:** . If the LCS recoveries are above criteria, estimate (J) positive results due to potential high bias, no qualification of non-detected results is necessary. If the LCS recoveries are between 10% and the lower recovery limit, estimate (J and UJ) positive and non-detect results for the samples associated with the analytical batch due to potential low bias in the results. If the recovery in the LCS is less than 10%, estimate (J) positive results due to low bias and use professional judgment to estimate (UJ) or reject (R) non-detect results due to potential false negatives. If the LCS/LCSD RPD > 25%, estimate results (J and UJ) for those compounds affected in the analytical batch.

Comments:

LCS - WG253289-1 (TO-15) - %Rec was acceptable (70-130%) for all except: 1,2,4-Trichlorobenzene 131%; 1,4-Dichlorobenzene 138%, 1,3-Dichlorobenzene 141% + 1,2-Dichlorobenzene 148%, MTBE 138% (mimics CCAL) -

*Actn: 1,3-Dichlorobenzene in SV-03 / 09-07-06 estimated (J) with possible high bias due to high LCS - overall bias indeterminate due to other QC issues.

LCS WG252926-1 (APH) - %Rec for Naphthalene & 2-Methylnaphthalene acceptable => No Actn required.

Lab SOP + TO-15 method - A single LCS OK - No LCSD done for this work => OK - No Actn

9. Sample Quantitation/Reporting Limits

Review raw data and reporting forms. What was the lowest concentration (ppbv) standard analyzed with the samples? 0.5 ppbV Were the sample-specific RLs based on this standard? (Yes) / No

$\mu g/m^3 = (ppbv \times Mwt \times DF) / 24.47$

where: Mwt = Molecular weight for the compound, g/mole
DF = Dilution Factor for analysis, unitless
24.47 = AWHL conversion factor = RT/P from ideal gas law with R at 0.08206 L-atm/mole-K; P = 1 atm (Standard pressure), and T = 25°C=298.16K

Reporting Limit checked (pick a non-detect in one sample and using the sample-specific DF, verify the RL. Compound checked: Trichloroethene ; Mwt 131.39

RL calculated 2.68 ug/m3 ; RL reported 2.68 ug/m3 ✓

Were all the compounds in the calibration standards reported for the samples? (Yes) / No. Were Tentatively Identified Compounds (TICs) reported for the samples? Yes / (No)

Did the sample-specific RLs for non-detected data meet the Worksheet #9b PQLs? (Yes) / (No) See below for m/p-Xylene

Comments:

Lab ICAL shows a 0.1 ppbV std but Raw Data missing - Lowest ICAL raw data vs for 0.5 ppbV

Lab reported results for 66 Compds which QAPP Worksheet #9b only required 40 Compds be reported - 26 additional compds shown on page TO-15-14A

All Targets Reported with RLs ≡ QAPP PQLs except Lab Reported m/p-Xylene RL at 1 ppbV rather than 0.5 ppbV since 2 isomers reported - This is acceptable & 1 ppbV here was < PALs.

PALs for DF=1 samples (see page 5) were not met (i.e. PQL > PAL) for 1,1,2,2-Tetrachloroethane; 1,1,2-Trichloroethane; 1,2-Dichloroethane; Bromodichloromethane; Carbon Tetrachloride; Chloroform; Dibromochloromethane, as indicated in Worksheet #9b, due to method limitation.

Cont'd on TO-15-14A + -14B

| Sort | Analysis Method Number | Analyte Name | Analyte CAS Number |
|---|---|---|---|
| 1 | TO-15 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 76-13-1 |
| 2 | TO-15 | 1,2,4-TRICHLOROBENZENE | 120-82-1 |
| 3 | TO-15 | 1,2,4-TRIMETHYLBENZENE | 95-63-6 |
| 4 | TO-15 | 1,2-DIBROMOETHANE | 106-93-4 |
| 5 | TO-15 | 1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE | 76-14-2 |
| 6 | TO-15 | 1,2-DICHLOROBENZENE | 95-50-1 |
| 7 | TO-15 | 1,3,5-TRIMETHYLBENZENE | 108-67-8 |
| 8 | TO-15 | 1,3-BUTADIENE | 106-99-0 |
| 9 | TO-15 | 1,3-DICHLOROBENZENE | 541-73-1 |
| 10 | TO-15 | 1,4-DICHLOROBENZENE | 106-46-7 |
| 11 | TO-15 | 1,4-DIOXANE | 123-91-1 |
| 12 | TO-15 | 2,2,4-TRIMETHYLPENTANE | 540-84-1 |
| 13 | TO-15 | 3-CHLOROPROPENE | 107-05-1 |
| 14 | TO-15 | 4-ETHYLTOLUENE | 622-96-8 |
| 15 | TO-15 | BENZYL CHLORIDE | 100-44-7 |
| 16 | TO-15 | CYCLOHEXANE | 110-82-7 |
| 17 | TO-15 | DICHLORODIFLUOROMETHANE | 75-71-8 |
| 18 | TO-15 | ETHYL ACETATE | 141-78-6 |
| 19 | TO-15 | ETHYL ALCOHOL | 64-17-5 |
| 20 | TO-15 | HEPTANE | 142-82-5 |
| 21 | TO-15 | HEXACHLOROBUTADIENE | 87-68-3 |
| 22 | TO-15 | ISO-PROPYL ALCOHOL | 67-63-0 |
| 23 | TO-15 | N-HEXANE | 110-54-3 |
| 24 | TO-15 | PROPYLENE | 115-07-1 |
| 25 | TO-15 | TETRAHYDROFURAN | 109-99-9 |
| 26 | TO-15 | VINYL BROMIDE | 593-60-2 |

TO-15-14A

Compounds reported by TO15 not requested in QAPP.xls

For Sample SV-02/09-07-06, lab performed a DF=2 dilution => in addition to compounds shown on pg TO-15-14 + Worksheet #9b, the following non-detected data exceeded PALs due to dilution:
1,2-Dichloropropane (benzene QL > PAL but result detected).

Samples SV-01/09-07-06 + OW-1001/09-07-06 were analyzed at DF=10 => in addition to compounds shown on previous page, the following non-detected data exceeded PALs due to dilution:
1,2-Dichloropropane, Benzene, Bromomethane, cis-1,3-Dichloropropene, Tetrachloroethene, trans-1,3-Dichloropropene + Vinyl chloride.

The data user will need to evaluate these non-detects at elevated RLs for usability.

11. Sample Qualitative and Quantitative Determination

Were the canisters pressurized with zero grade nitrogen or humid air prior to analysis? **Yes** / (**No**) If yes, was a dilution factor applied to the sample data? **Yes / No** (N/A)

Check the Mass Spectra of all positive detects. Did the Mass Spectra meet criteria (e.g., all ions > 10% matched those in reference spectra, etc – SOP/method criteria) (**Yes**) / **No**

Was the retention time (RT) for the detected result within ± 0.06 relative RT minutes of the standard component RT? (**Yes**) / **No** Did the primary/quantitation ion and secondary ion maximize a the same relative RT? (**Yes**) / **No**

Were all components reported in the samples quantitated within the calibration region of the instrument for the detected analytes? (**Yes**) / **No** Were results reported below the sample-specific RL reported as estimated due to uncertainty in quantitation? (**Yes**) / **No.** Were there any other data qualifiers on the results which may affect usability of the data? **Yes** / (**No.**) Explain all qualifiers below

Comments:

DF = 2 for SV-02/09-07-06; & DF = 10 for SV-01/09-07-06 & OW-1001 / 09-07-06 based on lab taking smaller volume for sample - i.e., 250mL = DF = 1 using which SV-02 only 125 mL analyzed - only 25mL analyzed for 2 other samples.

Mass Spectra of detects reasonably matched reference spectra ⇒ Quantitative & qualitative accuracy OK.

36 results in L0612717 and 10 results in L0612699 reported with "J" by lab due to result reported < RL.

These "J" data were accepted as estimated results with indeterminate bias due to reporting of results at or less than the instrument calibration range.

12. Field Duplicate Precision

Field duplicate samples are reviewed to assess representativeness of the sample aliquot to the area sampled and the precision of the results relative to field sampling techniques.

**Action**: If RPD > 30% and both results are > 5xQL, then estimate both results (J) with indeterminate bias. If RPD > 30% and one result > 5xQL and the other < QL, estimate both results (J). If one result is non-detect, and the other is < QL or < 5xQL, do not take action unless other data require action (i.e., use professional judgment). If one result is non-detect and the other is > 5xQL, estimate (UJ and J) both results.

Comments:

Field Duplicate Samples: SV-01/09-07-06 OW-1001/09-07-06

See page TO-15-16A where a spreadsheet comparison was made for results.

All Data > 5 x RL (SQL or QL) had RPD < 30% - some RPDs > 30% but results < QL ⇒ No Action required.

Acceptable FD precision for 12 detected VOCs.

No Action Required.

Field Duplicate Precision Evaluation Worksheet

Lab: AWHL
Date Sampled: 9/6-9/7/07
Method of Analysis: TO-15/APH

Lab Project #: BU1001
No. Samples 1A + 1FD
Matrix: Soil Vapor + Ambient Air

| Compound | Sample Result SV-01/09-07-06 | Sample Result SV-01/09-07-06 | Duplicate Result OW-1001/09-07-06 | Duplicate Result OW-1001/09-07-06 | | RPD | Action |
|---|---|---|---|---|---|---|---|
| 1,3,5-TRIMETHYLBENZENE | 28.4 | > QL but < 5X QL | 25.3 | > QL but < 5X QL | | 12 | No Action |
| 2-METHYLNAPHTHALENE | 2.3 | < QL | 2.32 | < QL | | 1 | No Action |
| ACETONE | 11.1 | < QL | 8.07 | < QL | | 32 | No Action |
| BROMODICHLOROMETHAN | 28.6 | < QL | 29.4 | < QL | | 3 | No Action |
| CHLOROFORM | 12.3 | < QL | 24.4 U | QL | | NA | No Action |
| CIS-1,2-DICHLOROETHENE | 40 | > QL but < 5X QL | 38.8 | > QL but < 5X QL | | 3 | No Action |
| ETHYL ALCOHOL | 12.8 | < QL | 37.6 U | QL | | NA | No Action |
| NAPHTHALENE | 7.15 | > QL but < 5X QL | 8.31 | > QL but < 5X QL | | 15 | No Action |
| O-XYLENE | 12.3 | < QL | 21.7 U | QL | | NA | No Action |
| P/M-XYLENE | 16.9 | < QL | 12.9 | < QL | | 27 | No Action |
| TOLUENE | 74.2 | > QL but < 5X QL | 55.7 | > QL but < 5X QL | | 28 | No Action |
| TRICHLOROETHENE | 3860 | > 5 x QL | 3840 | > 5 x QL | | 1 | No Action |

TO-15 - 16A

Date 10/11/06

Data Reviewer MJC.RH

New Environmental Horizons, Inc.

13. Additional QA/QC Issues

Were there any additional QA/QC issues noted in the project narrative or found during this review that were not previously addressed? (Yes) / No

List any additional issues which may affect the quality of the results. List the affected samples, QA/QC issue, and necessary actions taken in the comments section below.

Laboratory Duplicate for TO-15 done on a sample not associated with this client's projects - Sample/LD precision OK though.

APH LD done on sample SV-09/09-06-06 - Sample/LD precision for Naphthalene & 2-methylnaphthalene acceptable (RPD < 40%) => no action required.

There were no issues raised in narrative not already addressed.

## IV. Example Sample Calculations

Review of one sample per data package is performed to determine if sample results were correctly calculated and reported.

Sample ID: SV-01/09-07-06 was selected for review in this data package.

### A. Data Sheet Review

Were the data sheets completed according to the method requirements? (Yes) / No. If no, list below the affected fields.

### B. Quantitation Review

Reproduce a calculation for one volatile analyte in one of the samples that contained a positive result and compare the calculated result to the result reported by the laboratory.

Analyte Checked: Trichloroethene

Laboratory Result: 3860 ug/m³ Calculated Result: 3860 ug/m³ ✓

Example Calculation: 25 mL analysis => DF = 10

Response of Cpd = 1644140

IS Response = 761598 @ 10

$\overline{RRF_{ICAL}} = 0.3006$

$$Cmc\ (ppbV) = \frac{1644140 \times 10}{761598 \times 0.3006} \times 10 = 718.27\ ppbV$$

Mol Trichloroethene = 131.39

$$ug/m^3 = \frac{(718.27 \times 131.39)}{24.47} = 3857\ ug/m^3$$

$$= 3860\ ug/m^3$$

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# Groundwater Field Sampling Audit Checklist

Auditor: Brad Green_____ Field Team Leader: Mary Thomas_____
Audit Date: 9-25-06_____ Field Team Personnel: LAS, TMW, MBT, MTS_____

| Audit Items | Comments | Yes | No | NA |
|---|---|---|---|---|
| 1. What types of sampling equipment were observed during the audit (circle):<br>Bladder Pump<br>Instrument(s) to monitor water qualities parameters and flow through cell<br>Bailer<br>Peristaltic Pump<br>Other: _____ | | X<br>X | | |
| 2. Was the monitoring well developed prior to sampling? | Development performed previously. | | X | |
| 3. Prior to sampling was the well inspected for damage and reference point designation? | | X | | |
| 4. Immediately upon removal of the well cap were VOC's measured with a PID at the top of the well and recorded? | | X | | |
| 5. Was the presence of LNAPL checked for? | No history of LNAPL in well | | X | |
| 6. Was the bladder pump properly decontaminated (i.e. potable water rinse and scrub, non-phosphatic detergent wash and second potable water rinse) between each well location? | | X | | |
| 7. Was new tubing used at each sampling location? Was the tubing properly disposed of after the first use? | | X | | |
| 8.Was the pump, safety cable, tubing, and electrical lines lowered to a level such that the pump intake was at the approximate center of the saturated screen length of the well? | | X | | |
| 9. Was the groundwater level taken before and after the pump was started? | | X | | |
| 10. Was the water level measurement device decontaminated between sampling locations? | | X | | |
| 11. Where samples collected and containerized in the proper order? | | X | | |
| 11a. Was the Floating Product Layer sample taken before purging began (if applicable)? | | | | X |
| 11b. Were Dissolved Oxygen, Temperature, pH, Specific Conductance, Oxidation-Reduction Potential and Turbidity measurements taken during purging? | | X | | |
| 11c. Were the remaining samples collected in the order of the parameter's stability or volatilization reaction sensitivity? | | X | | |
| 11d. Were the sampling containers appropriately preserved (SVOCs, metals, TKN, anions/alkalinity unpreserved and WAD cyanide preserved with NaOH for all samples; VOCs, VPH, EPH preserved with HCl if sample pH < 9 or unpreserved if pH > 9)? | | X | | |
| 11e. Were field duplicates taken at the appropriate frequencies (i.e. one per every eighteen sampling locations) and on an analysis by analysis basis? | No duplicate collected at this location | | | X |
| 11f. Was a round of PE samples collected (if applicable)? | None performed | | | X |
| 12. Were equipment blank samples taken at the correct frequencies (i.e. every 18 locations)? | | | | X |
| 12a. Was laboratory provided de-ionized water pumped through new tubing? | | | | X |

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## Groundwater Field Sampling Audit Checklist

Auditor: Brad Green_____ Field Team Leader: Mary Thomas_____
Audit Date: 9-25-06_____ Field Team Personnel: LAS, TMW, MBT, MTS_____

| Audit Items | Comments | Yes | No | NA |
|---|---|---|---|---|
| 12b. Was the Bladder pump decontaminated before the equipment blank was sampled? | | | | X |
| 13. Was a table or a plastic sheet available to place all equipment on so that contact with the ground surface was limited? | | X | | |
| 14. Was the tubing and the flow-through-cell both shaded to prevent change in groundwater temperature? | | X | | |
| 15. As the well purging process was begun, was the water level drawdown and pump speed optimized? Was the target of drawdown attained? | | X | | |
| 16. As the purging process began, was the water level and pumping rate monitored every 3-5 minutes? | | X | | |
| 17. If the recharge rate of the well was less than the minimum pumping rate, what corrective action was taken (e.g., pump shut down and repeat purging process after well has recovered)? | | | | X |
| 18. During well purging, were turbidity, temperature, specific conductance, pH, ORP, and DO measured at the appropriate frequency to monitor field parameter stabilization? Were they measured with a flow-through cell? | | X | | |
| 18a. If the field parameters did not stabilize, what corrective action was taken? How long was the well monitored? | | | | X |
| 19. Were any corrective actions necessary due to pump tubing collapsing during sampling? If so, what were they (e.g., changing flow rates, changing tubing, etc.)? | | | | X |
| 20. Were all field measurements (e.g., pH, DO, Turbidity, Temperature, ORP, specific conductance) properly recorded on sampling form or in field notebook? | | X | | |
| 21. Were sample vials properly labeled with project name, unique sample identifier, date and time of collection, analysis to be performed, preservative, and initials of person collecting sample? | | X | | |
| 22. Were field notes recorded in a field log to document conditions during sampling such as weather, temperature, etc.? Were Locations recorded in a field log such that the exact locations of samples collected could be traced? | Did not review this audit item | | | X |
| Instrumentation | | | | |
| 1. Did the field sampler have a copy of the SOP for groundwater sampling and field measurement/screening equipment use and calibration for this procedure? | | X | | |
| 2. Was the pH meter calibrated on a daily basis? What buffers where used? | | X | | |
| 3. Was specific conductance calibrated on a daily basis? What was the specific conductance potential of the solution used? | | X | | |
| 4. Was the ORP probe checked against a Zobell solution at the beginning of the day? | | X | | |
| 5. Was the DO probe calibrated using saturated air and checked using a zero point solution daily? | | X | | |
| 6. Was an end of the day calibration check completed for the pH, specific conductance, ORP, DO probe and turbidity? | | X | | |

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# Groundwater Field Sampling Audit Checklist

Auditor: Brad Green_____ Field Team Leader: Mary Thomas_____
Audit Date: 9-25-06_____ Field Team Personnel: LAS, TMW, MBT, MTS_____

| Audit Items | Comments | Yes | No | NA |
|---|---|---|---|---|
| 7. Were appropriate calibration and calibration check field logs filled out? | | X | | |
| 8. Was the calibration of the turbidity meter checked daily using Gelex standards? What standards were used? | Did not audit this item | | | X |
| 9. When where the last time the turbidity meter was calibrated using Stablcal primary standards? | Did not audit this item | | | X |
| 10. When was the last time the membrane on the DO probe was changed? | Did not audit this item | | | X |
| 11. Was the accuracy of the temperature probe recently checked against WHDEL's certified thermometer? | | X | | |
| Groundwater Monitoring Well(s) sampled during Audit: SH-17S | | | | |

NOTES:

Date: _____ Auditor's Signature: _____

Sanborn, Head & Associates, Inc.
Consulting Engineers & Scientists

# Sediment Sampling Audit Checklist

Auditor: Brad Green_____ Field Team Leader: Don Flynn_____
Audit Date: 10-13-06 _____ Field Team Personnel: Don Flynn_____

| Audit Items | Comments | Yes | No | NA |
|---|---|---|---|---|
| **Sediment Sampling** | | | | |
| 1. What types of sampling equipment were observed during the audit (circle):<br>Ponar Grab<br>Eckman Grab<br>SS hand coring device<br>SS spoon, trowel and hand scoop<br>Sample jars<br>Line<br>Other: _____ | | <br><br><br>X<br>X<br>X | | |
| 2. Did the field sampler have a copy of the SOP for sediment sampling? | | X | | |
| 3. Was the sampling location approached from downstream, where practical? | Since these were floodplain sediments, samples were collected outside of surface water body | | | X |
| 4. Did collection of sediment sample proceed collection of surface water sample, at the same location (where applicable)? | Surface water samples not collected | | | X |
| 5. Was the sampling device appropriately placed into the sediment (correct depth, minimal disruption)? Were sediment samples collected from approximately 0-8"? | Yes, sample depth were 0-1 ft bgs and 1-3 ft bgs | X | | |
| 6. Was standing water allowed to drain from sampling? | | | | X |
| 7. Were the correct type and quantity of sample containers available for the location being sampled ? | | X | | |
| 8. Were VOC and AVS/SEM samples taken from the top 0-2cm of the first grab sample retrieved? | | | | X |
| 8a. Was the AVS/SEM container for analysis filled to ensure no head space? | | | | X |
| 8b. Were the containers for VOC analysis filled with approximately 5 grams of sediment each? | | | | X |
| 9. Was the first grab sample field -screened with a PID? | | X | | |
| 10. Were multi-grab samples needed to obtain the appropriate amount of sample? | | X | | |
| 11. When the sample was mixed in the stainless steel bowl were all large roots, twigs, leaves and etc. Removed from the sample? | | X | | |
| 11a. Was the container for analysis of SVOCs, metals, cyanide and TOC filled approximately ½ full? | Cyanide sample and TOC were not collected | X | | |
| 12. Were sample vials properly labeled with project name, unique sample identifier, date and time of collection, analysis to be performed, preservative, and initials of person collecting sample? | | X | | |
| 13. Was the sediment sample screened for pH? | | | X | |
| 14. Was equipment properly decontaminated (i.e. a potable rinse and scrub, a non-phosphatic detergent wash, a second potable water rinse, methanol rinse followed by a third potable rinse, then a DI water rinse, with a final rinse in surface water from the area of the next sample to be collected)? | | X | | |

Sanborn, Head & Associates, Inc.
CONSULTING ENGINEERS & SCIENTISTS

# Sediment Sampling Audit Checklist

Auditor: Brad Green Field Team Leader: Don Flynn
Audit Date: 10-13-06 Field Team Personnel: Don Flynn

| Audit Items | Comments | Yes | No | NA |
|---|---|---|---|---|
| 15. Was an equipment rinsate blank produced for all analytical parameters at the correct frequency? | | X | | |
| 15a. Was the equipment rinsate blank collected in an appropriate manner (i.e., produced after decontamination using laboratory supplied reagent free water)? | | X | | |
| 16. Was a field duplicate collected at the proper frequency (one in 20 samples for each matrix)? | | X | | |
| 17. Were field notes recorded in a field log to document conditions during sampling? | | X | | |
| 18. Was sample collection recorded on a chain-of-custody and was sample custody maintained during sampling? Where samples placed in a cooler with ice? | | X | | |
| Sediment locations sampled during Audit: FP-09C | | | | |

NOTES:

Date: Auditor's Signature:

# ASSESSMENT OF GROUNDWATER AND SURFACE WATER PH DATA USABILITY

SHA
ENGINEERS ▪ SCIENTISTS

SANBORN, HEAD & ASSOCIATES, INC.
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www.sanbornhead.com

# MEMORANDUM

To: 2032.00 File

From: Mary B. Thomas / Timothy M. White, P.G.

Checked by: Bradley A. Green, P.G.

Reviewed by: Charles A. Crocetti, Ph.D., P.G.

File: 2032.00

Date: August 3, 2007

Re: Assessment of Groundwater and Surface Water pH Data Usability
Phase 1B-5 Remedial Investigation
Blackburn & Union Privileges Superfund Site
Walpole, Massachusetts

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Given that pH is considered a definitive data parameter, Sanborn, Head & Associates, Inc. (SHA) completed an assessment of the quality assurance/quality control (QA/QC) procedures for analysis of pH in groundwater and surface water samples collected during the Phase 1B-5 Remedial Investigation (Phase 1B-5 RI) at the Blackburn & Union Privileges Superfund Site (Site). Tables of the groundwater and surface water pH data are included as Attachments 1 and 2 to this summary memorandum.

## Groundwater

Approximately 46 groundwater samples were collected during the Phase 1B-5 RI groundwater sampling round conducted from September 25 through October 5, 2006. Groundwater samples were collected using low flow techniques, consistent with the Standard Operating Procedure (SOP) for Groundwater Sampling (SOP S-1669F) and the SOP for Collection of Groundwater Samples from Shallow Well Points (SOP S-2032E). QA/QC procedures performed during groundwater sampling included daily calibration of the Yellow Spring Instruments (YSI) pH probe (included on the YSI 556 sonde and measured using a flow-through cell). A three point calibration of 4, 7 and 10 s.u., was performed when calibrating for groundwater pH values between 4 and 10 s.u., and as required for the YSI instruments, a two point calibration of 7 and 12.45 s.u. was conducted when calibration for groundwater with pH greater than 10 s.u. was necessary. The calibration range of the YSI pH probe was determined by reviewing previous groundwater pH data collected during earlier groundwater sampling rounds. Following calibration, an initial three-point laboratory control sample (LCS) was analyzed to confirm proper calibration of the instrument (using standards of pH 4, 7 and 10 s.u. or 7, 10 and 12.45

s.u., as appropriate). In addition, a three-point calibration check was completed at the end of each day (or prior to calibration of the instrument to a different pH range).

The LCS and calibration checks performed during measurement of groundwater samples from the Site were generally within ±0.2 s.u., as established in United States Environmental Protection Agency Region 1 (USEPA-NE) Quality Assurance Project Plan (QAPP) Worksheet #23a. When the end-of-the-day calibration checks were not within ±0.2 s.u. for at least two of the three calibration points for the field-measured value (i.e., the 7 and 10 s.u. calibration points, if the pH of the groundwater sampled was 8.5 s.u.), pH measurements were qualified as estimated (J) and assigned an indeterminate (I) bias. On several occasions, the end-of-the-day calibration check was greater than 2 times the calibration check acceptance criteria of ±0.2 s.u.; in these cases, the pH measurement was rejected (R). A total of 4 of the 46 pH measurements (approximately 9%) made on groundwater samples collected during the September/October 2006 sampling round were flagged as estimated values (J) due to end-of-the-day calibration checks which were not within ±0.2 s.u., and 4 of the 46 pH measurements (approximately 9%) were rejected.

One additional pH measurement (from well SH-01R) was also qualified as estimated (J) and assigned an indeterminate (I) bias because the pH measurement (13.1 s.u.) exceeded the highest calibration standard commercially available (12.45 s.u. at 25 degrees centigrade). Linearity of the pH calibration curve above this standard is uncertain. Results greater than 12.45 s.u. (temperature-adjusted) are therefore considered estimated values.

In accordance with the low flow groundwater sampling SOP, stabilization of water quality parameters, including pH, was achieved prior to collection of the groundwater sample for chemical analysis. Therefore, multiple pH measurements were collected during purging of each groundwater monitoring well; as required by SOP S-1669F, these readings were within ±0.1 s.u. for three or more consecutive measurements. These multiple pH measurements are considered as effective as field duplicate samples in evaluating the representativeness and precision of the pH measurements made on groundwater samples from the Site. Since three or more consecutive pH readings were within ±0.1 s.u. for each monitoring well sampled, the Measurement Performance Criteria (MPC) established in USEPA-NE QAPP Worksheet #23a for field duplicate samples for pH was achieved during the Phase 1B-5 Supplemental RI groundwater sampling round.

Completeness of pH measurements in groundwater from the Site was 91%, which exceeds the MPC established in the QAPP for completeness of 90%. In addition, approximately 88% of the non-rejected pH measurements performed on groundwater samples from the Site collected during the Phase 1B-5 RI groundwater sampling round were not qualified.

**Surface Water**

The pH of four surface water samples was measured during Phase 1B-5 RI activities, conducted on September 29, 2006. QA/QC procedures performed during pH sampling of surface water included calibration of the YSI pH probe (included on the YSI 556 sonde used for sampling). A three point calibration (using standards with pH of 4, 7 and 10 s.u.) was performed. Following

calibration, an initial three point LCS was analyzed to confirm proper calibration of the instrument. In addition, a three point calibration check was completed at the end of the day. The LCS and calibration checks performed during measurement of surface water samples from the September 2006 surface water sampling round were within ±0.2 s.u., as established in USEPA-NE QAPP Worksheet #23a.

Water quality parameters, including pH, were allowed to equilibrate prior to collection of the surface water sample for chemical analysis. Therefore, multiple pH measurements were observed prior to sample collection. The multiple pH observations are considered effective and suggest good representativeness and precision of the pH measurements.

In total, 100% of the pH measurements performed on September 29, 2006 on surface water from the Site were not qualified. In addition, surface water completeness was 100%, exceeding the MPC established in the QAPP for completeness of 90%.

MBT/TMW:tmw

Attachment 1: Summary of Field Measurements – Groundwater pH
Attachment 2: Summary of Field Measurements – Surface Water pH

S:\CONDATA\2000s\2032\Phases 1B-4 & 1B-5 Report\02 Draft Phase 1B-4 & 1B-5 Rep\App C\20070803_pH Usability Report.doc

**ATTACHMENT 1**
**Summary of Field Measurements - Groundwater pH**
**Phase 1B-5 Remedial Investigation**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**

| Sample Location | Collection Date | pH (s.u.) | Qualifier | Bias |
|---|---|---|---|---|
| SH-01D | 10/3/2006 | 13.8 | R | |
| SH-01R | 10/4/2006 | 13.1 | J | I |
| SH-01S | 10/5/2006 | 11.1 | | |
| SH-02R | 9/29/2006 | 7.5 | | |
| SH-03D | 10/3/2006 | 7.0 | | |
| SH-03S | 9/29/2006 | 6.8 | | |
| SH-04S | 10/4/2006 | 10.4 | R | |
| SH-05D | 10/2/2006 | 6.8 | | |
| SH-05R-A | 10/3/2006 | 7.2 | | |
| SH-05R-B | 10/3/2006 | 7.3 | | |
| SH-05S | 10/4/2006 | 10.7 | | |
| SH-06R-A | 10/2/2006 | 6.2 | | |
| SH-06R-B | 10/2/2006 | 6.2 | | |
| SH-12S | 10/2/2006 | 5.7 | | |
| SH-13S | 9/28/2006 | 5.8 | | |
| SH-14D | 10/2/2006 | 6.2 | | |
| SH-14S | 10/2/2006 | 6.4 | | |
| SH-15D | 9/27/2006 | 6.3 | R | |
| SH-15S | 10/3/2006 | 10.4 | | |
| SH-17D | 10/5/2006 | 10.8 | | |
| SH-17R | 10/4/2006 | 10.6 | | |
| SH-17S | 9/25/2006 | 5.0 | | |
| SH-18D | 9/26/2006 | 5.9 | | |
| SH-18S | 9/26/2006 | 5.8 | | |
| SH-19D | 9/25/2006 | 5.7 | J | I |
| SH-19R | 9/28/2006 | 7.4 | | |
| SH-19S | 9/29/2006 | 5.0 | | |
| SH-21S | 9/26/2006 | 4.7 | J | I |
| SH-22S | 9/25/2006 | 6.0 | | |
| SH-23S | 9/25/2006 | 5.3 | | |
| SH-24R | 9/28/2006 | 7.5 | | |
| SH-24S | 9/28/2006 | 5.9 | | |
| SH-25D | 9/27/2006 | 7.0 | R | |
| SH-25S | 9/26/2006 | 6.7 | | |
| SH-26S | 10/4/2006 | 10.7 | | |
| SH-27D | 10/2/2006 | 6.5 | | |
| SH-27R | 9/29/2006 | 6.2 | | |
| SH-27S | 9/25/2006 | 6.0 | | |
| SH-28D | 9/27/2006 | 6.8 | | |
| SH-28R | 9/29/2006 | 6.3 | | |
| SH-28S | 9/27/2006 | 5.7 | | |
| WP-01 | 9/26/2006 | 5.8 | J | I |
| WP-03 | 9/28/2006 | 4.5 | | |
| WP-04 | 9/27/2006 | 5.4 | J | I |
| WP-05 | 9/27/2006 | 4.2 | | |
| WP-06 | 10/5/2006 | 9.8 | | |

Notes:

1. Groundwater samples were collected using low flow techniques, consistent with the SOP for Groundwater Sampling (SOP S-1669F) and the SOP for Collection of Groundwater Samples from Shallow Well Points (SOP S-2032E), using a YSI 556 sonde with flow through cell. Field measurements of pH in groundwater are discussed in more detail in the attached memorandum. pH is reported in standard pH units (s.u.).

"R" - Indicates data rejected during validation.
"J" - The associated numerical value is an estimated quanitity due to quality control exceedance(s). The value is usable for project objectives with the documentation of the uncertainty, bias, and/or imprecision.
"I" - Indeterminate

**ATTACHMENT 2**
**Summary of Field Measurements - Surface Water pH**
**Phase 1B-5 Remedial Investigation**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**

| Sample Location | Collection Date | pH (s.u.) | Qualifier | Bias |
|---|---|---|---|---|
| SW-108 | 9/29/2006 | 6.7 | | |
| SW-107 | 9/29/2006 | 8.6 | | |
| SW-105B | 9/29/2006 | 7 | | |
| SW-102 | 9/29/2006 | 7.1 | | |

Notes:

1. Surface water samples were collected using a YSI 556 sonde with flow through cell. Field measurements of pH in groundwater are discussed in more detail in the attached memorandum. pH is reported in standard pH units (s.u.).

# APPENDIX D

# CORRELATION PLOTS

**Figure D-1**
**Temperature vs. pH**
**2006 Groundwater Sampling Round**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**

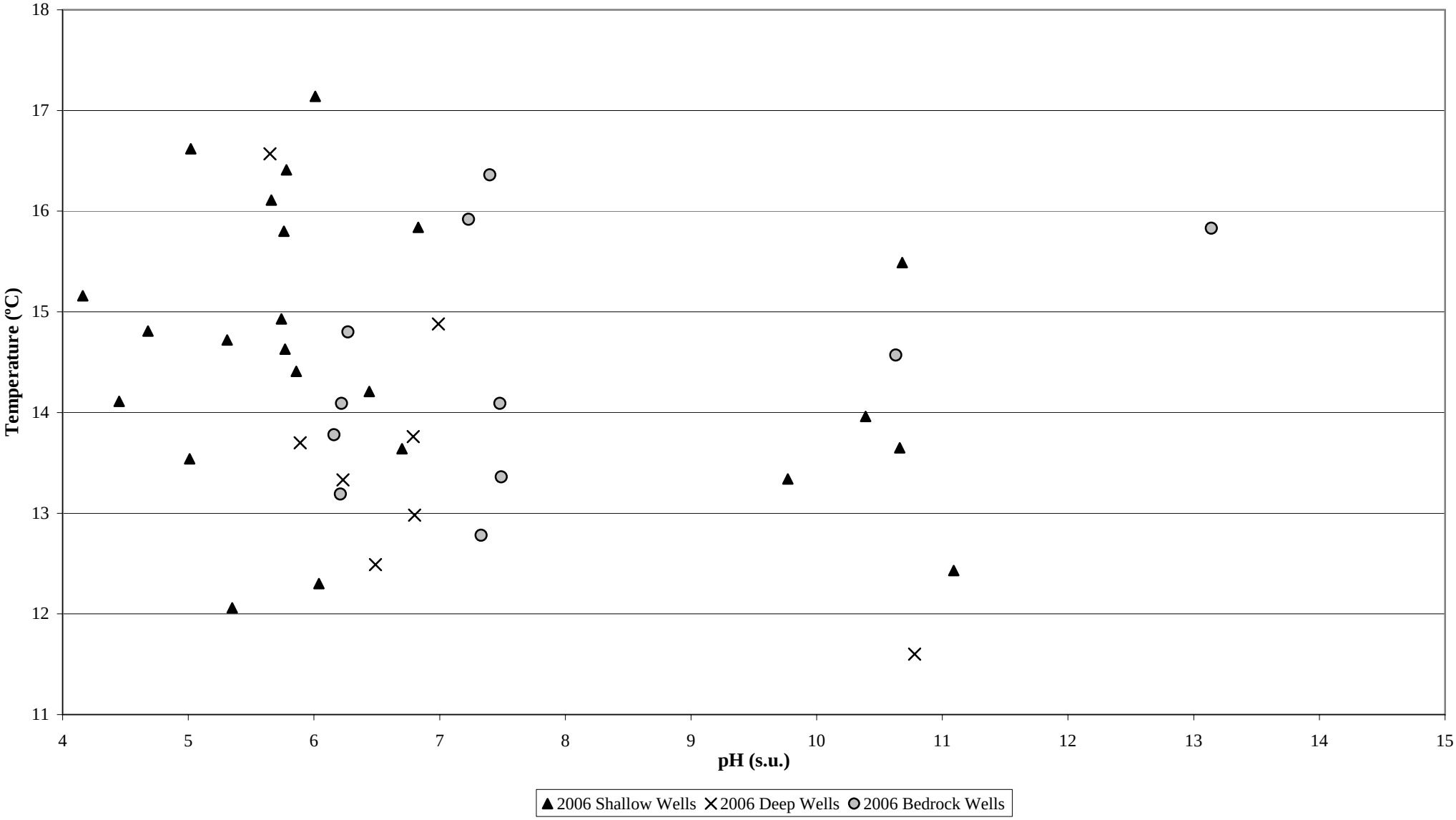

**Figure D-2**
**Specific Conductance vs. pH**
**2006 Groundwater Sampling Round**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**

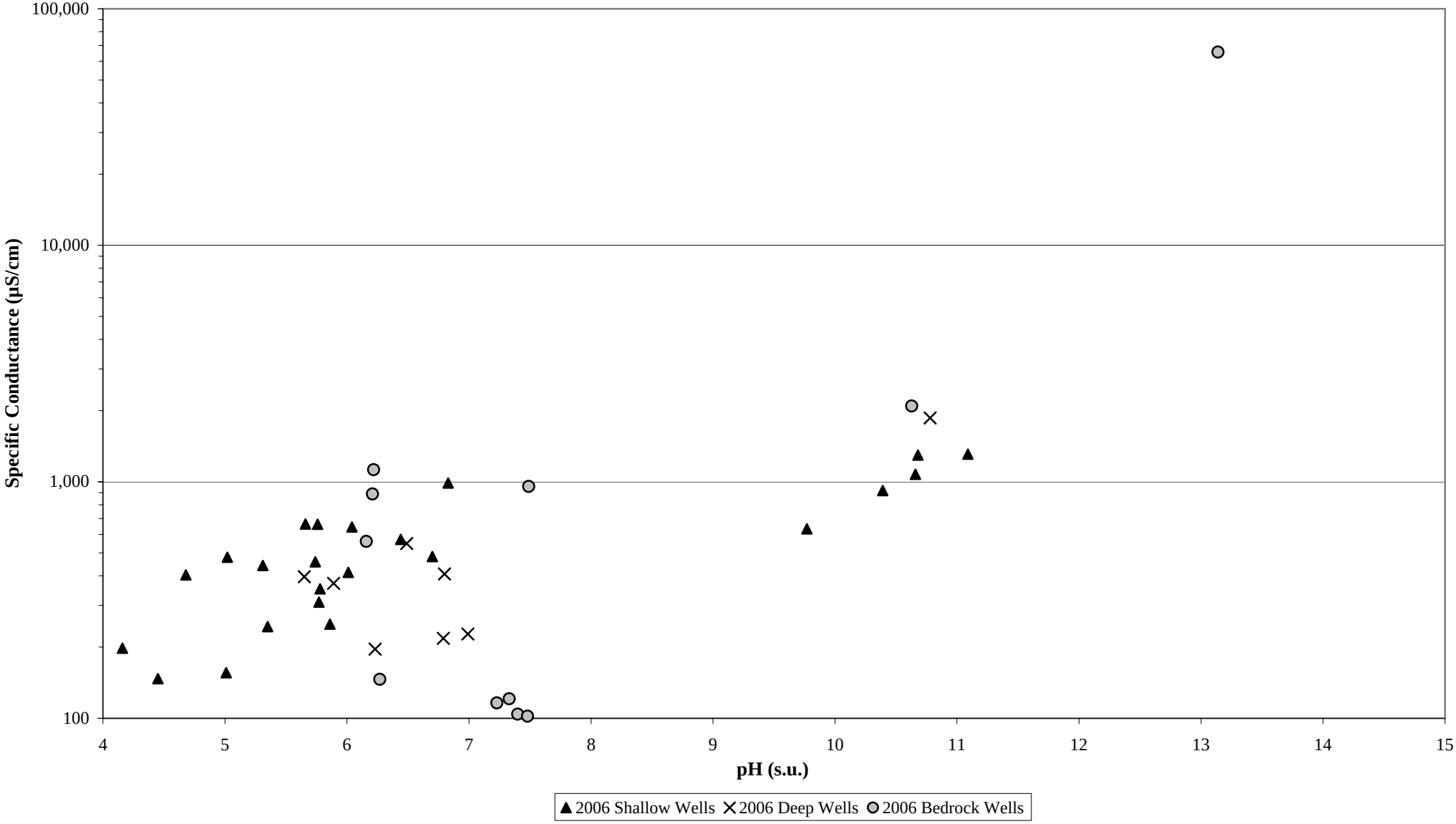

**Figure D-3**
**Dissolved Oxygen vs. pH**
**2006 Groundwater Sampling Round**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**

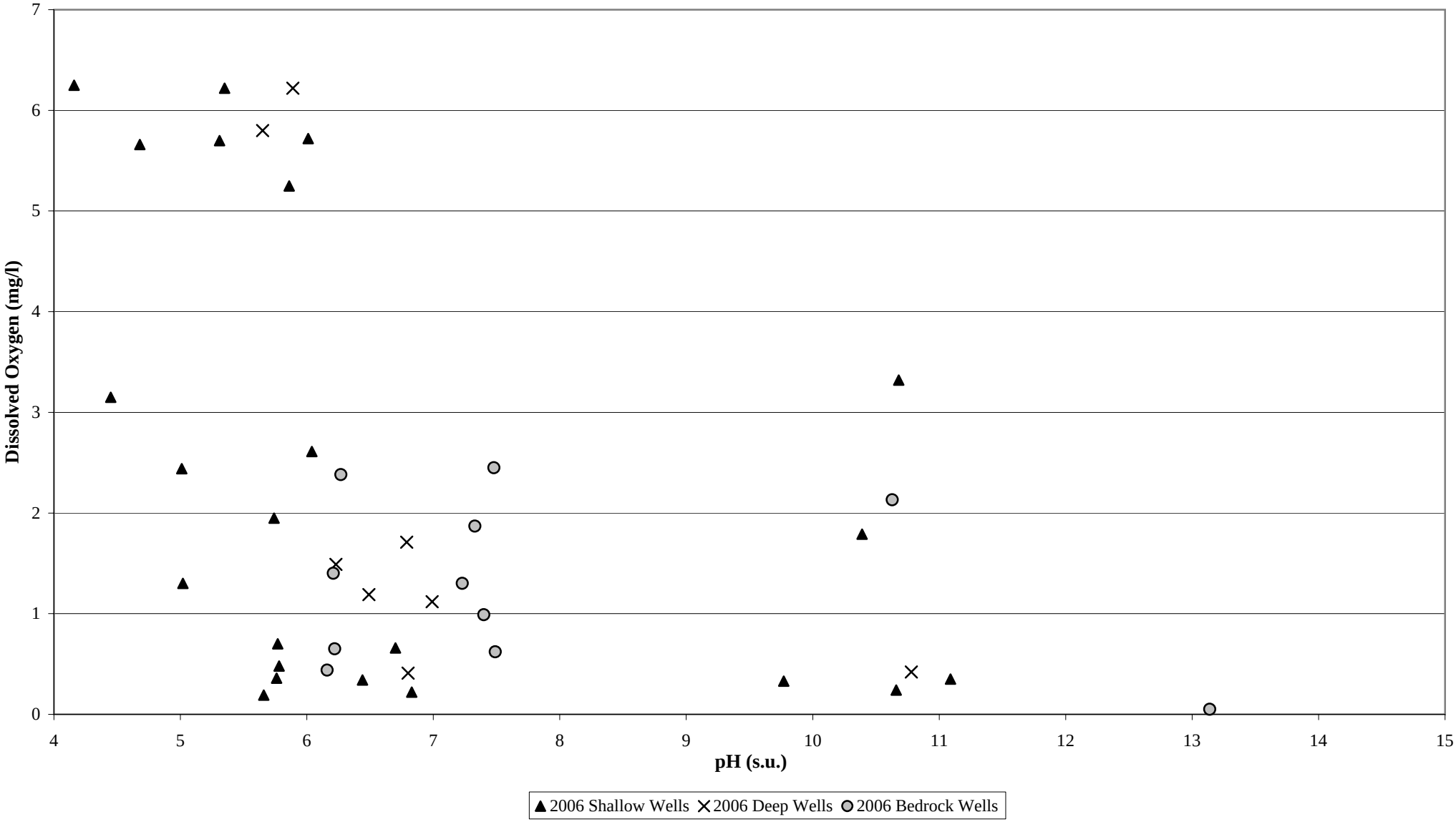

**Figure D-4**
**Oxidation/Reduction Potential (ORP) vs. pH**
**2006 Groundwater Sampling Round**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**

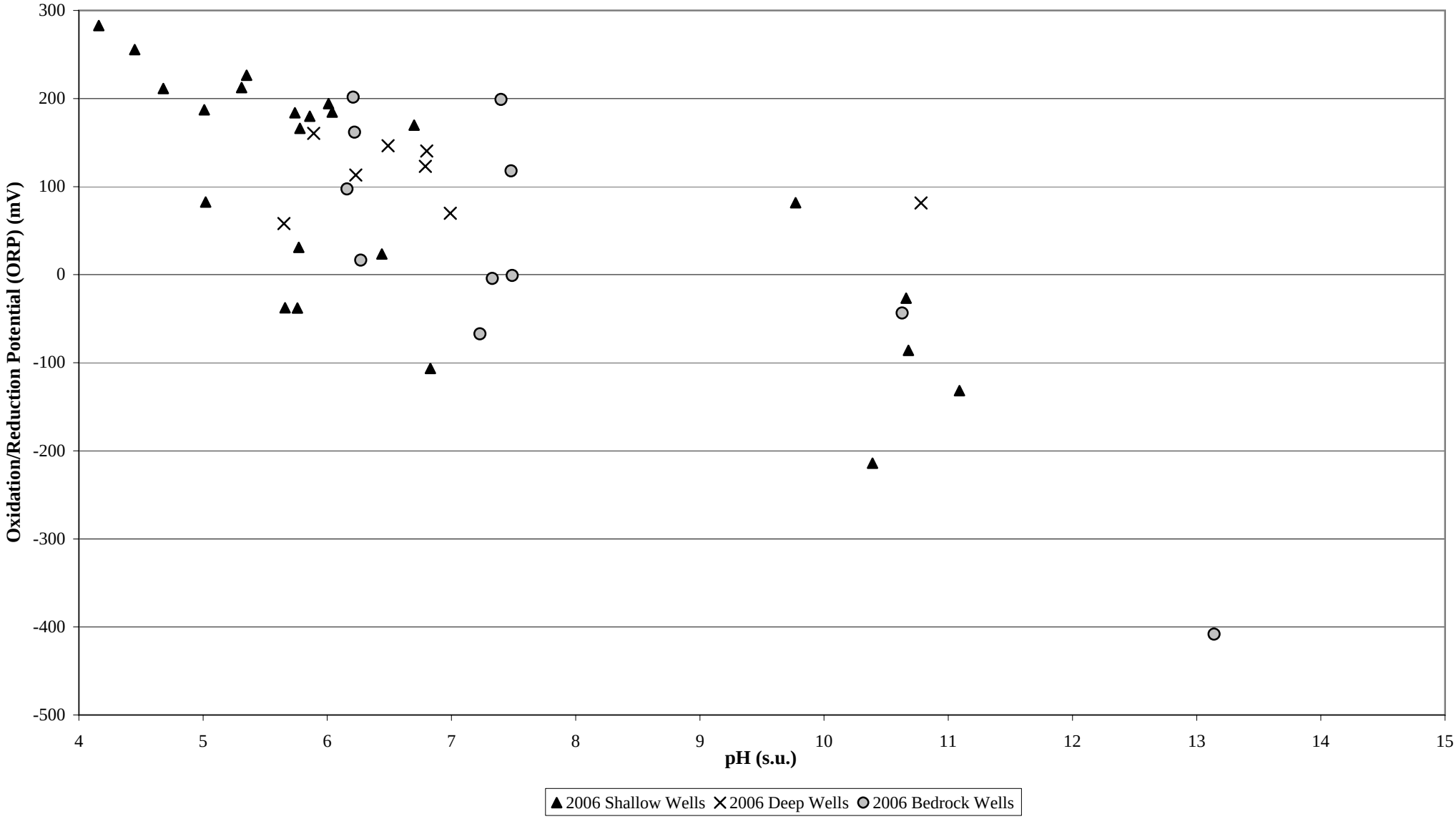

**Figure D-5**
**Turbidity vs. pH**
**2006 Groundwater Sampling Round**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**

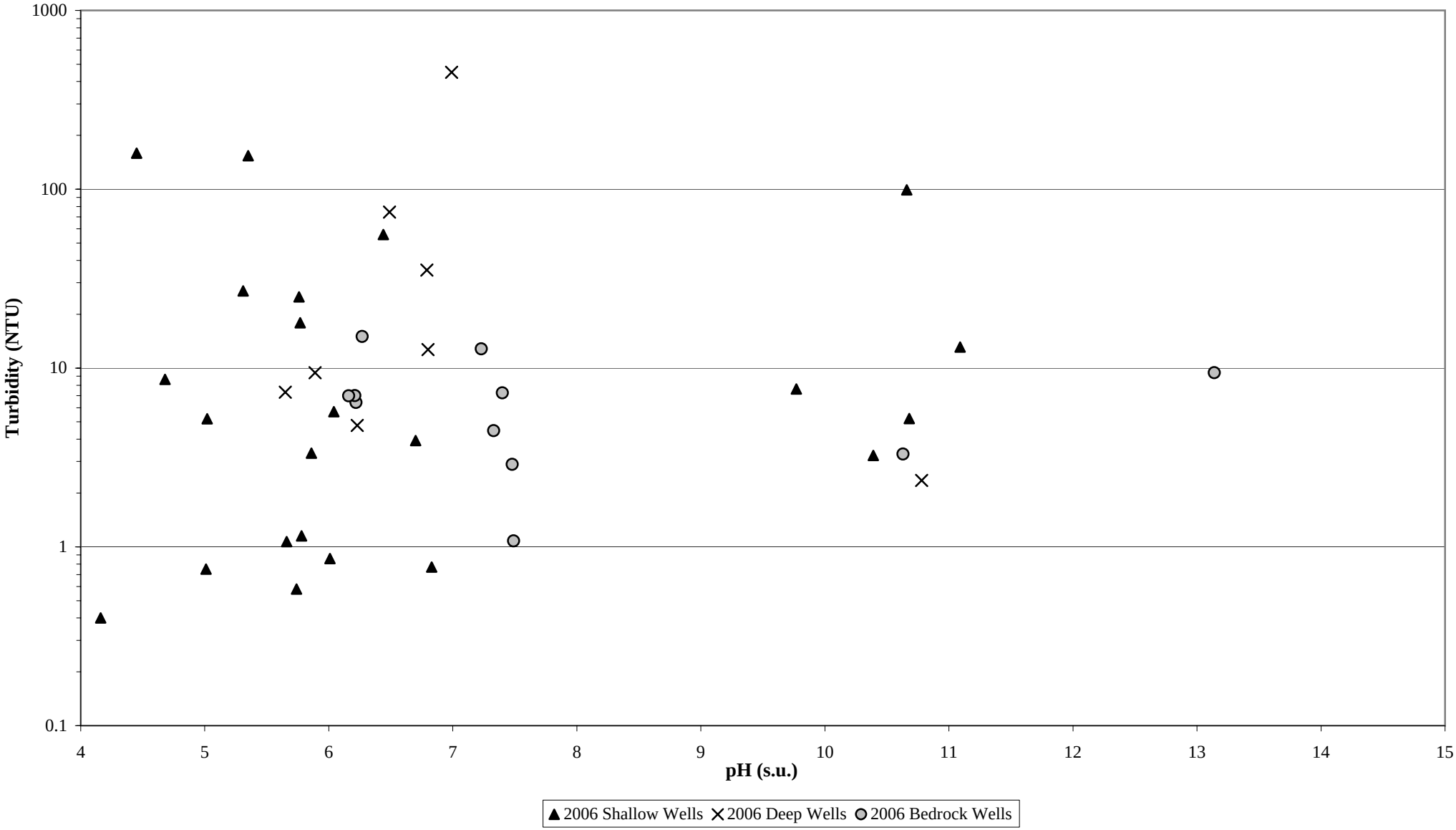

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**Figure D-6**
**Density vs. pH**
**2006 Groundwater Sampling Round**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**

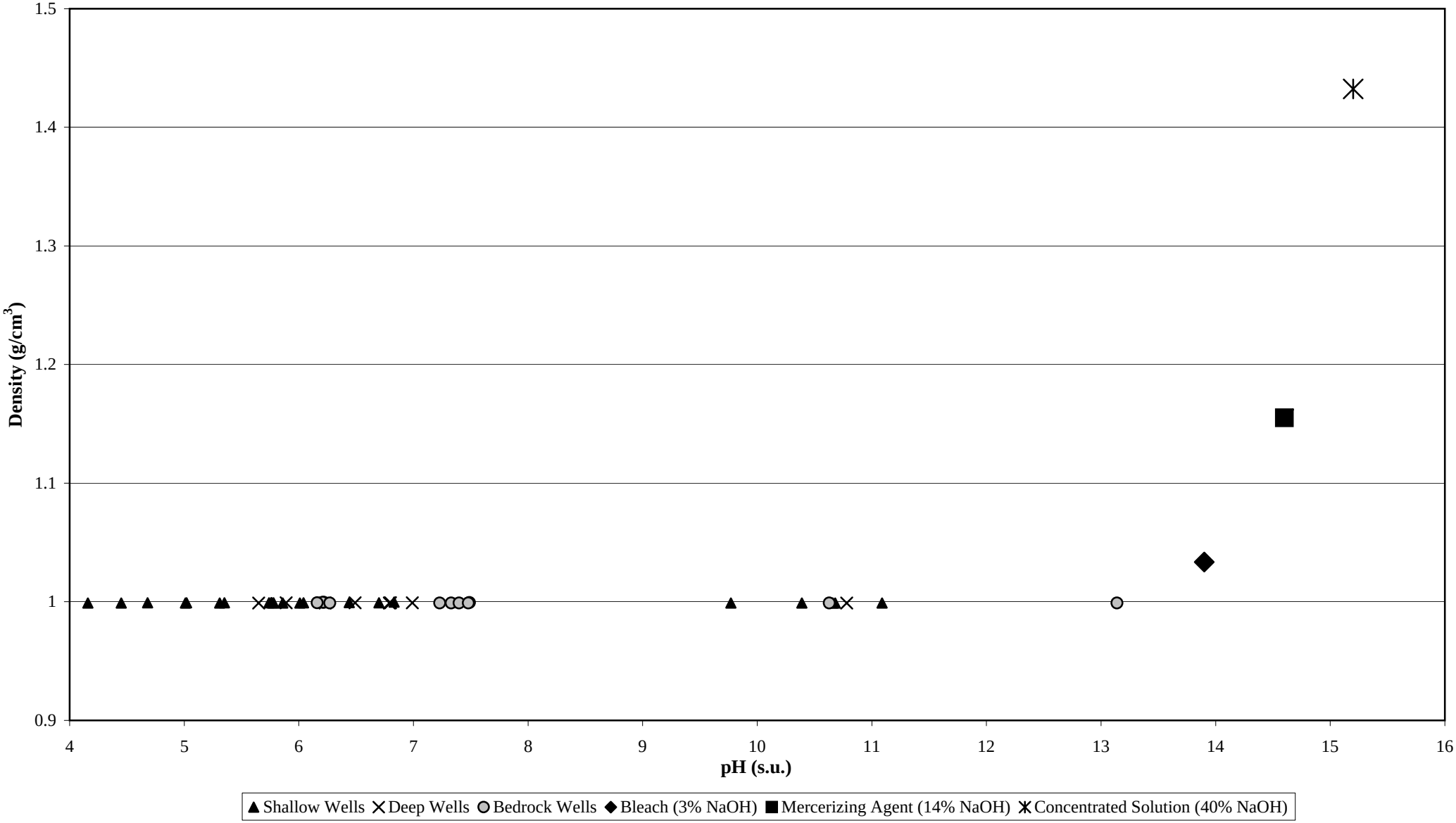

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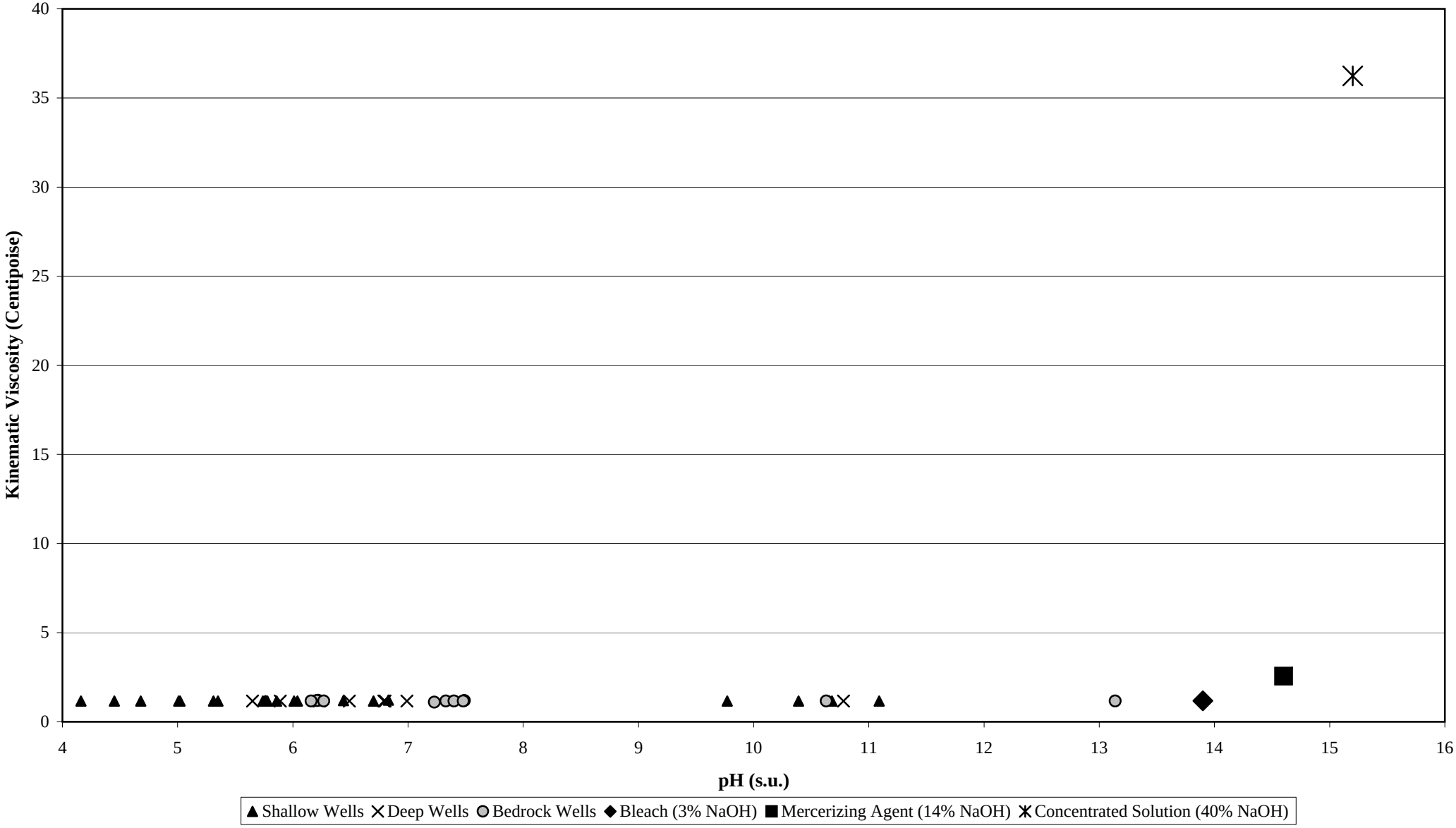
**Figure D-7**
**Kinematic Viscosity vs. pH**
**2006 Groundwater Sampling Round**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



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Date: April 2007

**Figure D-8**
**Specific Conductance vs. Dissolved Oxygen**
**2006 Groundwater Sampling Round**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**

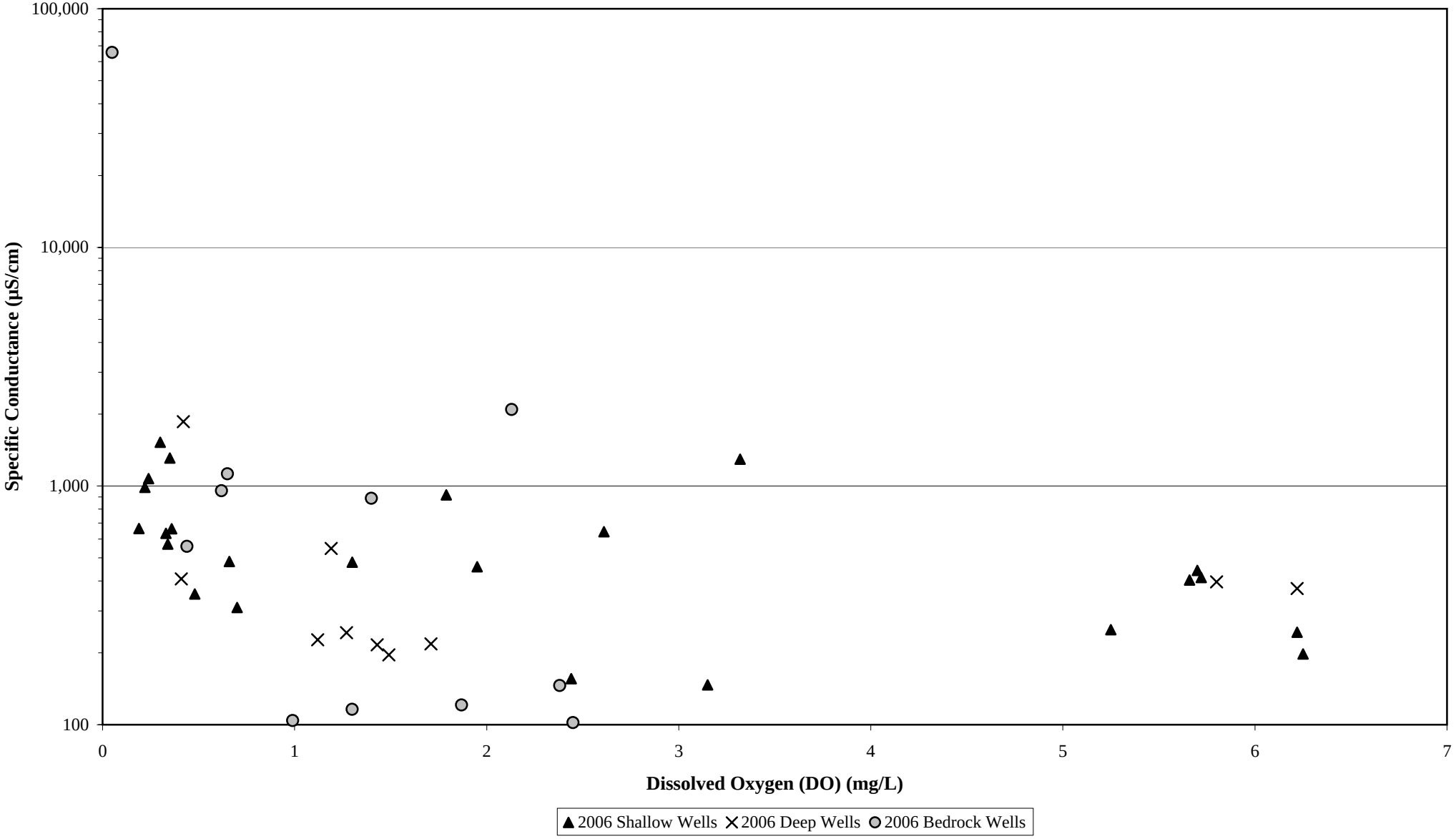

**Figure D-9**
**Oxidation-Reduction Potential vs. Dissolved Oxygen**
**2006 Groundwater Sampling Round**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**

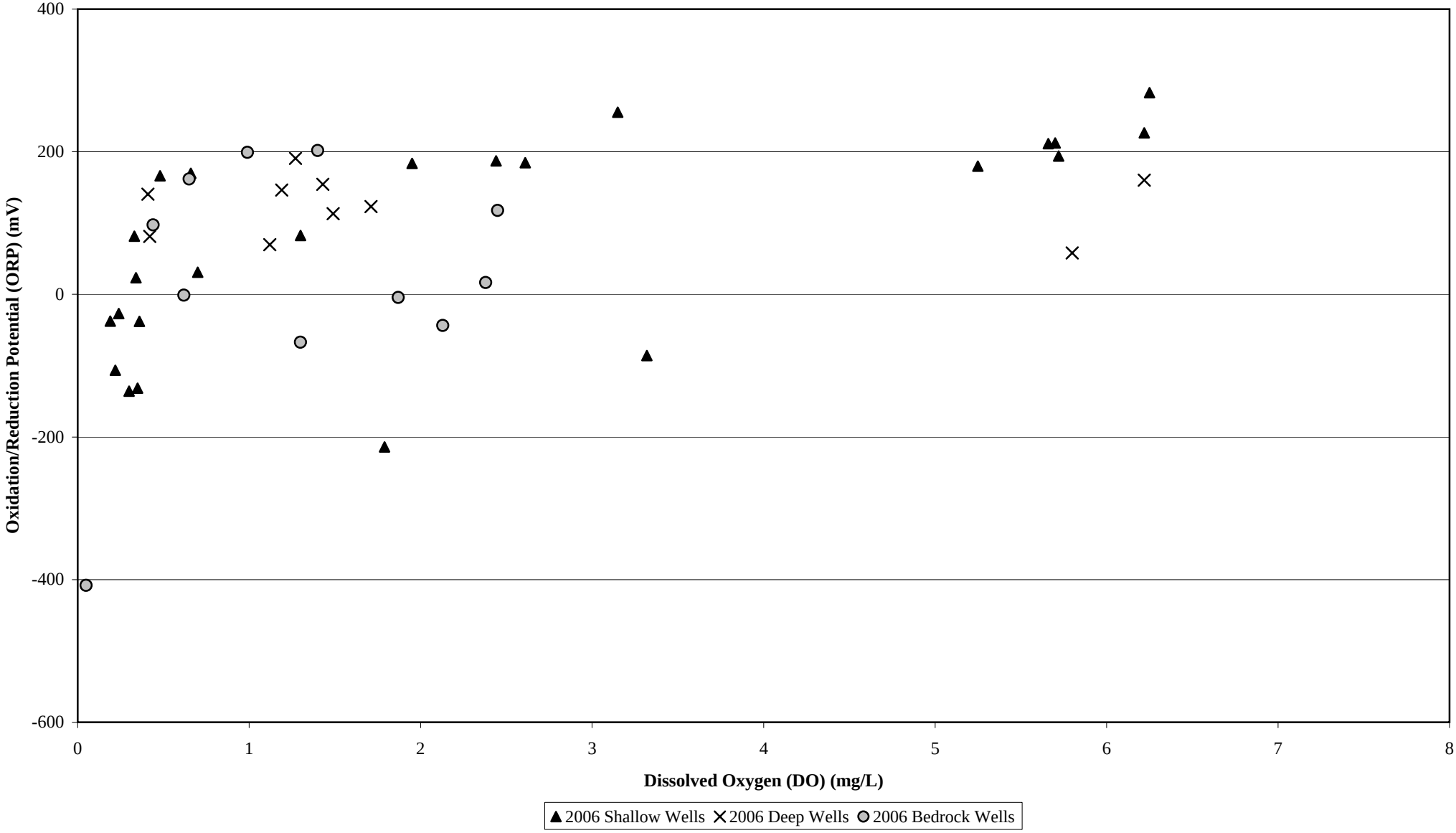

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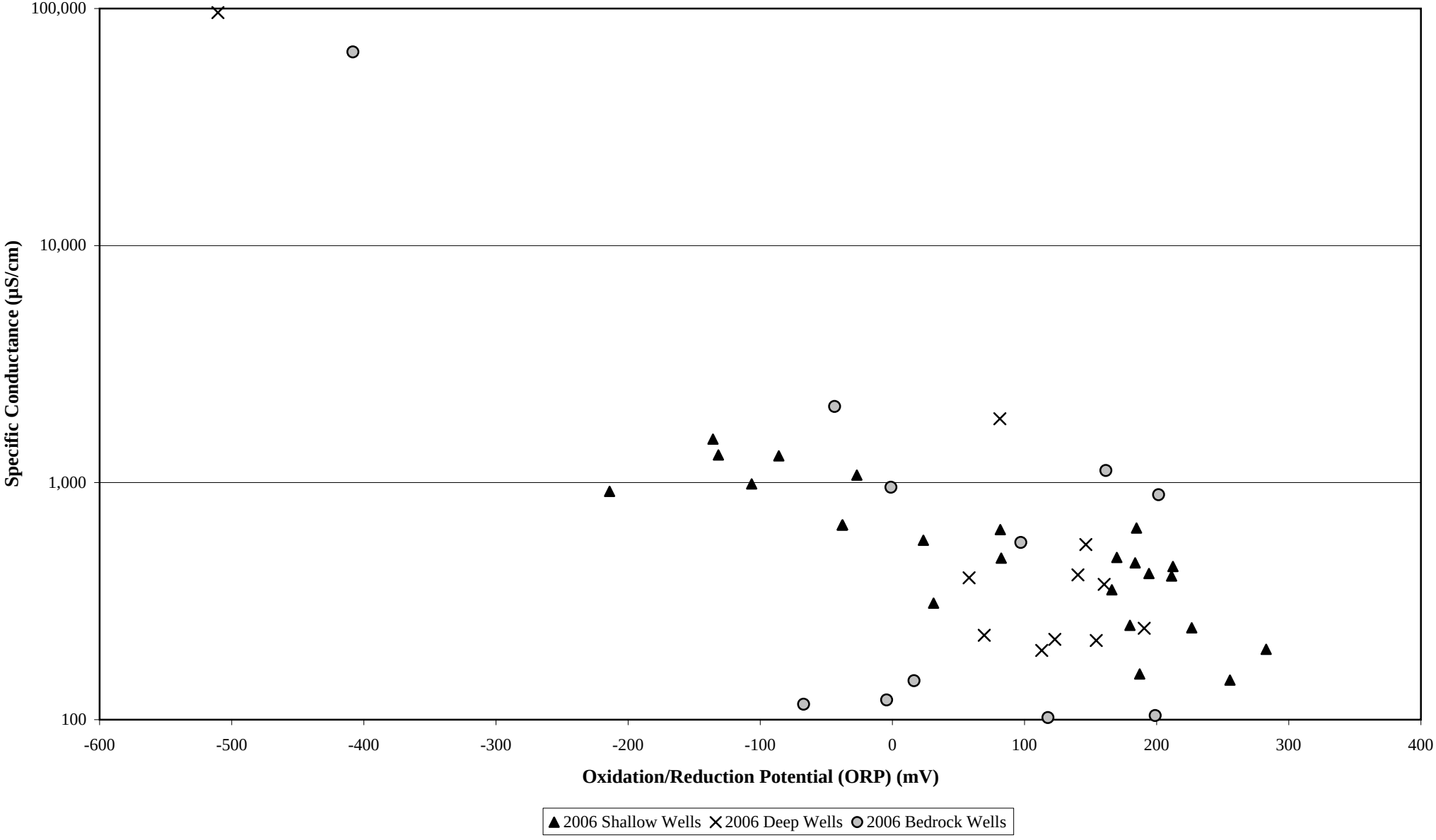
**Figure D-10**
**Specific Conductance vs. Oxidation/Reduction Potential**
**2006 Groundwater Sampling Round**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



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Date: April 2007

**Figure D-11**
**Aluminum vs. pH**
**2006 Groundwater Sampling Round**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**

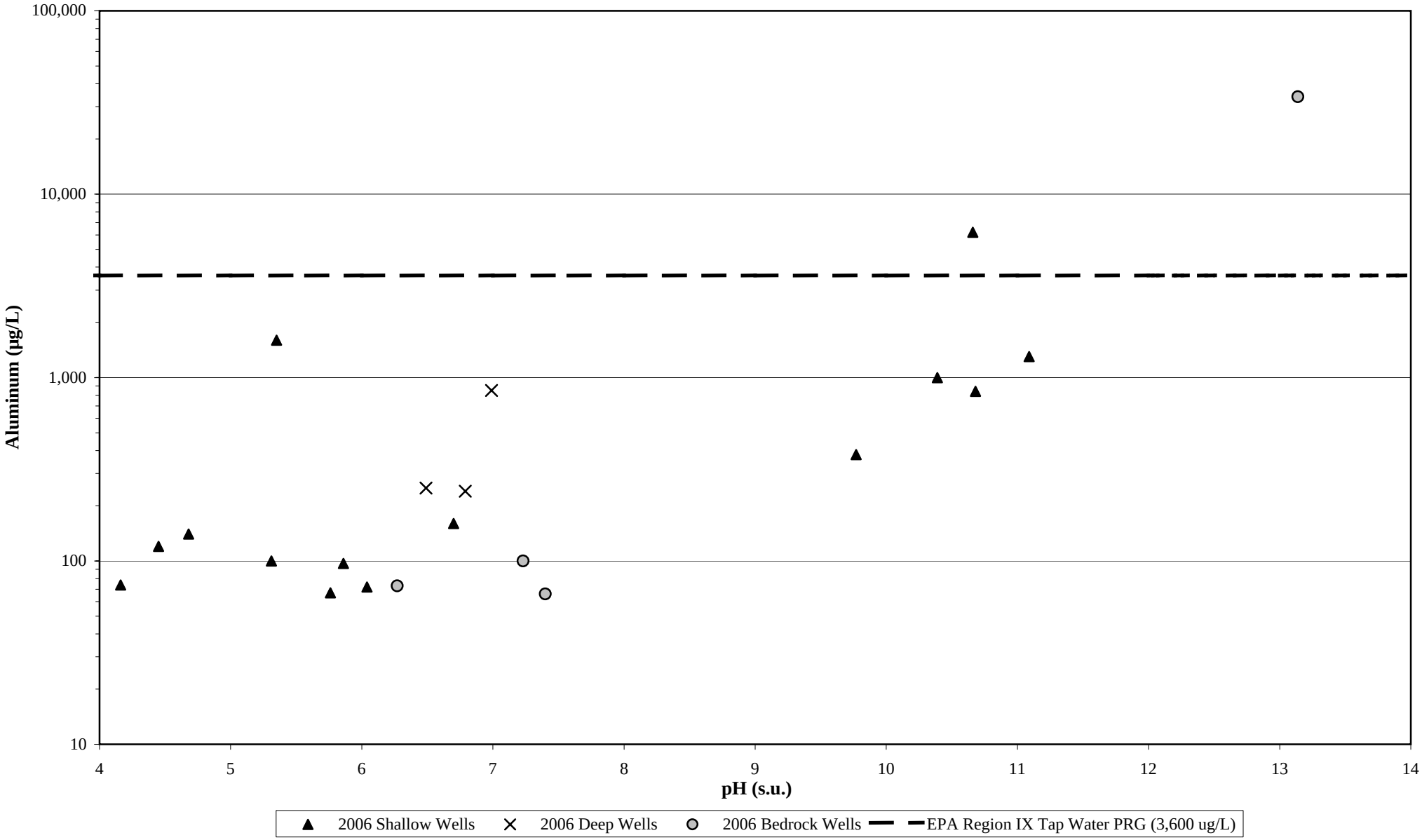

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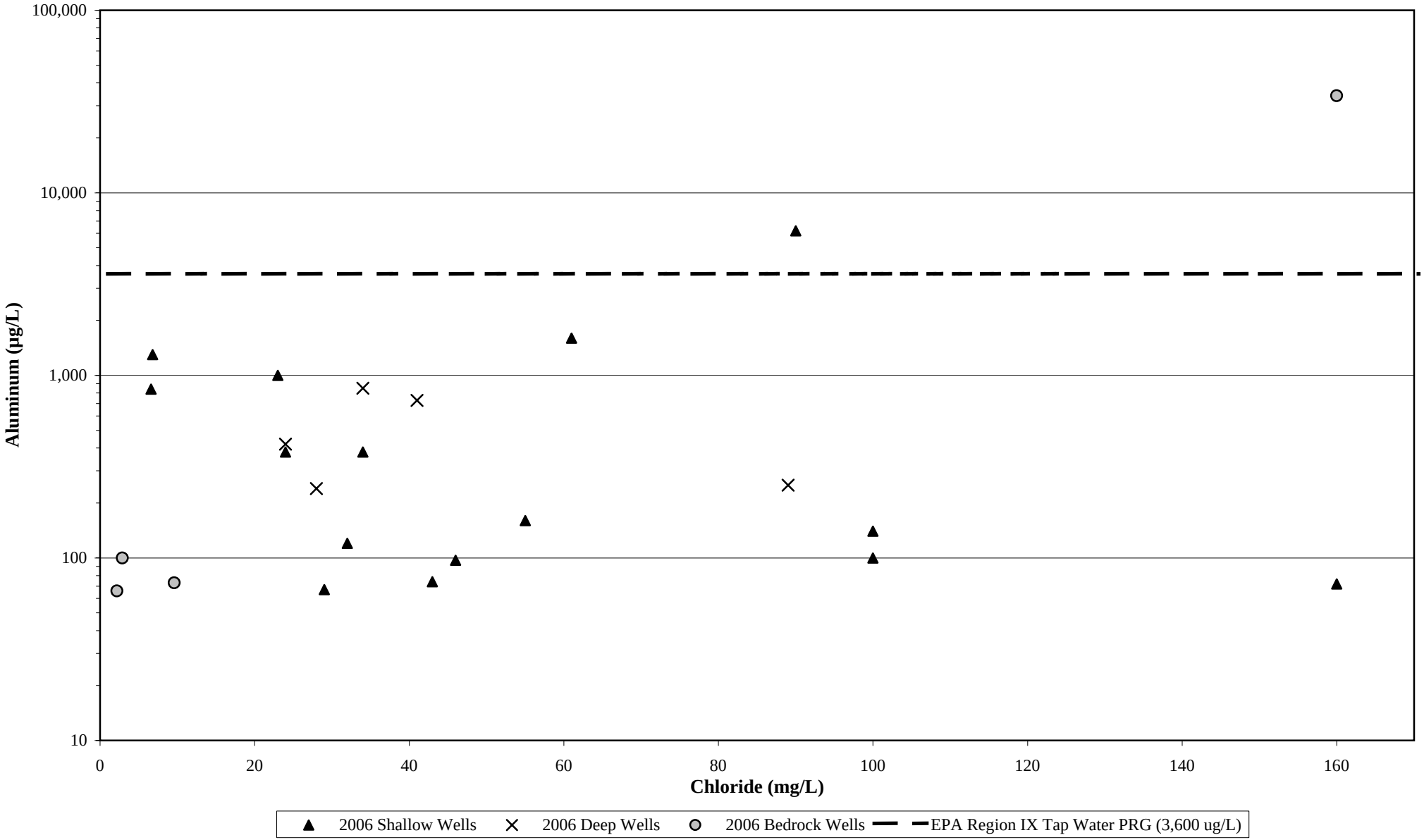
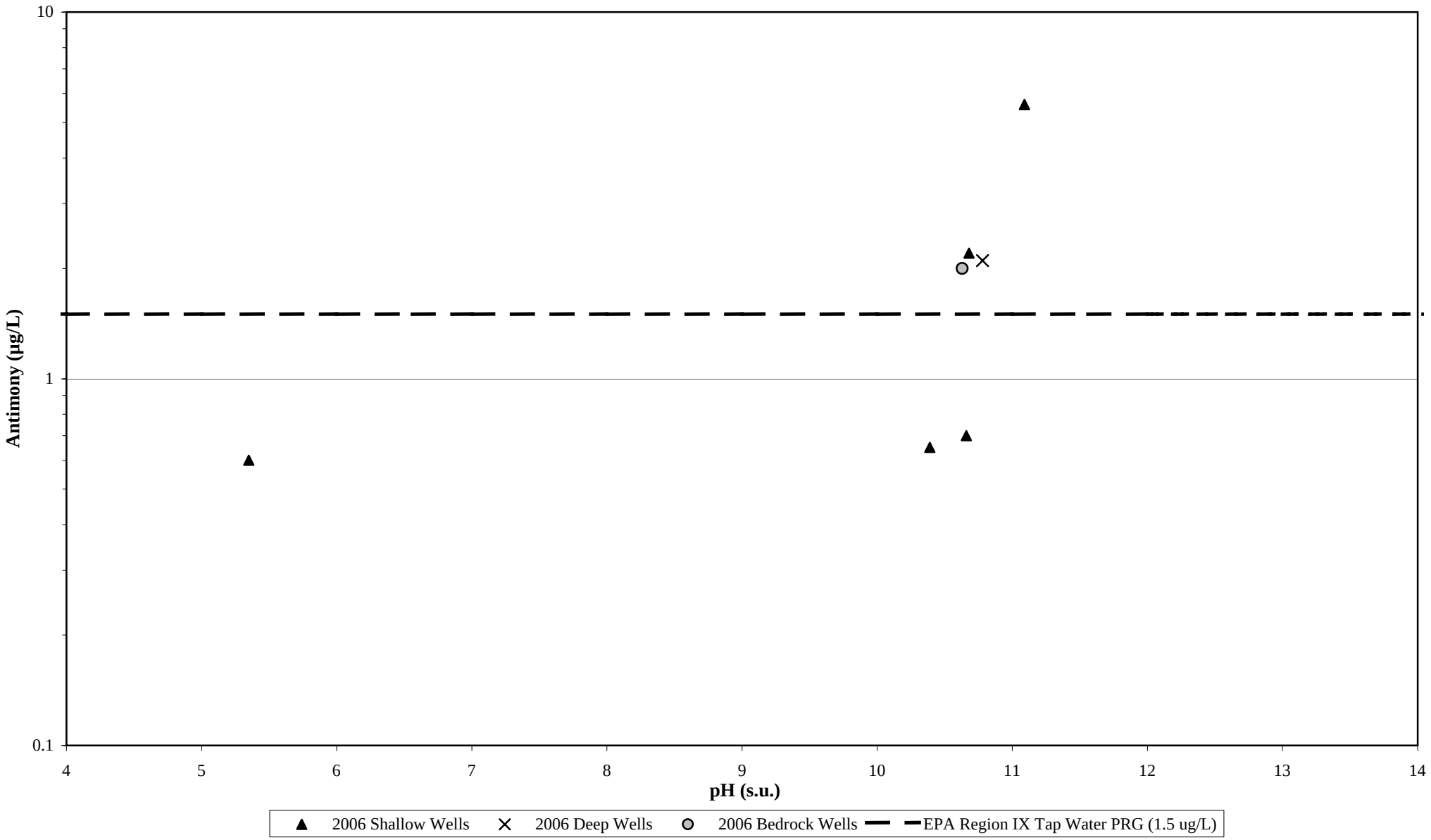
**Figure D-12**
**Aluminum vs. Chloride**
**2006 Groundwater Sampling Round**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



Revision No.: 01 - DRAFT
Date: April 2007

**Figure D-13**
**Antimony vs. pH**
**2006 Groundwater Sampling Round**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



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Date: April 2007

**Figure D-14**
**Antimony vs. Chloride**
**2006 Groundwater Sampling Round**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**

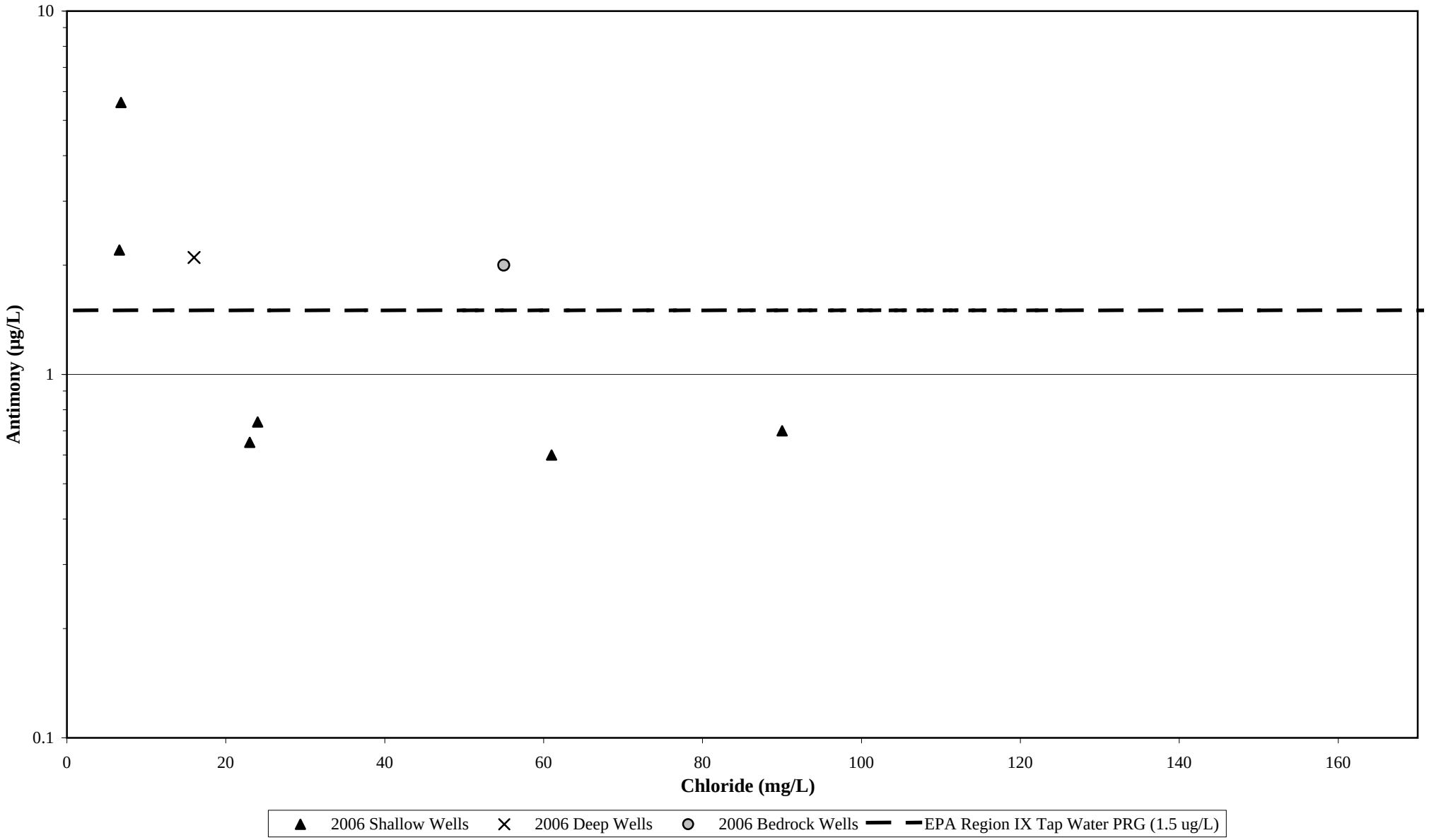
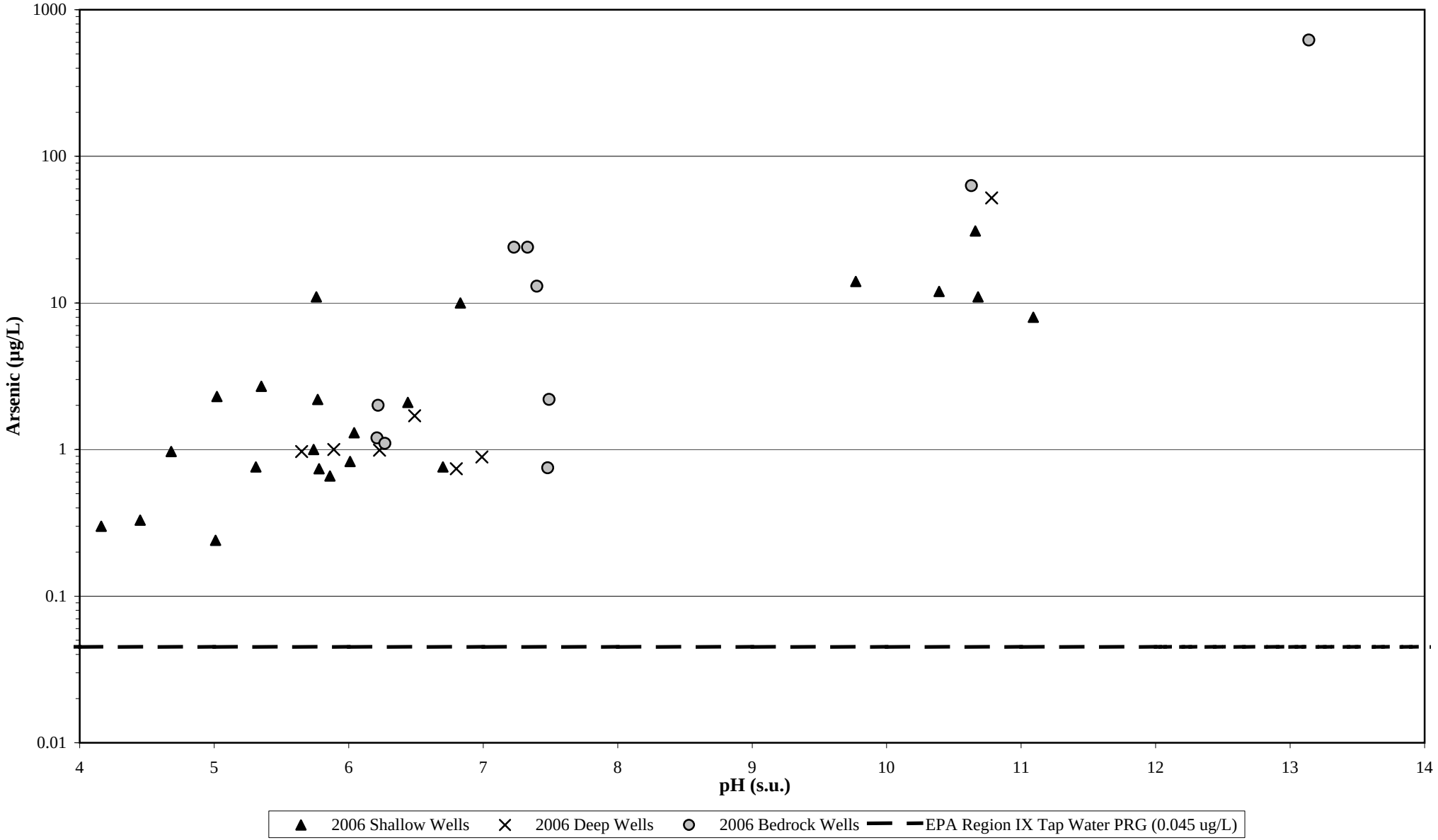


**Figure D-15**
**Arsenic vs. pH**
**2006 Groundwater Sampling Round**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



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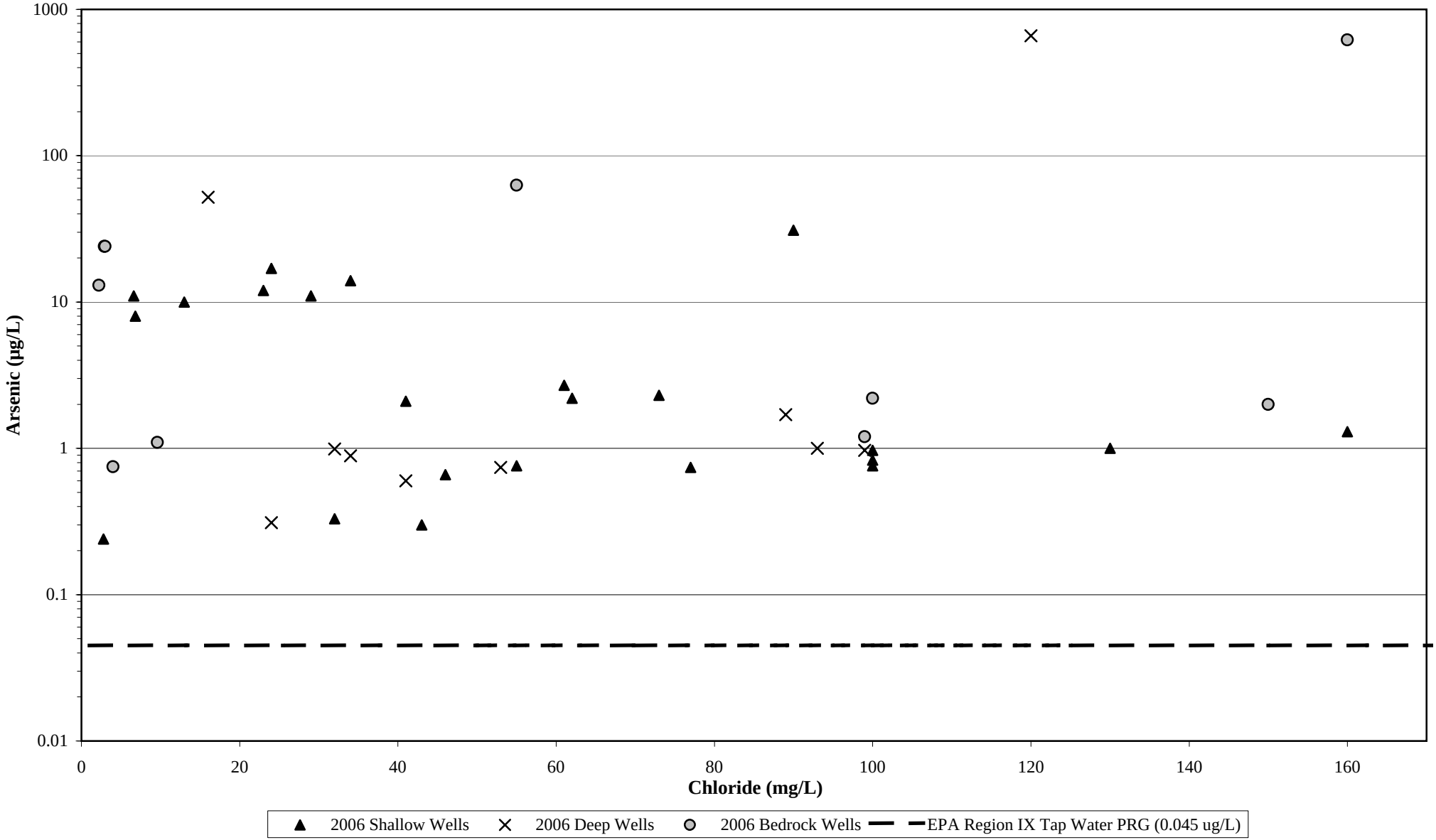
Date: April 2007

**Figure D-16**
**Arsenic vs. Chloride**
**2006 Groundwater Sampling Round**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



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Date: April 2007

**Figure D-17**
**Arsenic vs. Dissolved Oxygen**
**2006 Groundwater Sampling Round**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**

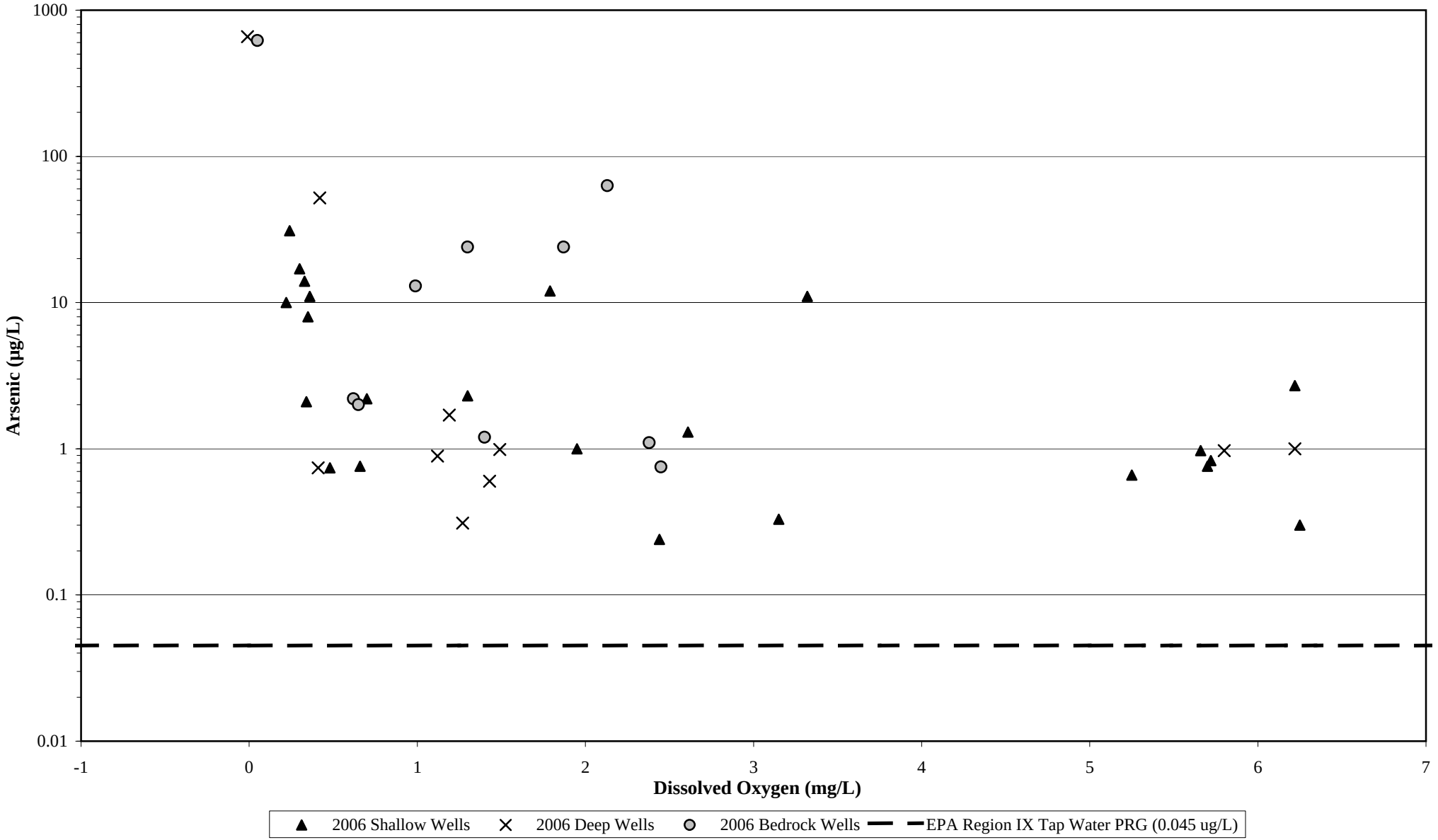

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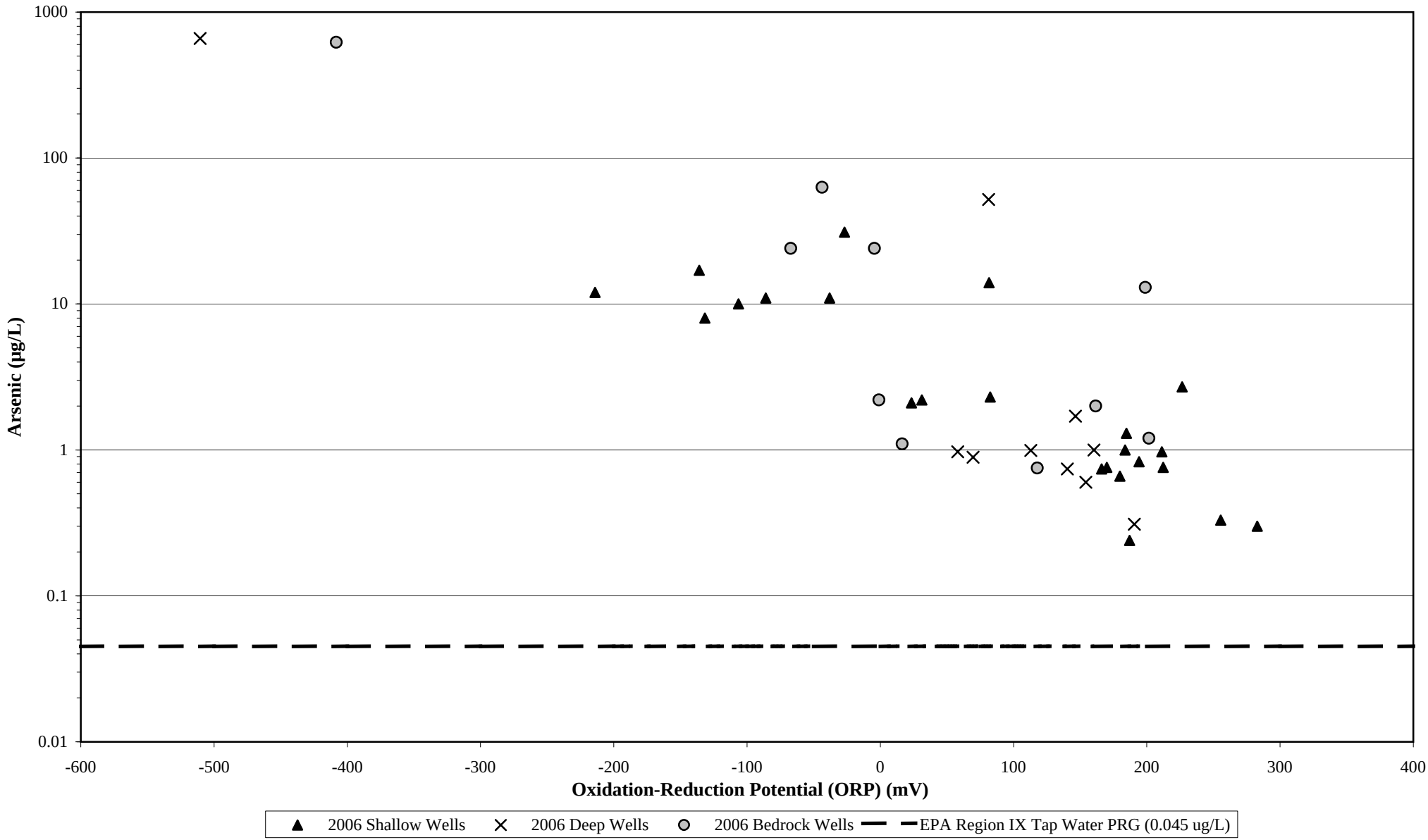
**Figure D-18**
**Arsenic vs. Oxidation-Reduction Potential (ORP)**
**2006 Groundwater Sampling Round**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



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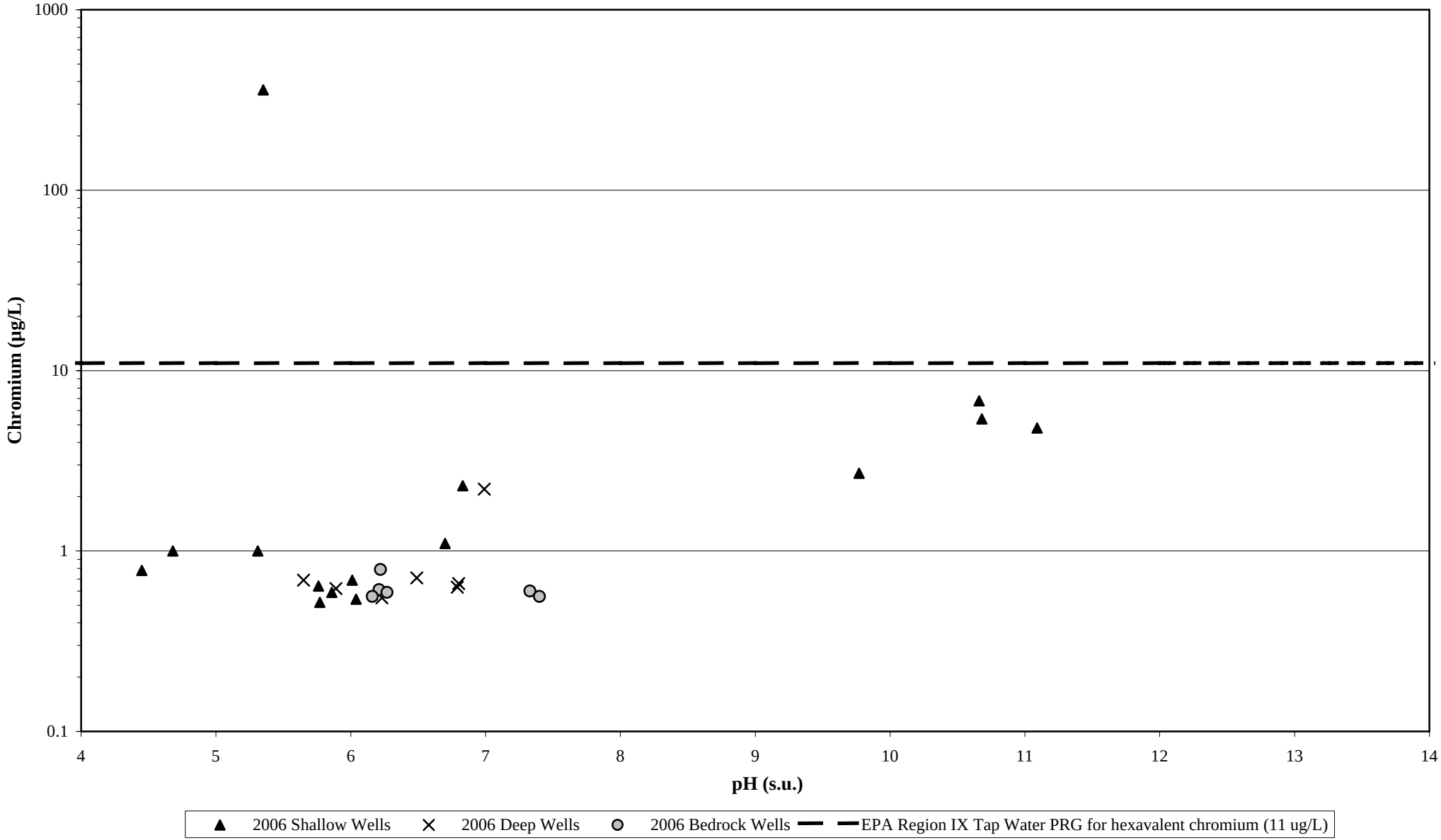
Date: April 2007

**Figure D-19**
**Chromium vs. pH**
**2006 Groundwater Sampling Round**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



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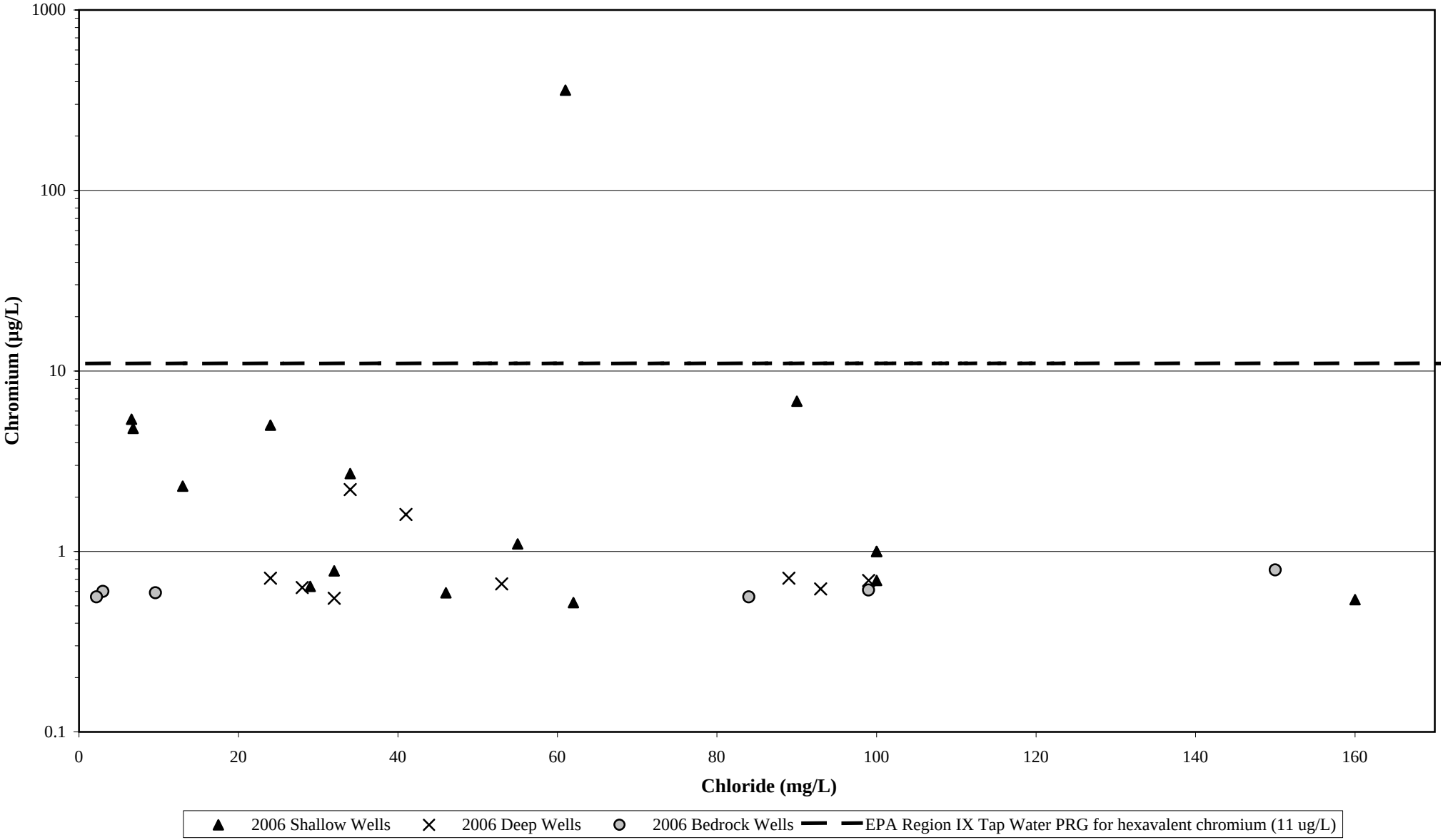
Date: April 2007

**Figure D-20**
**Chromium vs. Chloride**
**2006 Groundwater Sampling Round**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



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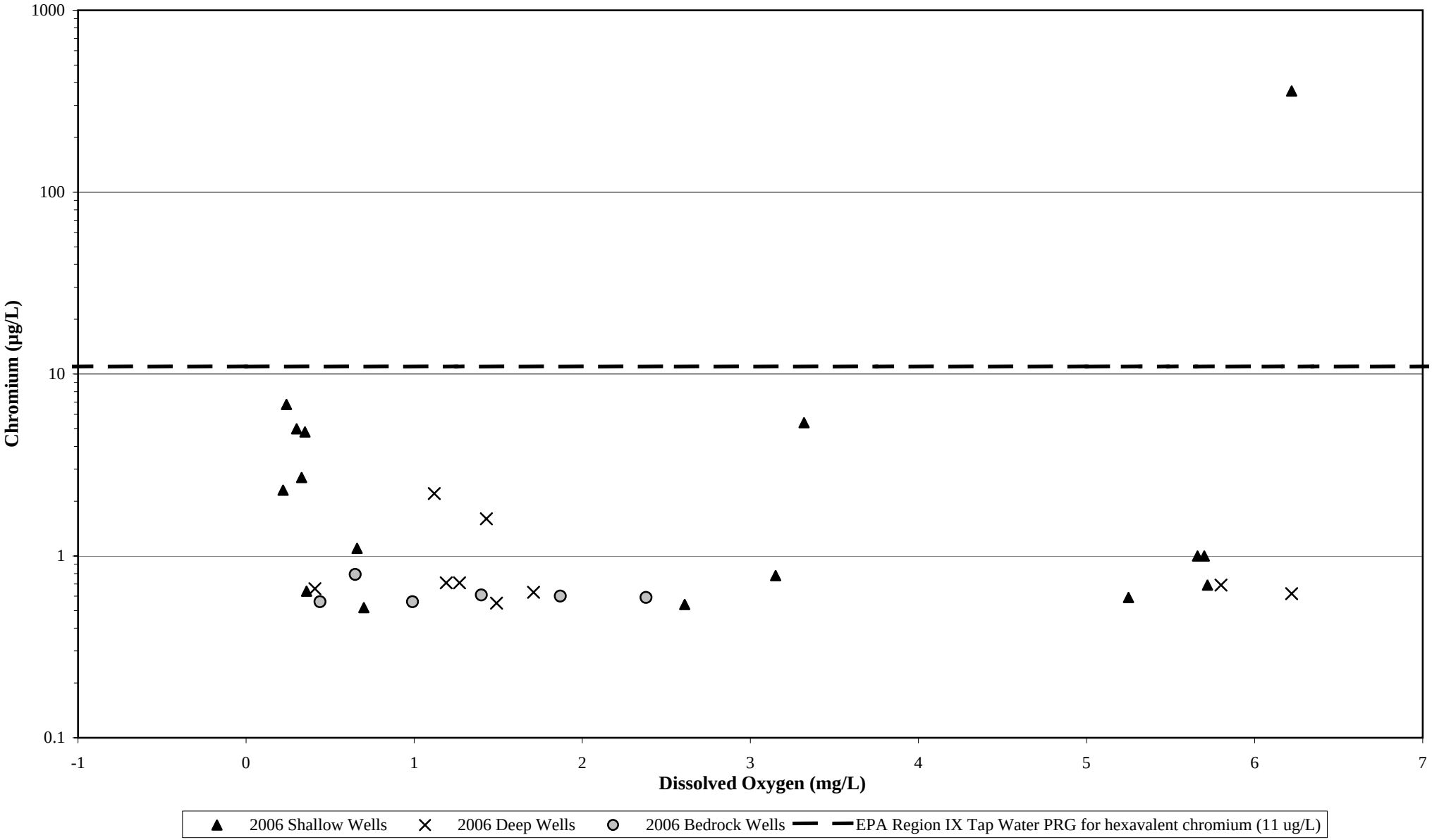
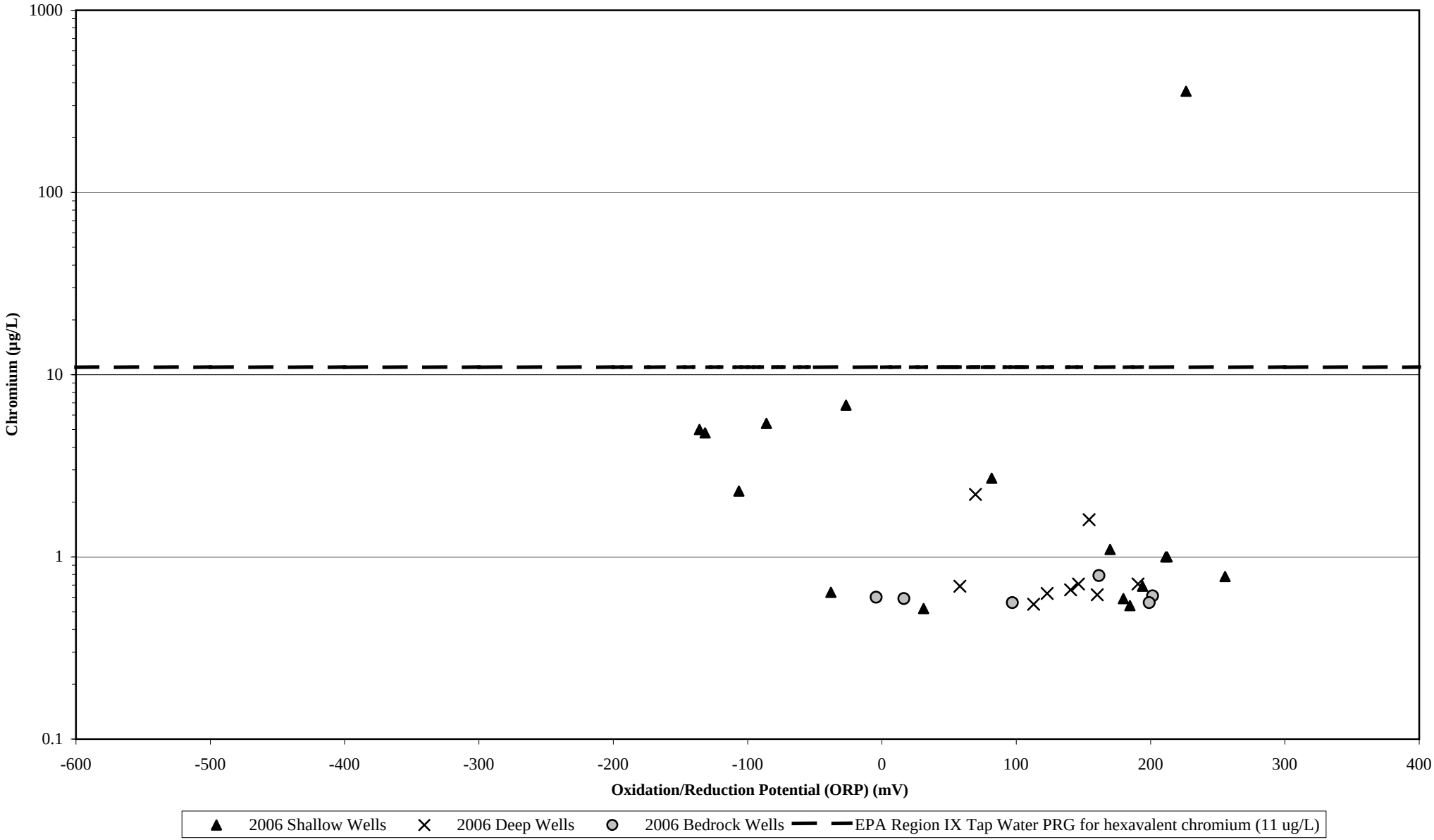
Date: April 2007

**Figure D-21**
**Chromium vs. Dissolved Oxygen**
**2006 Groundwater Sampling Round**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



Revision No.: 01 - DRAFT
Date: April 2007

**Figure D-22**
**Chromium vs. Oxidation/Reduction Potential (ORP)**
**2006 Groundwater Sampling Round**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



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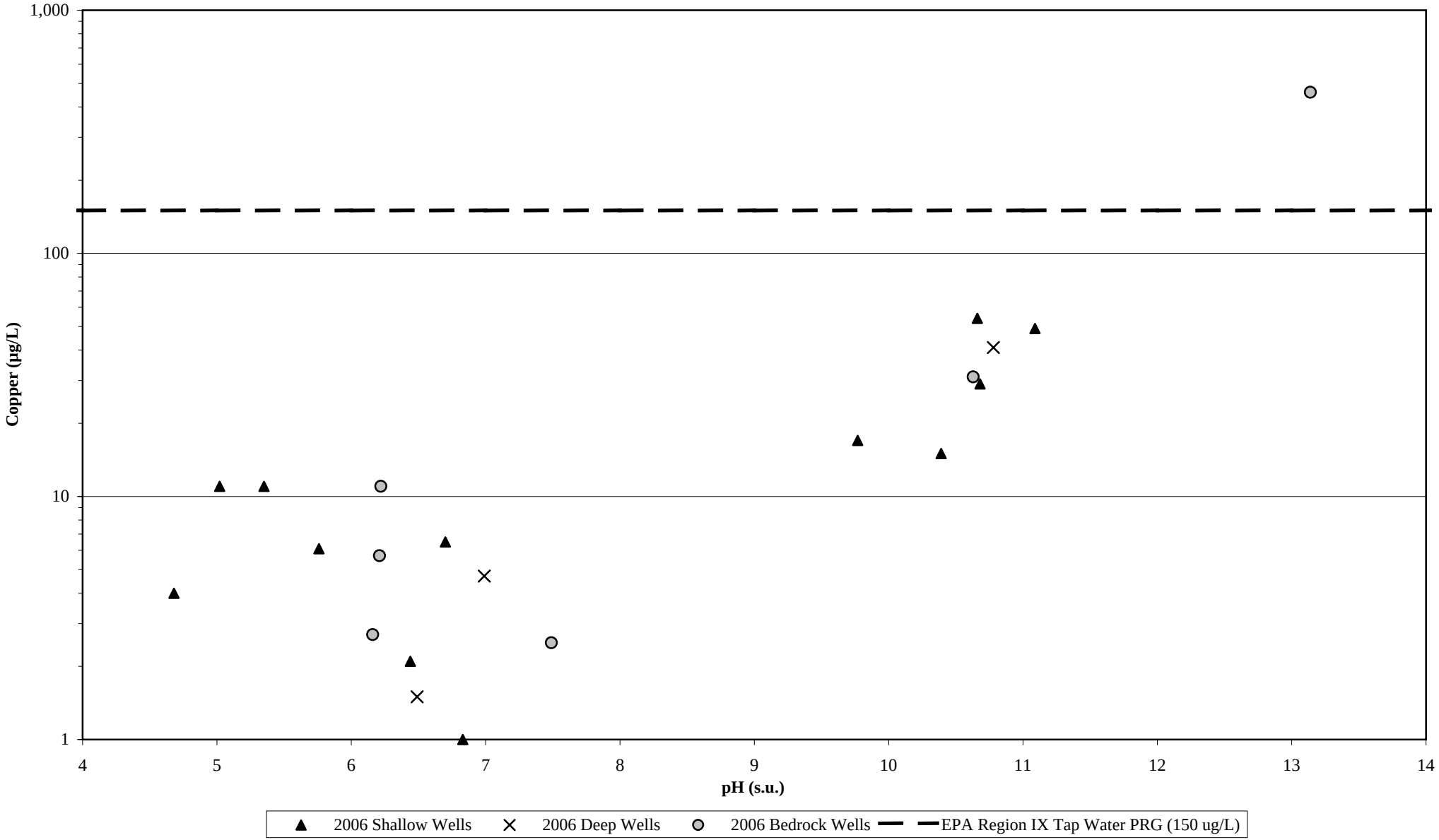
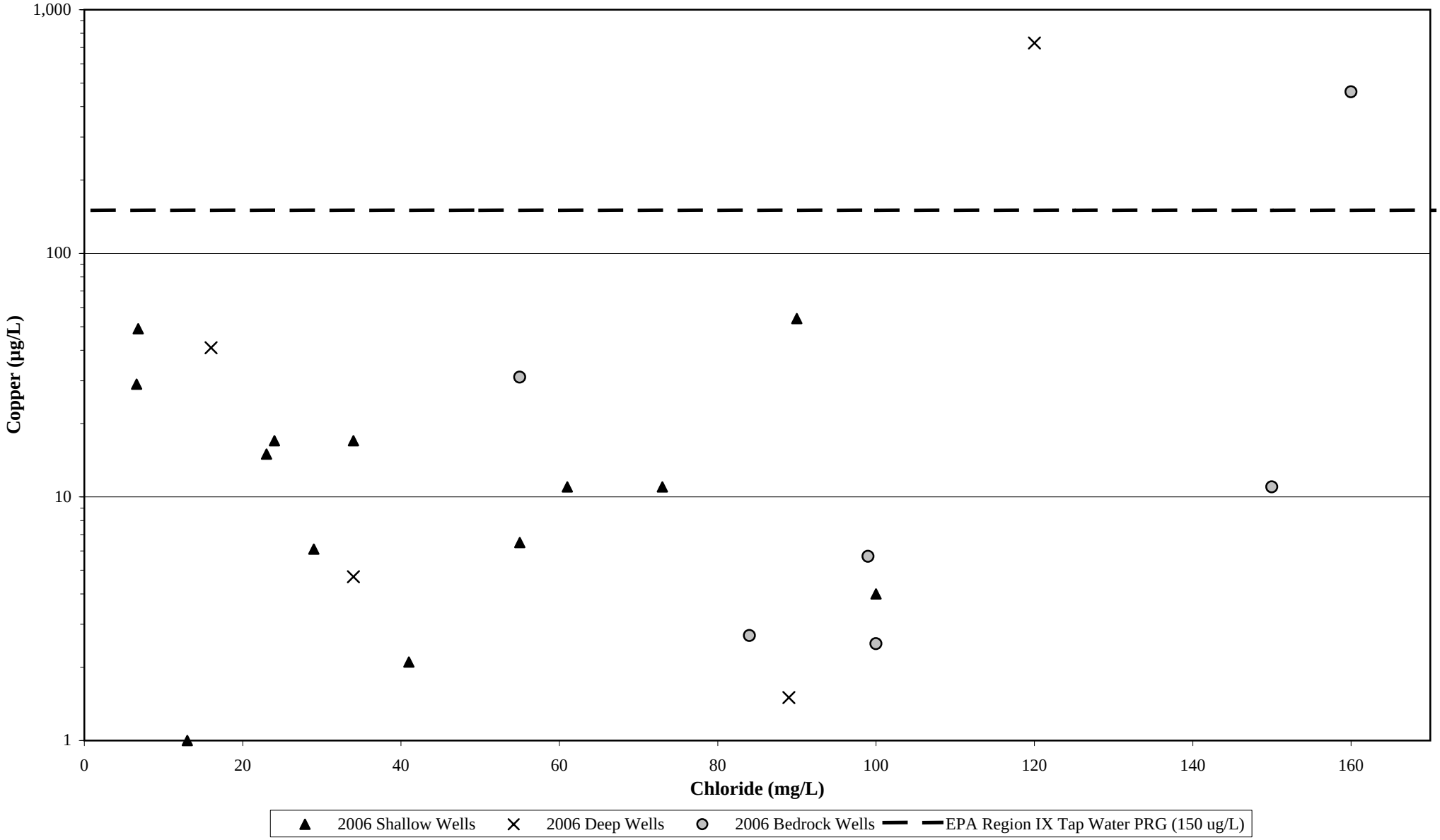
Date: April 2007

**Figure D-23**
**Copper vs. pH**
**2006 Groundwater Sampling Round**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



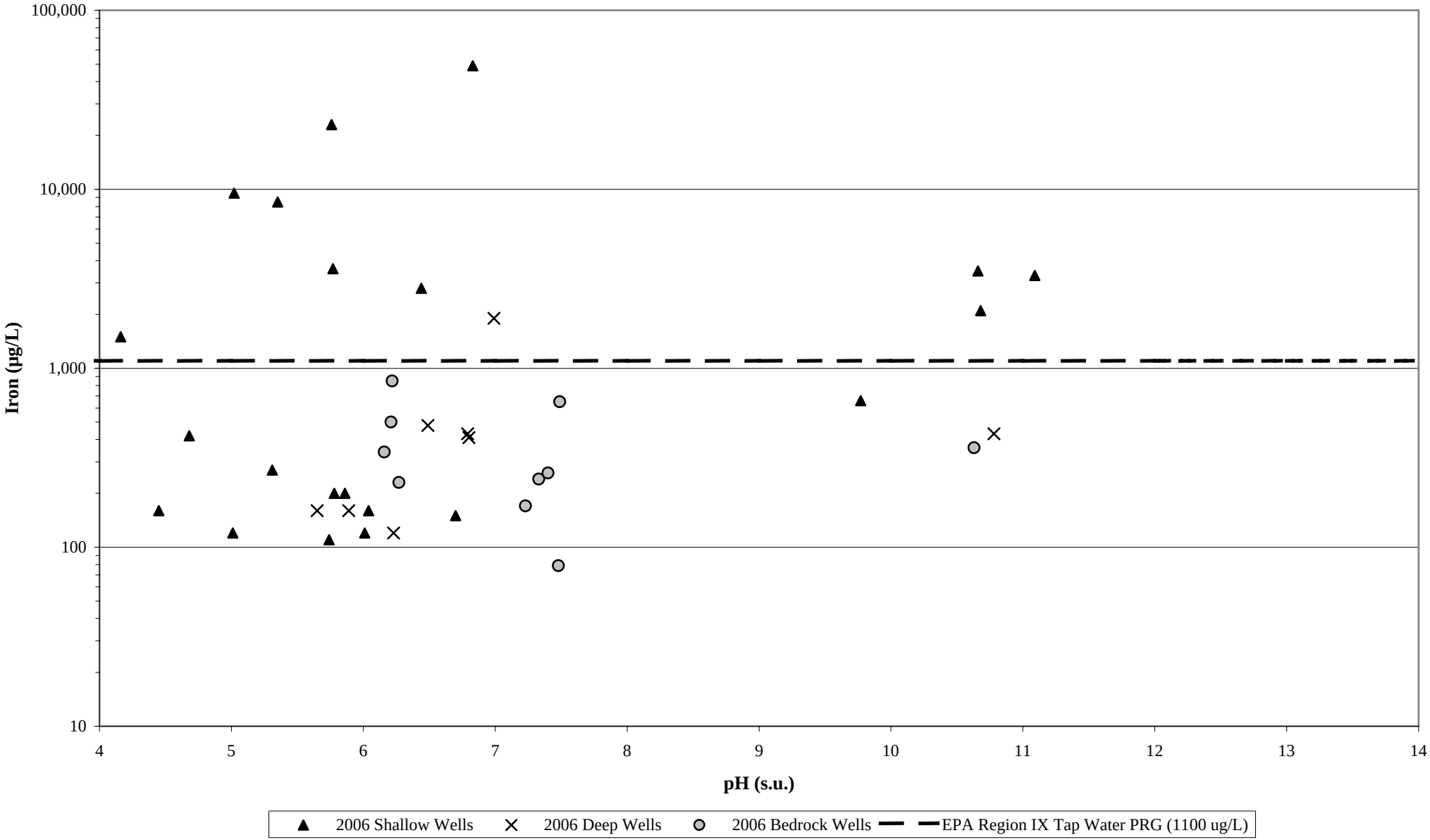
Revision No.: 01 - DRAFT
Date: April 2007

**Figure D-24**
**Copper vs. Chloride**
**2006 Groundwater Sampling Round**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



Revision No.: 01 - DRAFT
Date: April 2007

**Figure D-25**
**Iron vs. pH**
**2006 Groundwater Sampling Round**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



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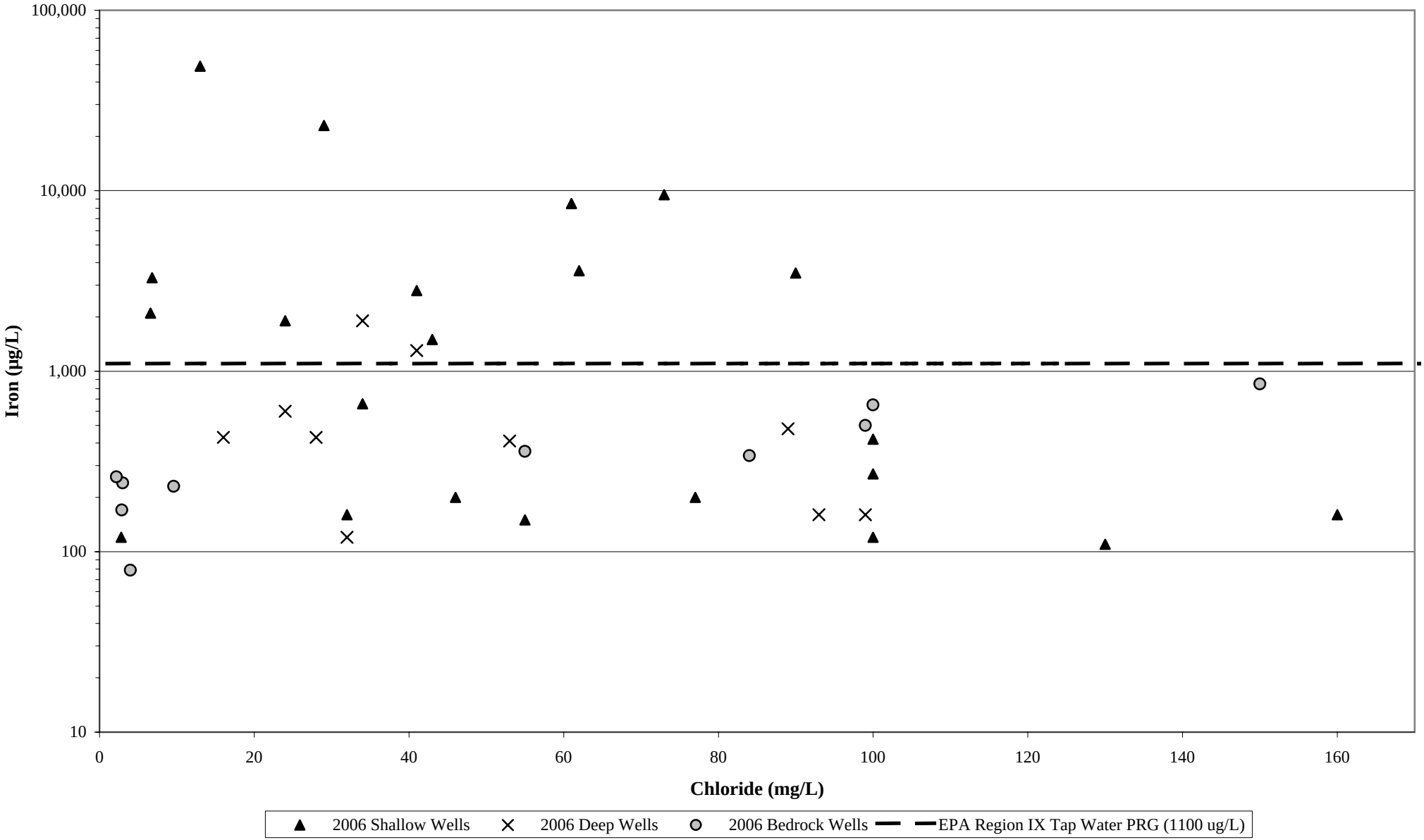
Date: April 2007

**Figure D-26**
**Iron vs. Chloride**
**2006 Groundwater Sampling Round**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



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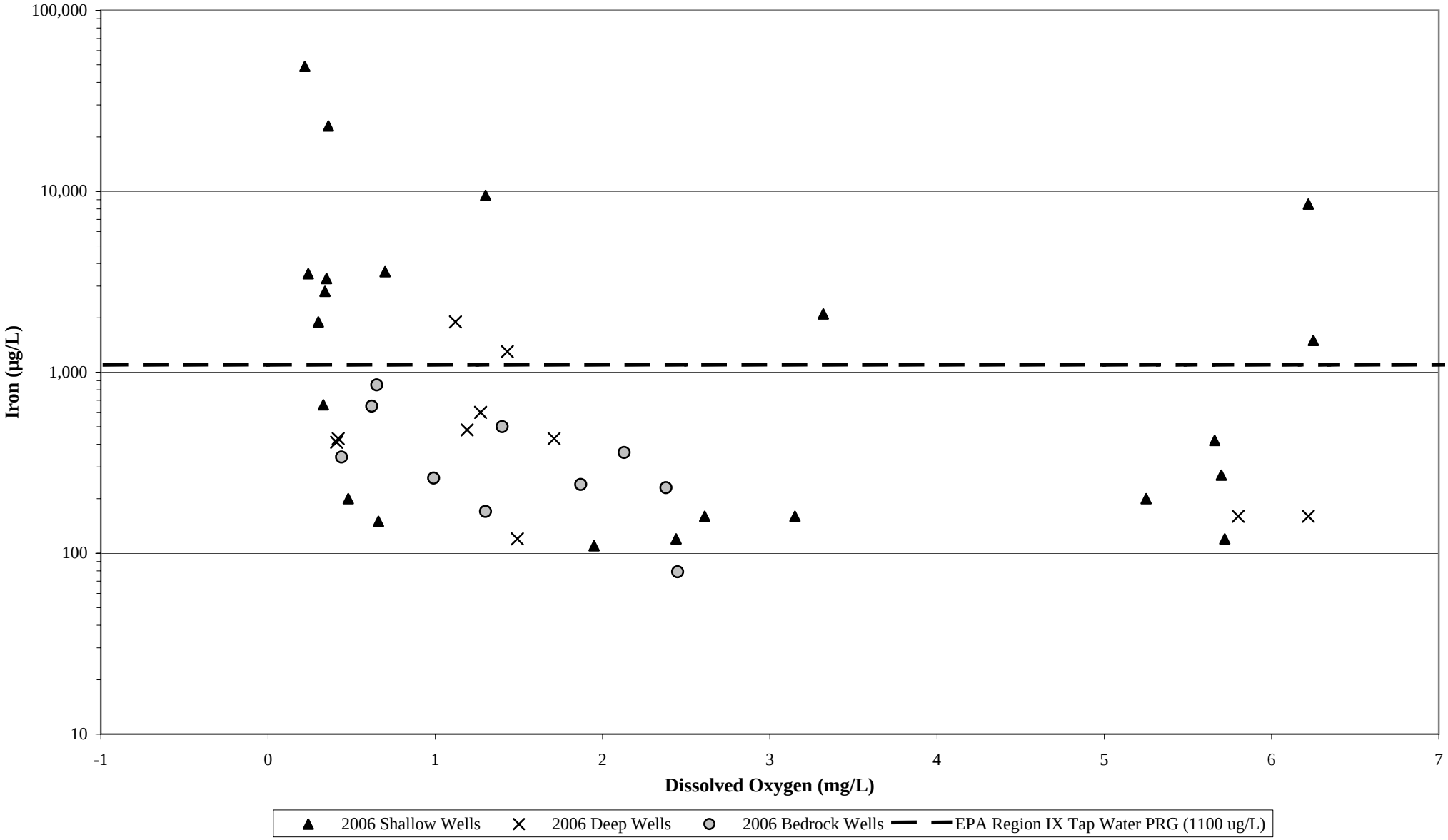
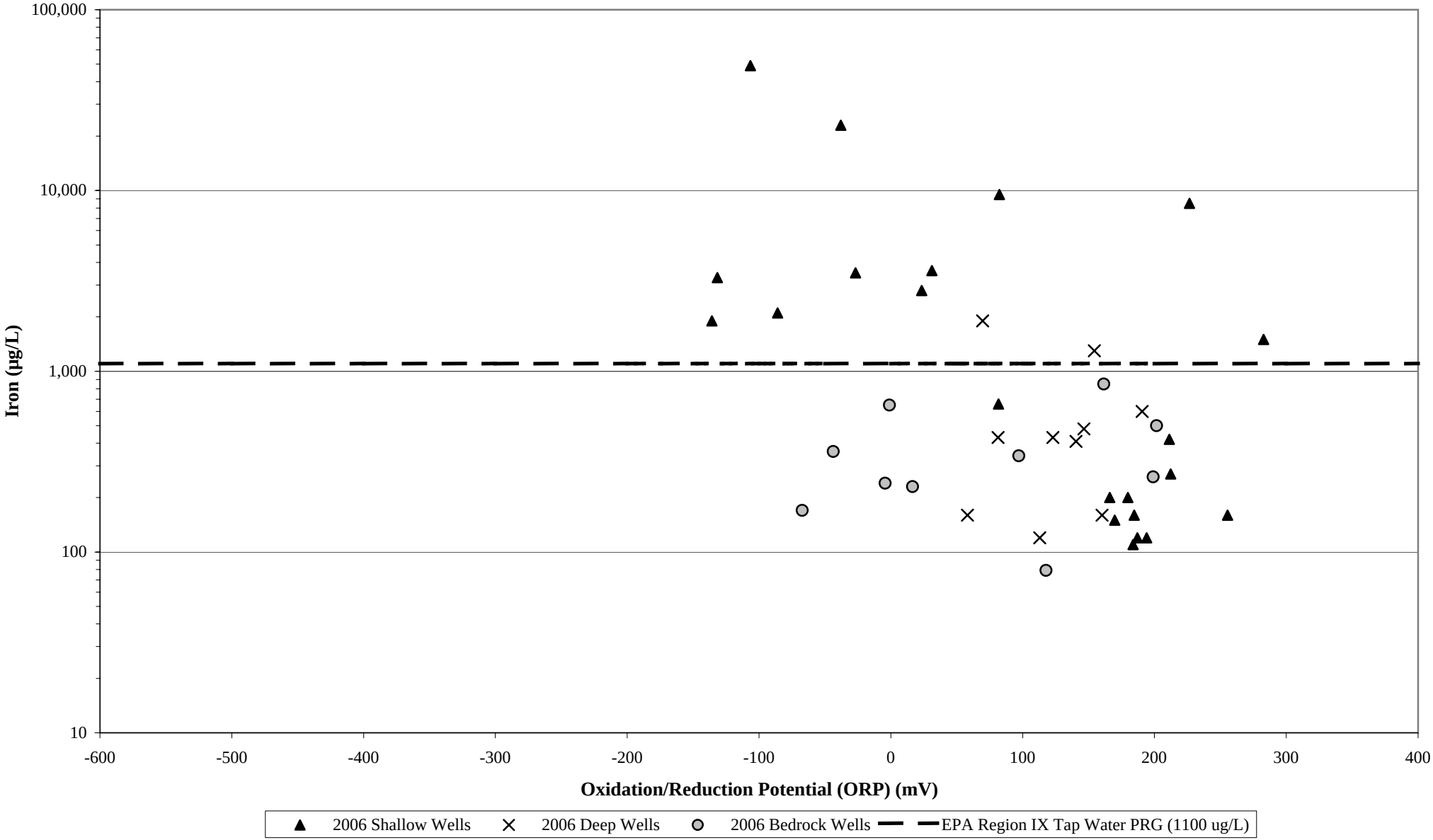
Date: April 2007

**Figure D-27**
**Iron vs. Dissolved Oxygen**
**2006 Groundwater Sampling Round**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



Revision No.: 01 - DRAFT
Date: April 2007

**Figure D-28**
**Iron vs. Oxidation/Reduction Potential (ORP)**
**2006 Groundwater Sampling Round**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



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Date: April 2007

**Figure D-29**
**Manganese vs. pH**
**2006 Groundwater Sampling Round**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**

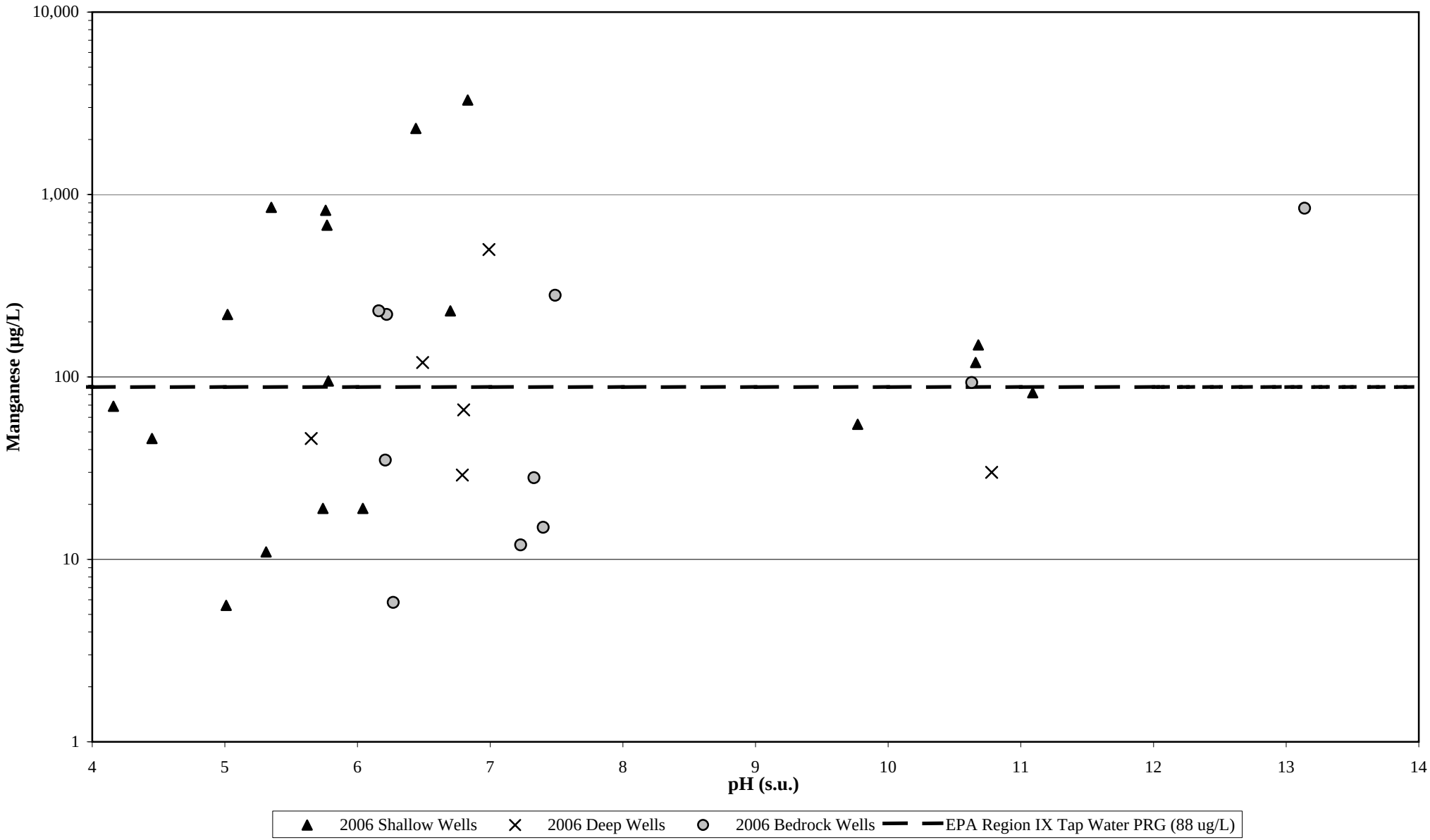
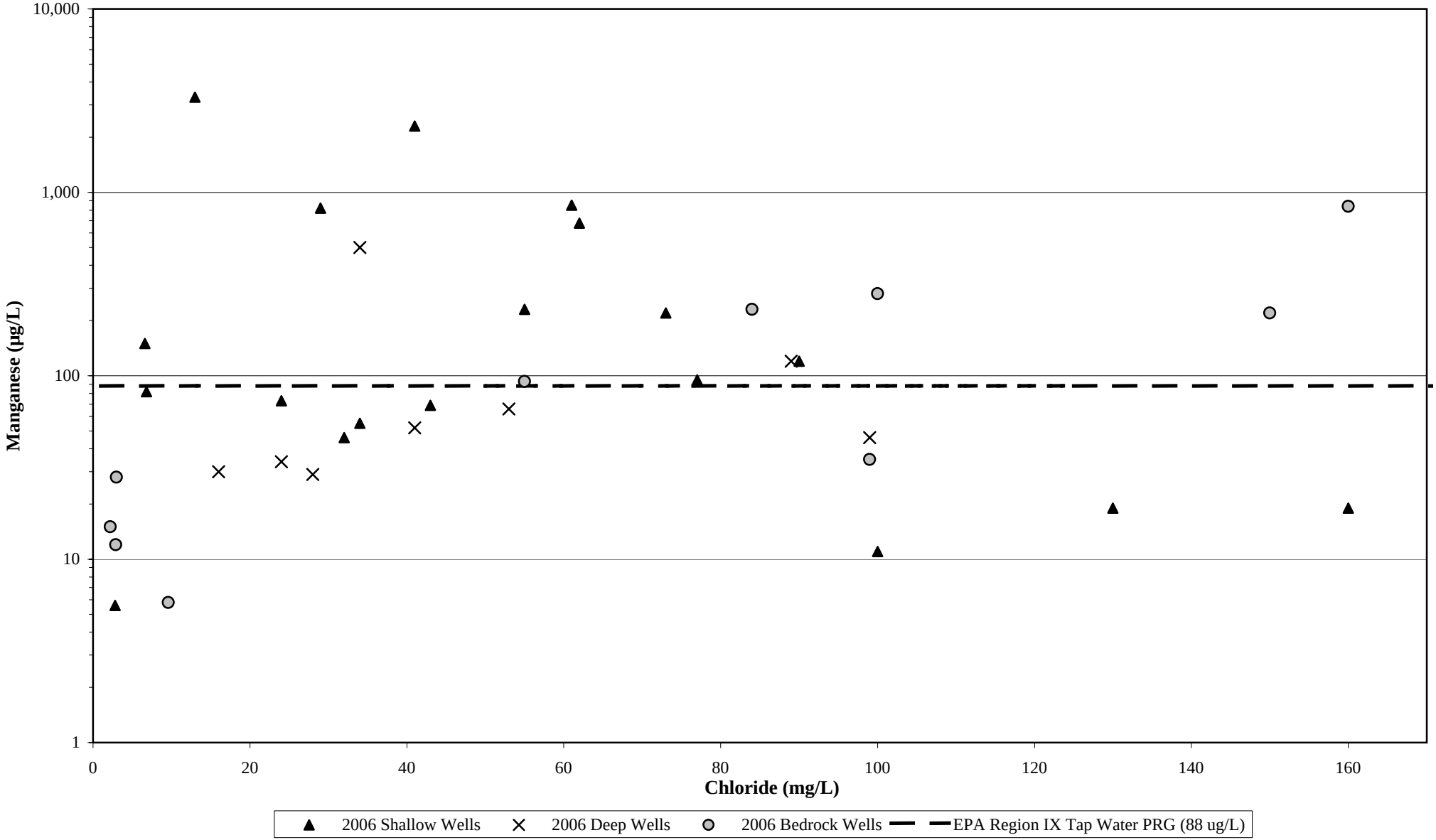
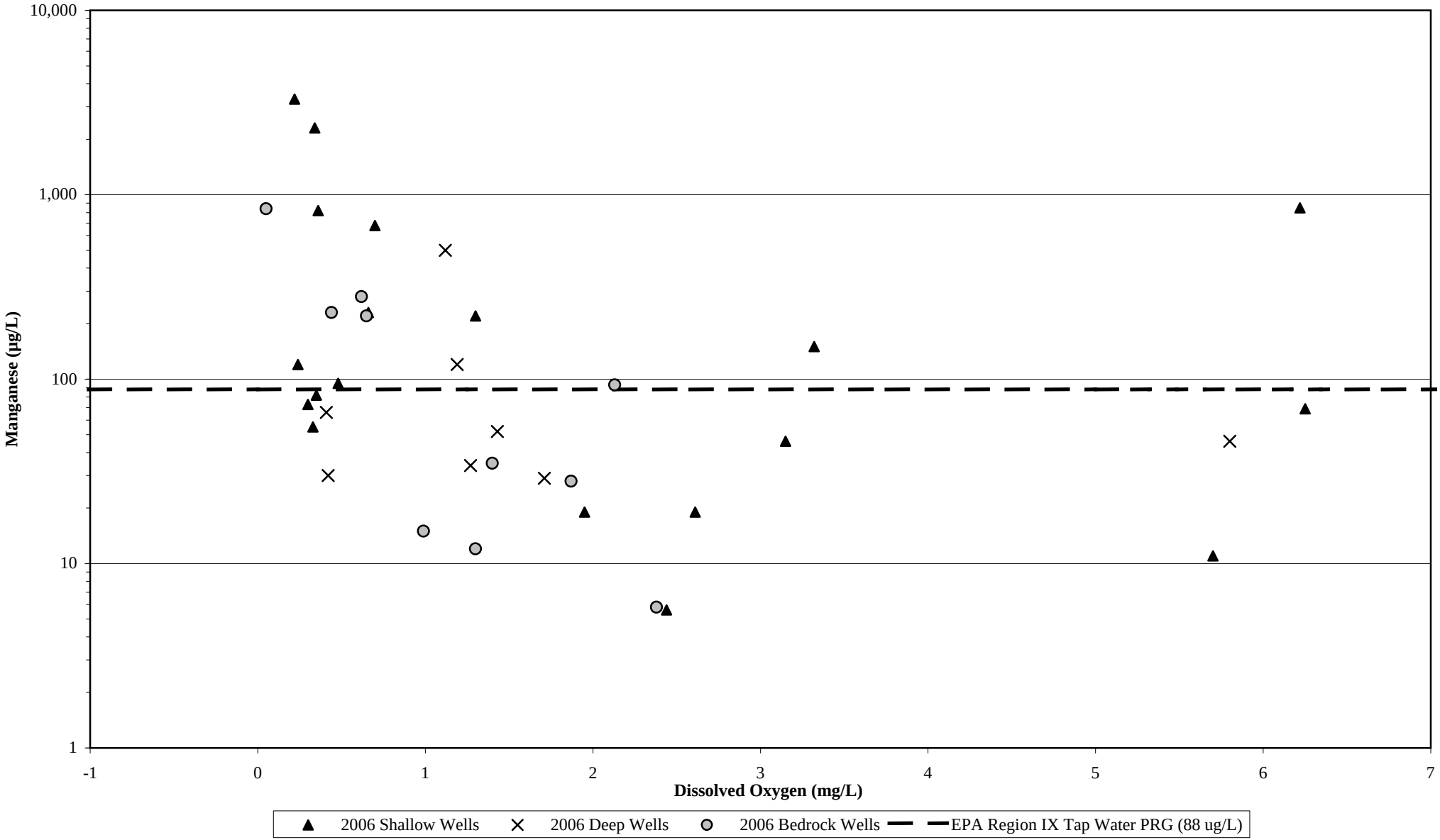


**Figure D-30**
**Manganese vs. Chloride**
**2006 Groundwater Sampling Round**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



Revision No.: 01 - DRAFT
Date: April 2007

**Figure D-31**
**Manganese vs. Dissolved Oxygen**
**2006 Groundwater Sampling Round**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



Revision No.: 01 - DRAFT
Date: April 2007

**Figure D-32**
**Manganese vs. Oxidation/Reduction Potential (ORP)**
**2006 Groundwater Sampling Round**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**

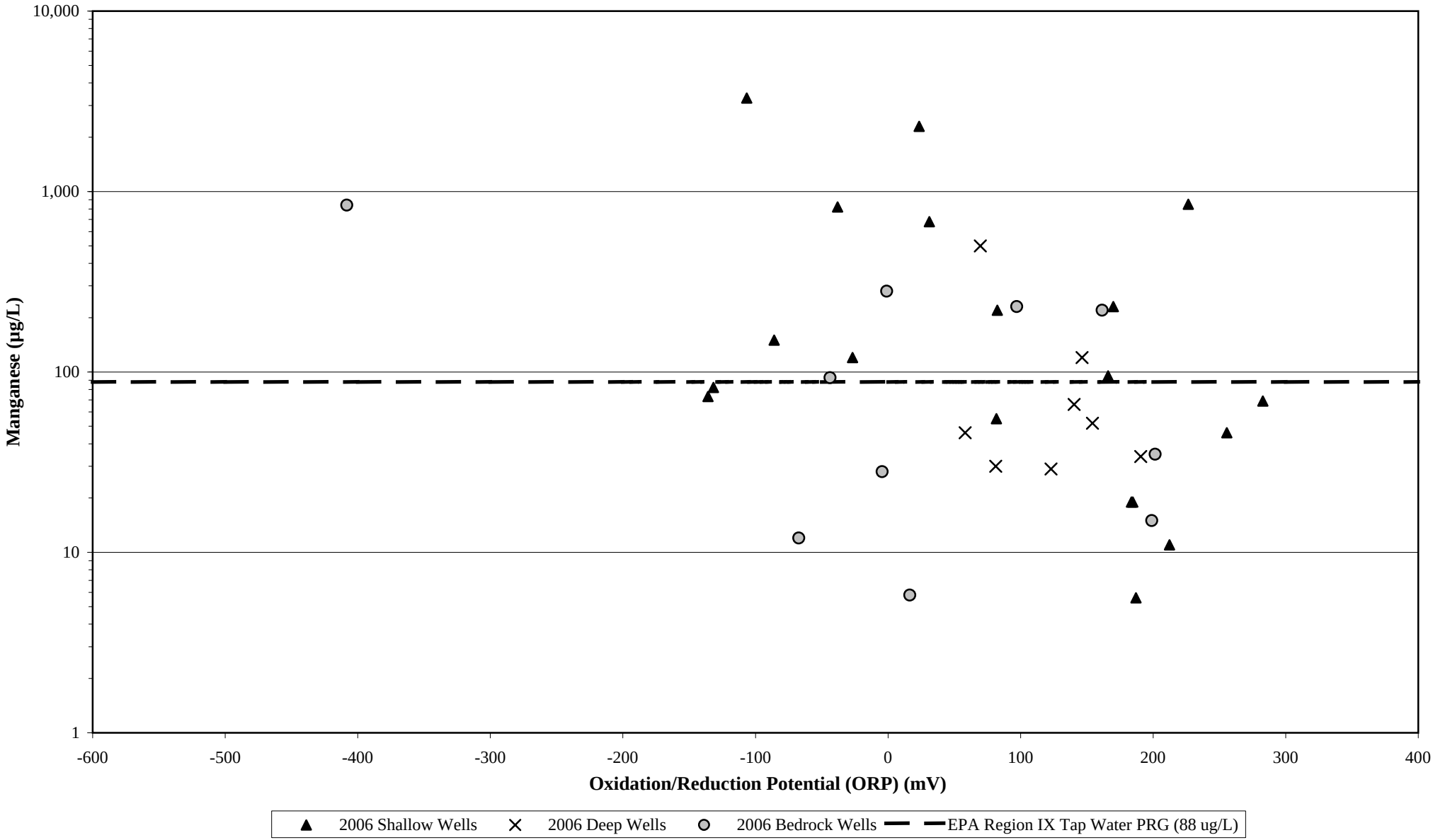


**Figure D-33**
**Lead vs. pH**
**2006 Groundwater Sampling Round**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**

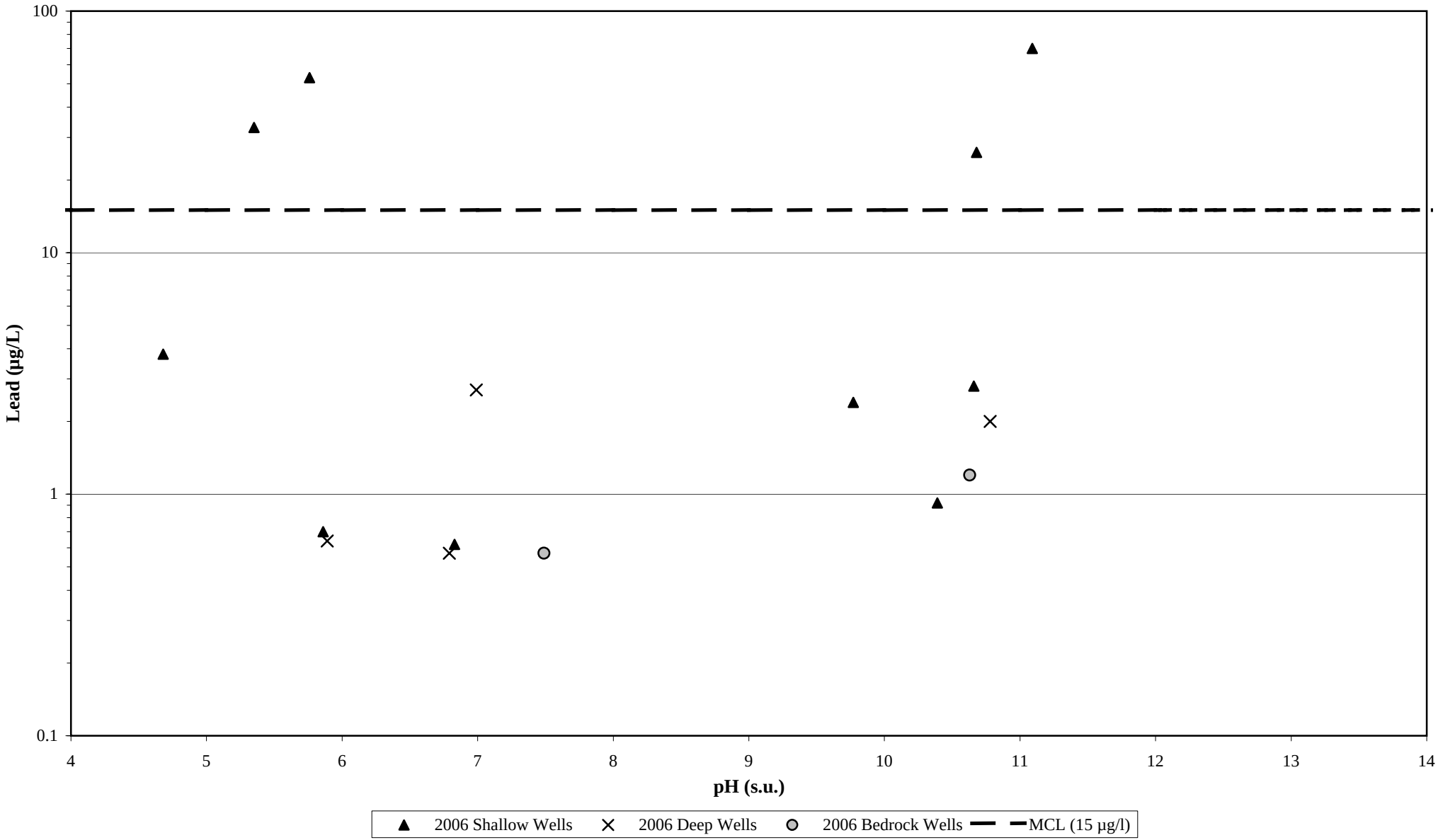


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**Figure D-34**
**Lead vs. Chloride**
**2006 Groundwater Sampling Round**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**

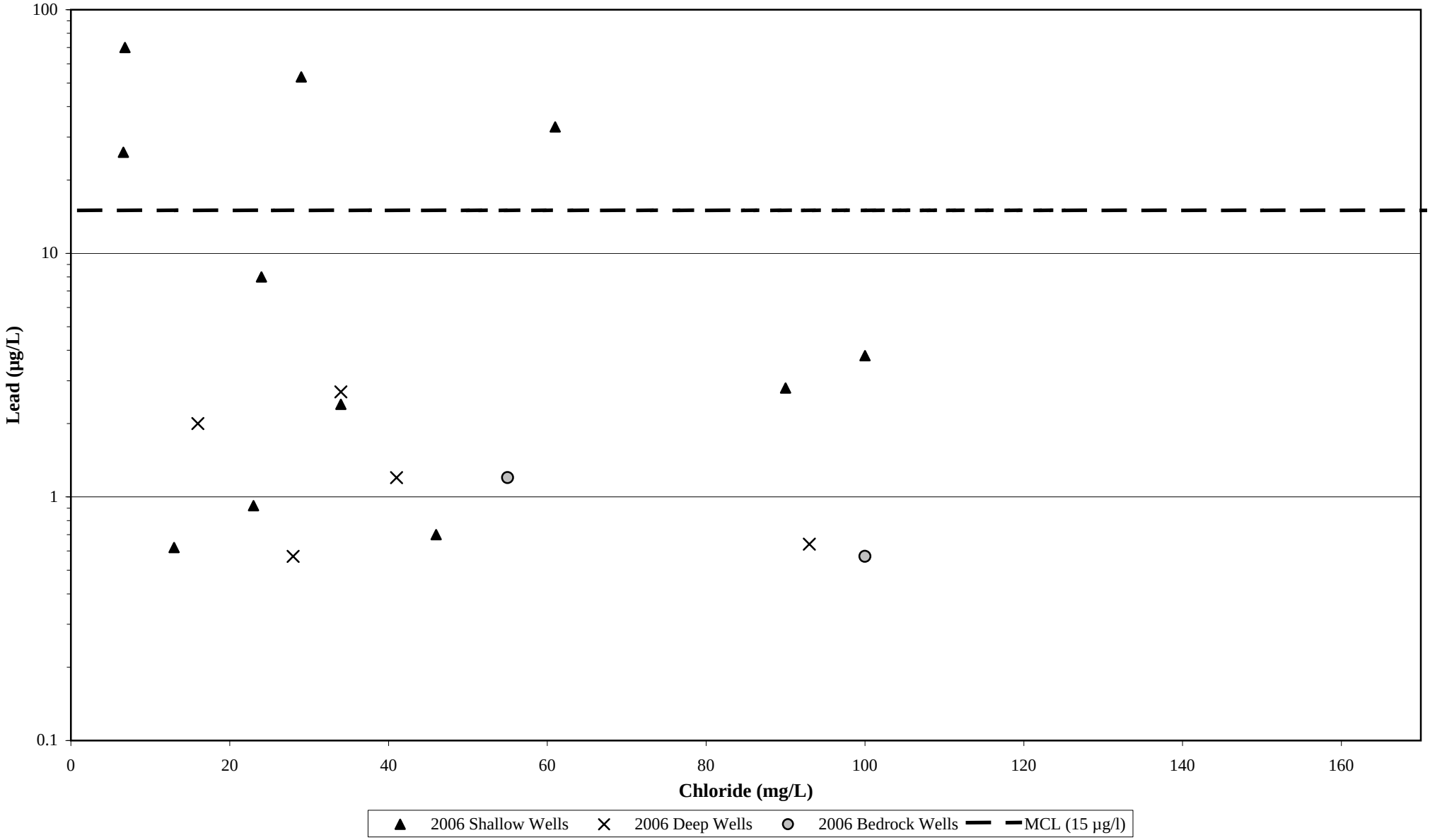

**Figure D-35**
**Nickel vs. pH**
**2006 Groundwater Sampling Round**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**

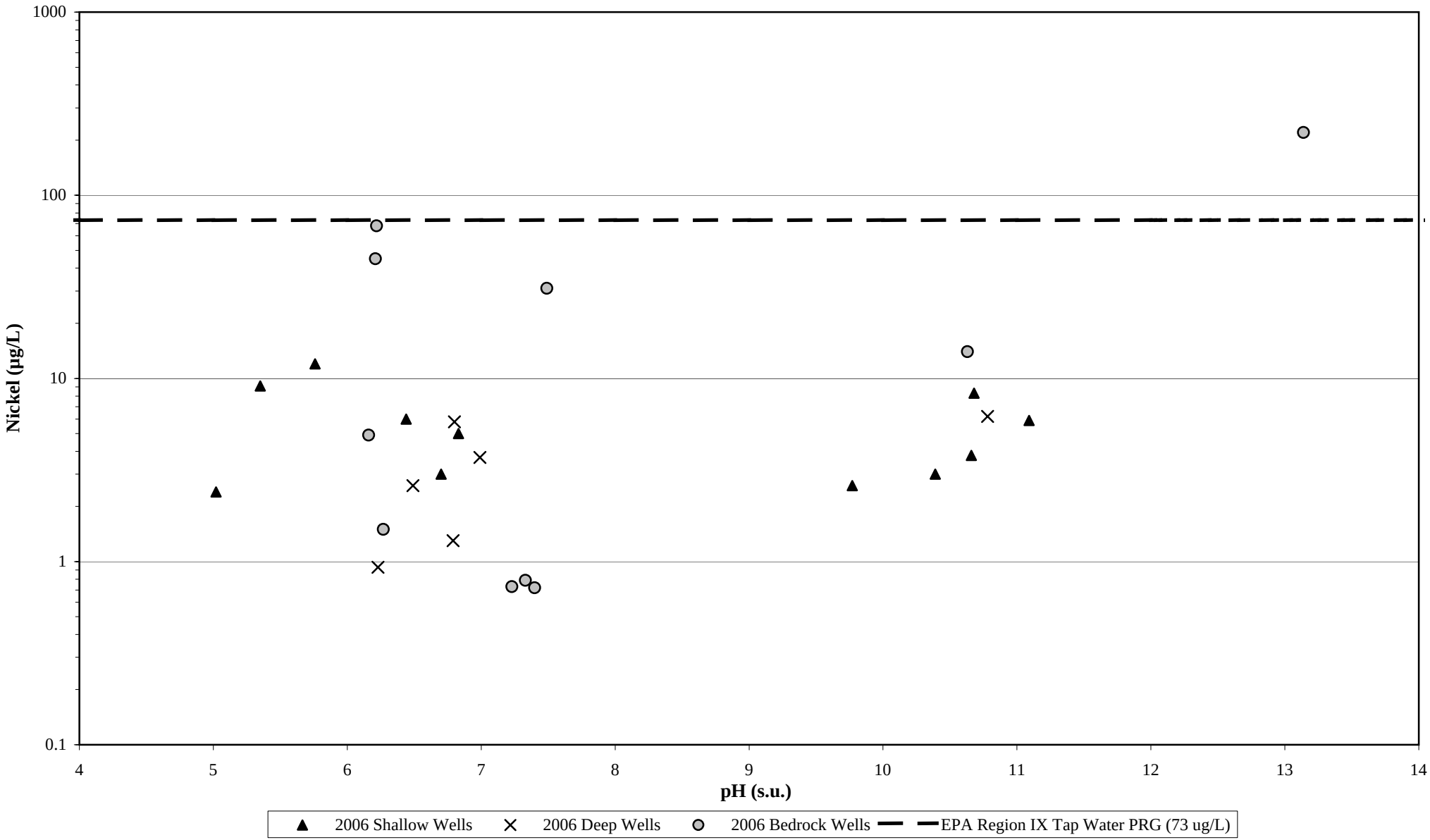

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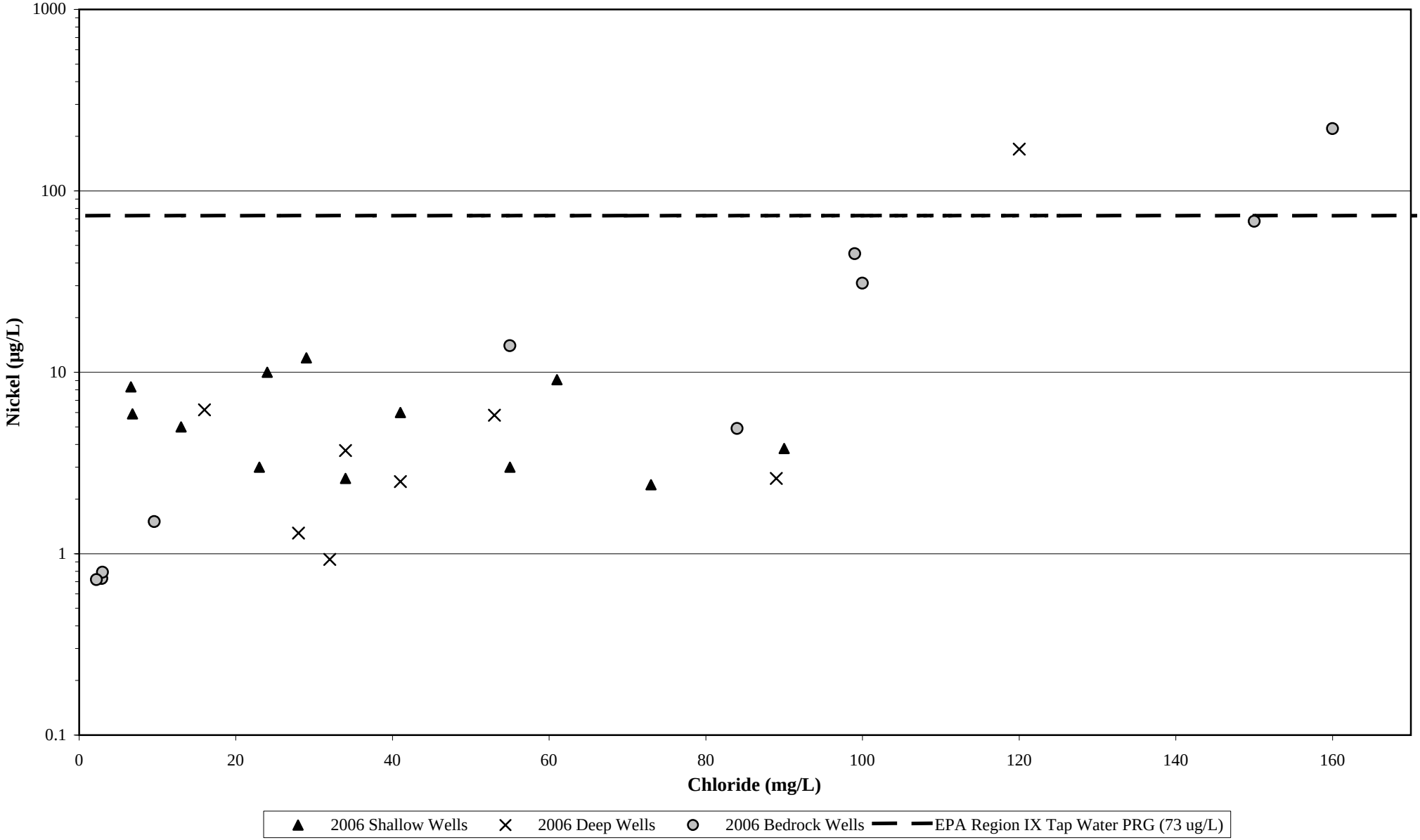
**Figure D-36**
**Nickel vs. Chloride**
**2006 Groundwater Sampling Round**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



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Date: April 2007

**Figure D-37**
**Potassium vs. pH**
**2006 Groundwater Sampling Round**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**

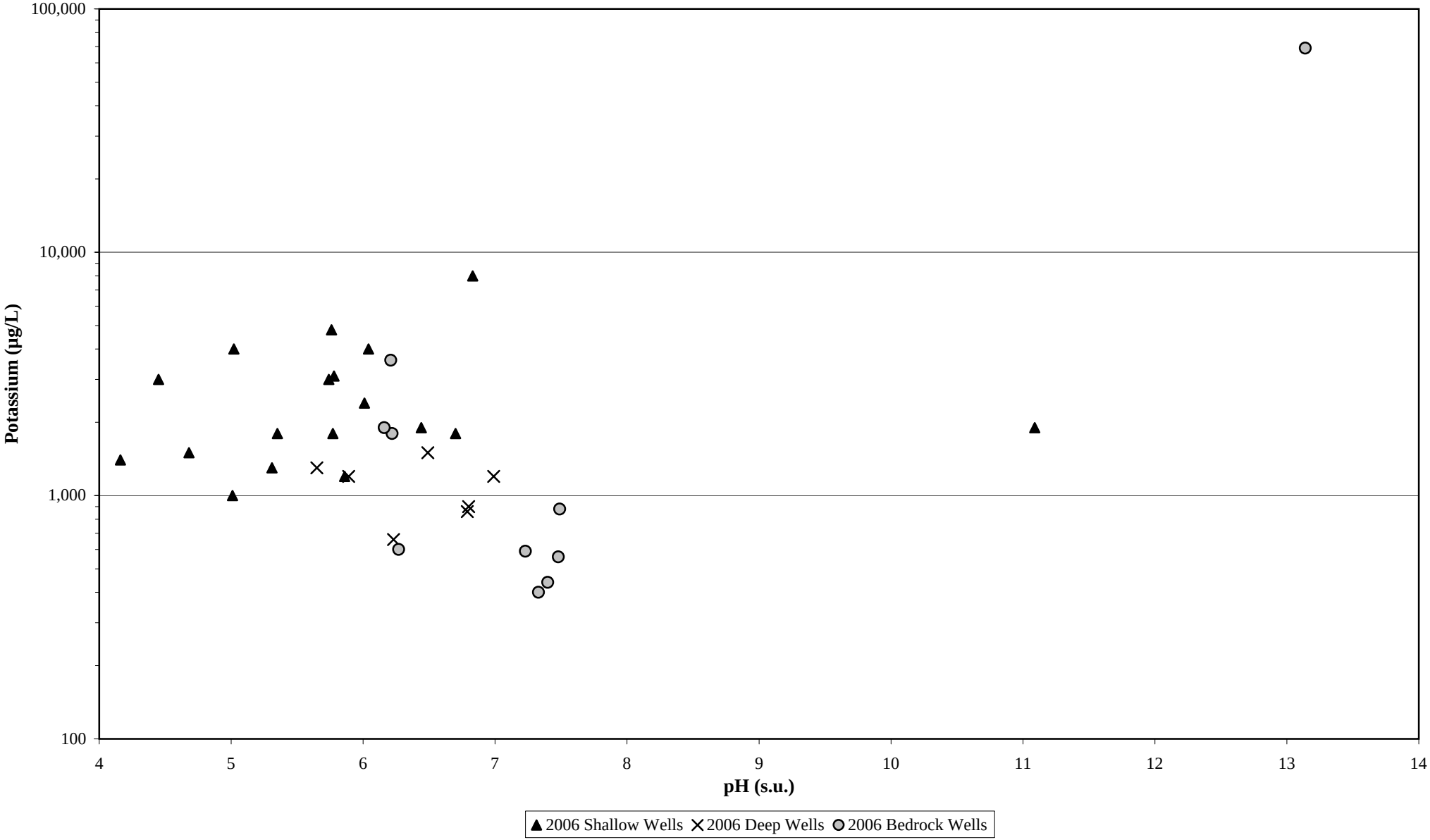

**Figure D-38**
**Sodium vs. pH**
**2006 Groundwater Sampling Round**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**

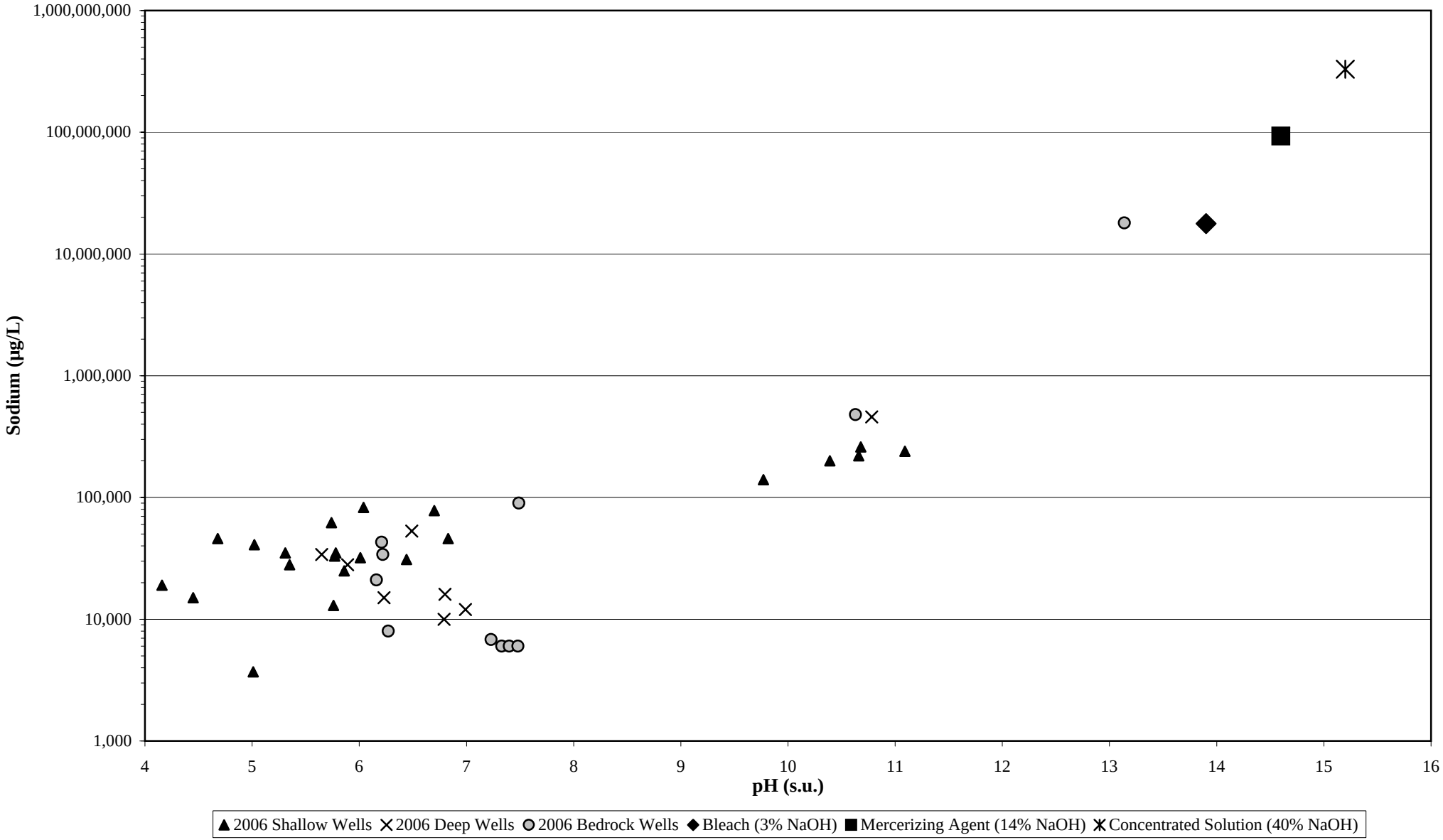

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**Figure D-39**
**Vanadium vs. pH**
**2006 Groundwater Sampling Round**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**

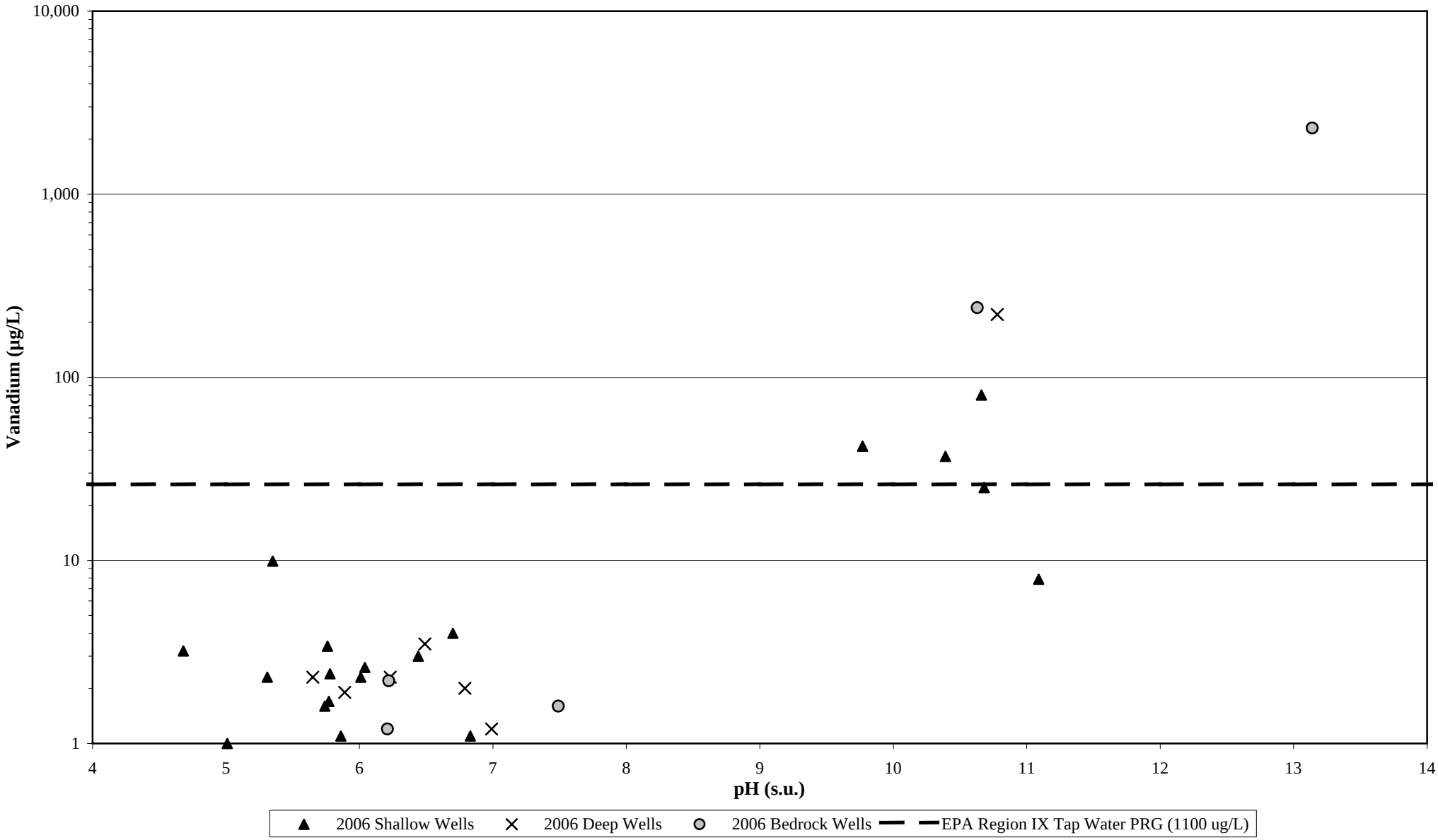


**Figure D-40**
**Alkalinity vs. pH**
**2006 Groundwater Sampling Round**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**

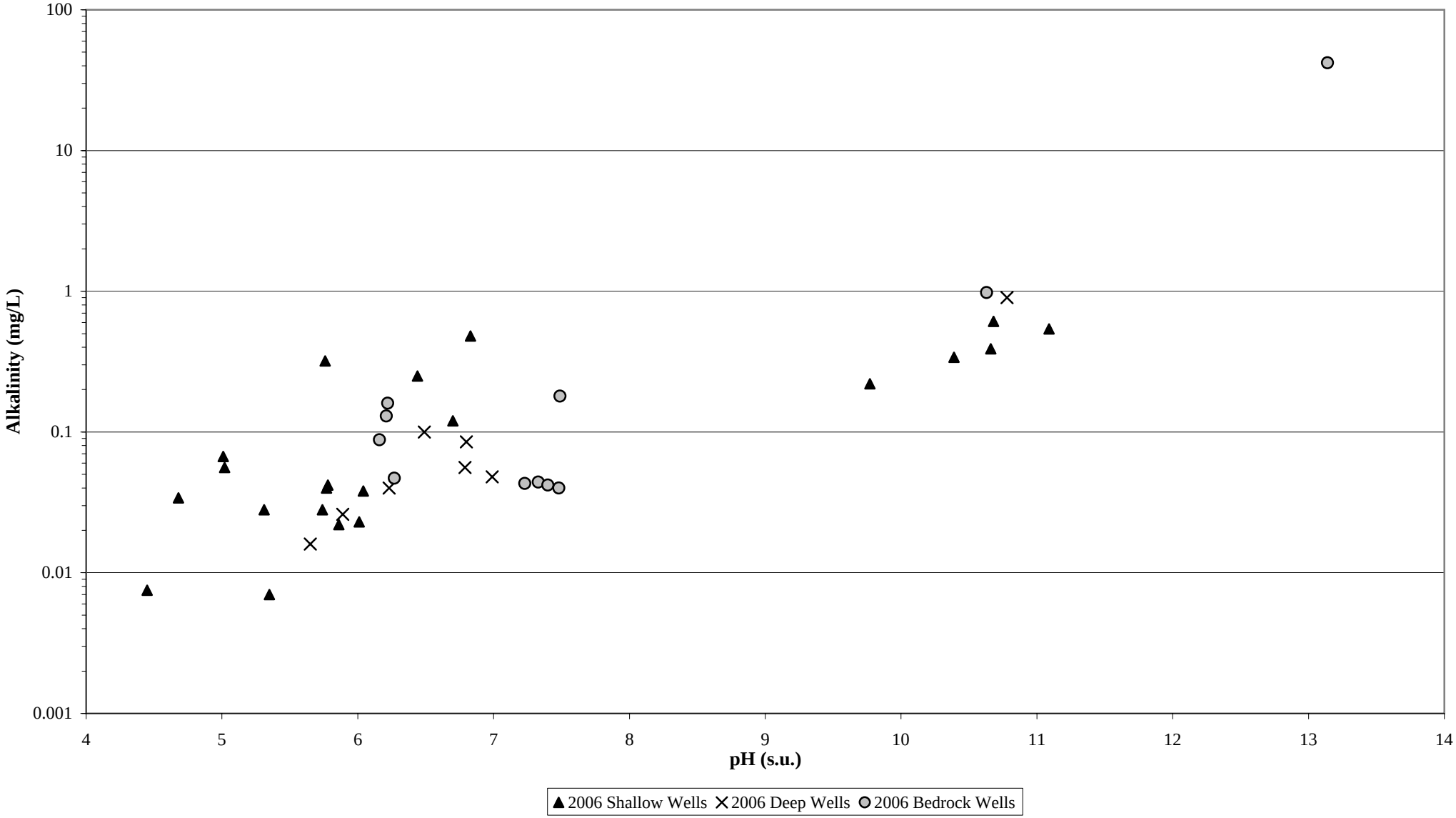


**Figure D-41**
**Chloride vs. pH**
**2006 Groundwater Sampling Round**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**

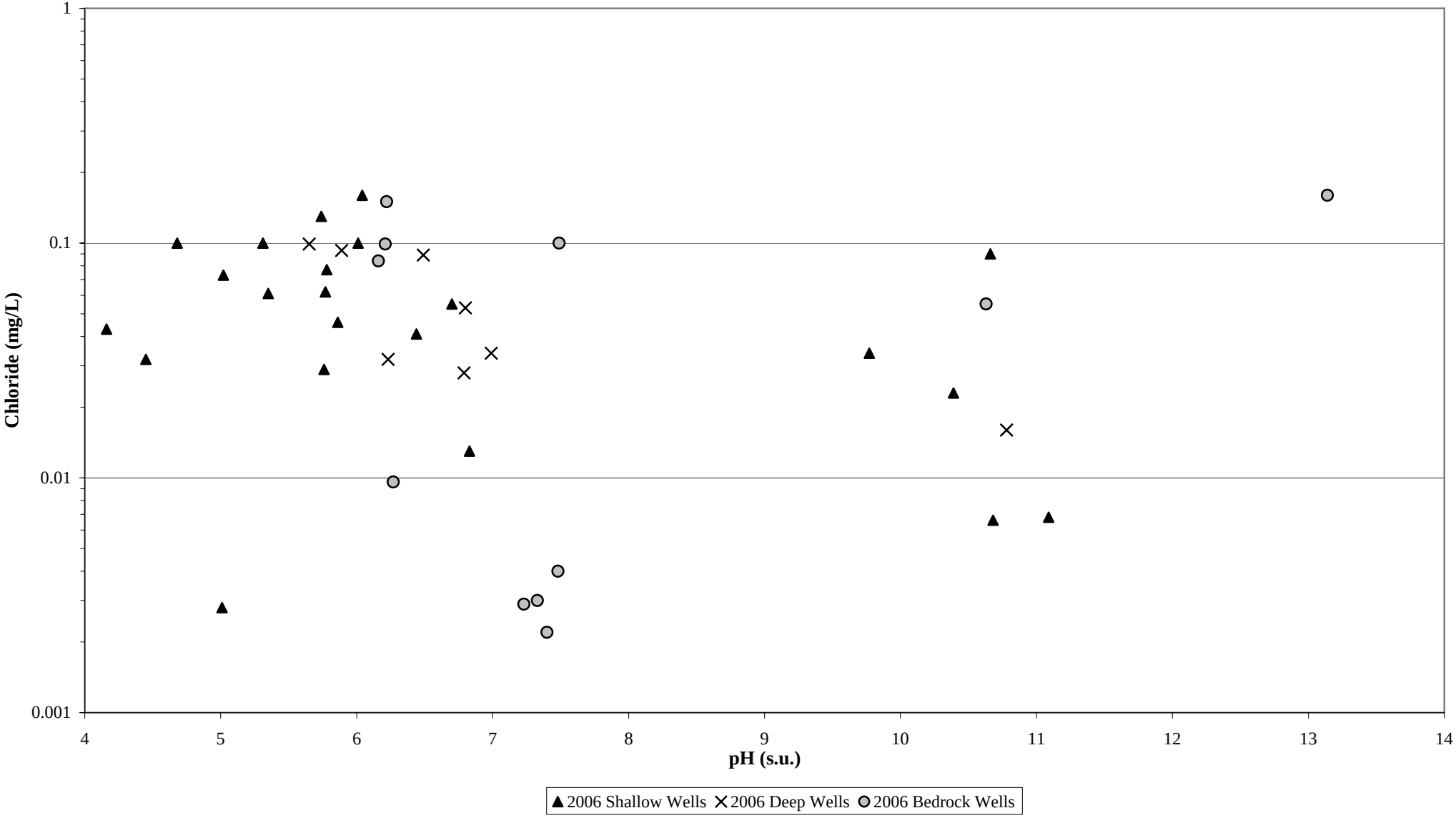


**Figure D-42**
**Sulfate vs. pH**
**2006 Groundwater Sampling Round**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**

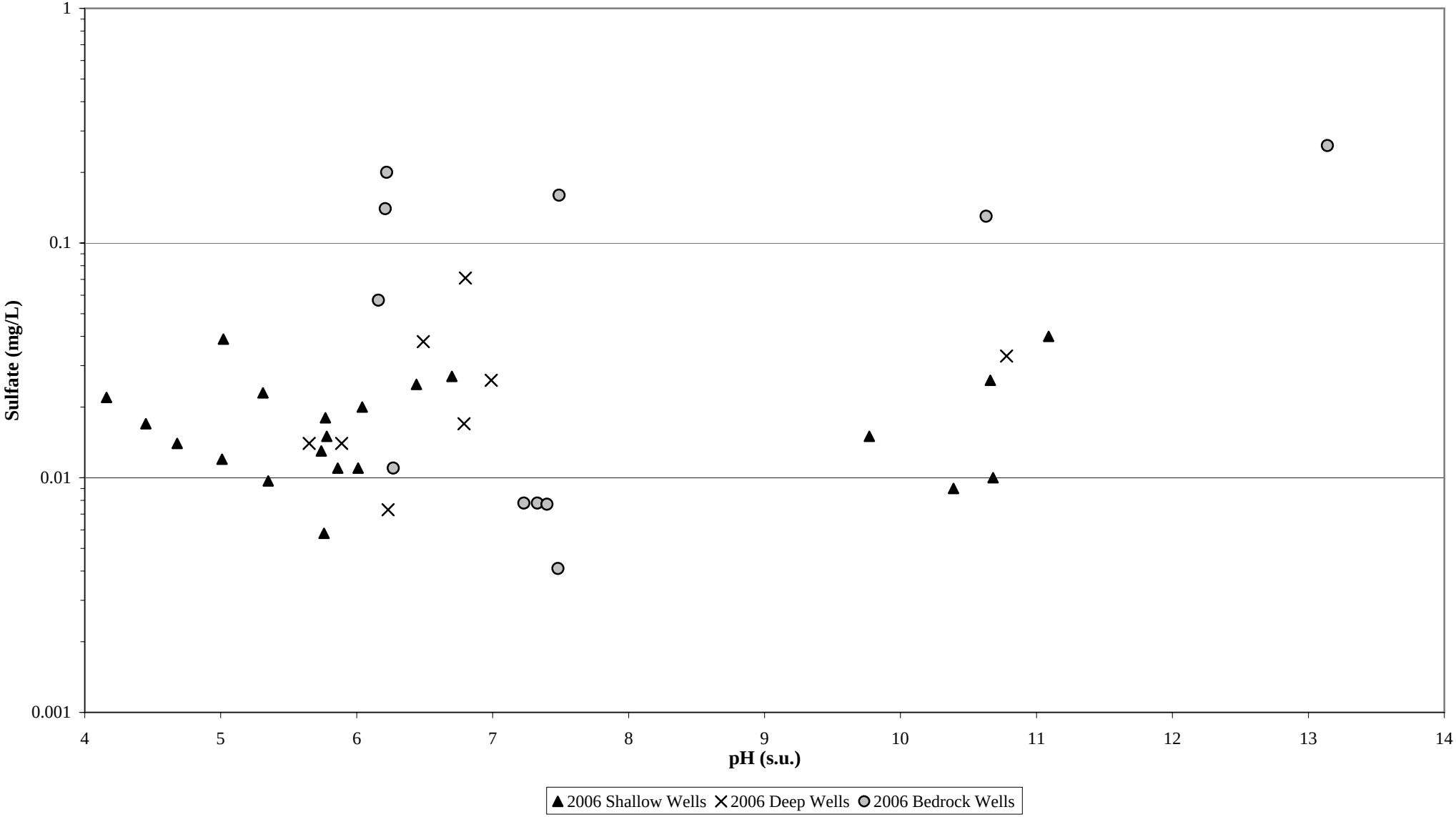


**Figure D-43**
**Nitrate vs. pH**
**2006 Groundwater Sampling Round**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**

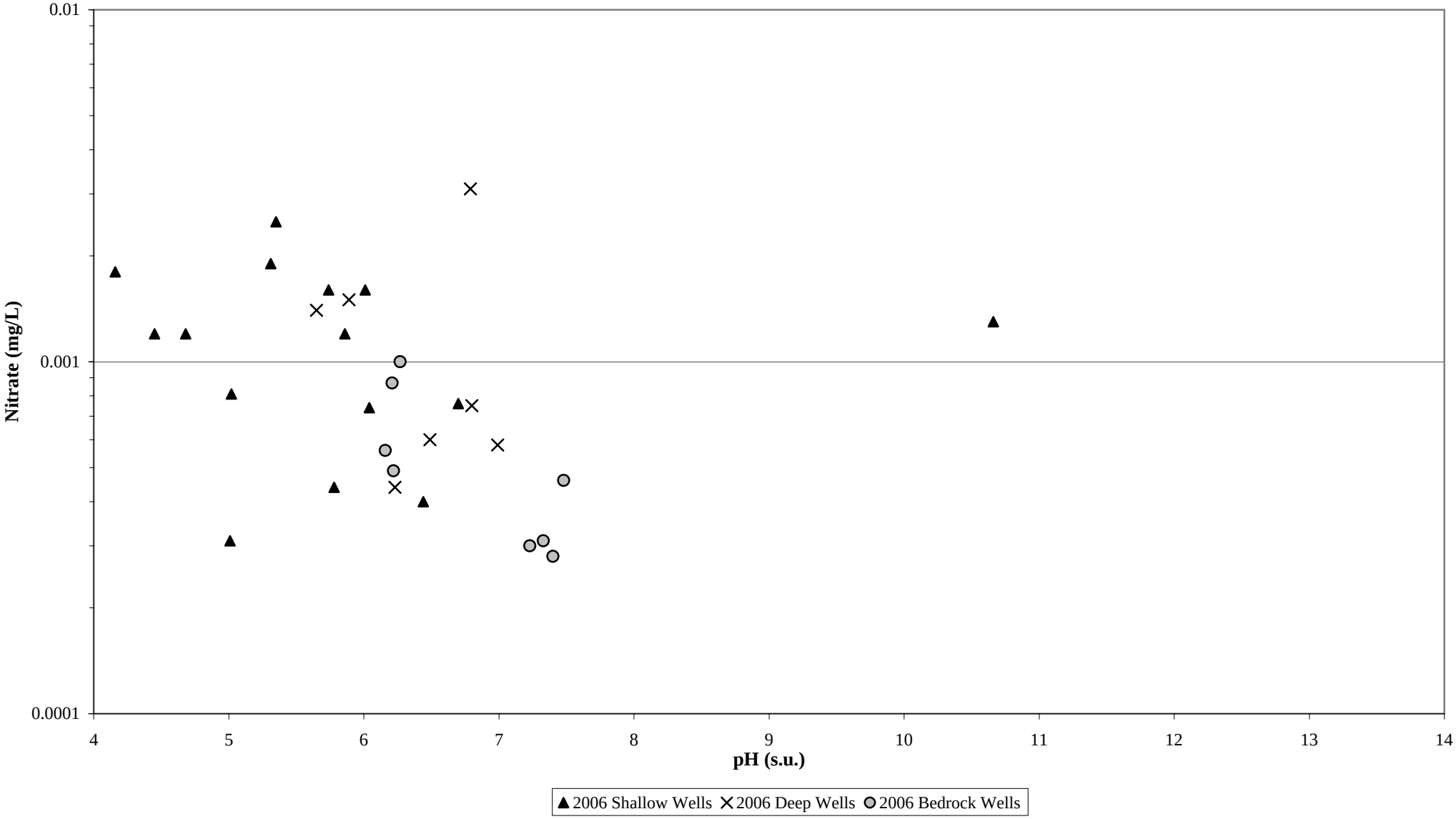
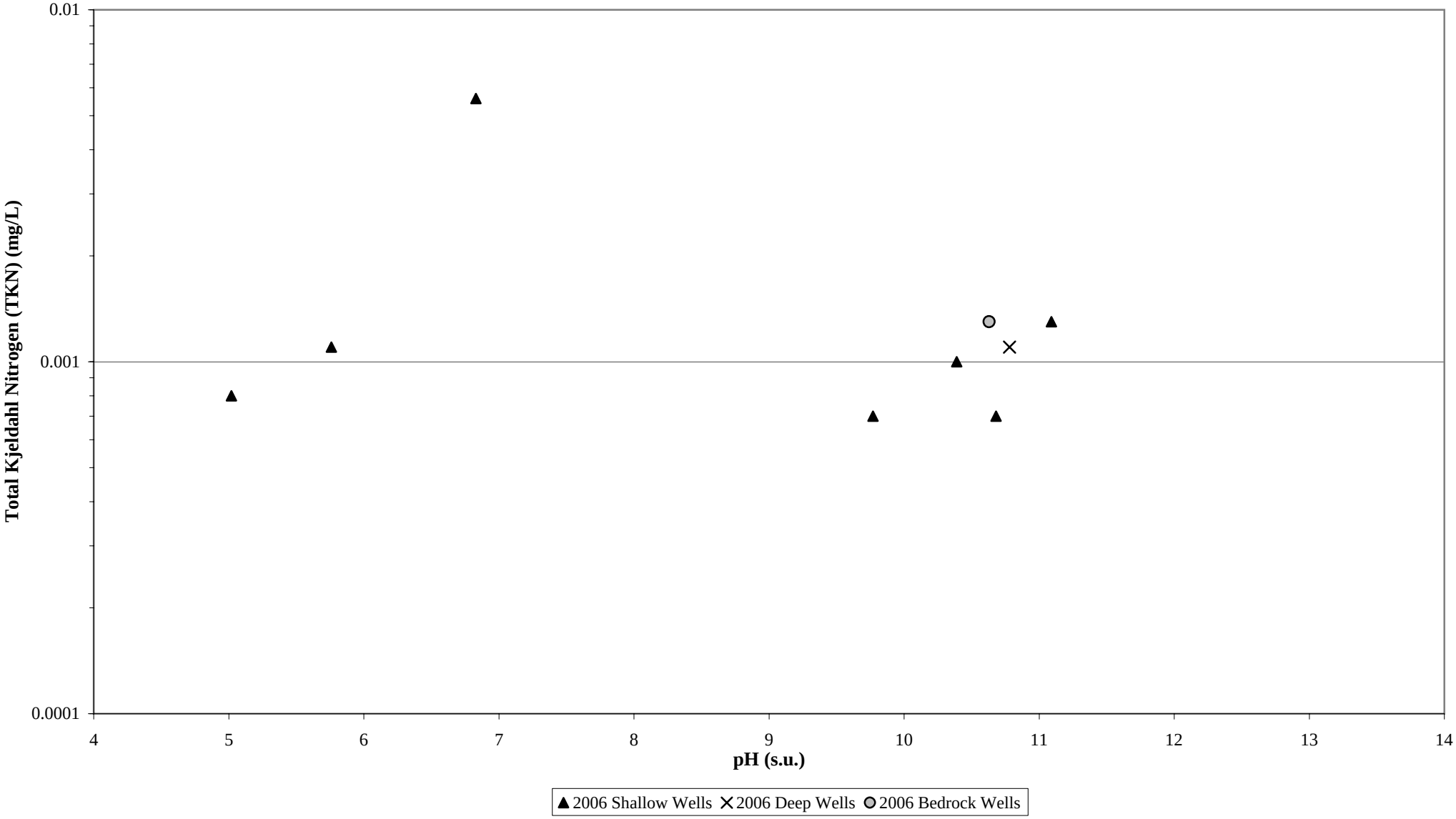


**Figure D-44**
**Total Kjeldahl Nitrogen (TKN) vs. pH**
**2006 Groundwater Sampling Round**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**

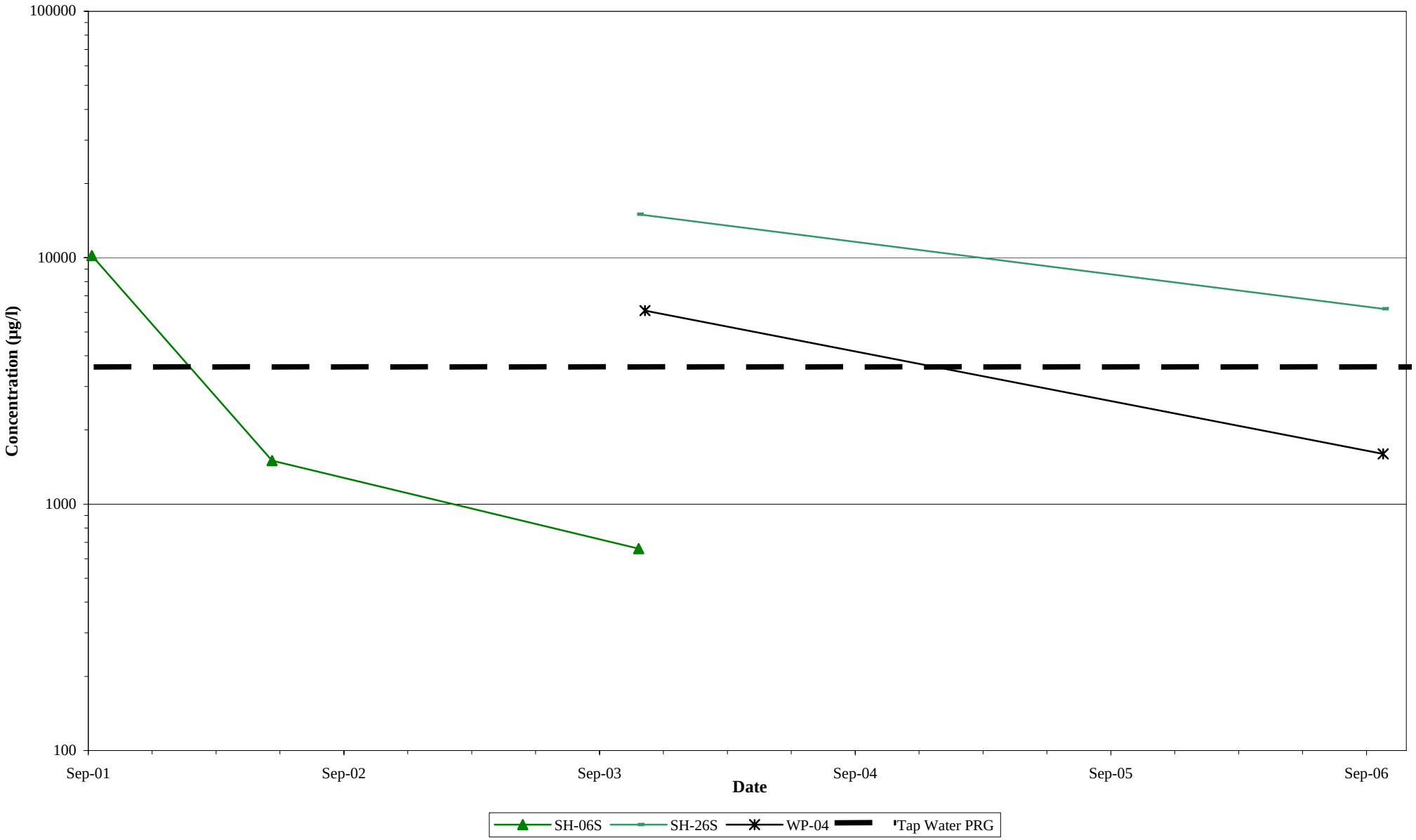


# APPENDIX E

# TIME SERIES PLOTS

**FIGURE E.1**
**Aluminum in Shallow Groundwater**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**

ND = ½RL



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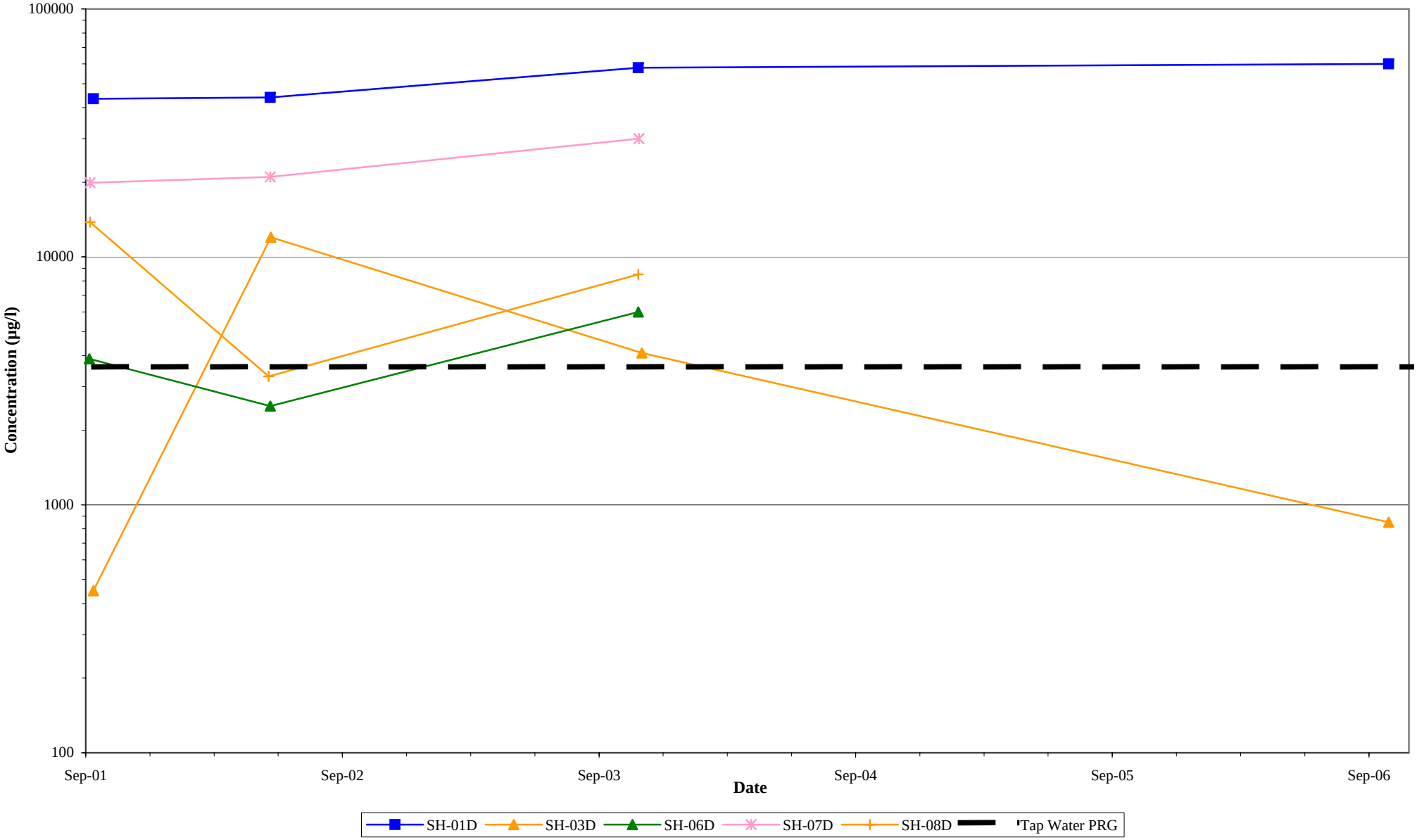
Date: April 2007

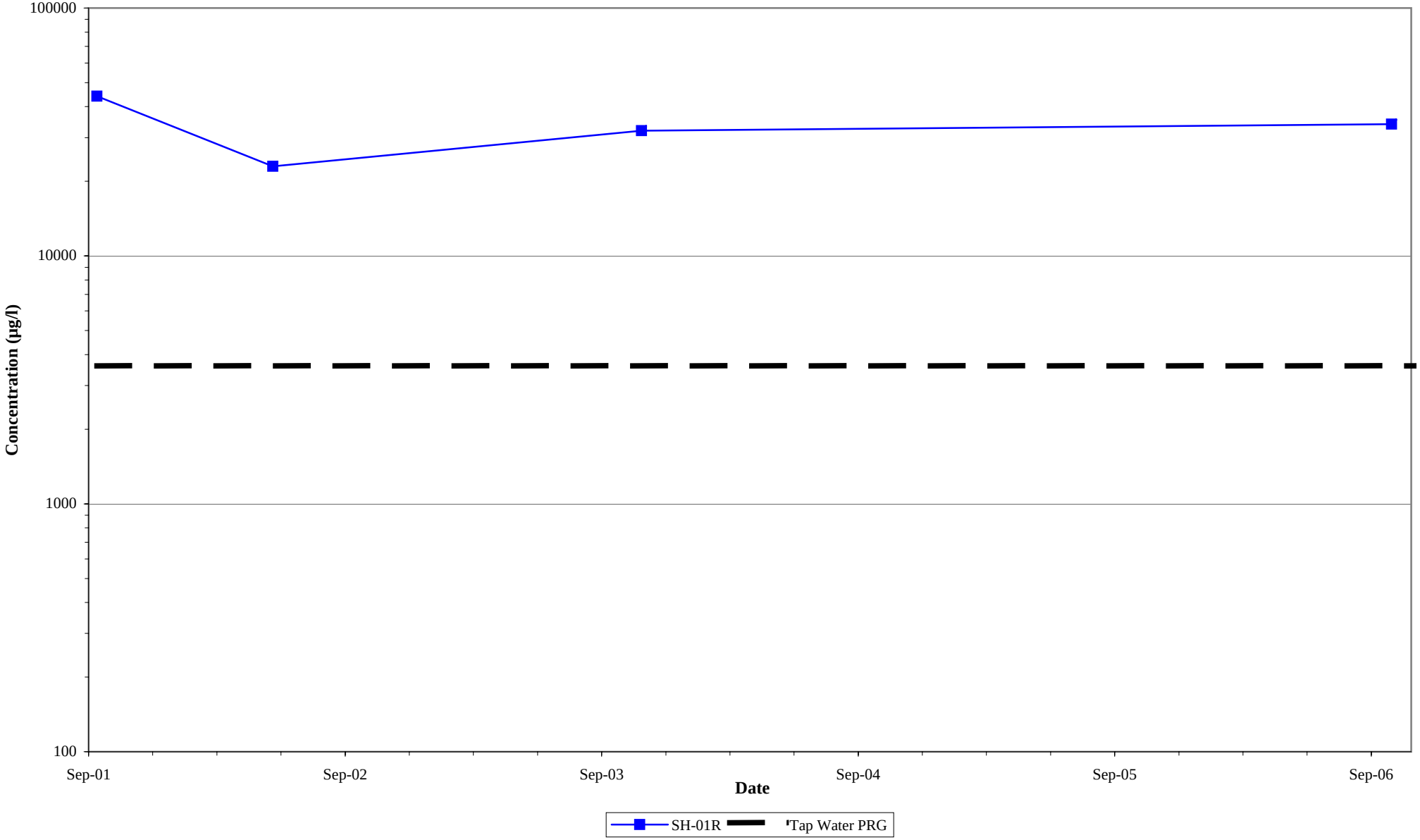
ND = ½RL

**FIGURE E.2**
**Aluminum in Deep Groundwater**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



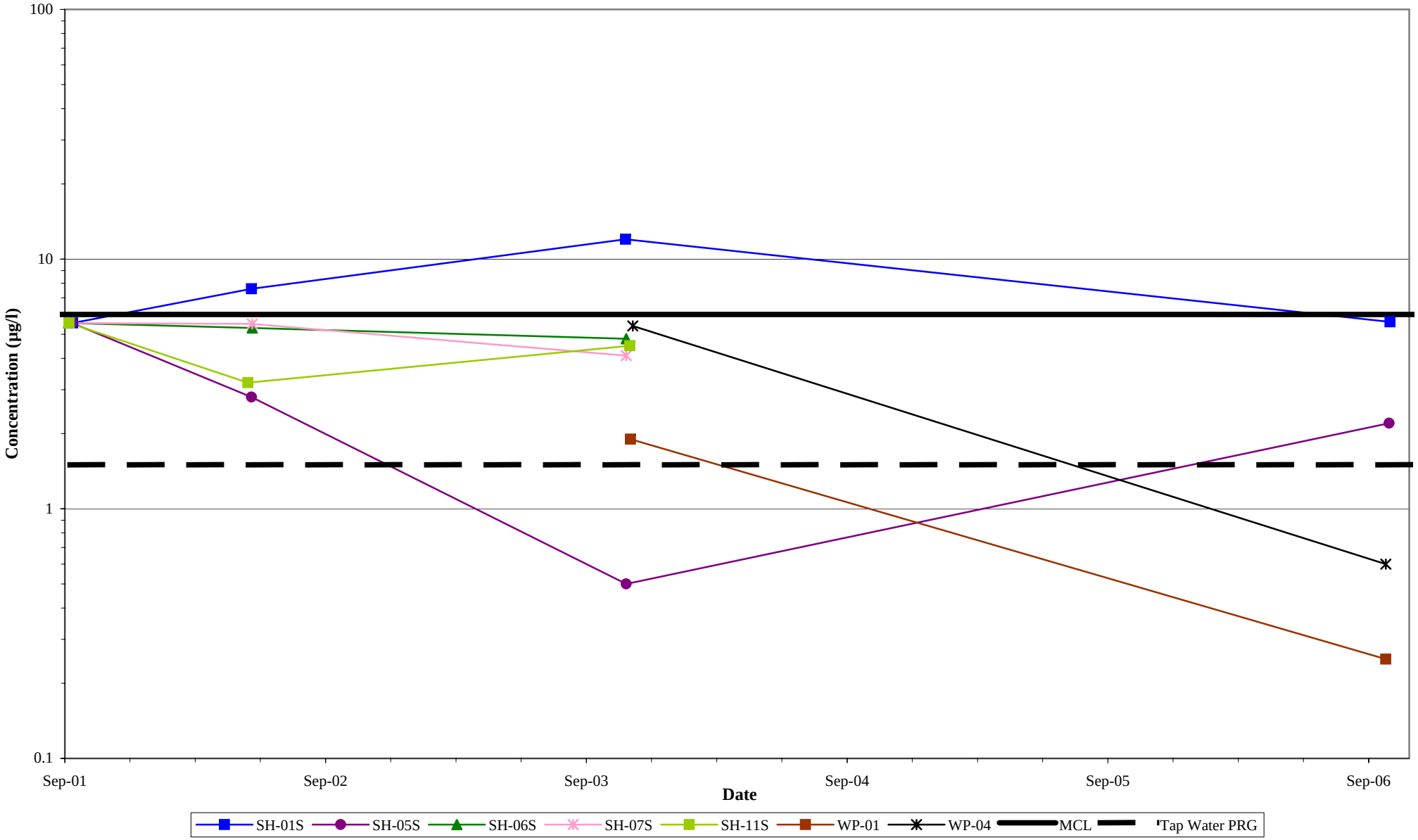
ND = ½RL

**FIGURE E.3**
**Aluminum in Bedrock Groundwater**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



ND = ½RL

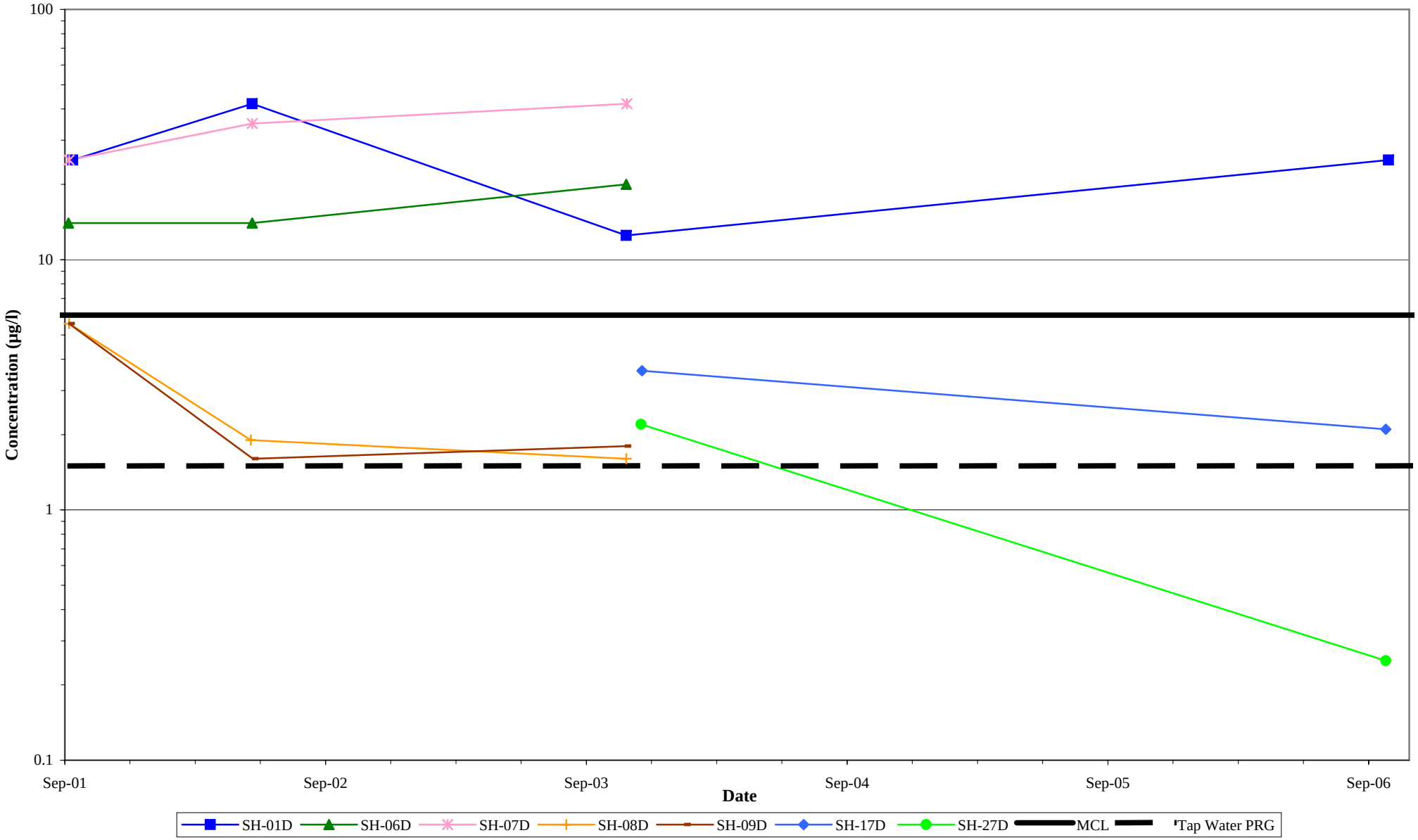
**FIGURE E.4**
**Antimony in Shallow Groundwater**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



Revision No.: 01 - DRAFT
Date: April 2007

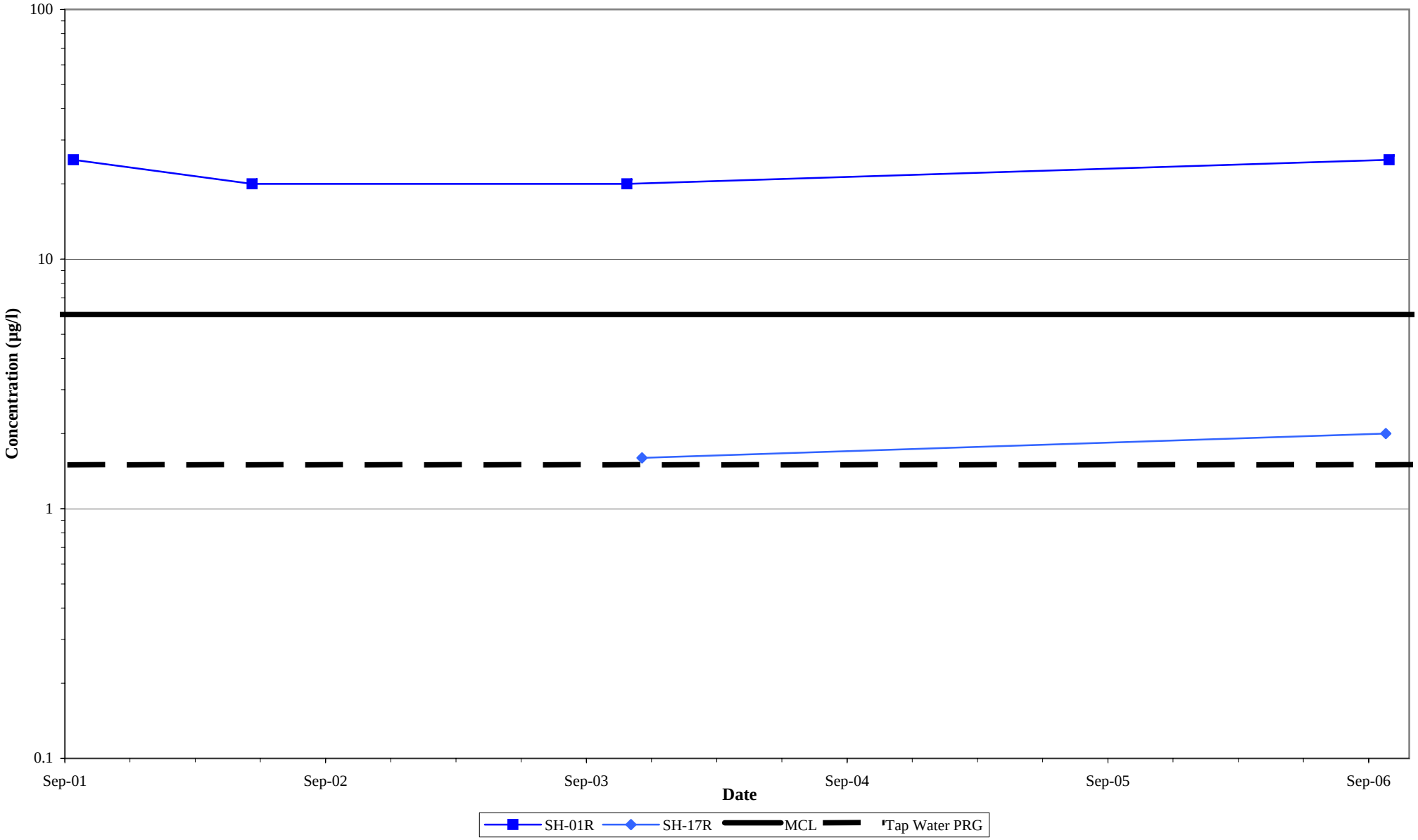
ND = ½RL

**FIGURE E.5**
**Antimony in Deep Groundwater**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



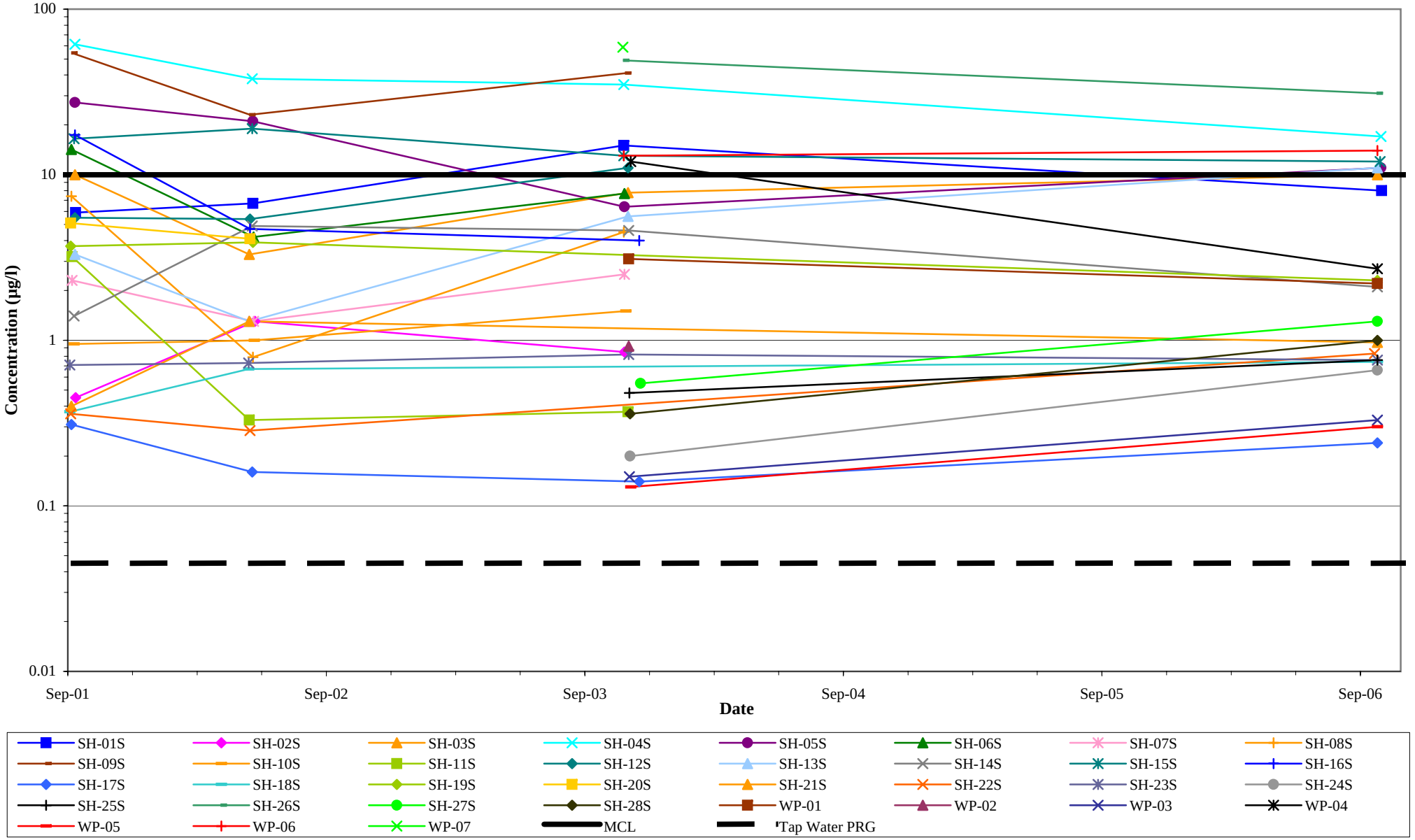
ND = ½RL

**FIGURE E.6**
**Antimony in Bedrock Groundwater**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



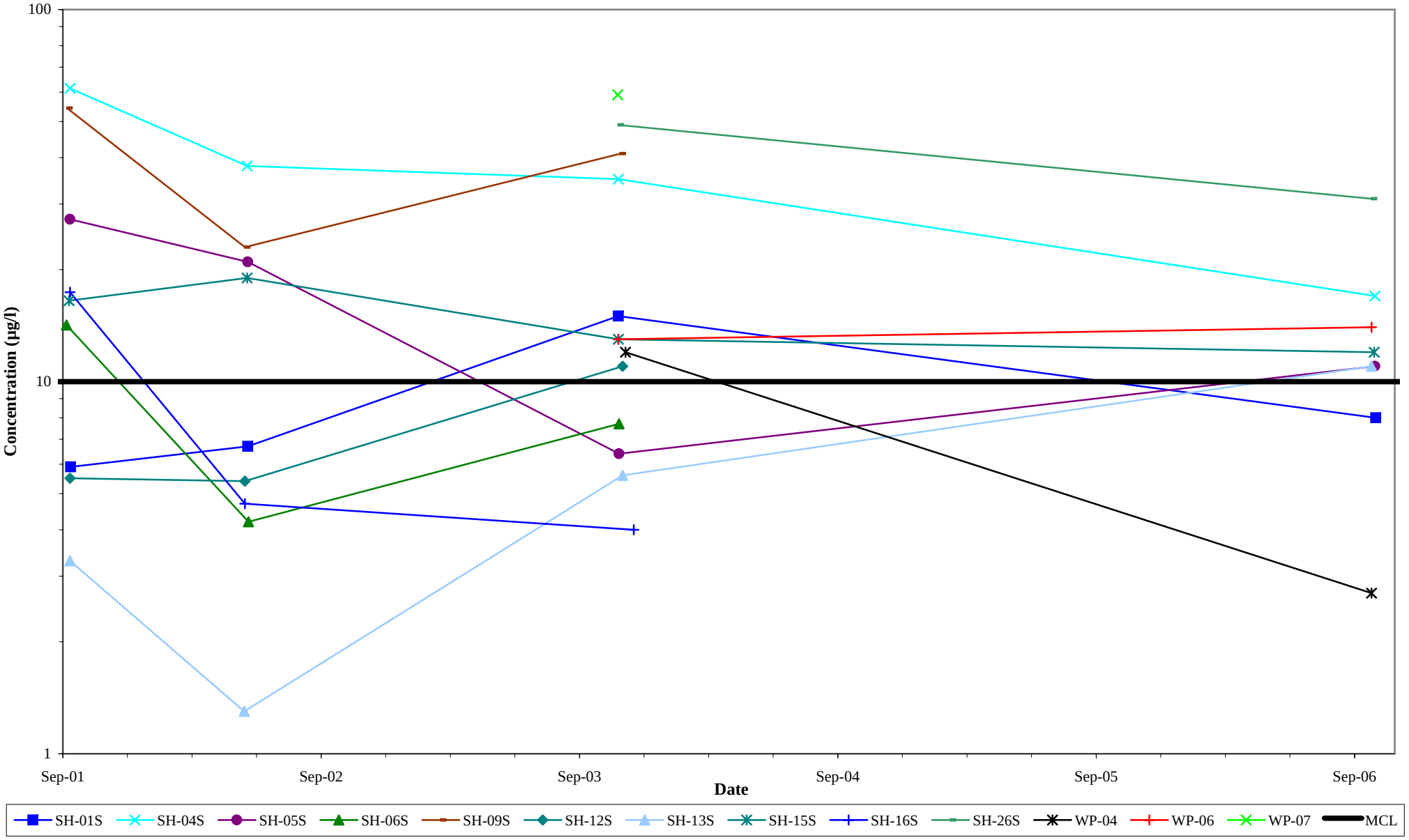
ND = ½RL

**FIGURE E.7**
**Arsenic in Shallow Groundwater**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



ND = ½RL

**FIGURE E.7a**
**Arsenic Greater than MCL in Shallow Groundwater**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



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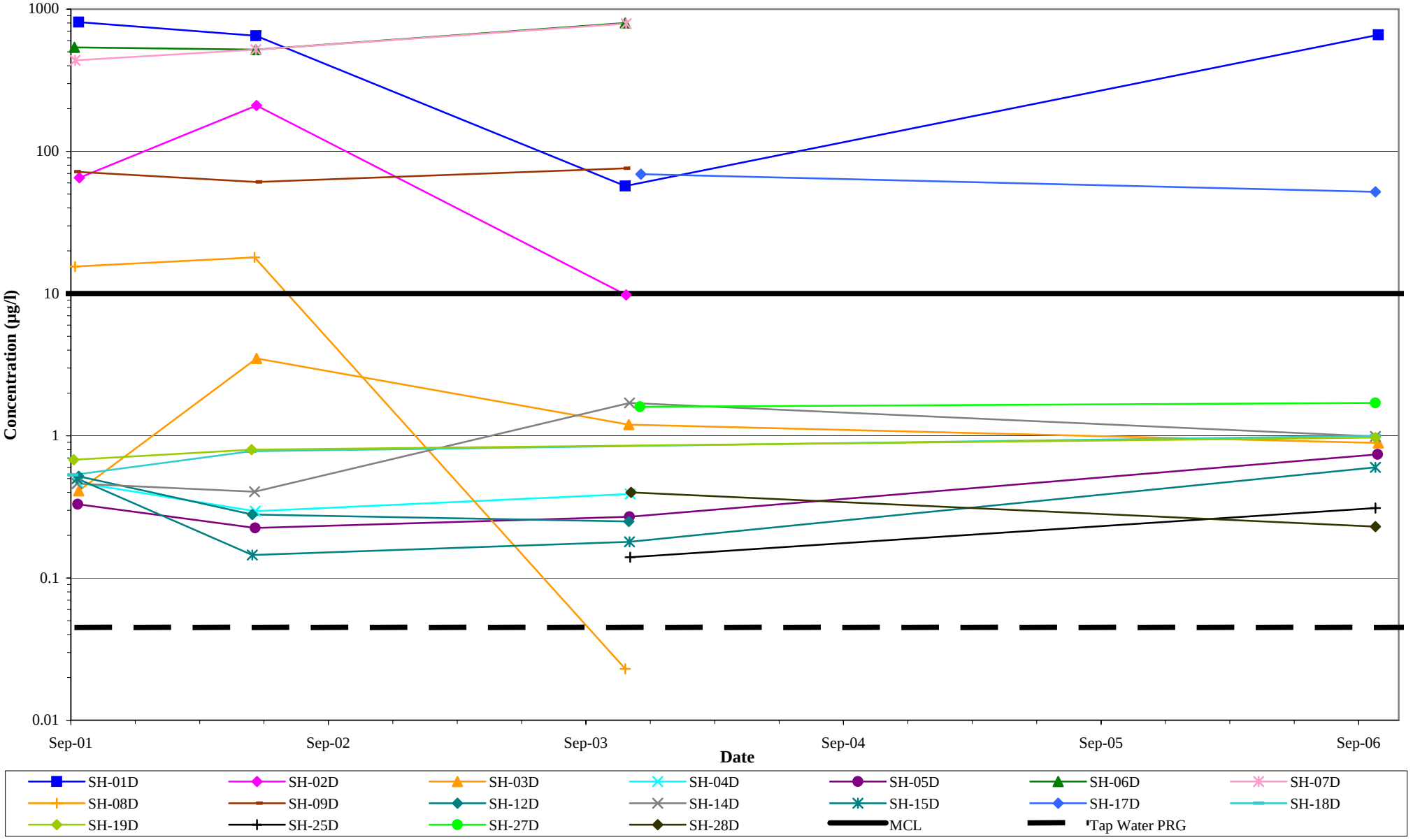
Date: April 2007

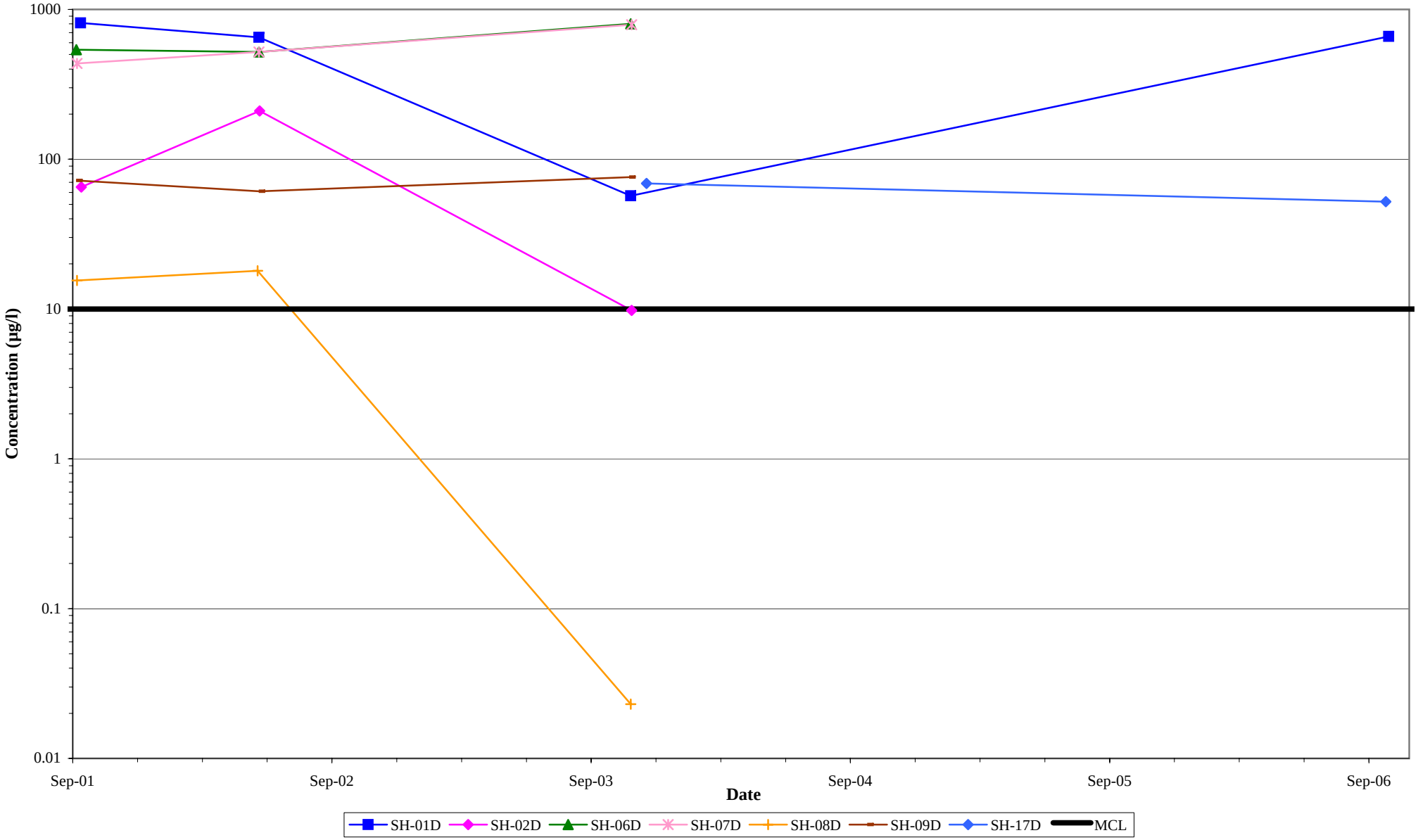
ND = ½RL

**FIGURE E.8**
**Arsenic in Deep Groundwater**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



ND = ½RL

**FIGURE E.8a**
**Arsenic Greater than MCL in Deep Groundwater**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



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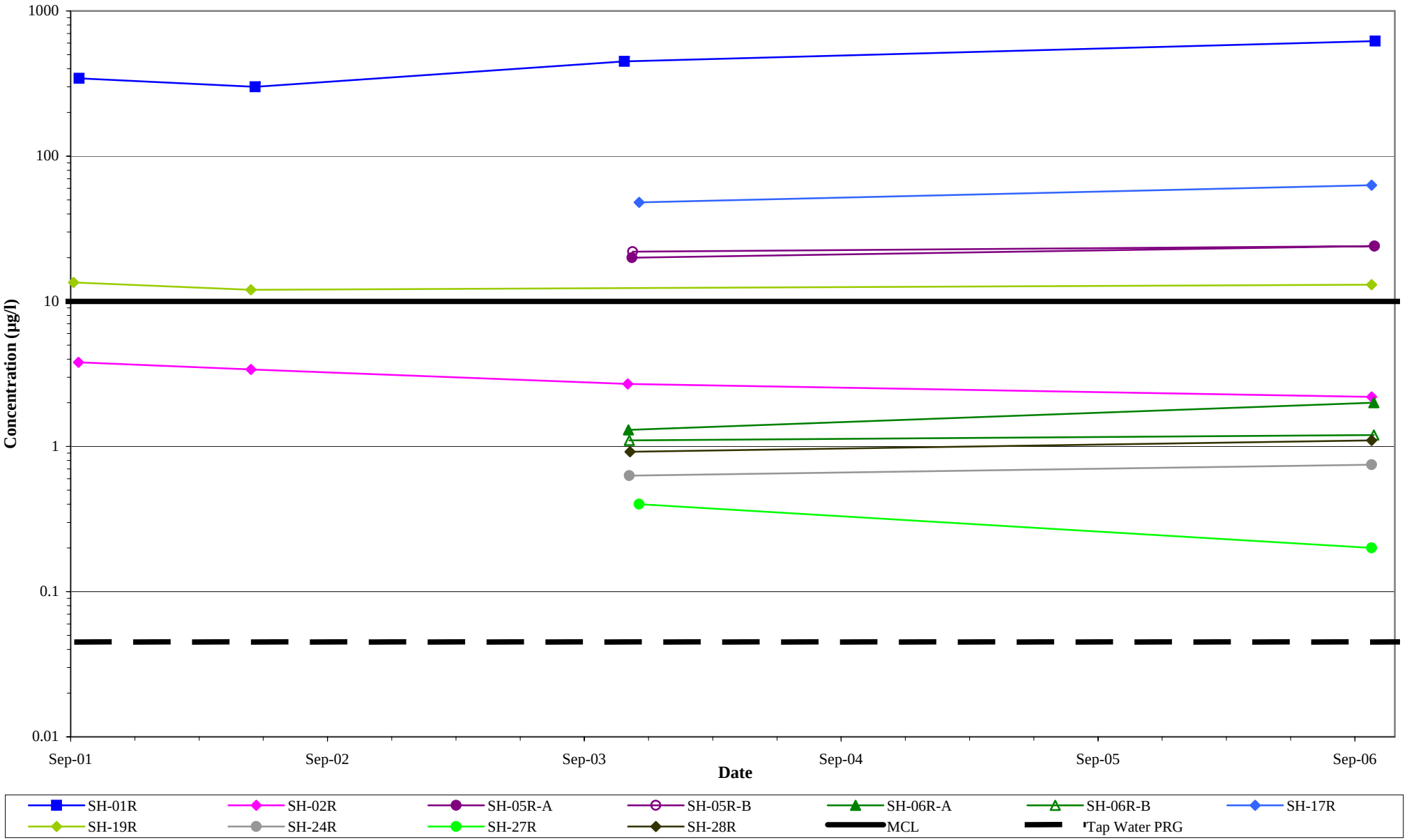
Date: April 2007

ND = ½RL

**FIGURE E.9**
**Arsenic in Bedrock Groundwater**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



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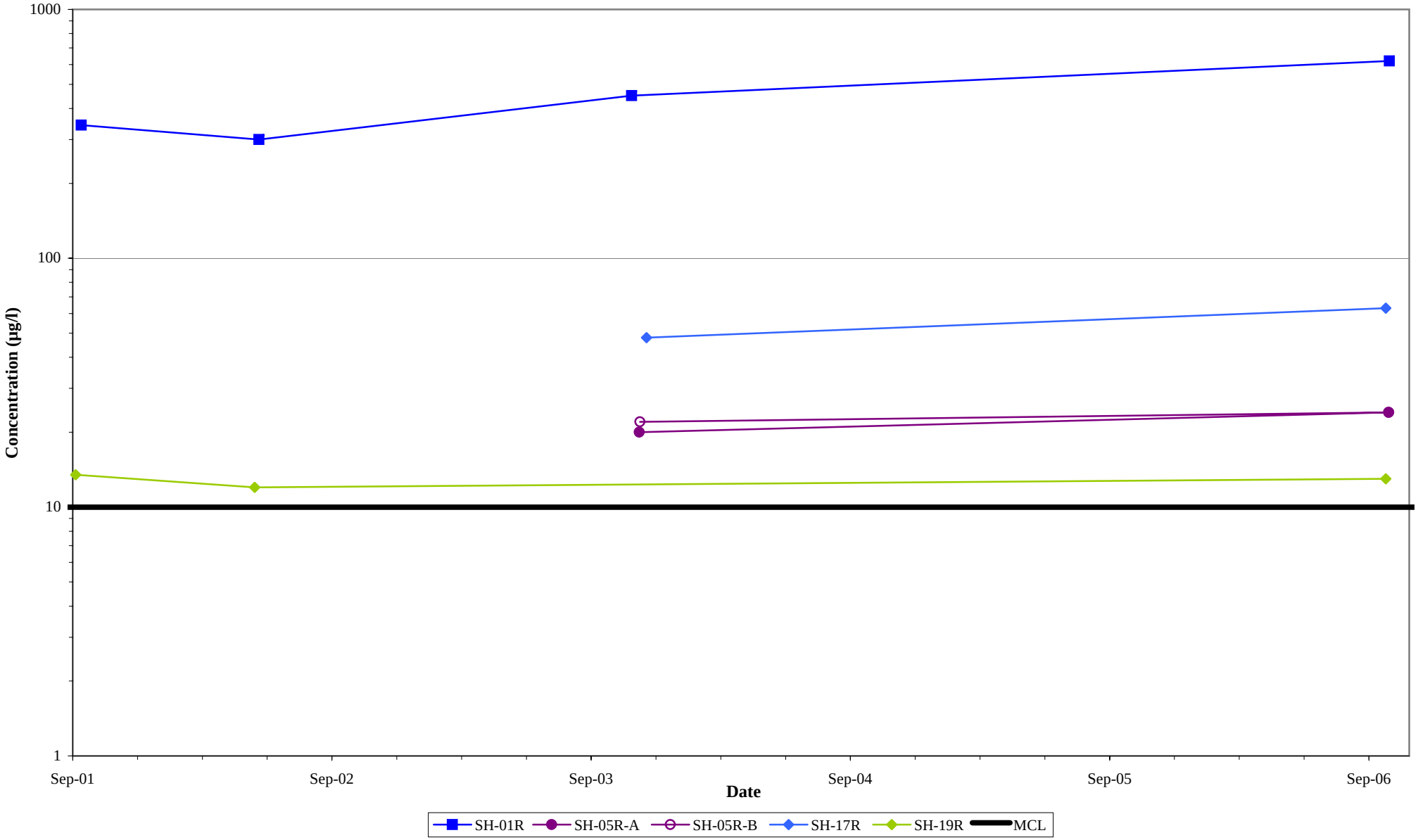
Date: April 2007

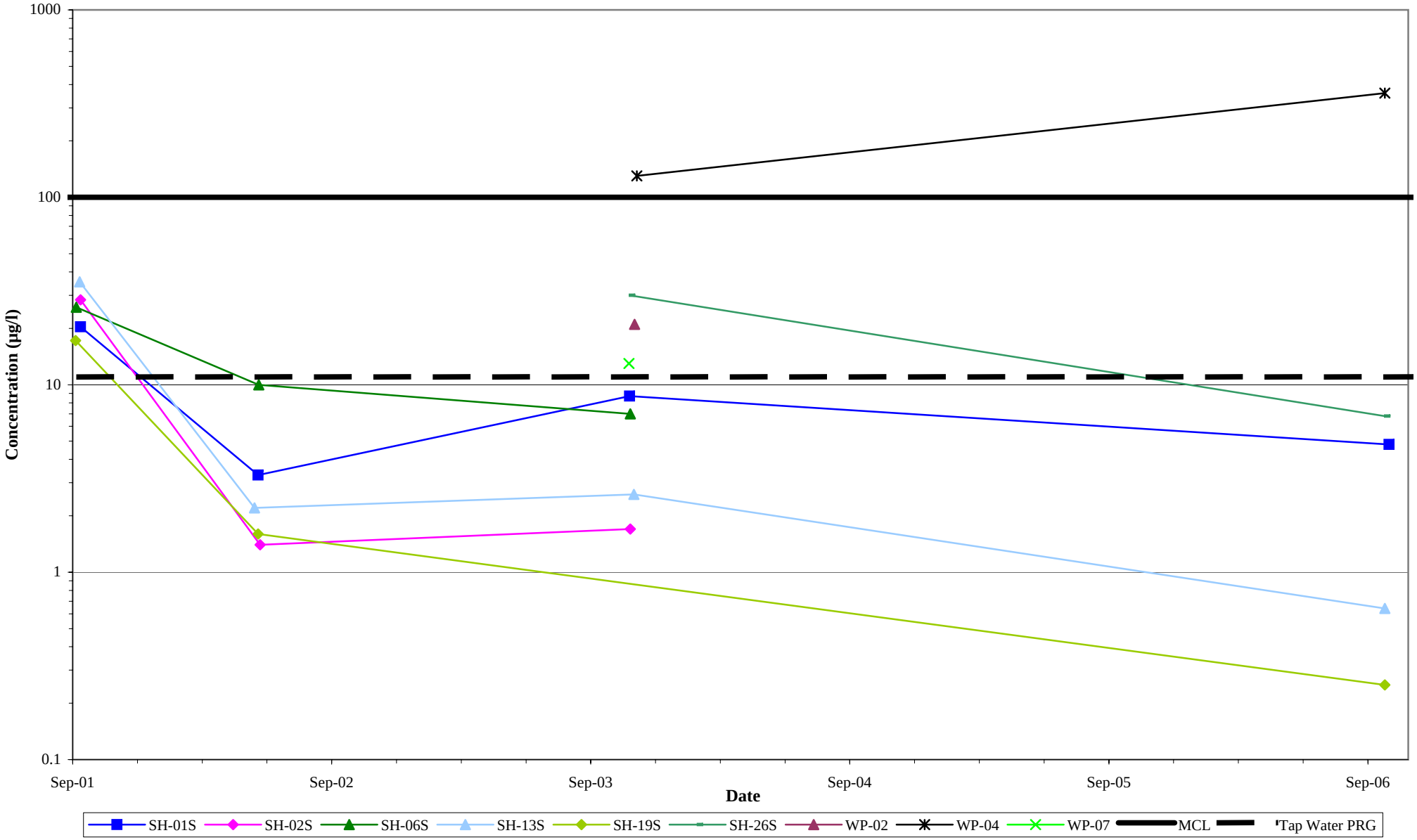
ND = ½RL

**FIGURE E.9a**
**Arsenic Greater than MCL in Bedrock Groundwater**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



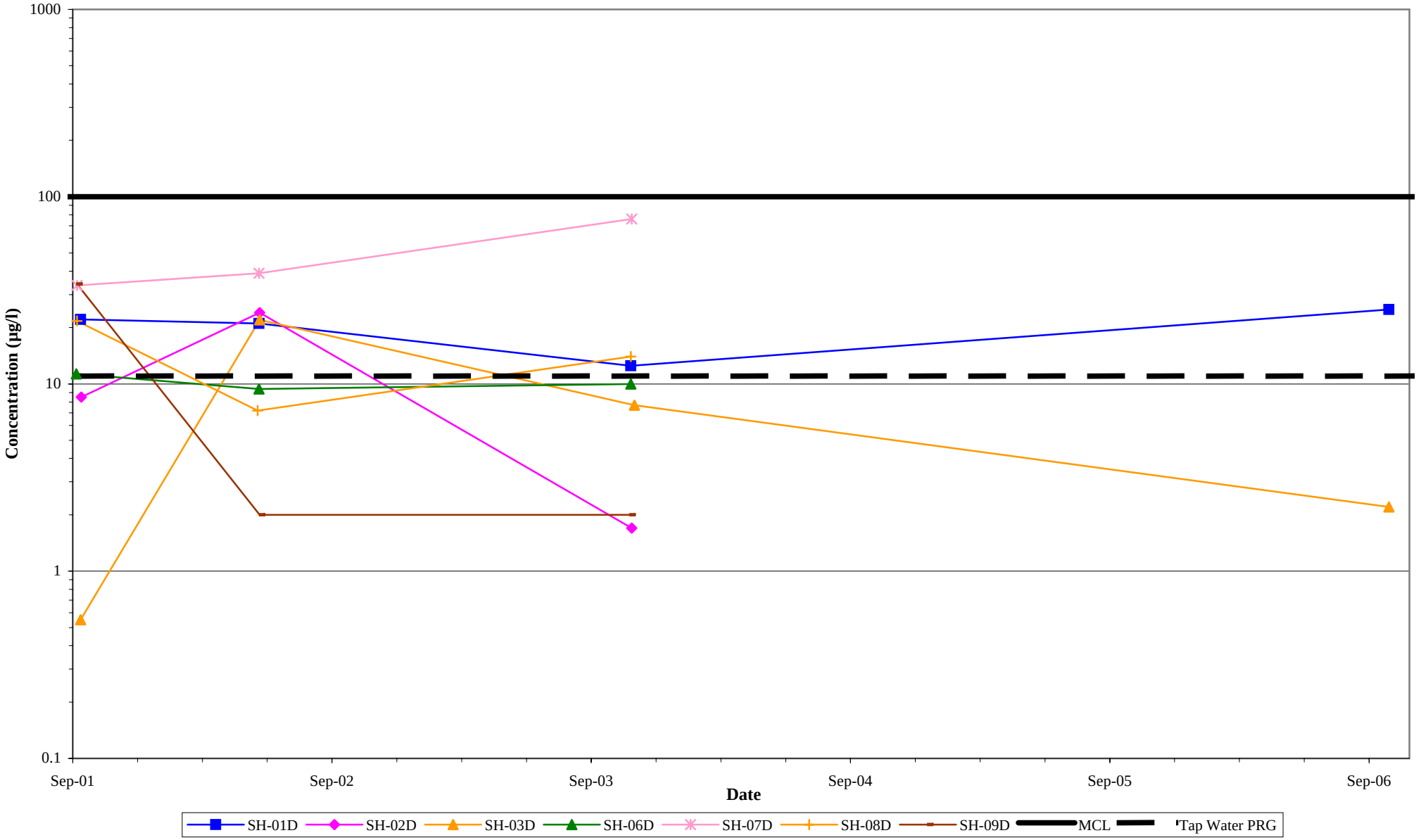
ND = ½RL

**FIGURE E.10**
**Chromium in Shallow Groundwater**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



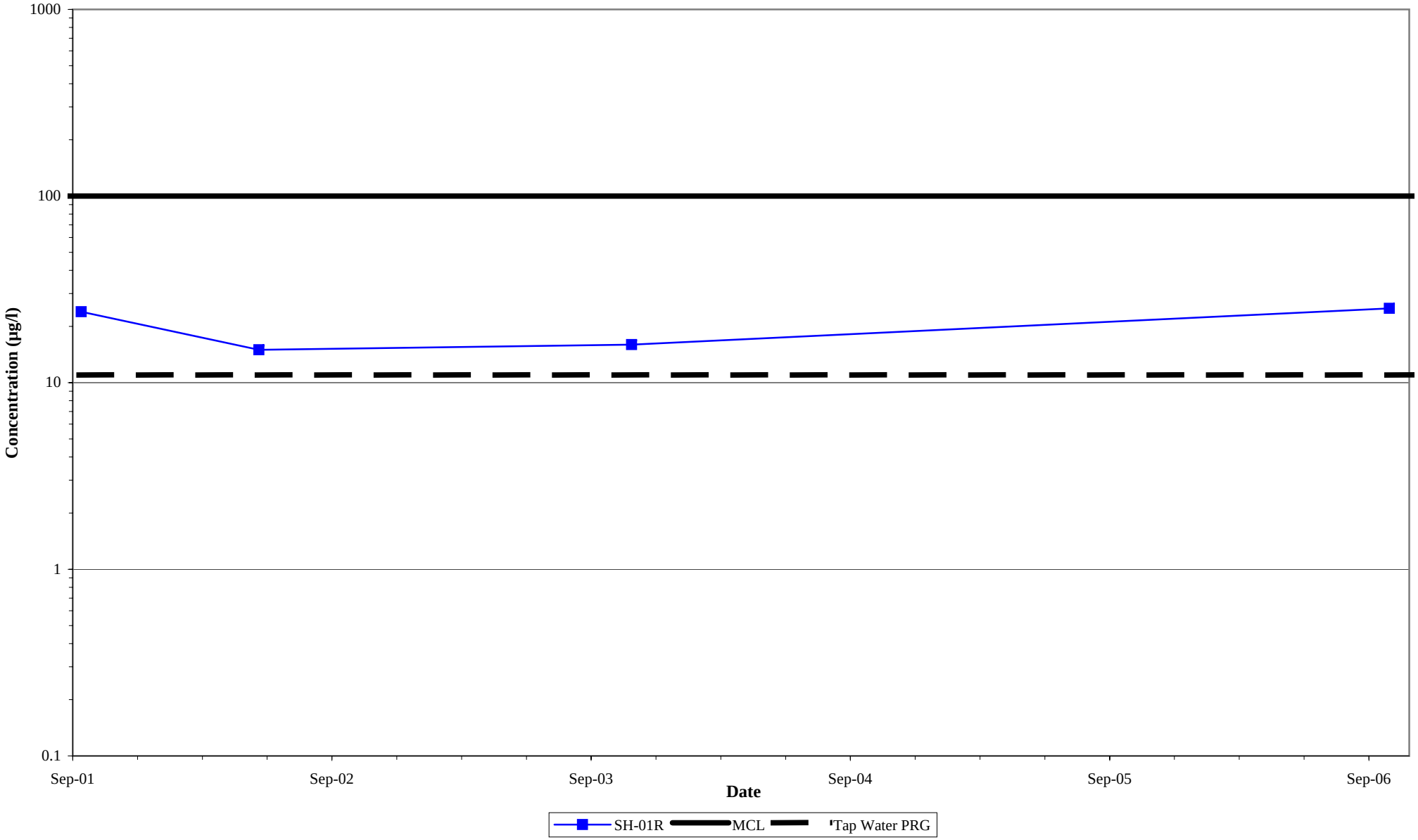
ND = ½RL

**FIGURE E.11**
**Chromium in Deep Groundwater**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



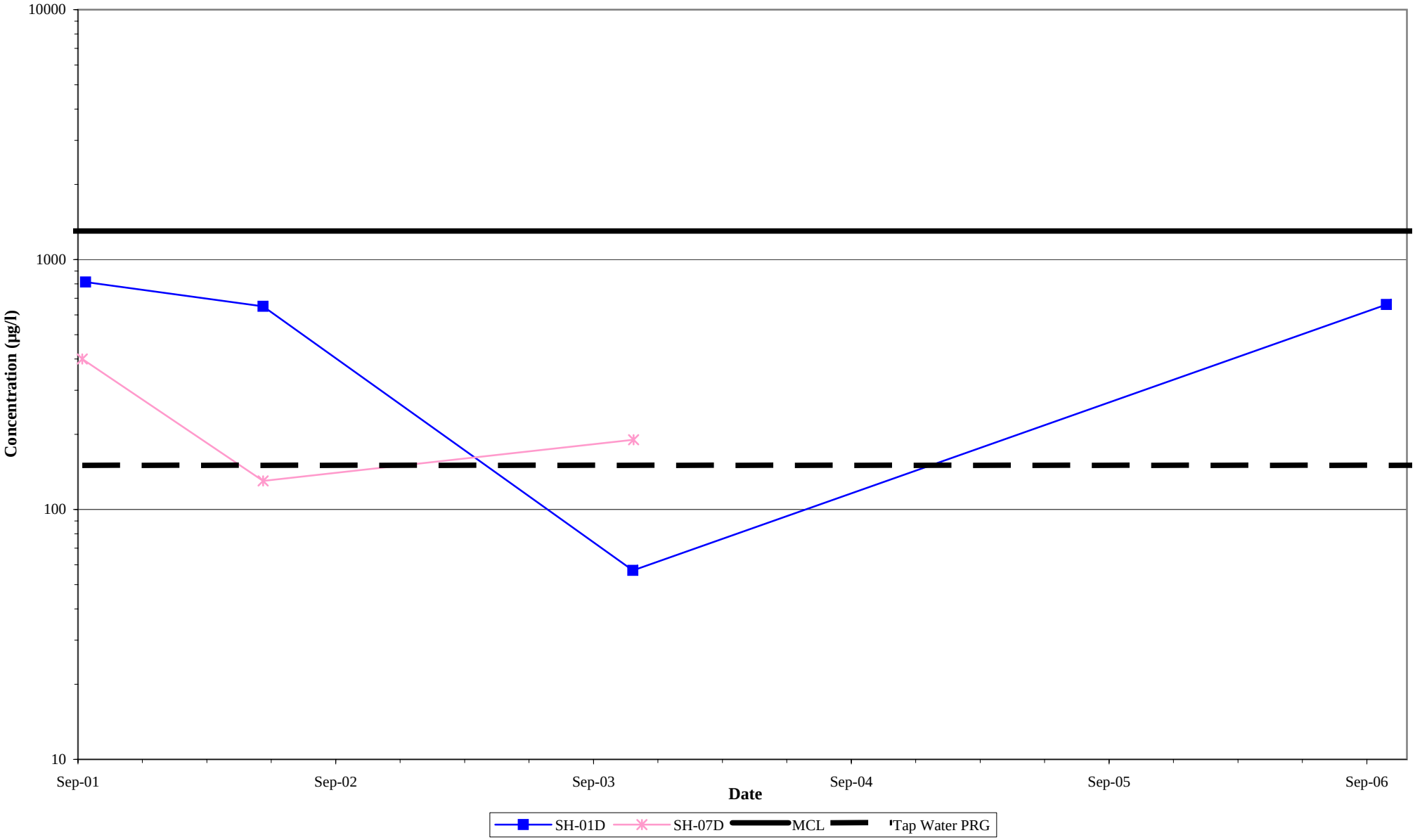
ND = ½RL

**FIGURE E.12**
**Chromium in Bedrock Groundwater**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



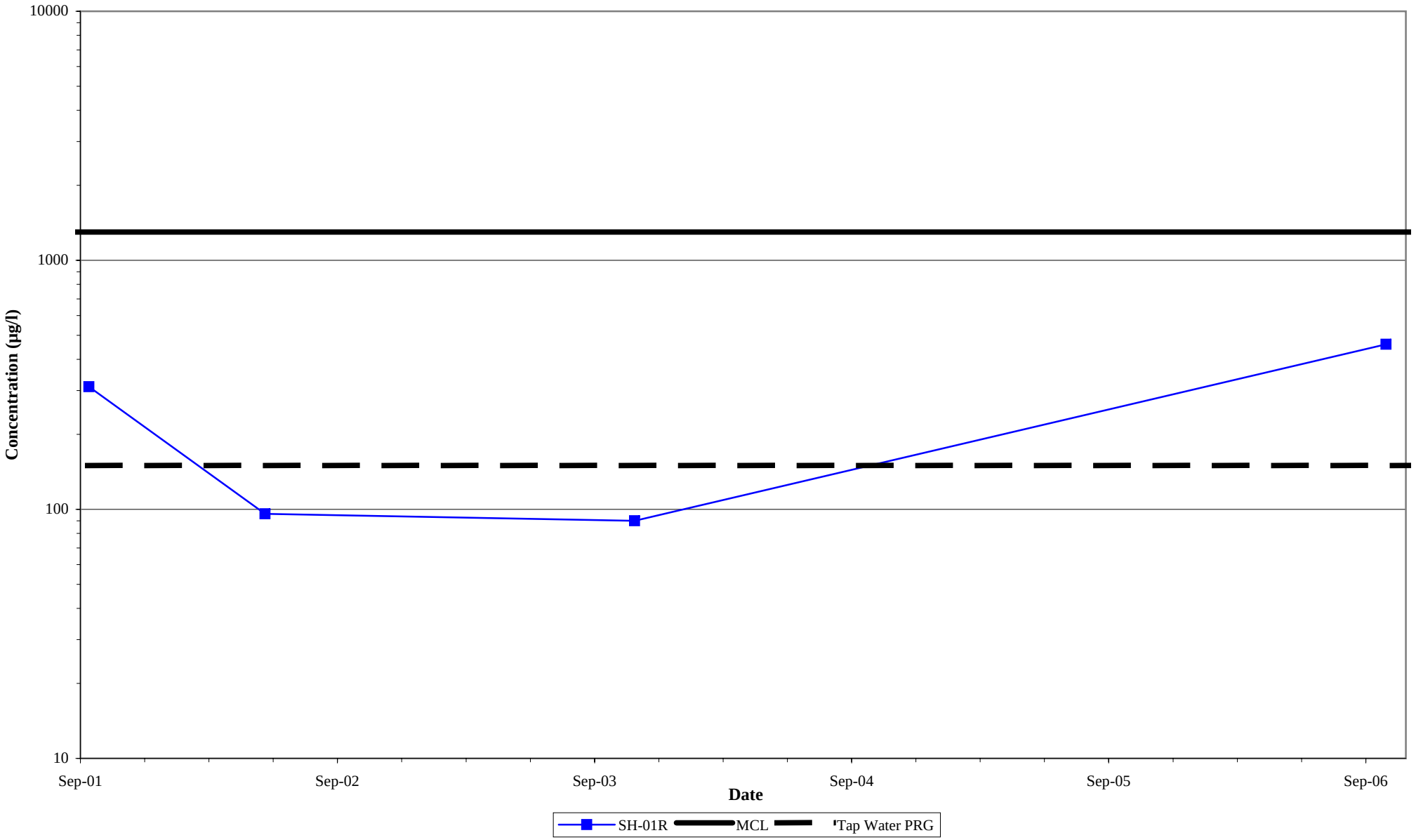
ND = ½RL

**FIGURE E.13**
**Copper in Deep Groundwater**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



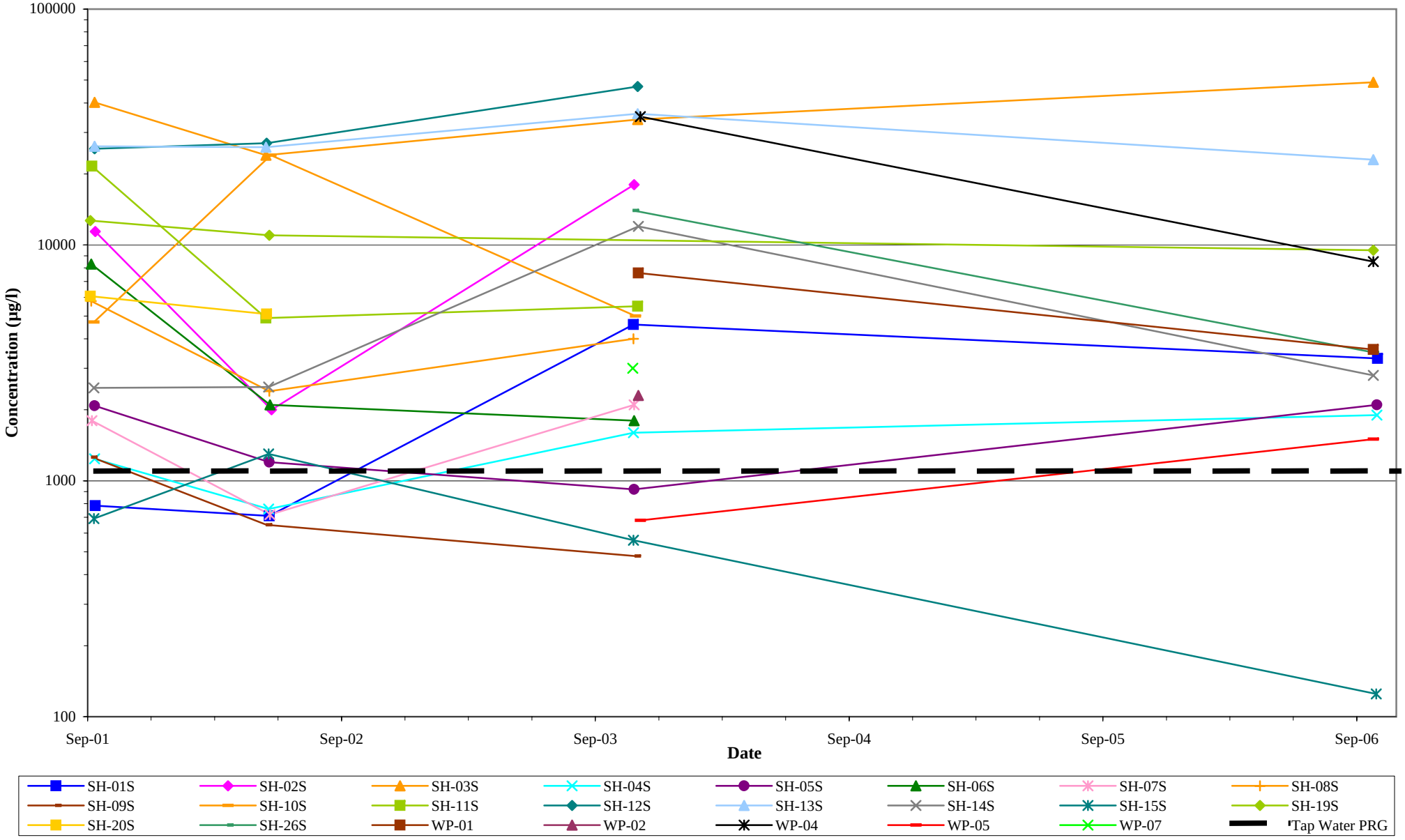
ND = ½RL

**FIGURE E.14**
**Copper in Bedrock Groundwater**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



ND = ½RL

**FIGURE E.15**
**Iron in Shallow Groundwater**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



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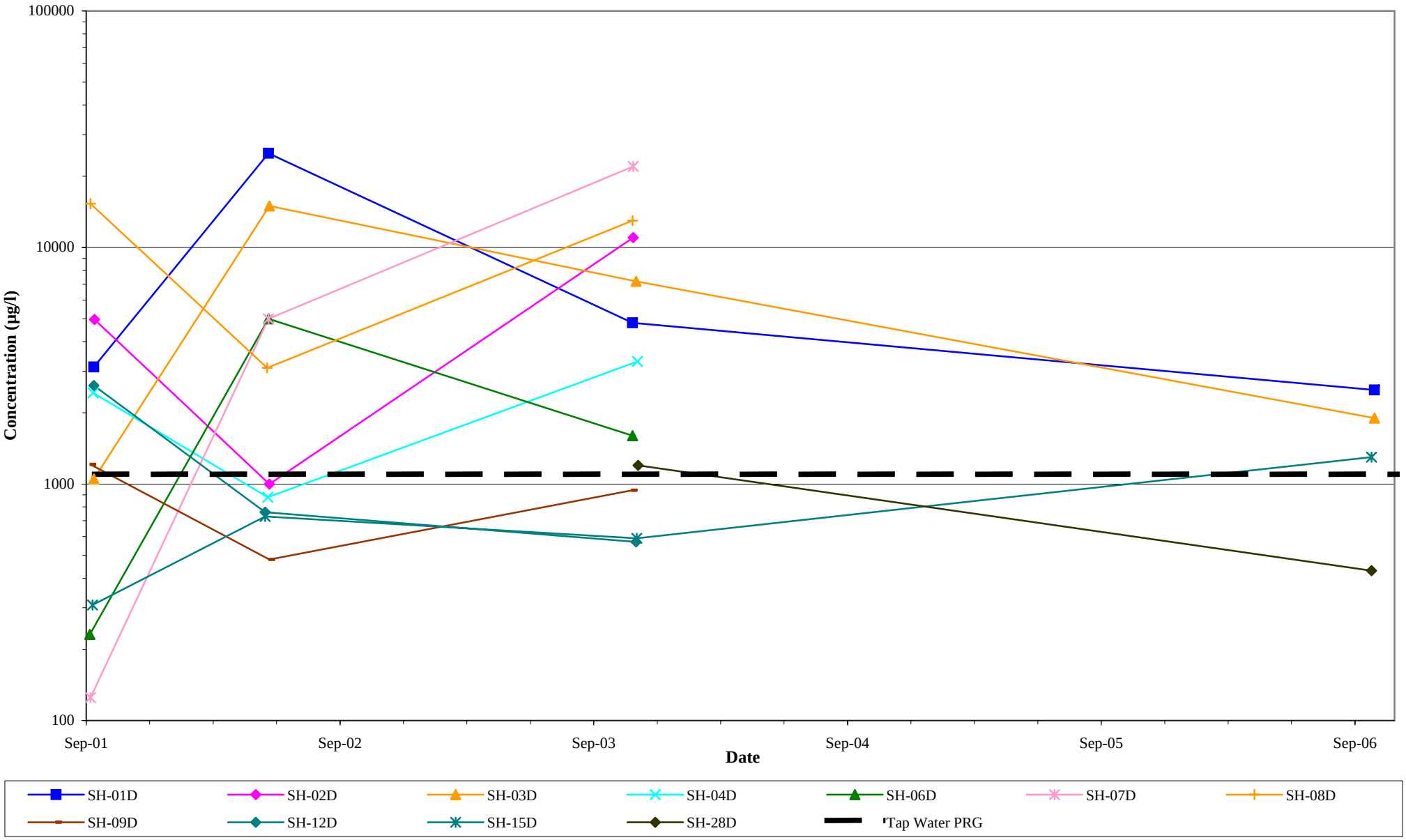
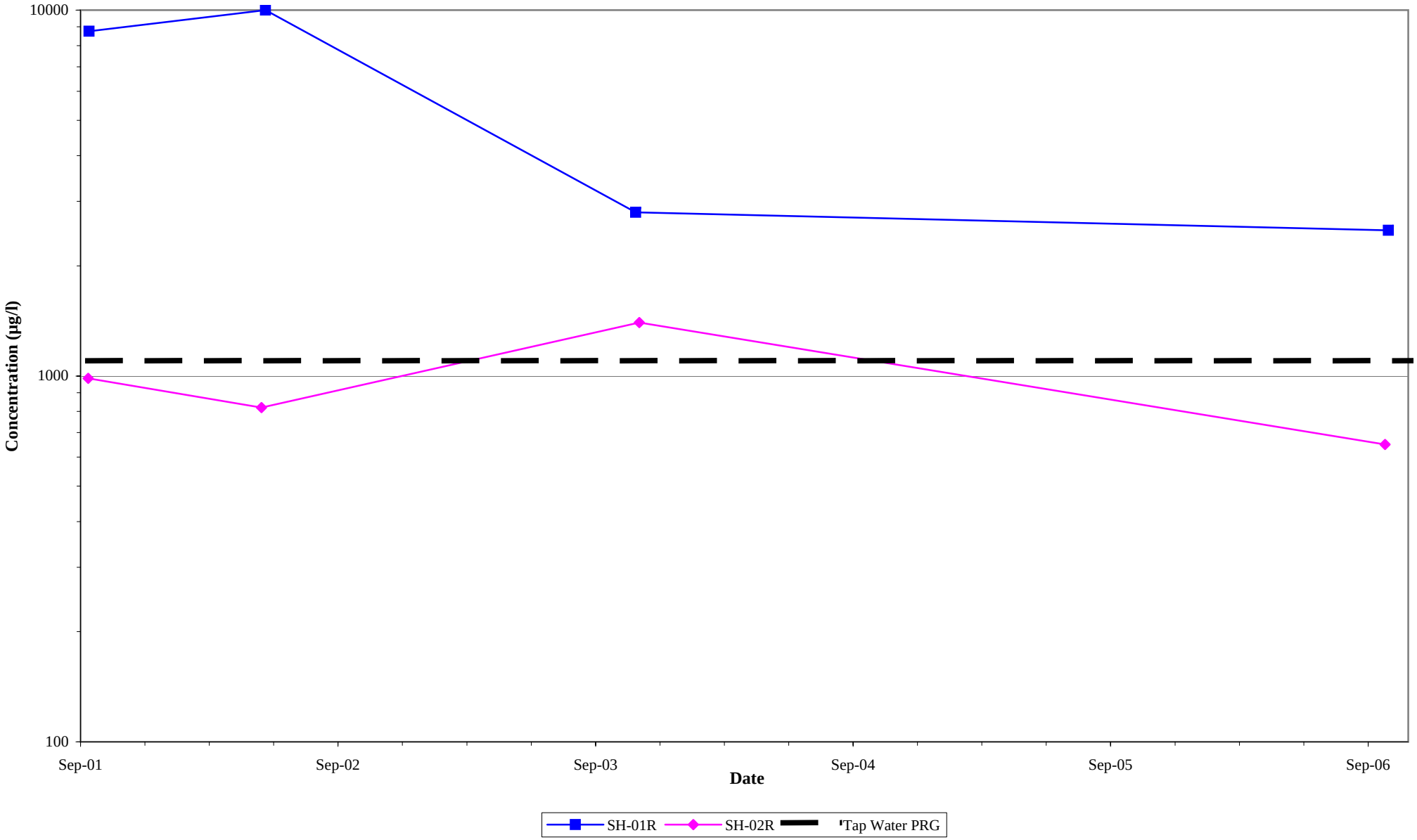
ND = ½RL

**FIGURE E.16**
**Iron in Deep Groundwater**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



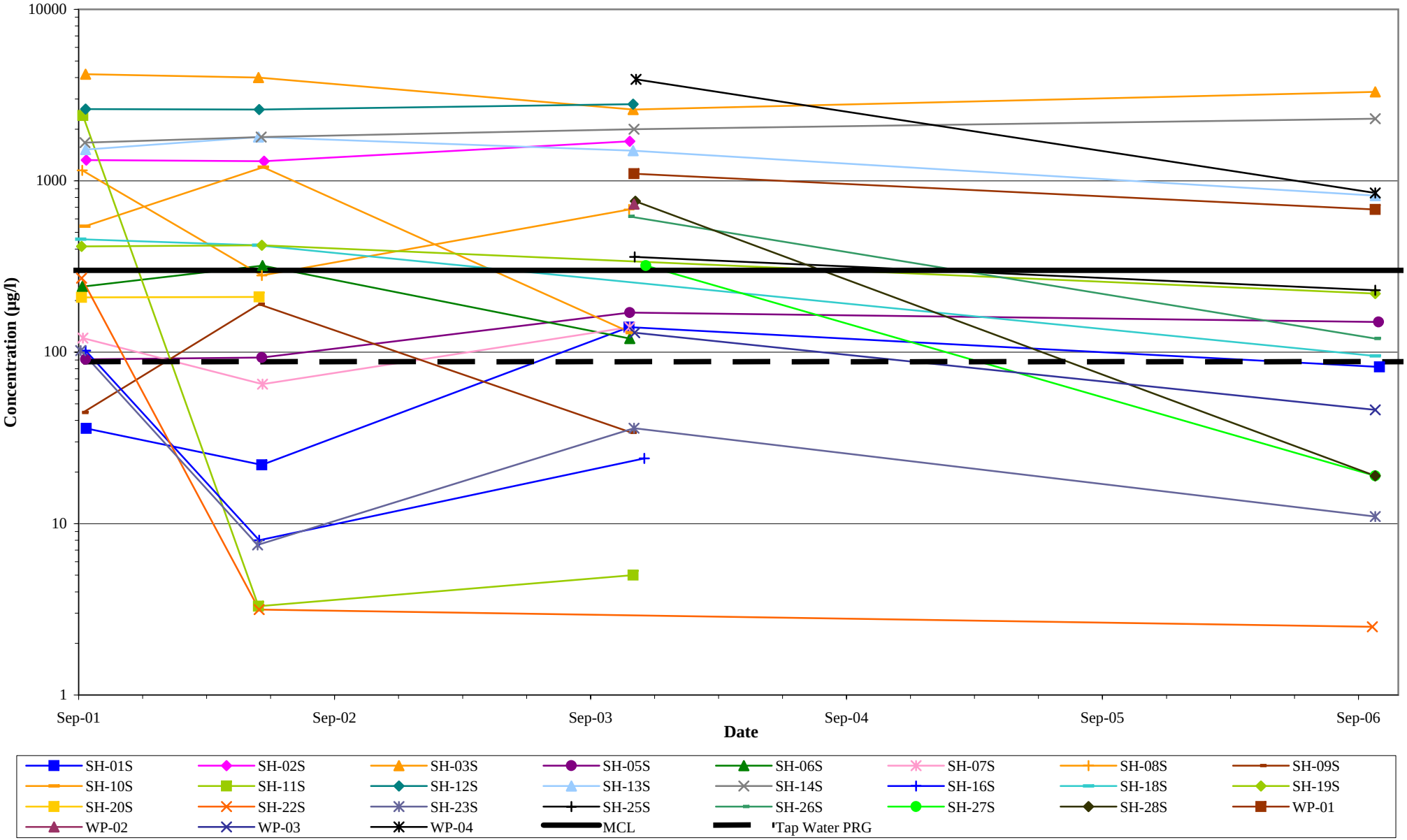
ND = ½RL

**FIGURE E.17**
**Iron in Bedrock Groundwater**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



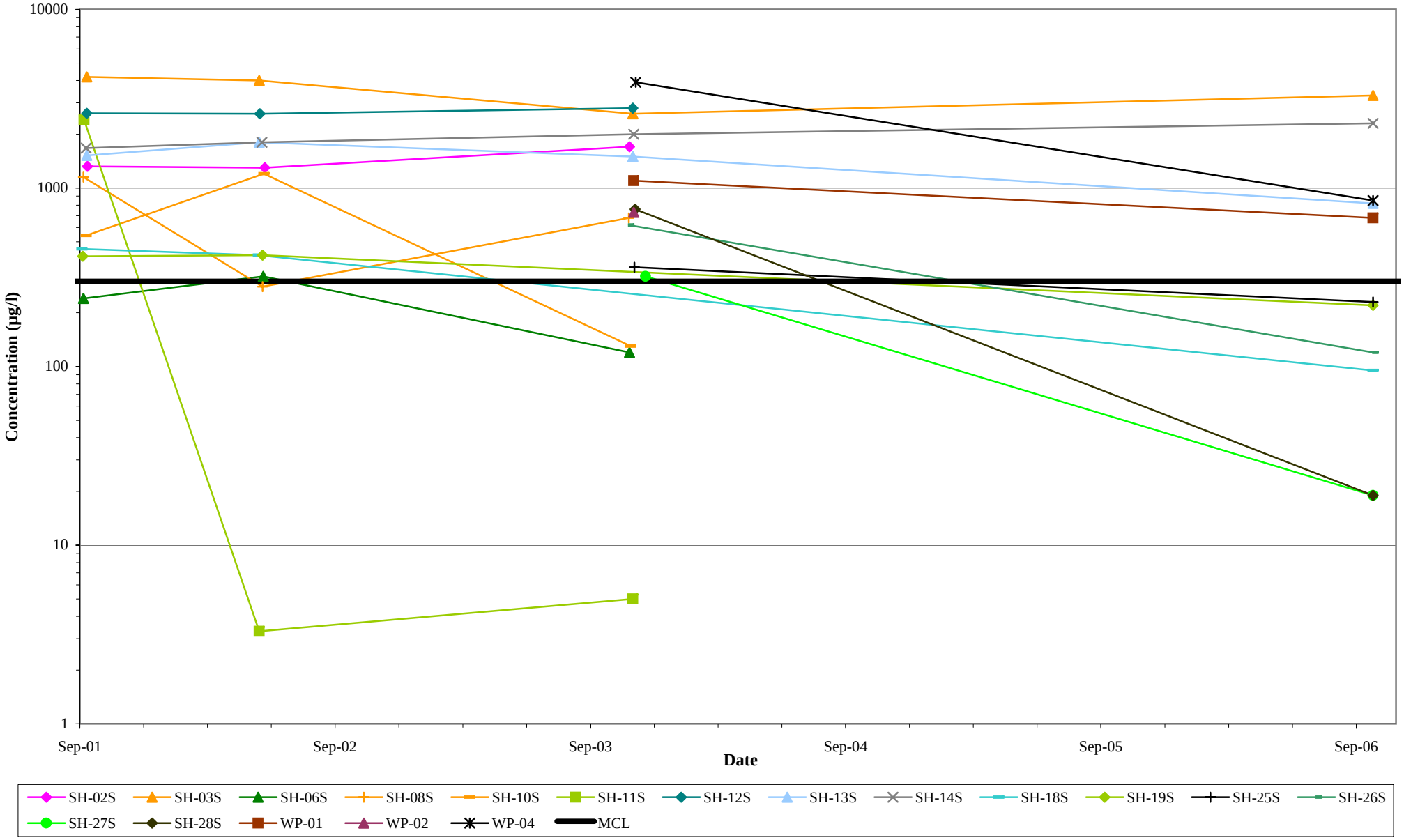
ND = ½RL

**FIGURE E.18**
**Manganese in Shallow Groundwater**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



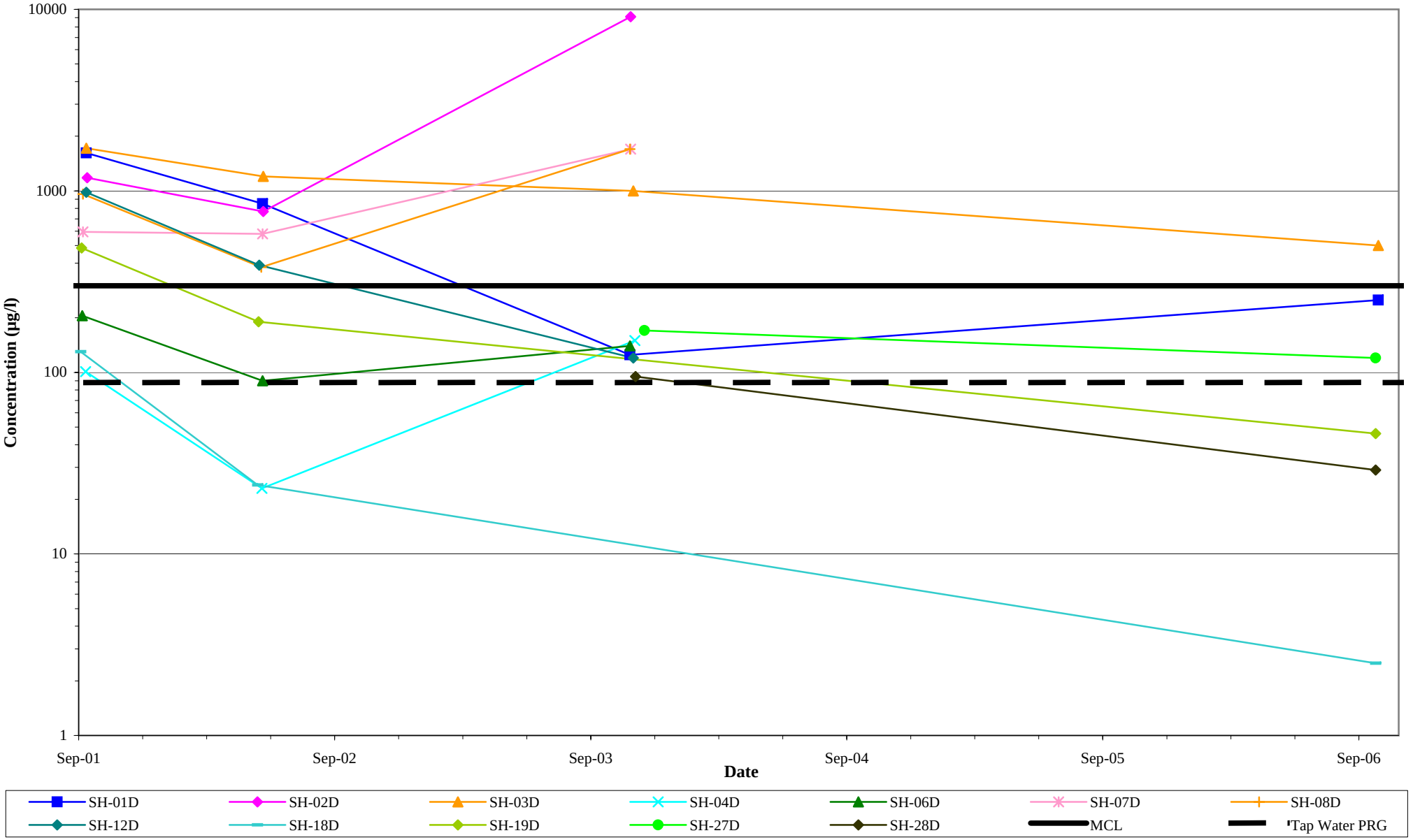
ND = ½RL

**FIGURE E.18a**
**Manganese Greater than MCL in Shallow Groundwater**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



ND = ½RL

**FIGURE E.19**
**Manganese in Deep Groundwater**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



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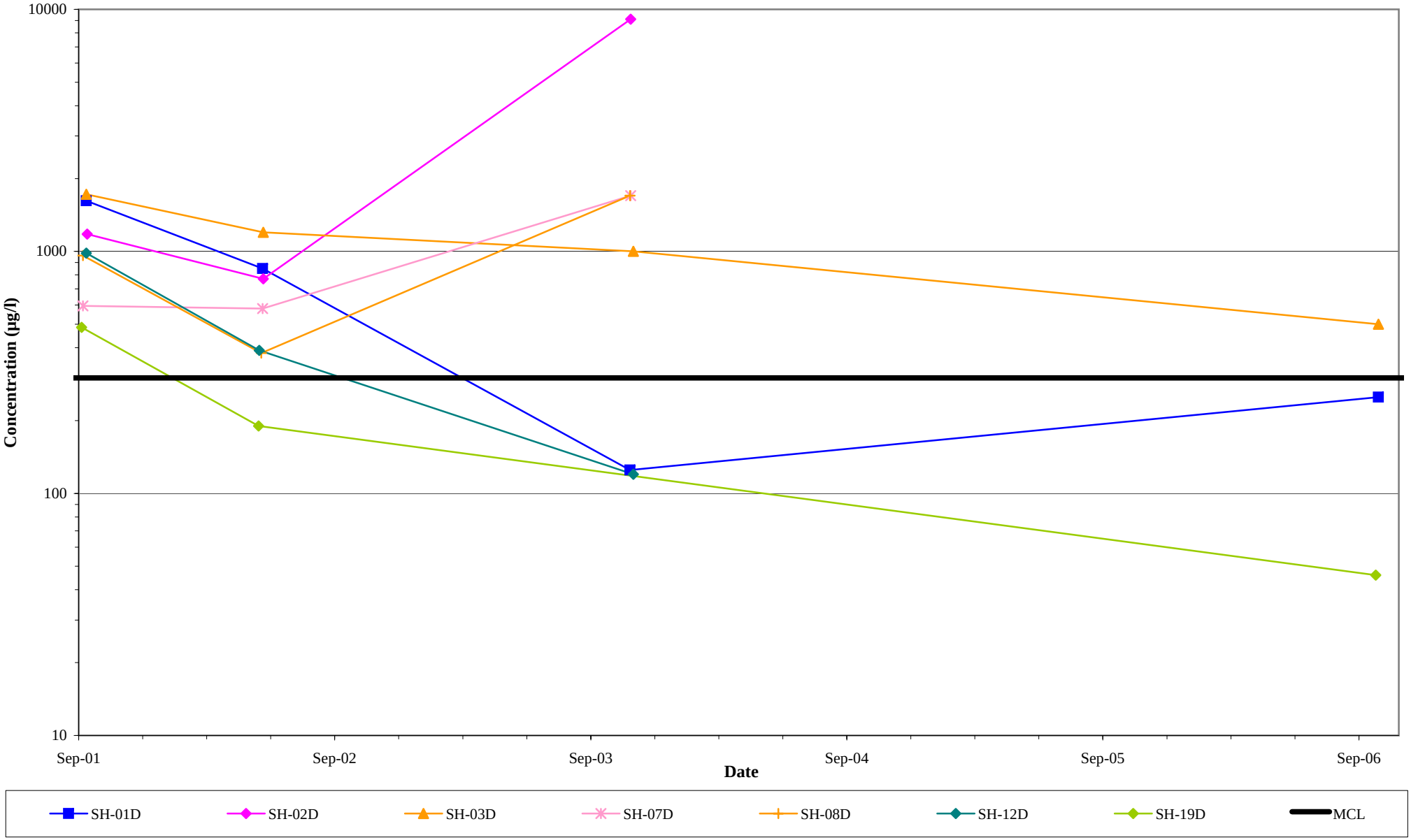
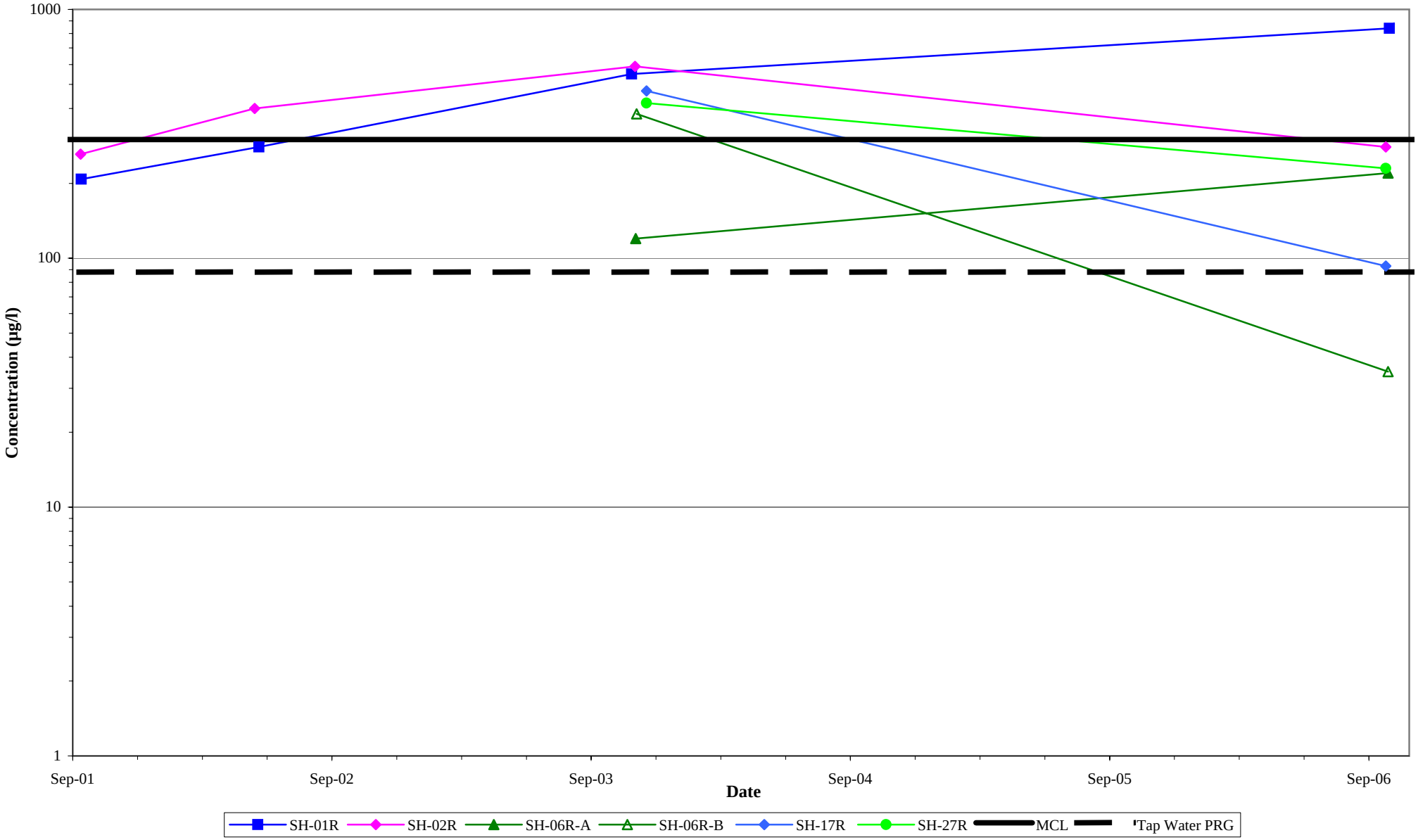
ND = ½RL

**FIGURE E.19a**
**Manganese Greater than MCL in Deep Groundwater**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



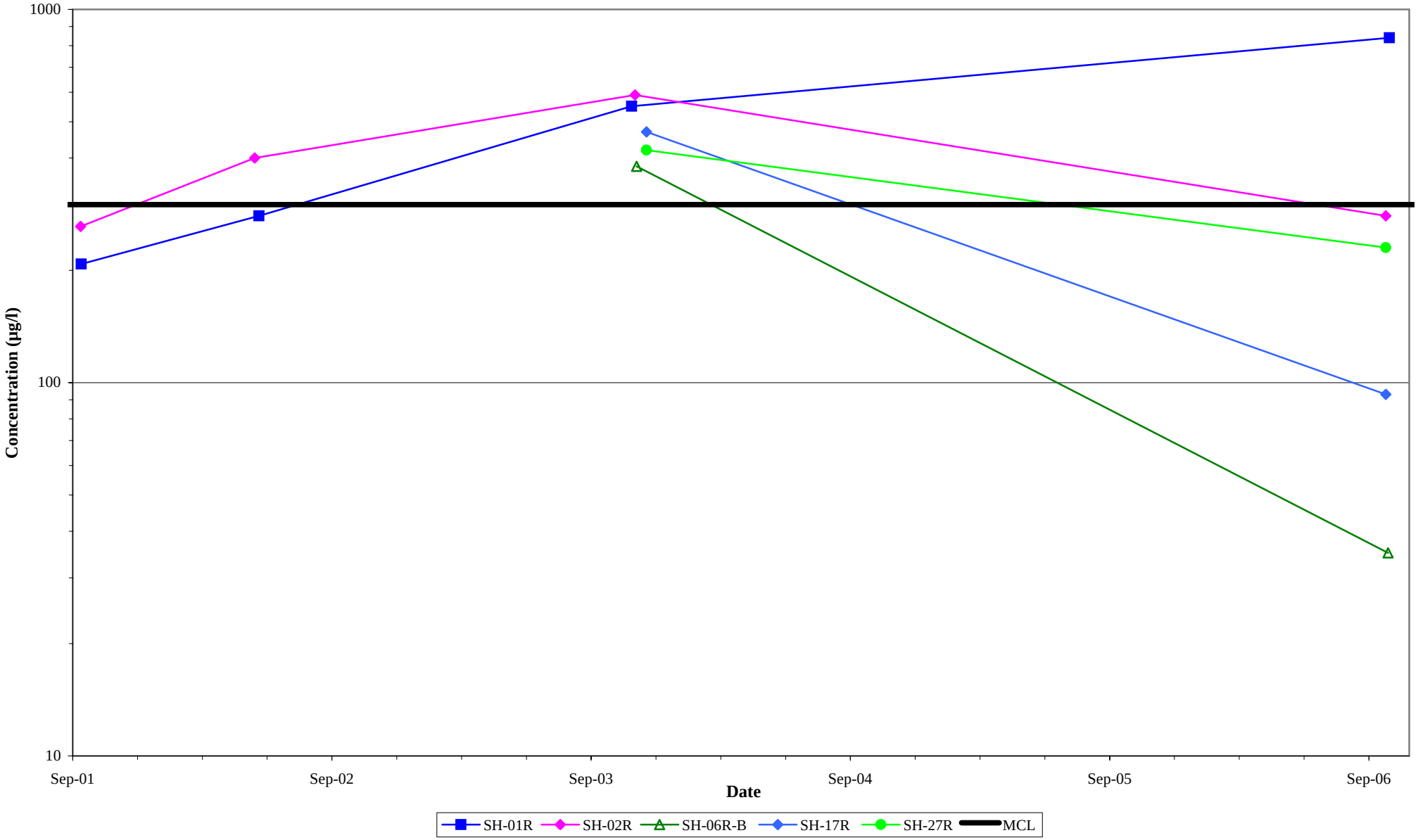
ND = ½RL

**FIGURE E.20**
**Manganese in Bedrock Groundwater**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



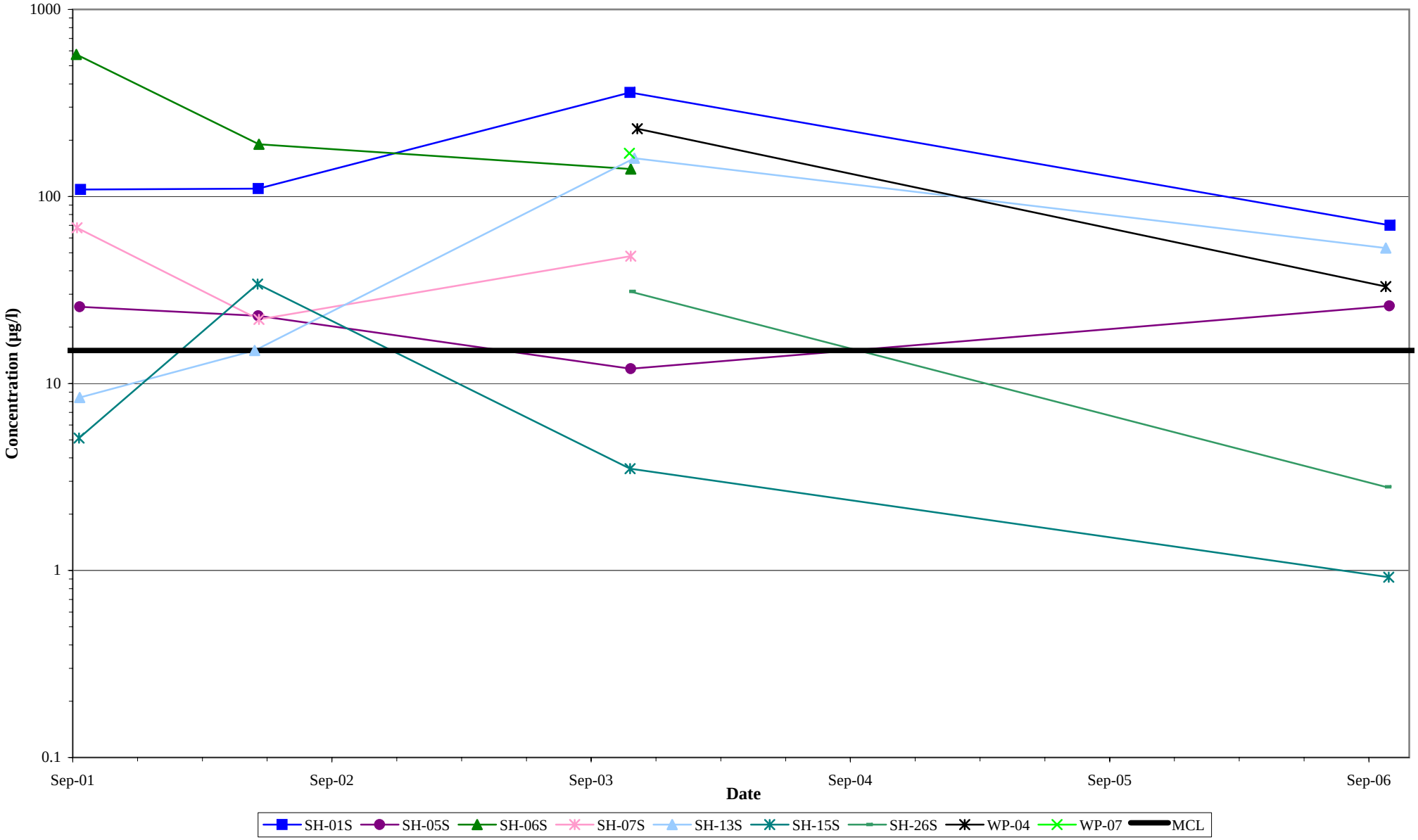
ND = ½RL

**FIGURE E.20a**
**Manganese Greater than MCL in Bedrock Groundwater**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



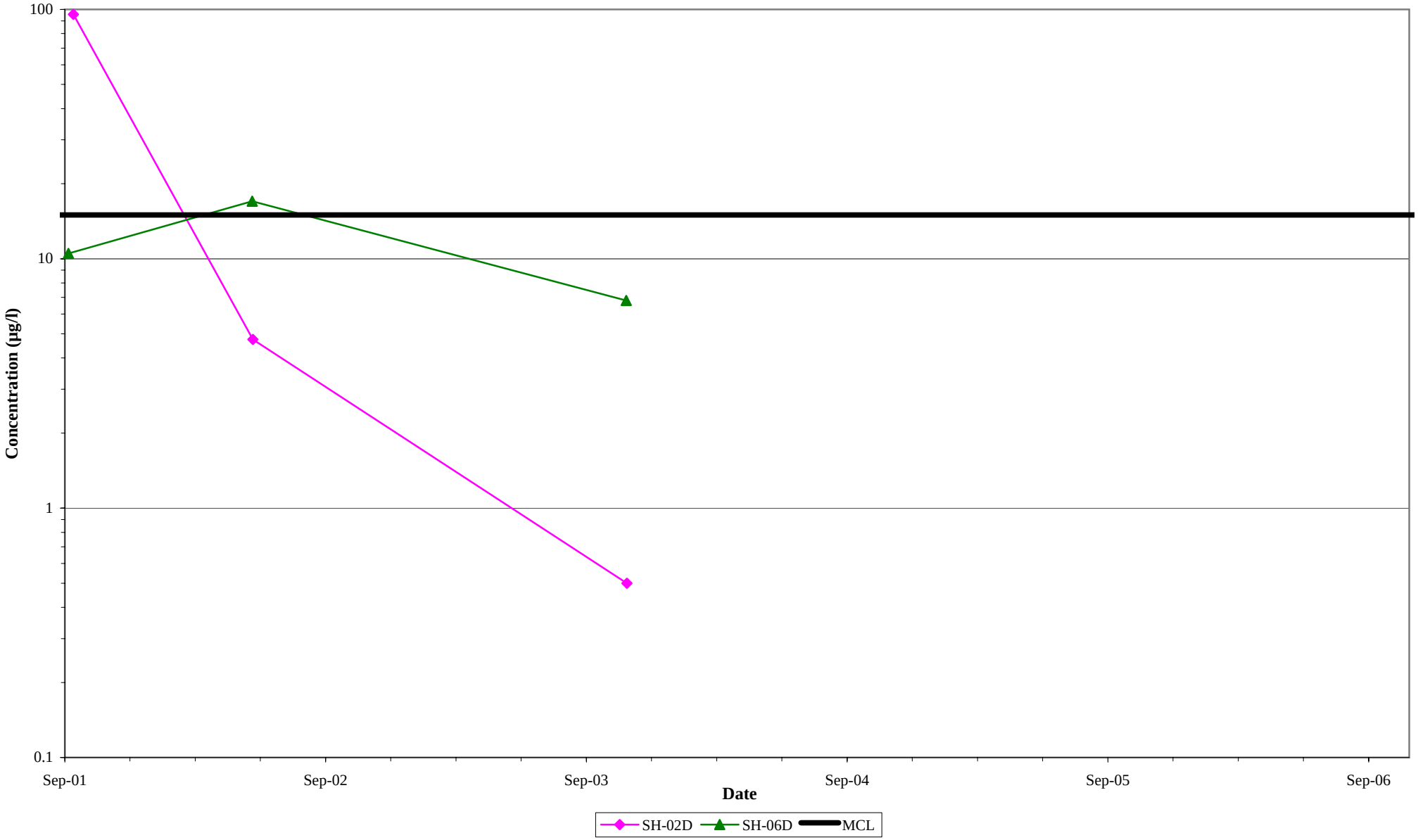
ND = ½RL

**FIGURE E.21**
**Lead in Shallow Groundwater**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



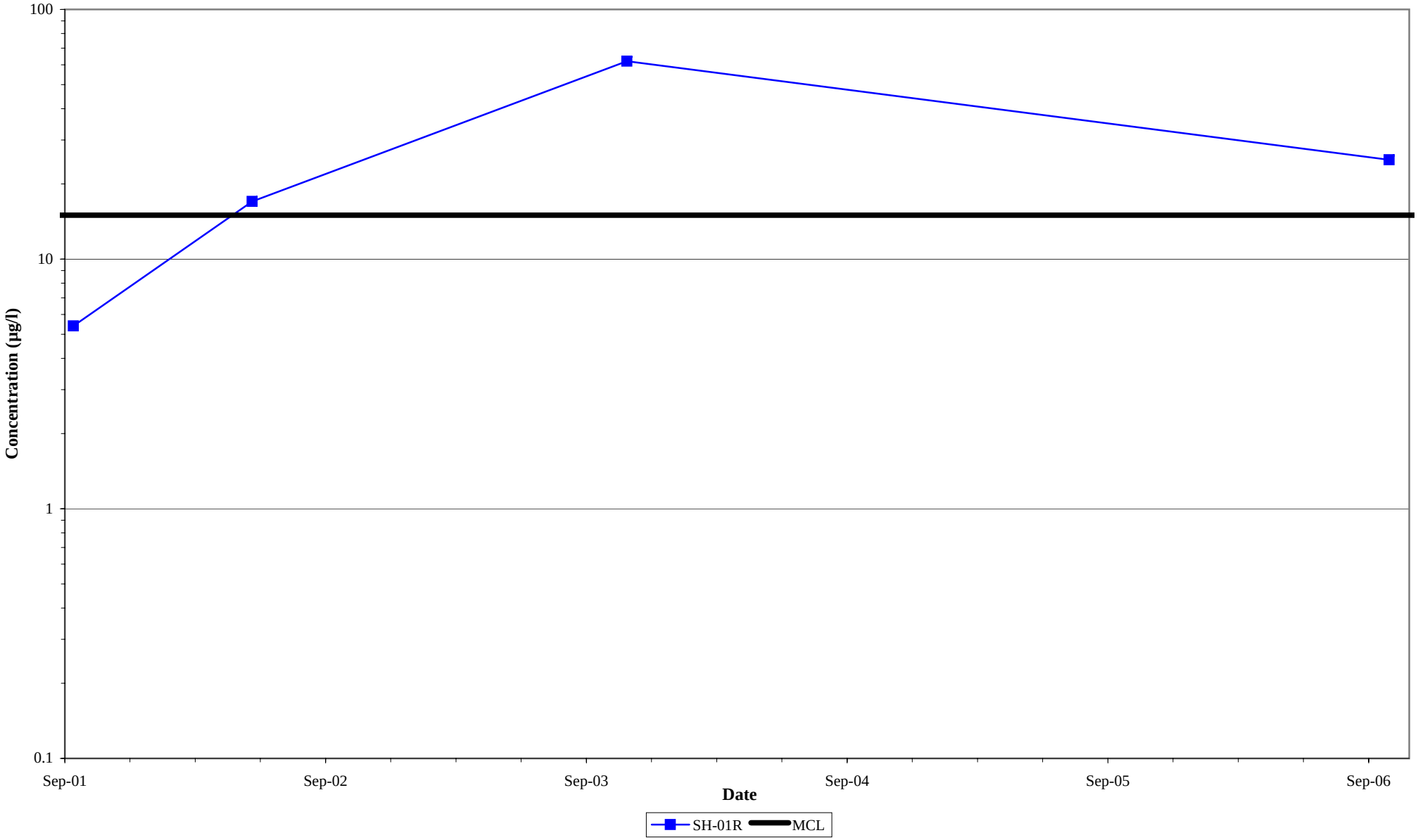
ND = ½RL

**FIGURE E.22**
**Lead in Deep Groundwater**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



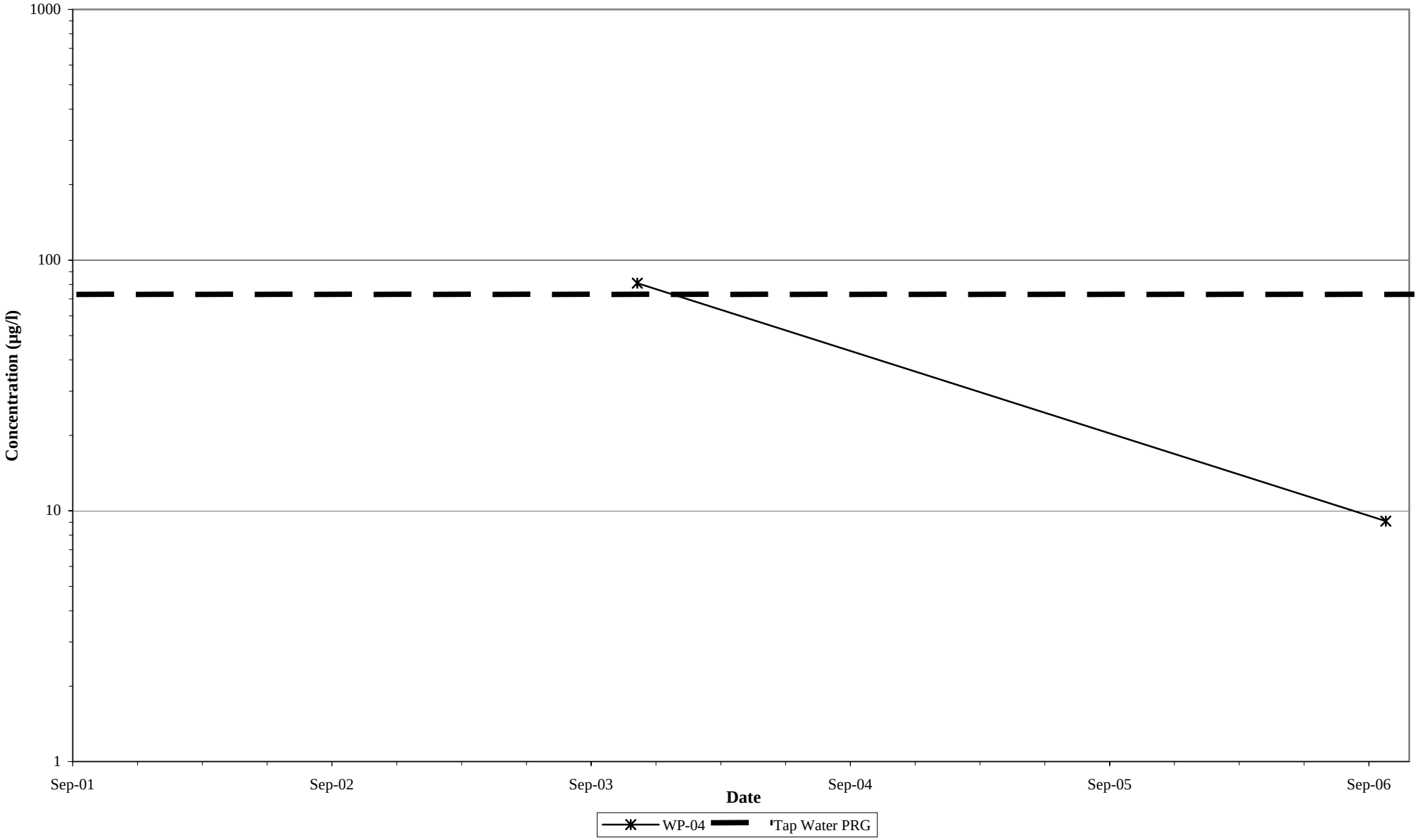
ND = ½RL

**FIGURE E.23**
**Lead in Bedrock Groundwater**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



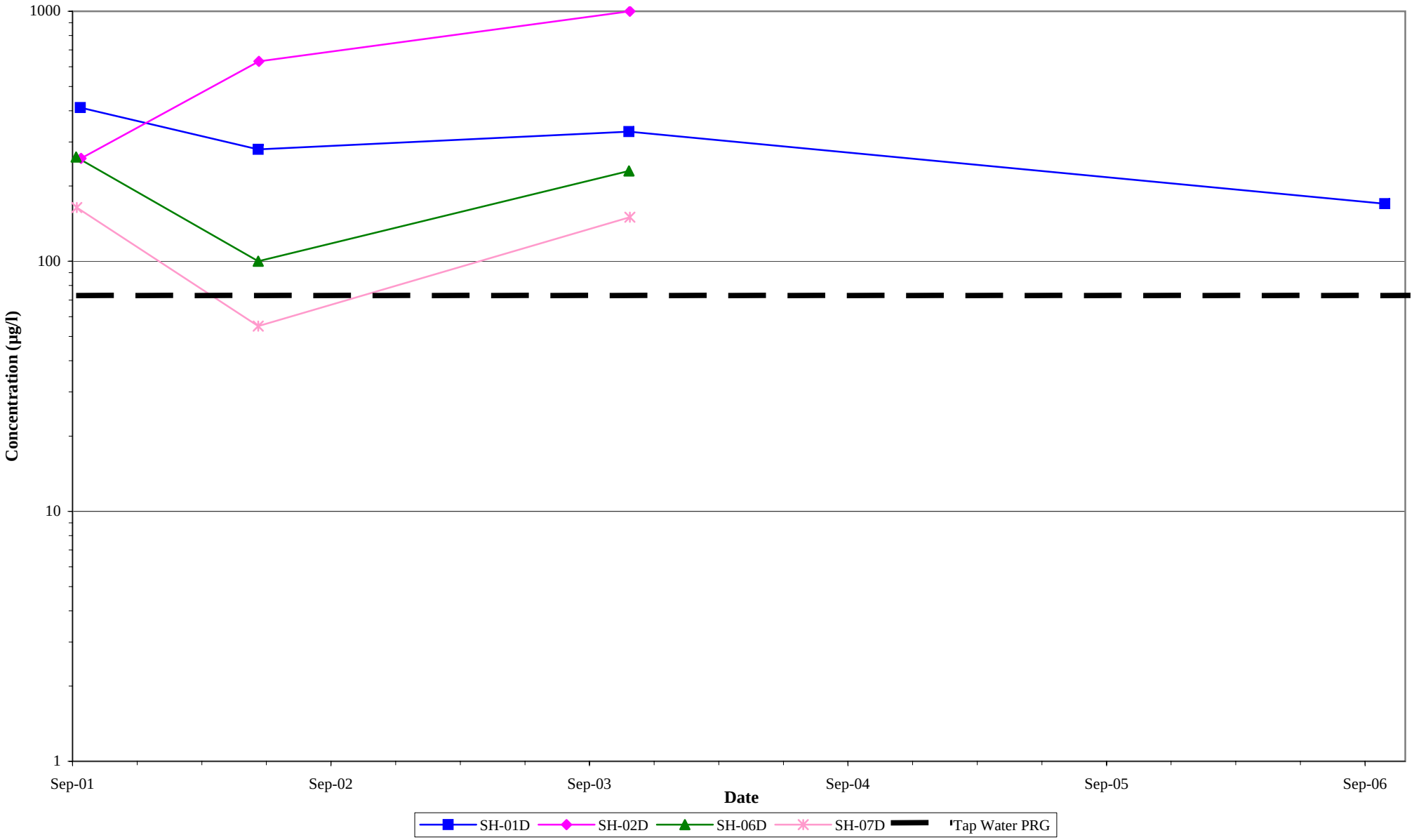
ND = ½RL

**FIGURE E.24**
**Nickel in Shallow Groundwater**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



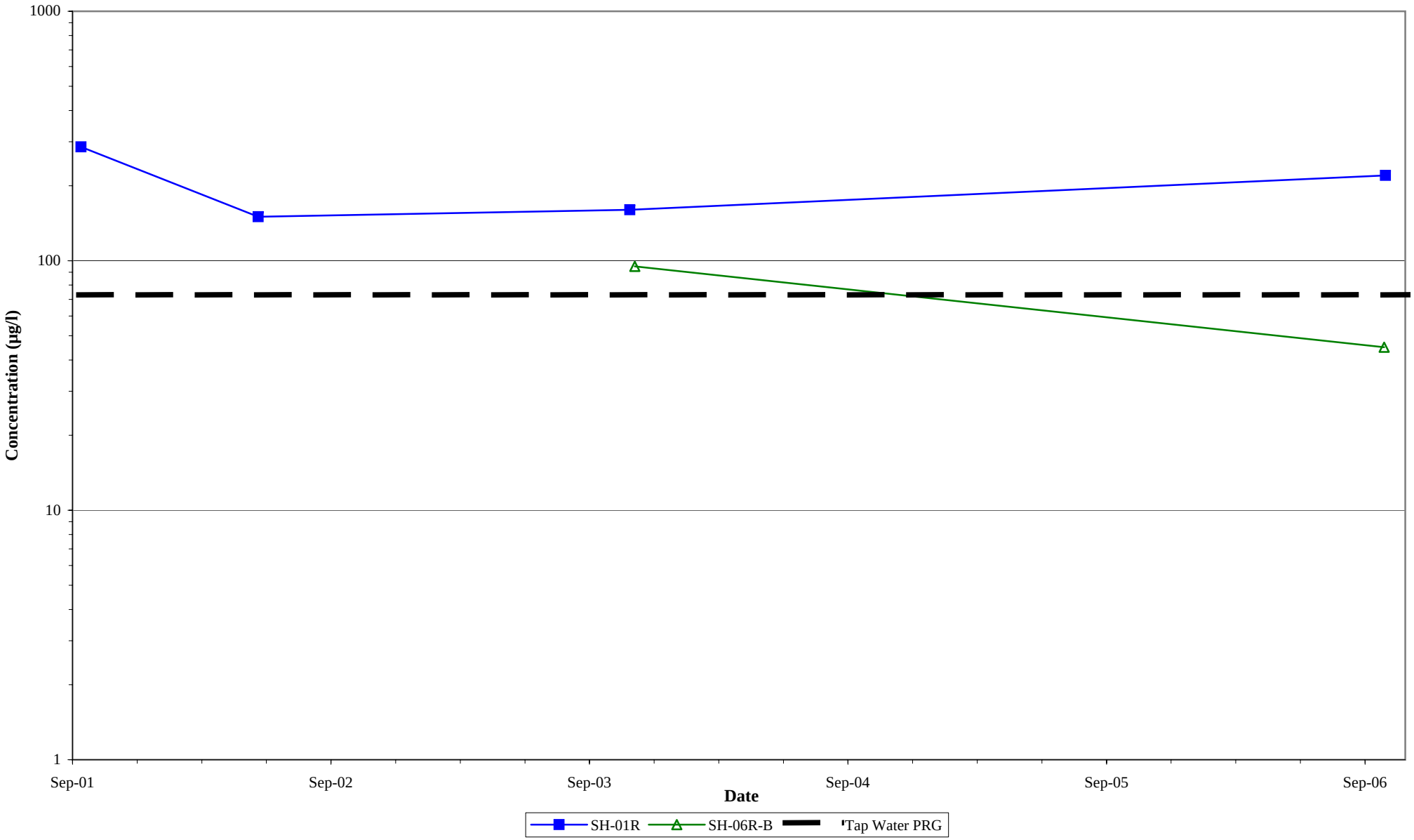
ND = ½RL

**FIGURE E.25**
**Nickel in Deep Groundwater**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



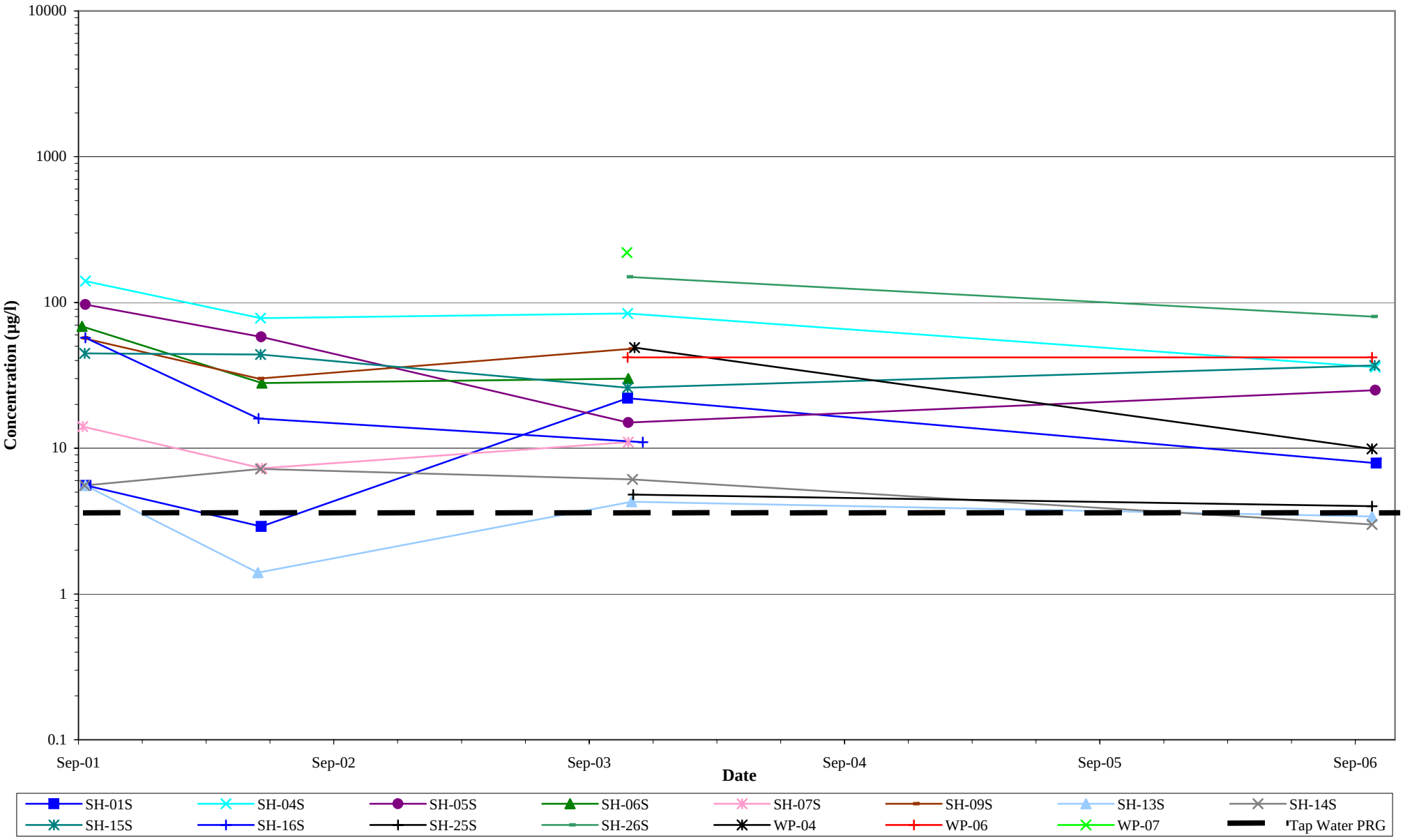
ND = ½RL

**FIGURE E.26**
**Nickel in Bedrock Groundwater**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



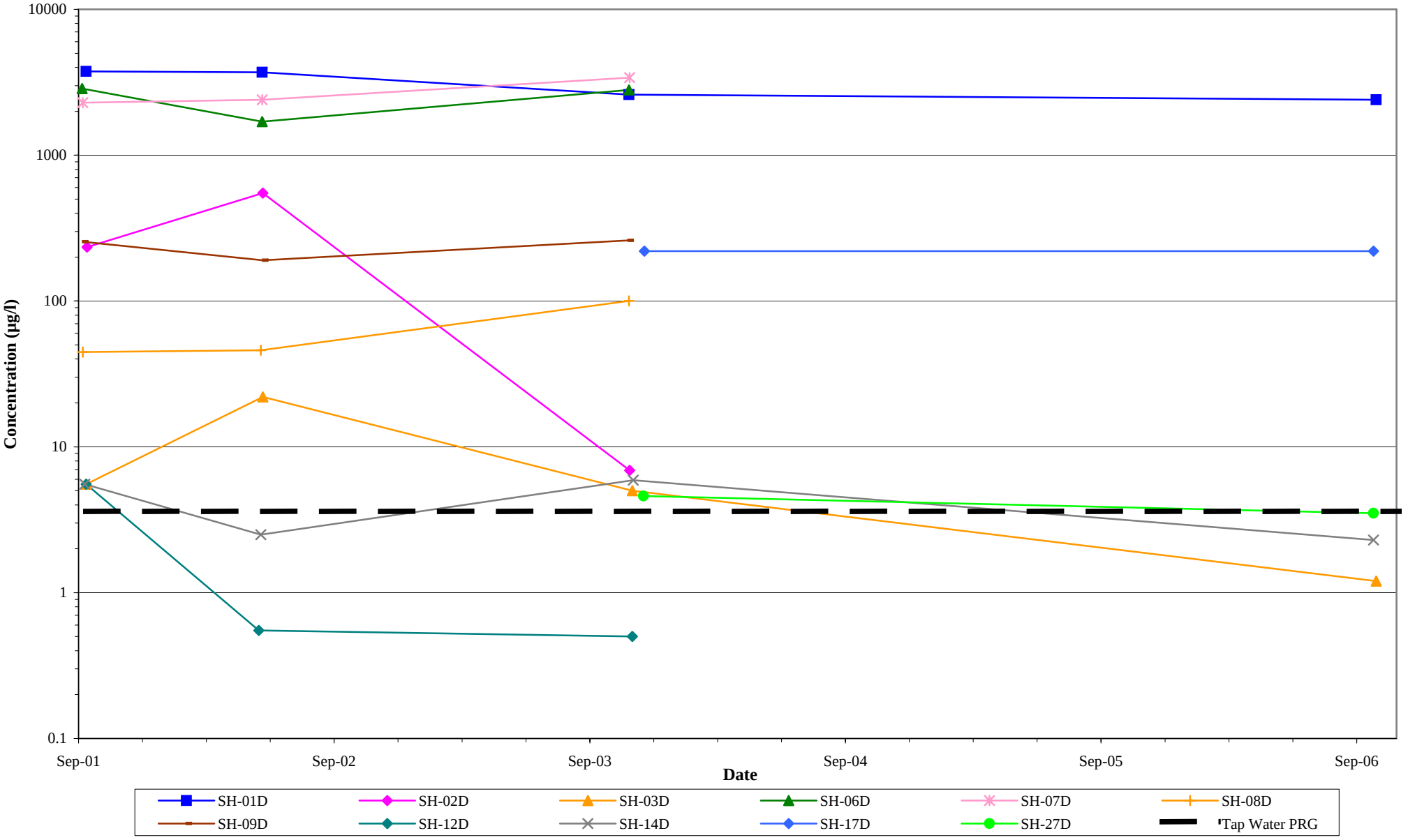
ND = ½RL

**FIGURE E.27**
**Vanadium in Shallow Groundwater**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



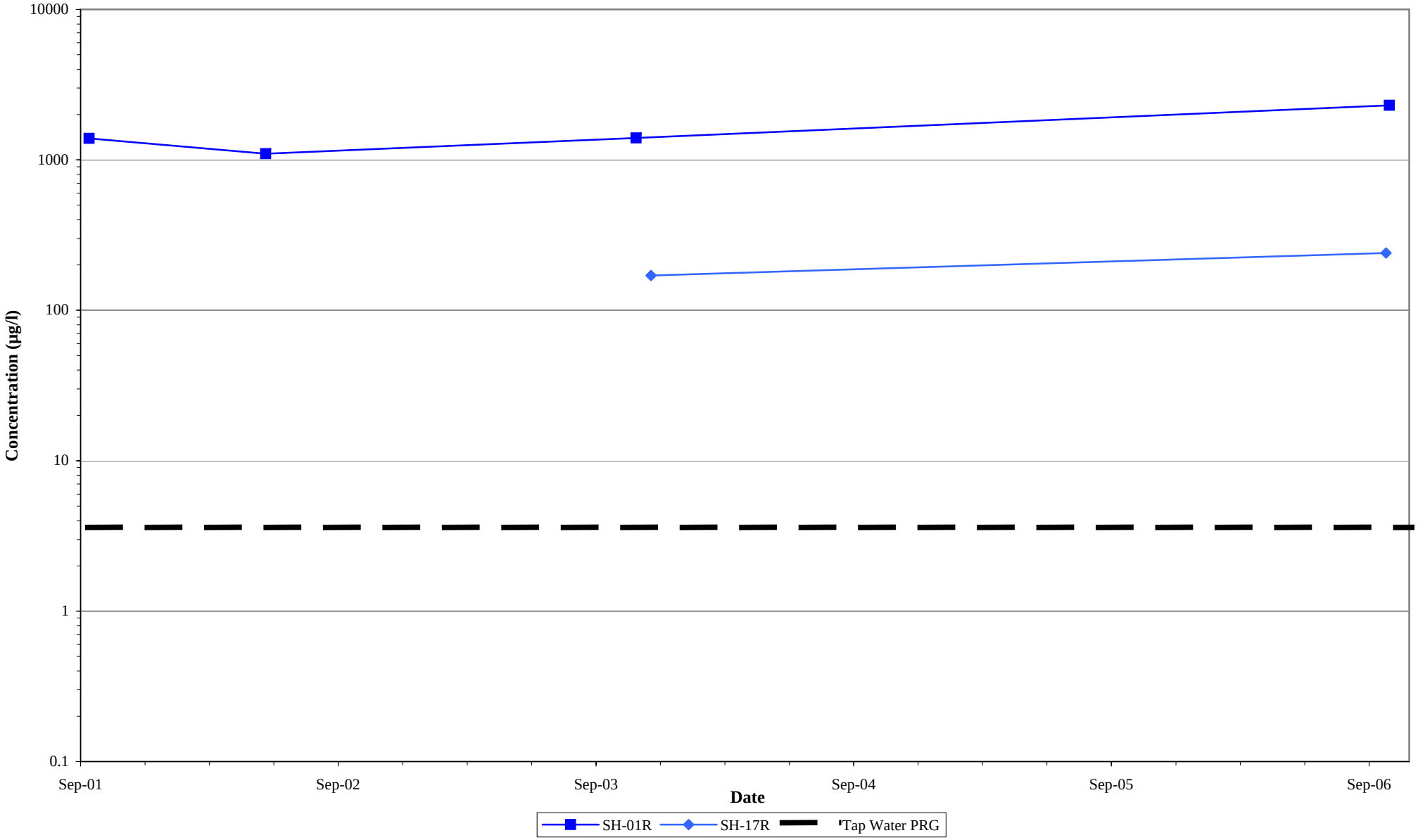
ND = ½RL

**FIGURE E.28**
**Vanadium in Deep Groundwater**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



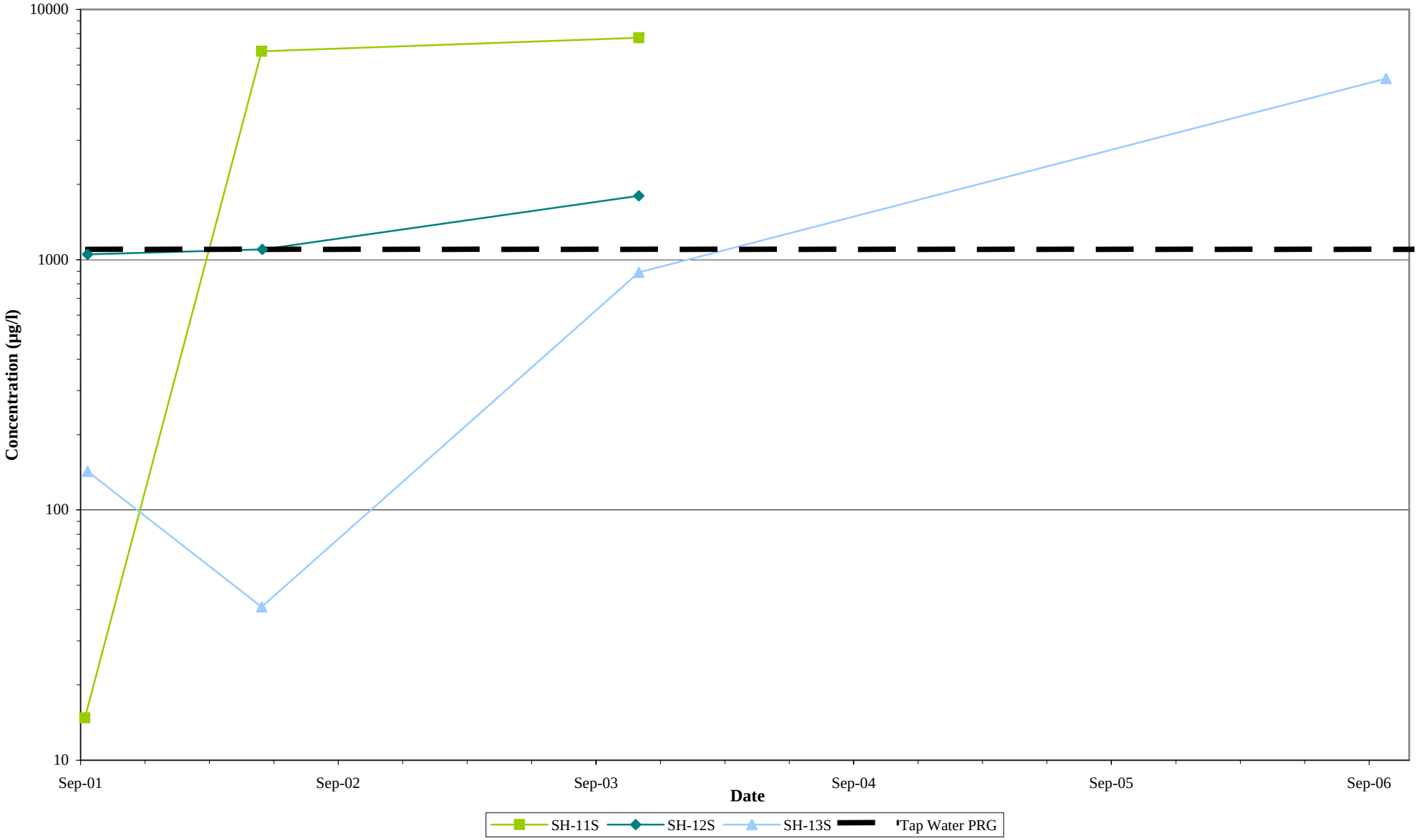
ND = ½RL

**FIGURE E.29**
**Vanadium in Bedrock Groundwater**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



ND = ½RL

**FIGURE E.30**
**Zinc in Shallow Groundwater**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



ND = ½RL

**FIGURE E.31**
**Zinc in Deep Groundwater**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**

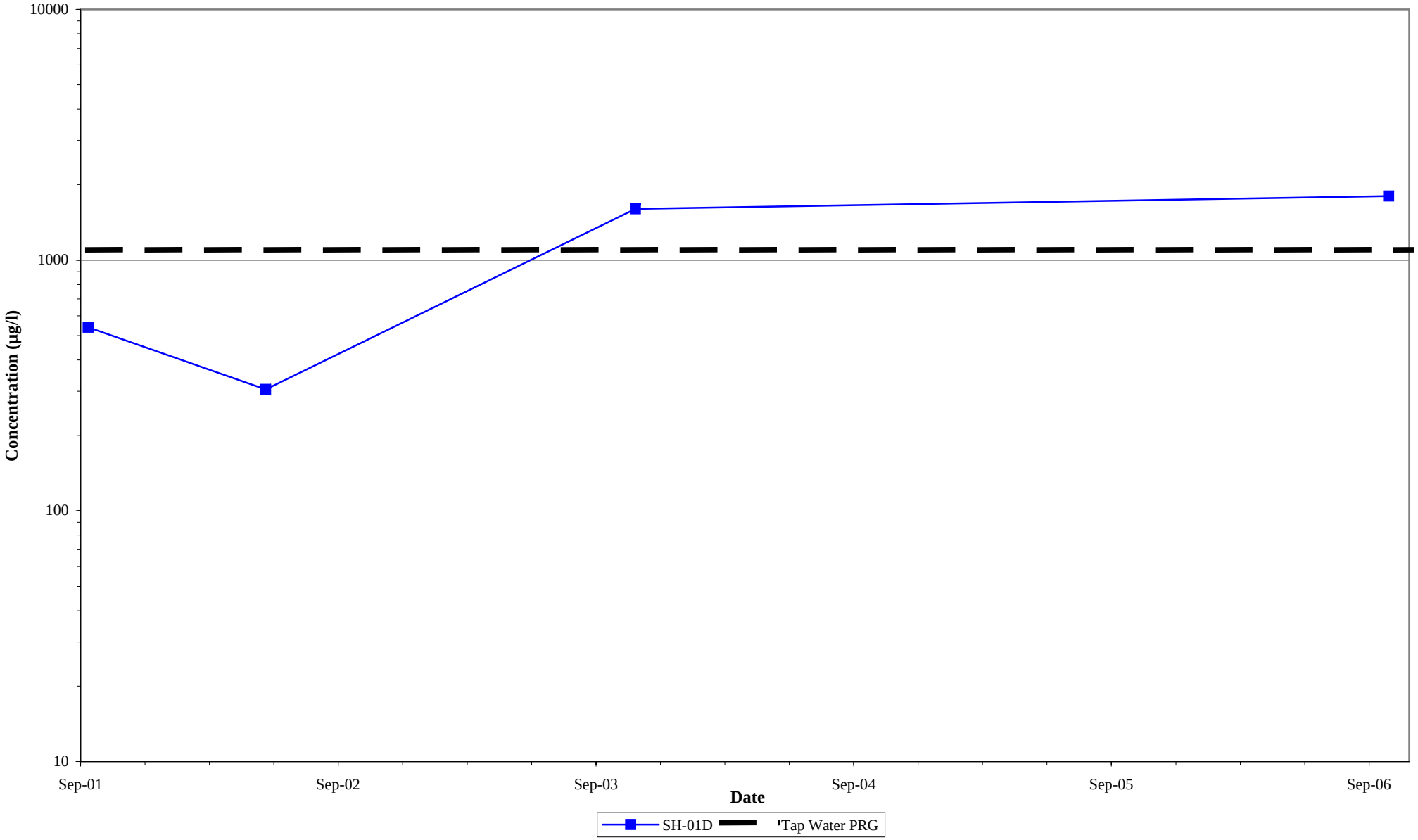


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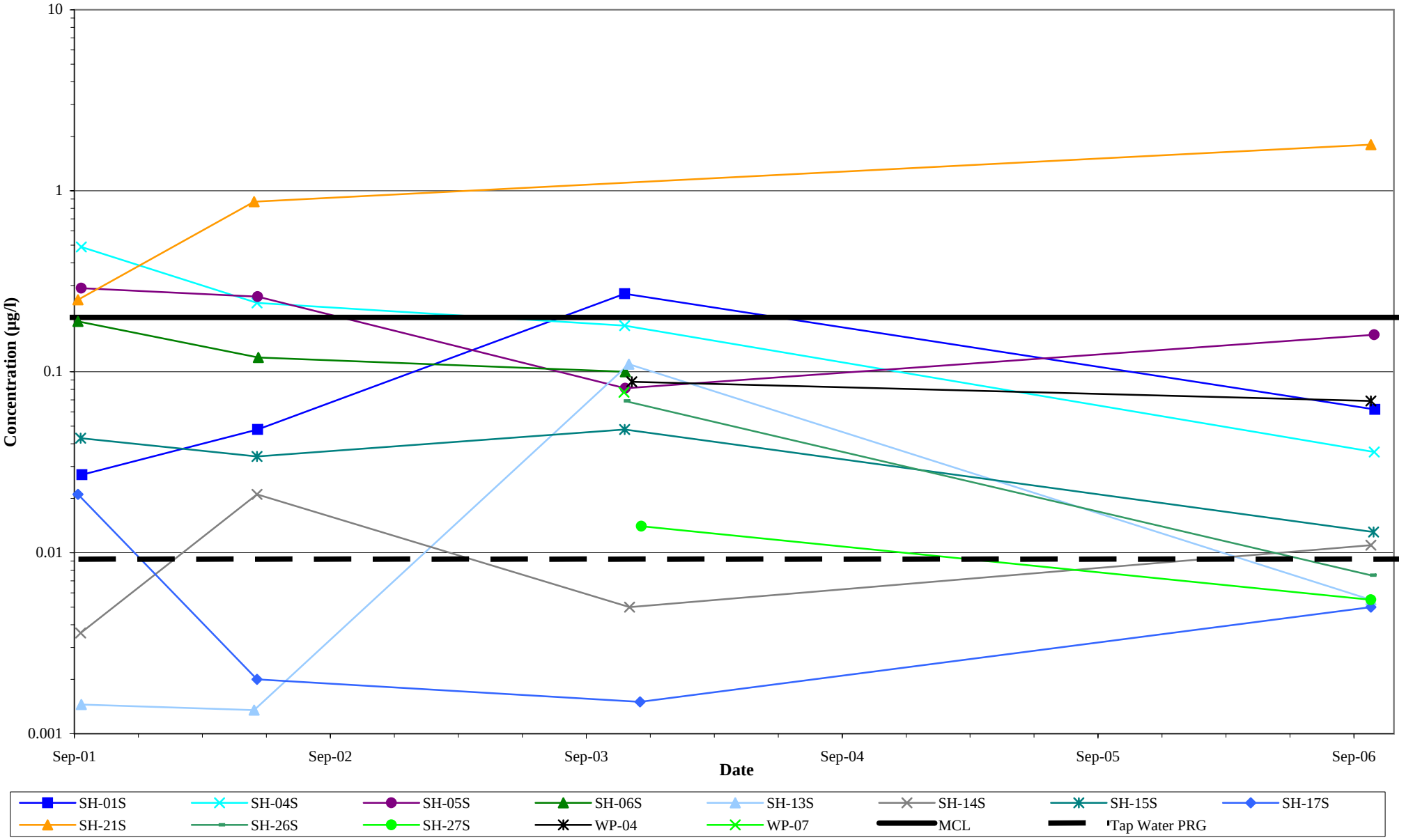
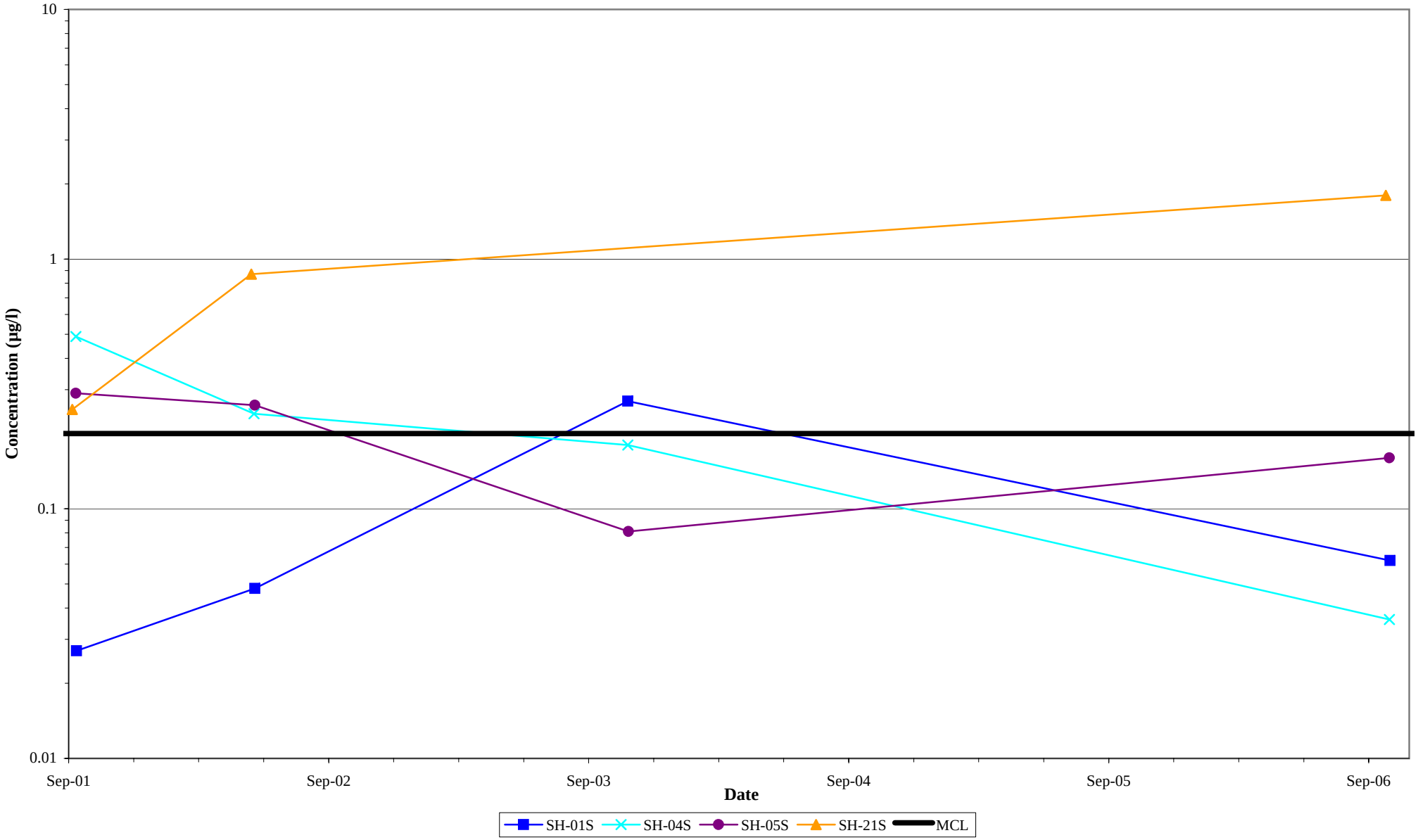
**FIGURE E.32**
**Benzo(a)pyrene in Shallow Groundwater**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



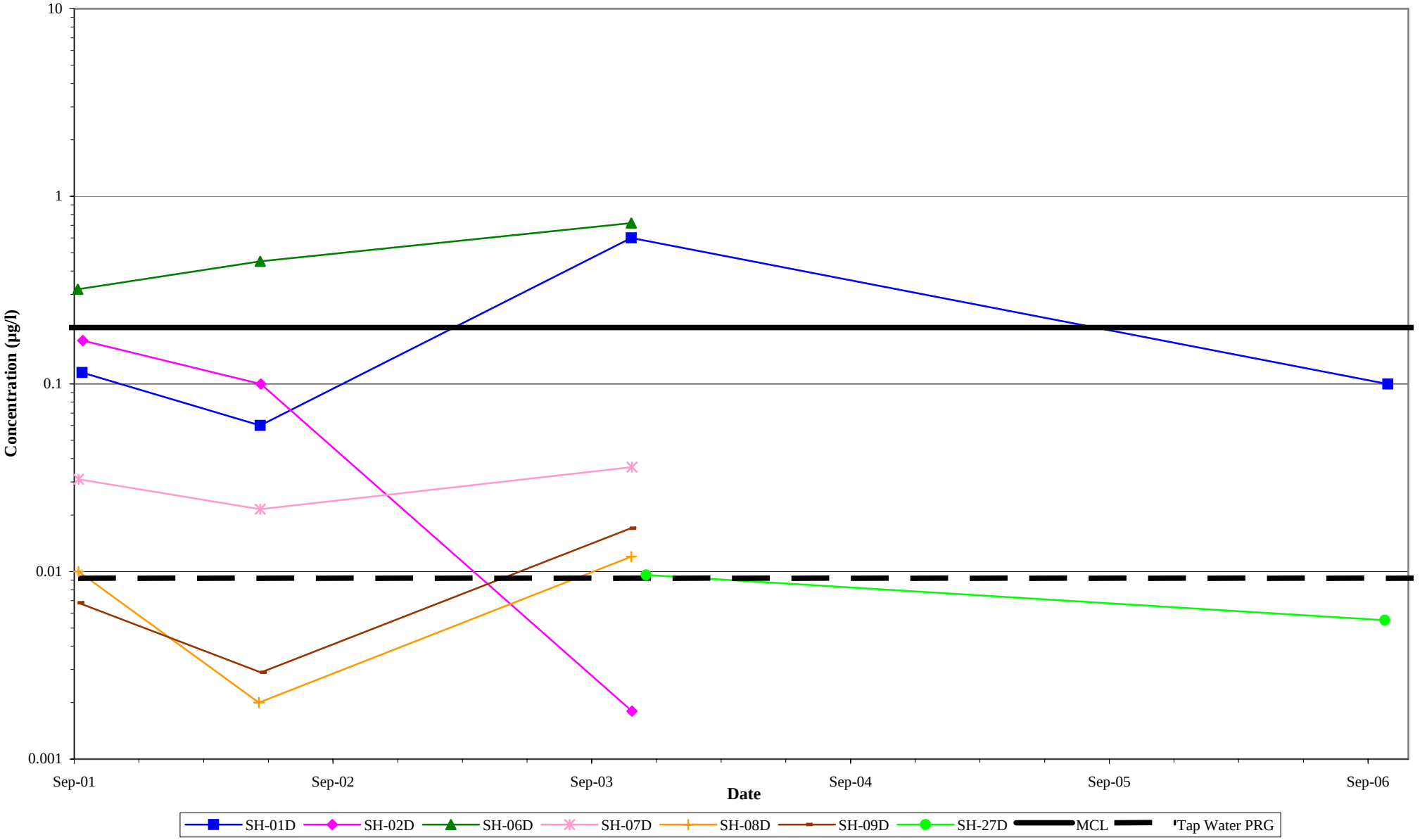
ND = ½RL

**FIGURE E.32a**
**Benzo(a)pyrene Greater than MCL in Shallow Groundwater**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



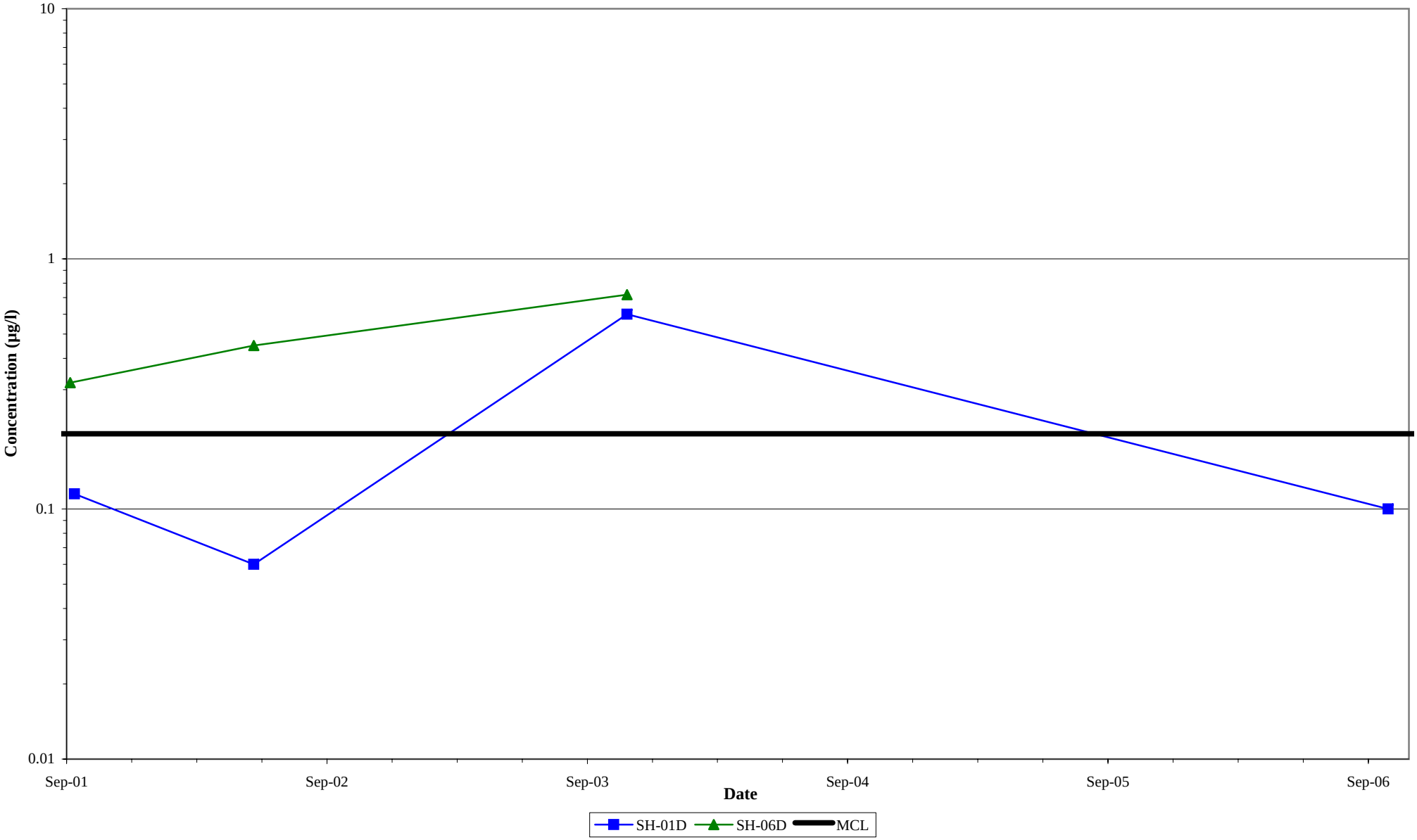
ND = ½RL

**FIGURE E.33**
**Benzo(a)pyrene in Deep Groundwater**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



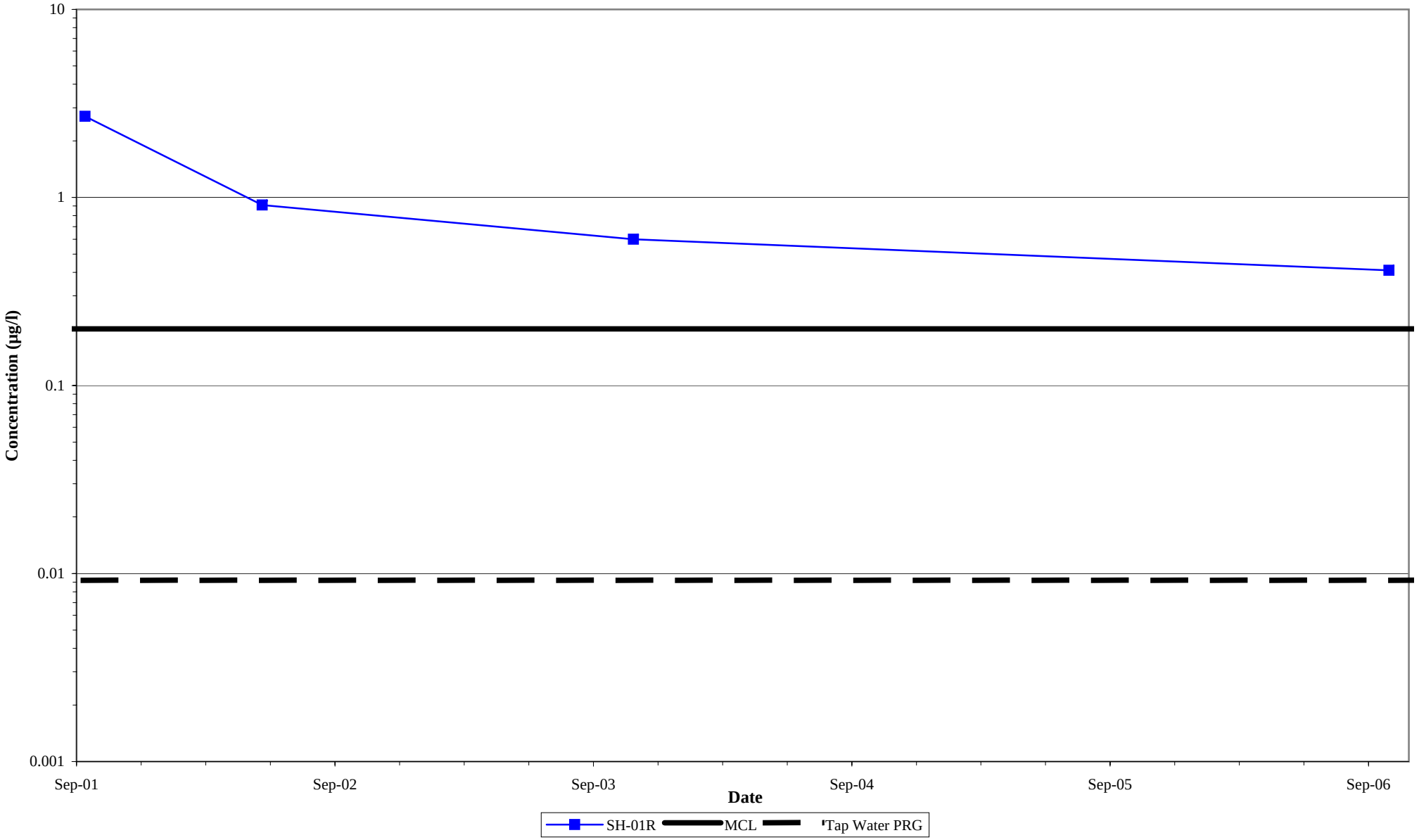
ND = ½RL

**FIGURE E.33a**
**Benzo(a)pyrene Greater than MCL in Deep Groundwater**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



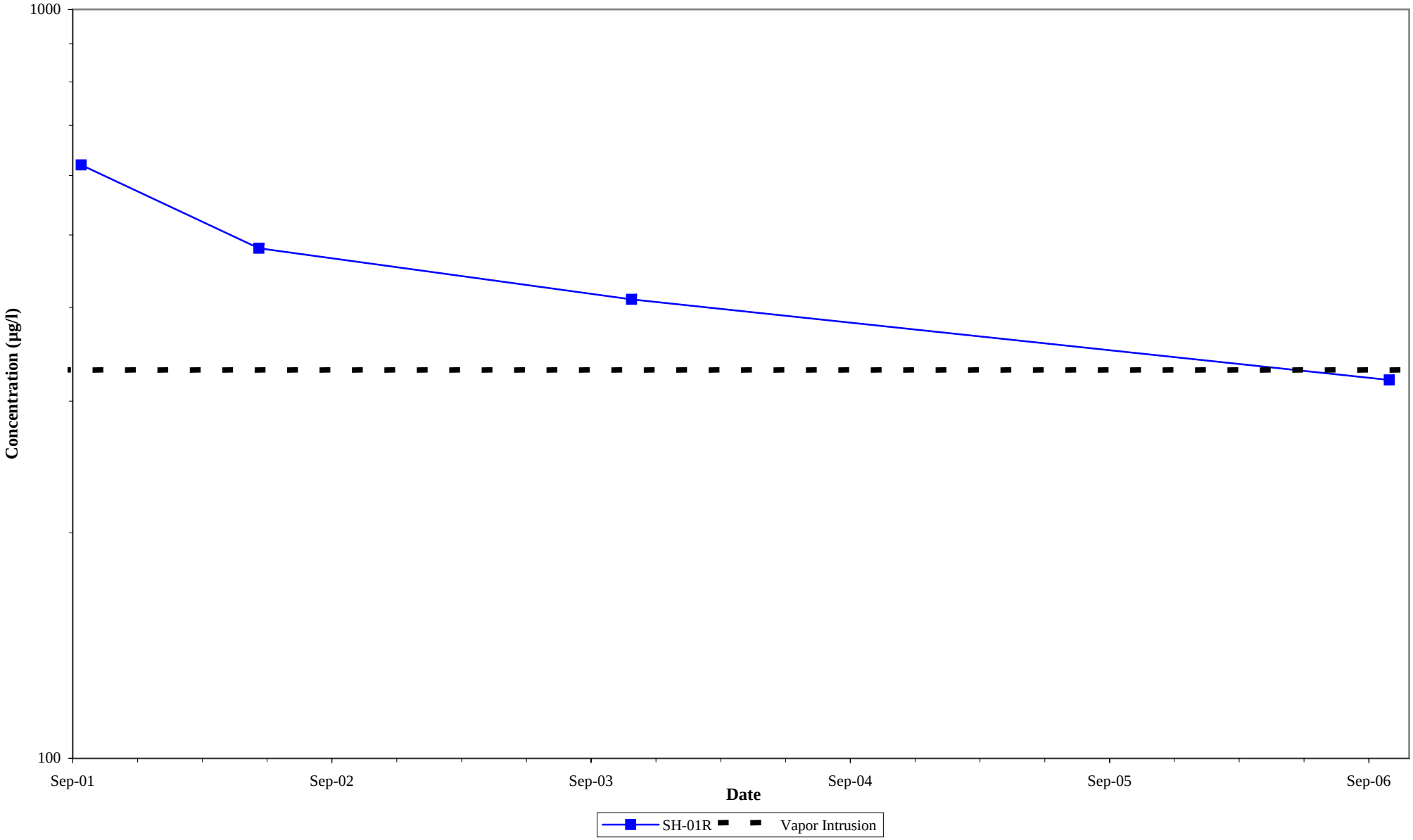
ND = ½RL

**FIGURE E.34**
**Benzo(a)pyrene in Bedrock Groundwater**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



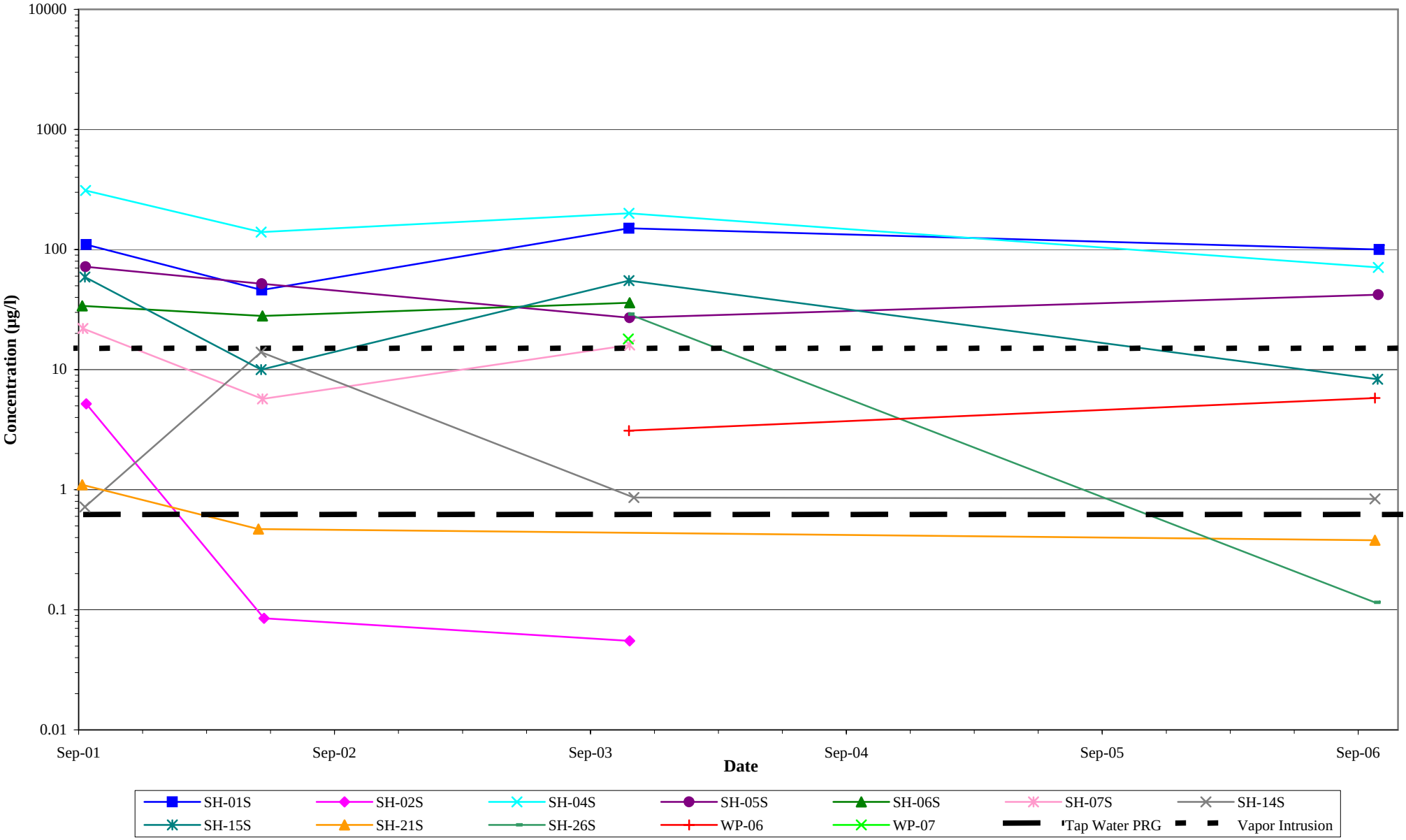
ND = ½RL

**FIGURE E.35**
**2-Methylnaphthalene in Bedrock Groundwater**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



ND = ½RL

**FIGURE E.36**
**Naphthalene in Shallow Groundwater**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**

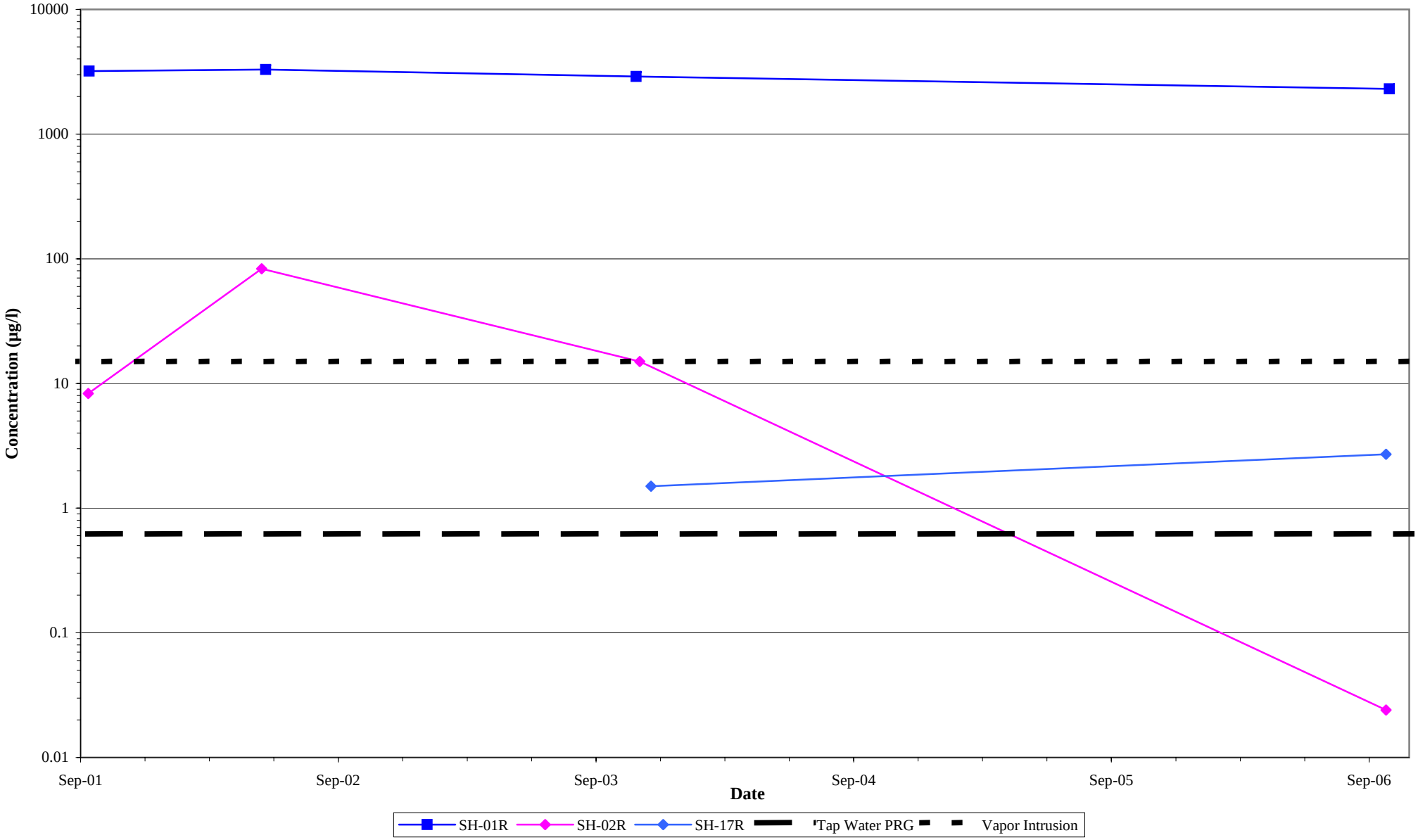


ND = ½RL

**FIGURE E.37**
**Naphthalene in Deep Groundwater**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**

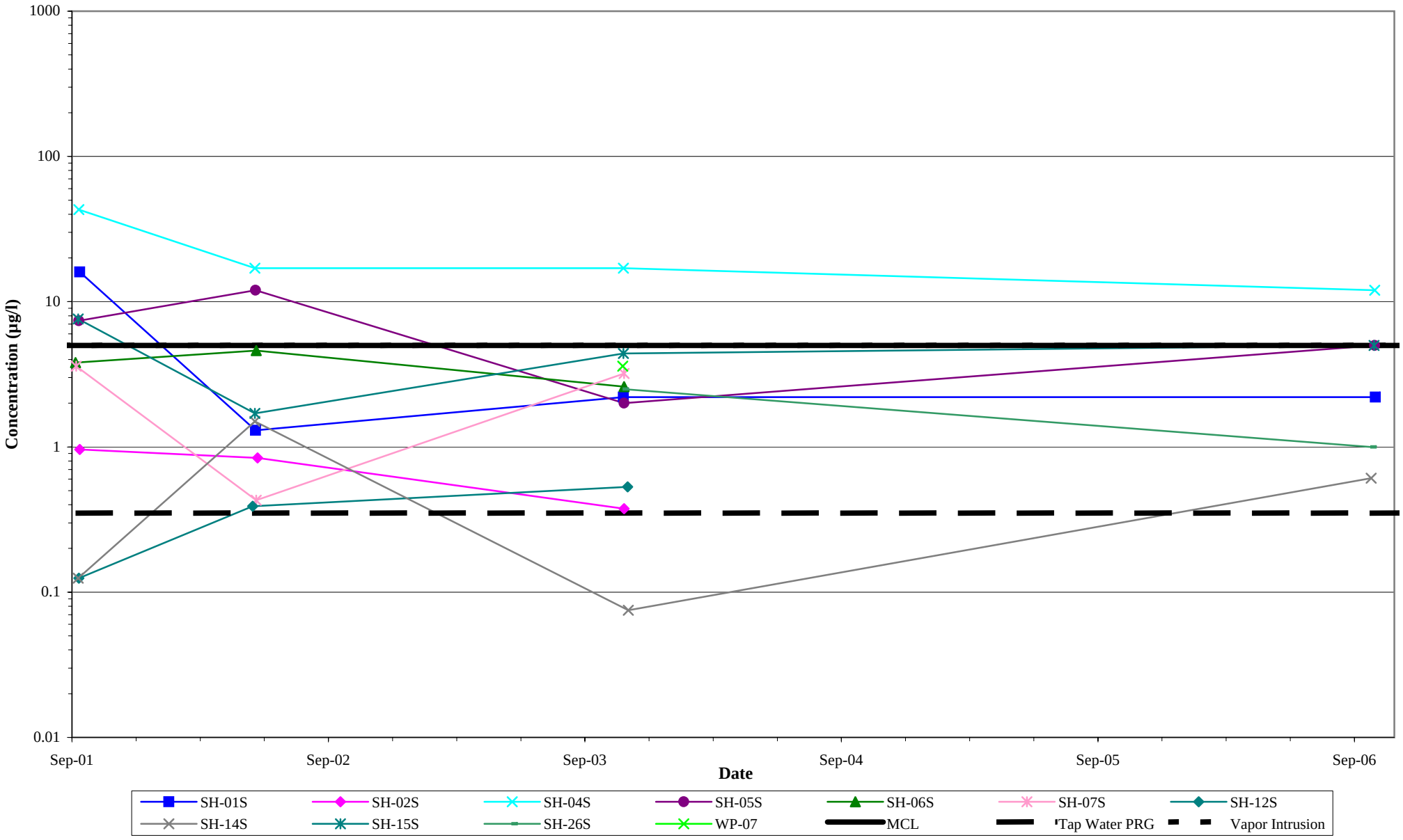
ND = ½RL

**FIGURE E.38**
**Naphthalene in Bedrock Groundwater**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



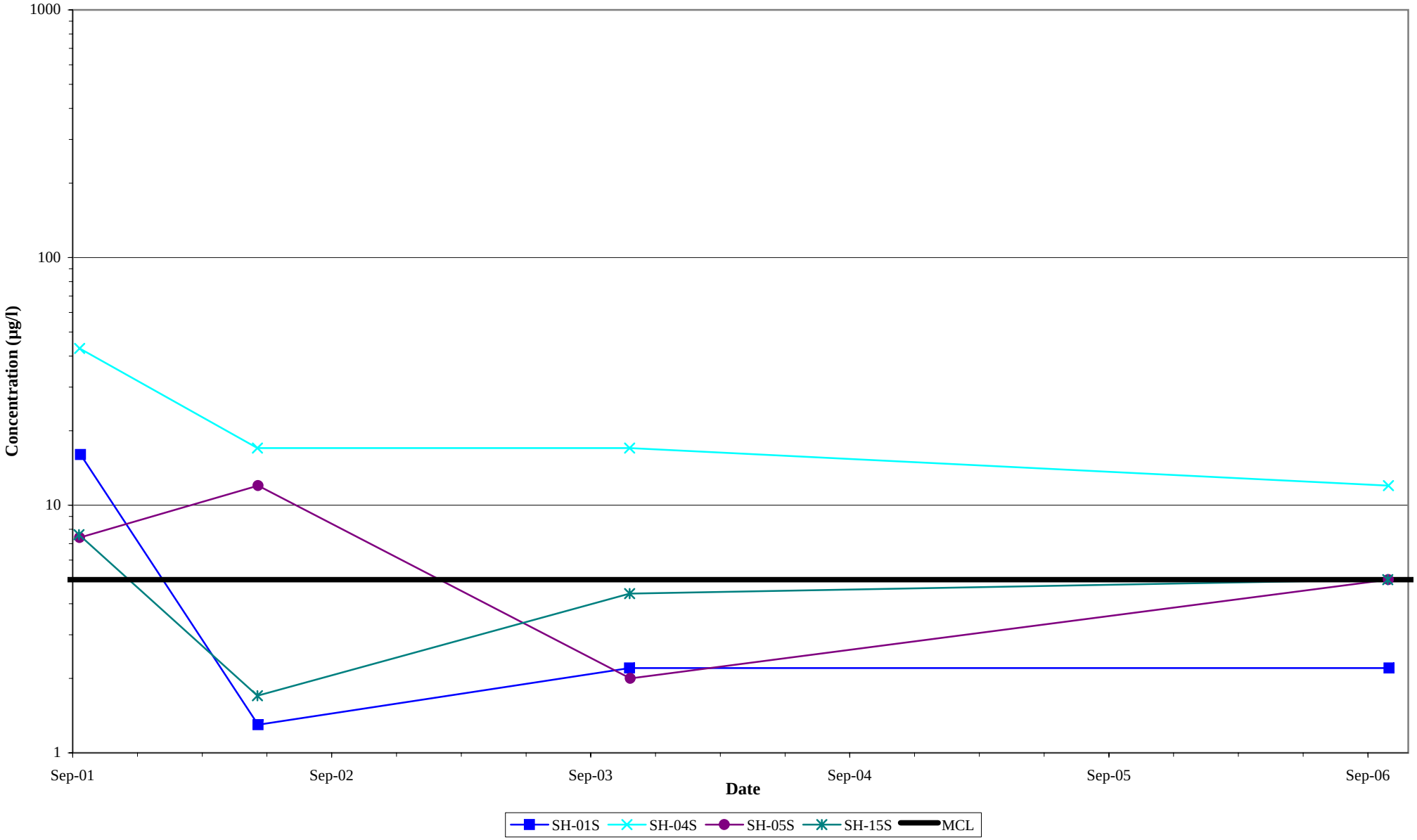
ND = ½RL

**FIGURE E.39**
**Benzene in Shallow Groundwater**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



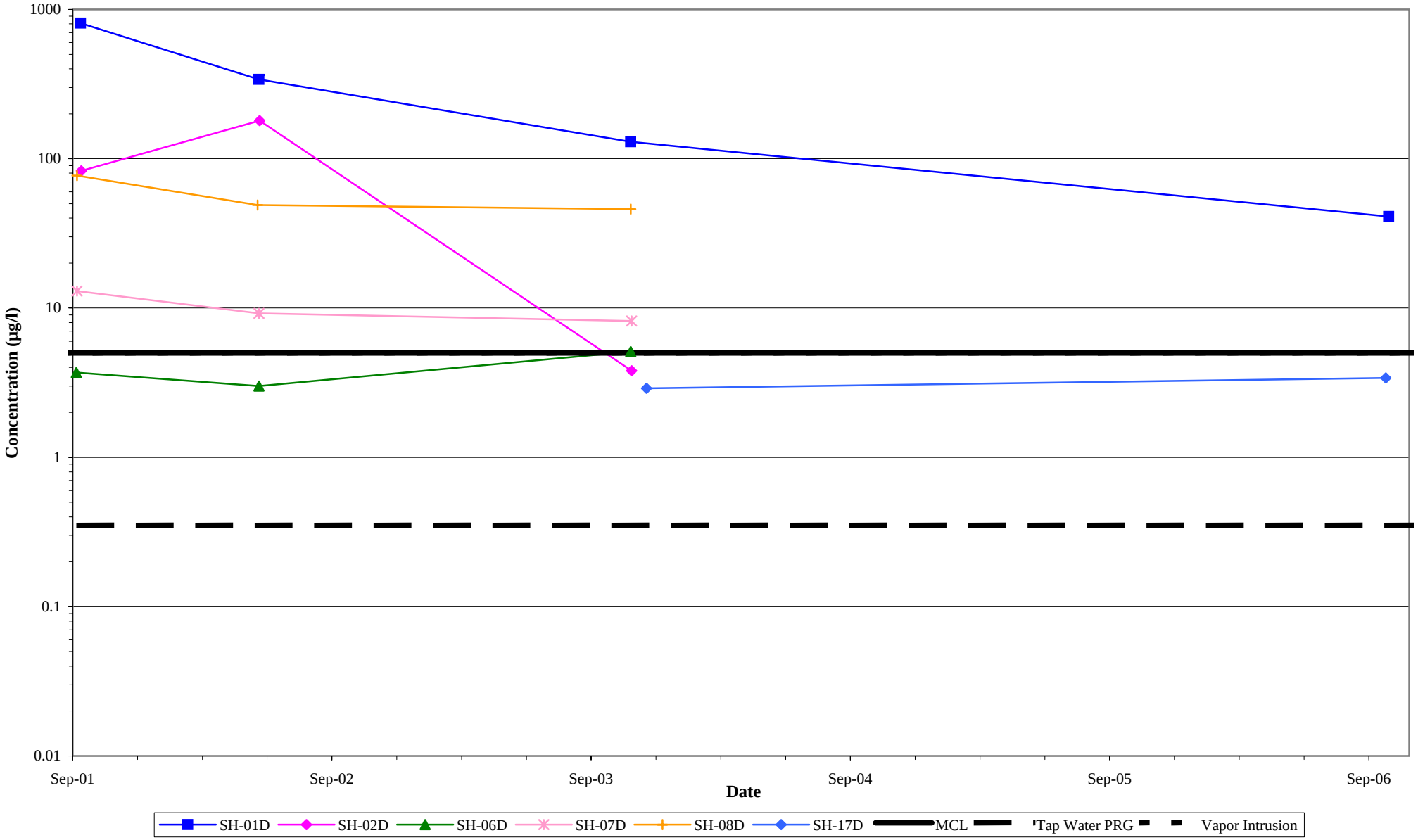
ND = ½RL

**FIGURE E.39a**
**Benzene Greater than MCL in Shallow Groundwater**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



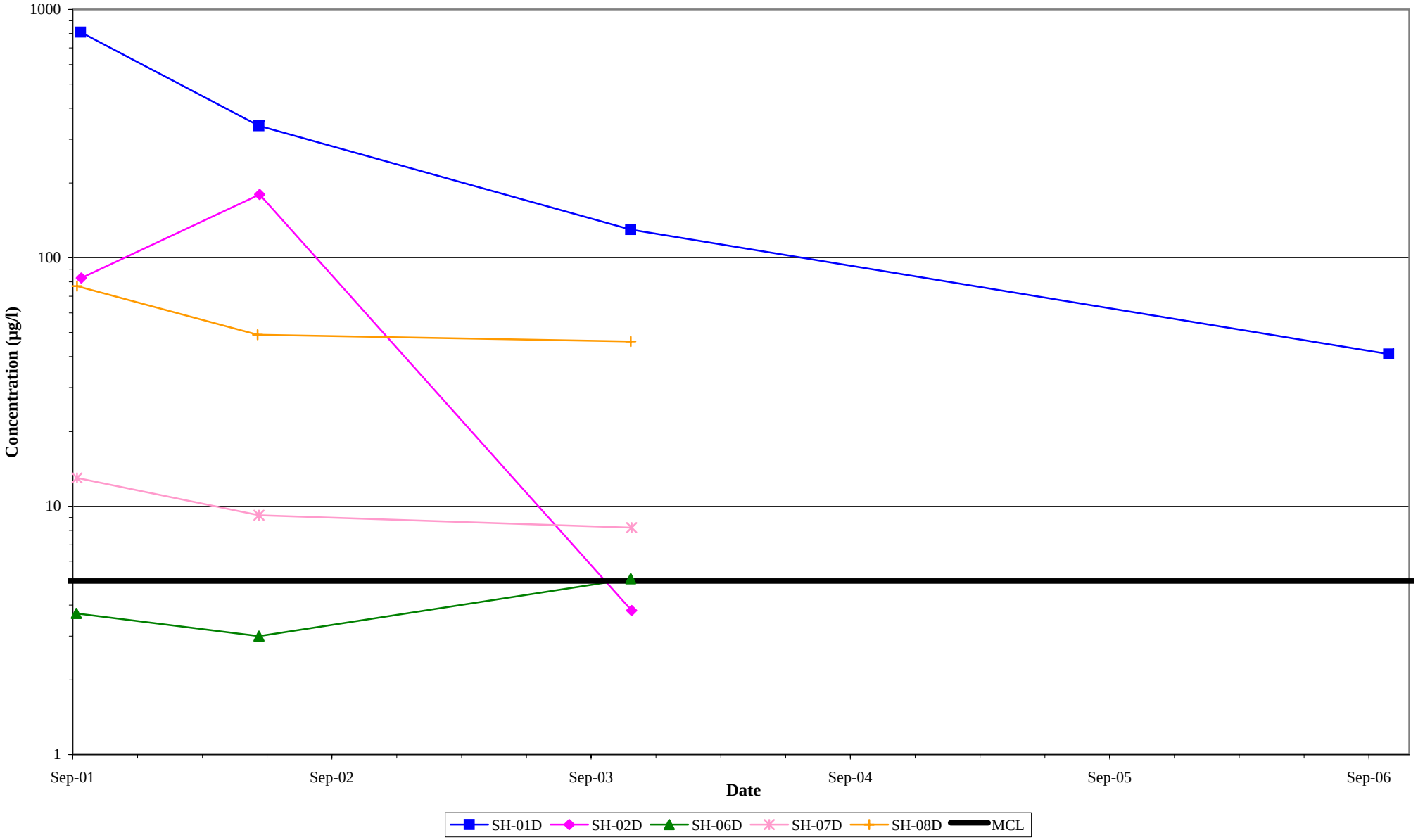
ND = ½RL

**FIGURE E.40**
**Benzene in Deep Groundwater**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



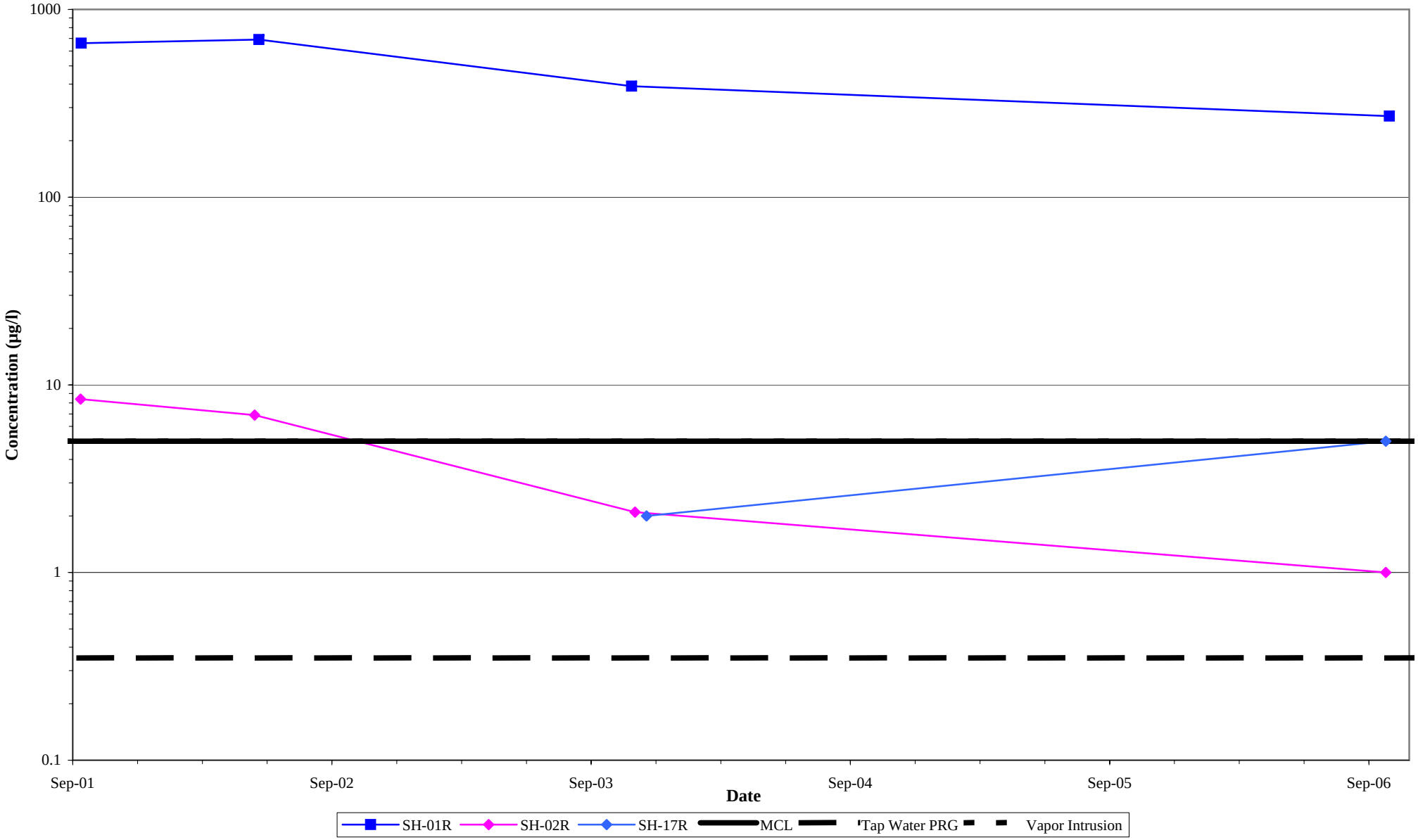
ND = ½RL

**FIGURE E.40a**
**Benzene Greater than MCL in Deep Groundwater**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



ND = ½RL

**FIGURE E.41**
**Benzene in Bedrock Groundwater**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



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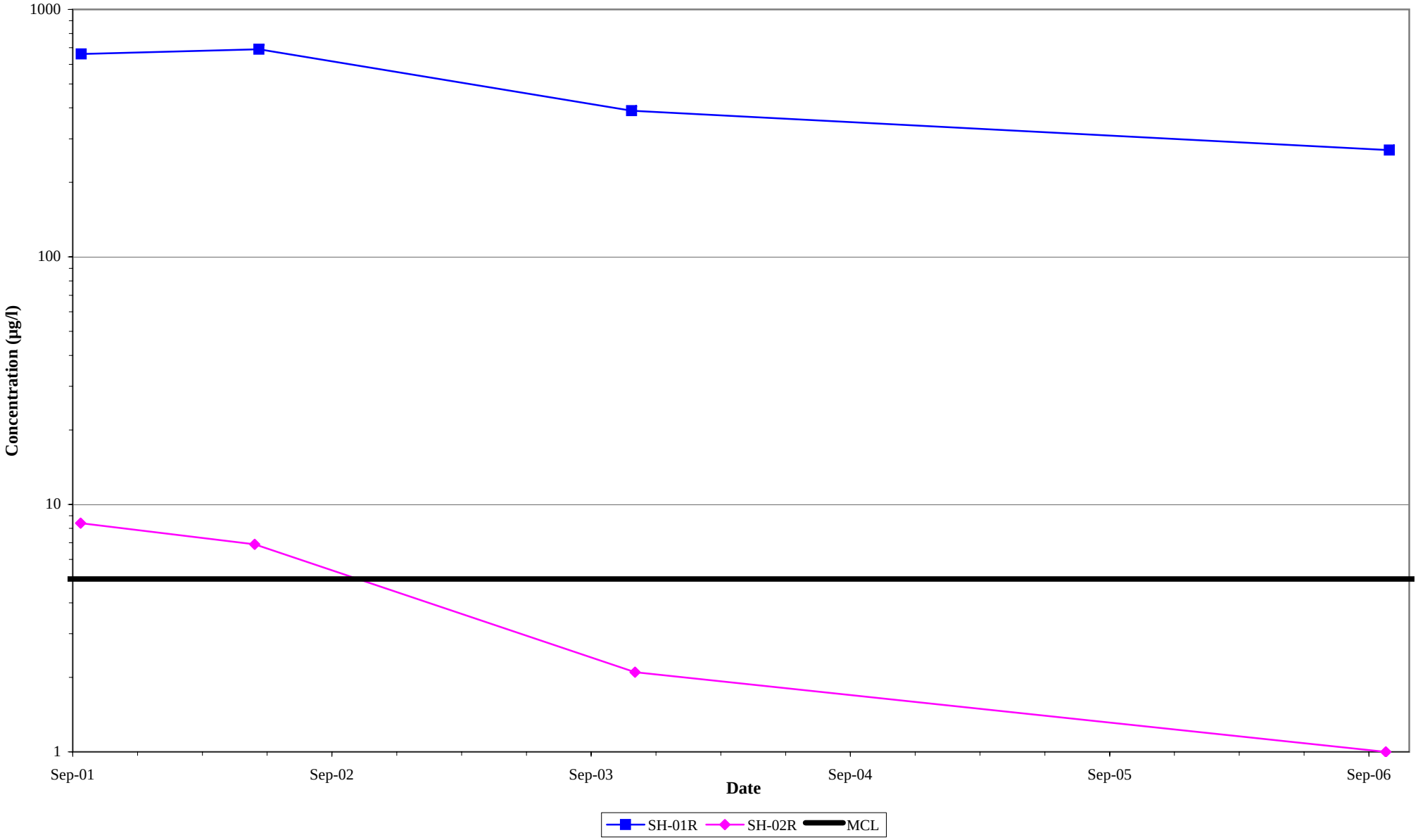
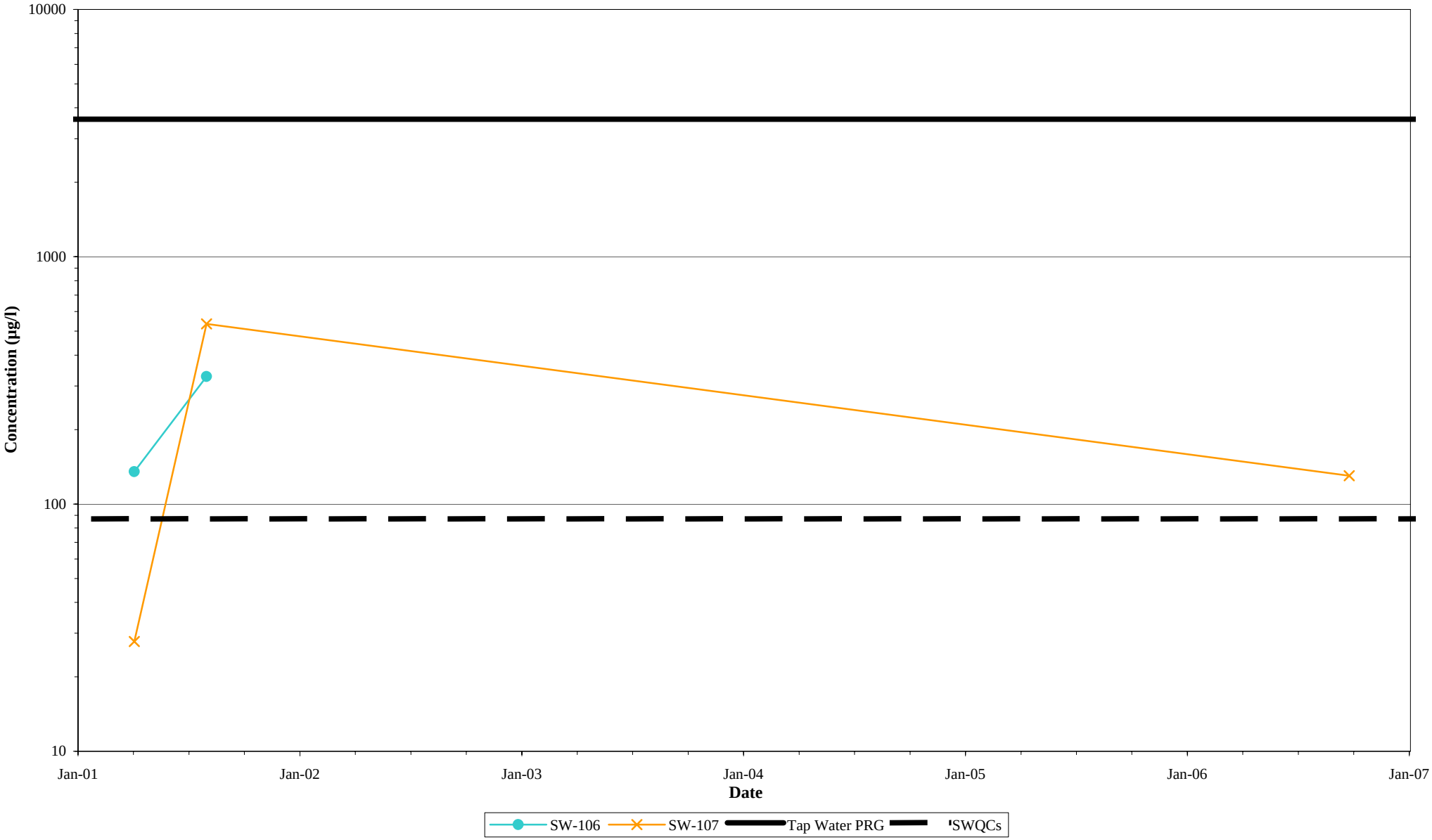
ND = ½RL

**FIGURE E.41a**
**Benzene Greater than MCL in Bedrock Groundwater**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



ND = ½RL

**FIGURE E.42a**
**Dissolved Aluminum in Surface Water**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



ND = ½RL

**FIGURE E.42b**
**Total Aluminum in Surface Water**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**

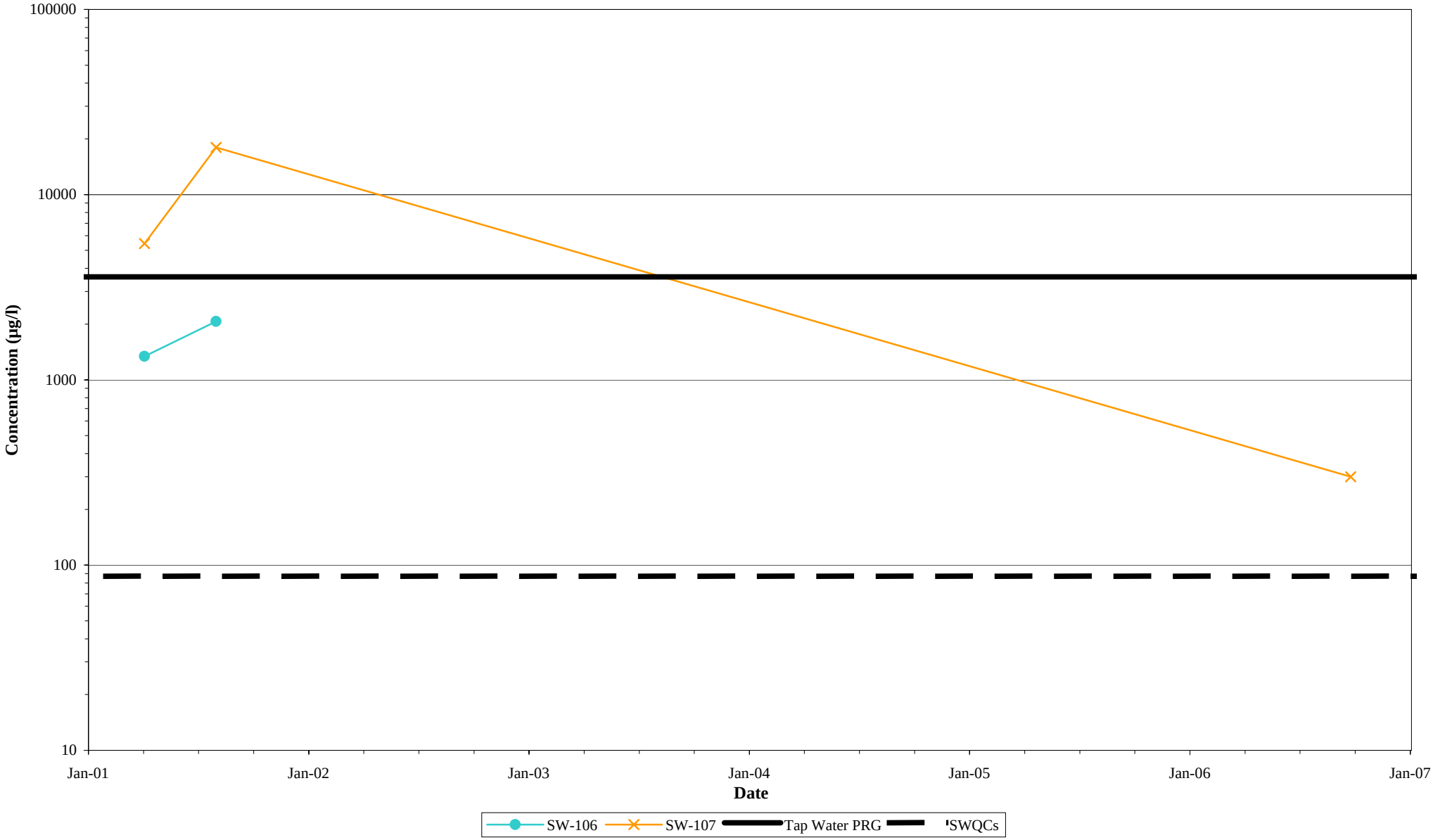


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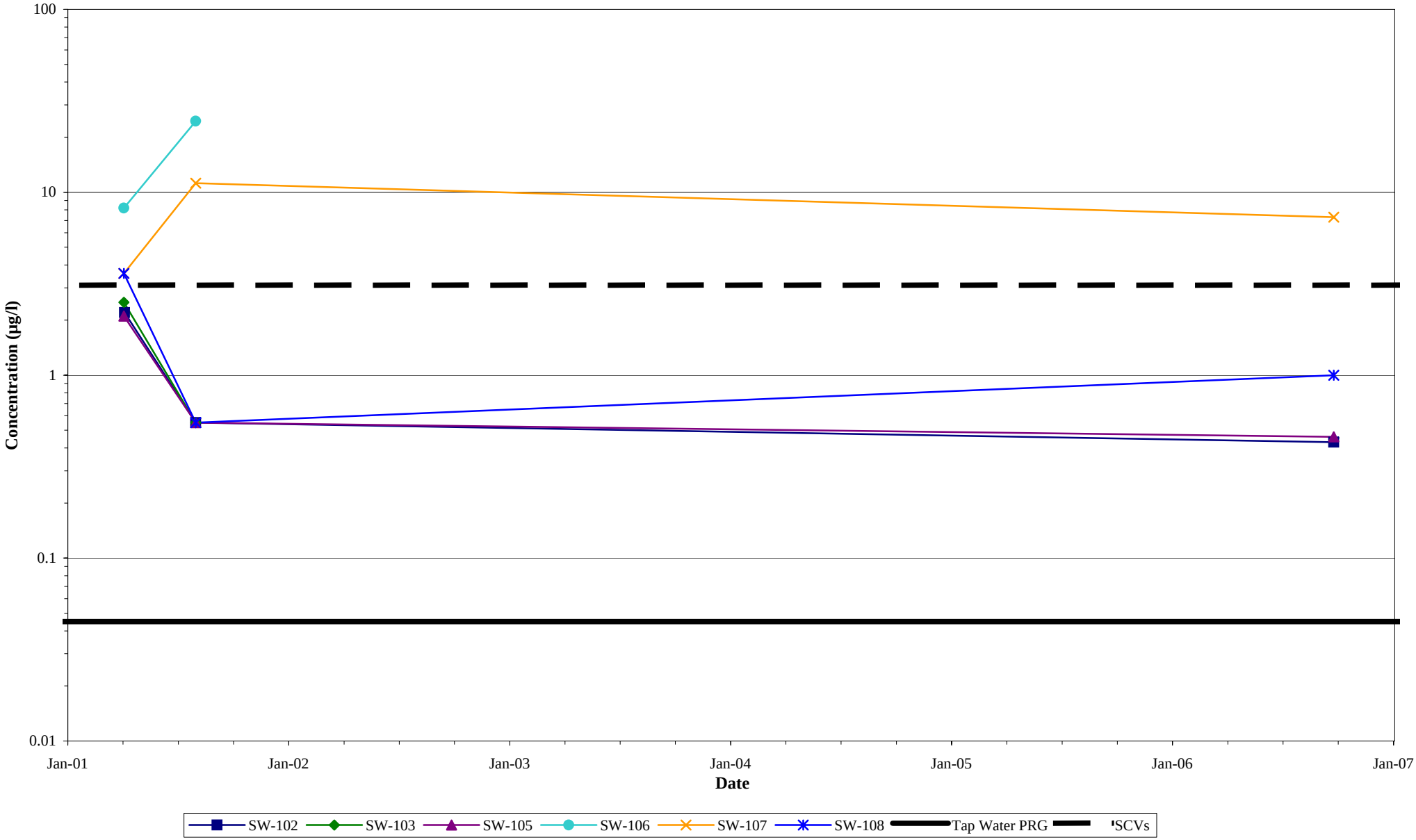
**FIGURE E.43a**
**Dissolved Arsenic in Surface Water**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**

ND = ½RL



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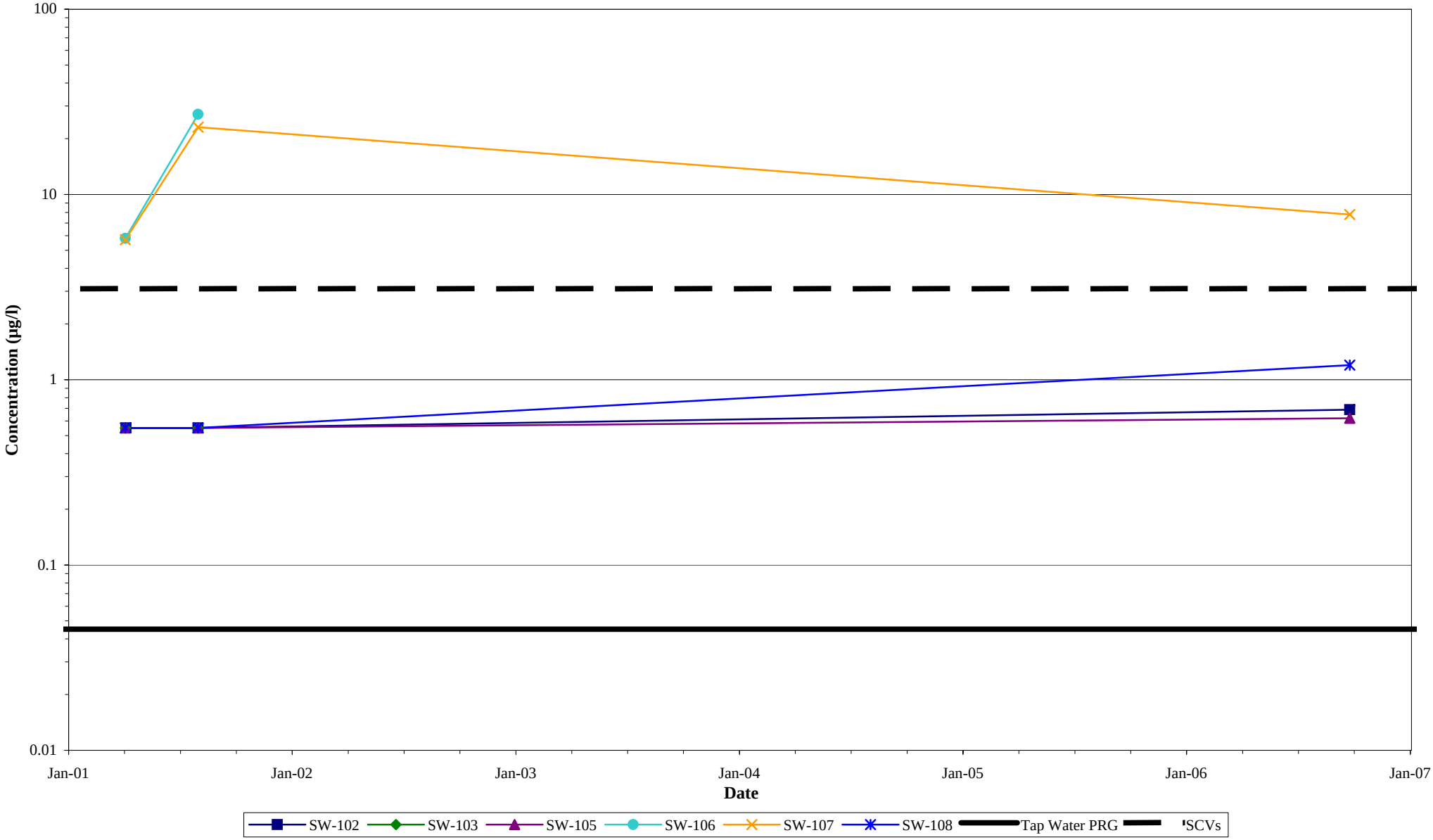
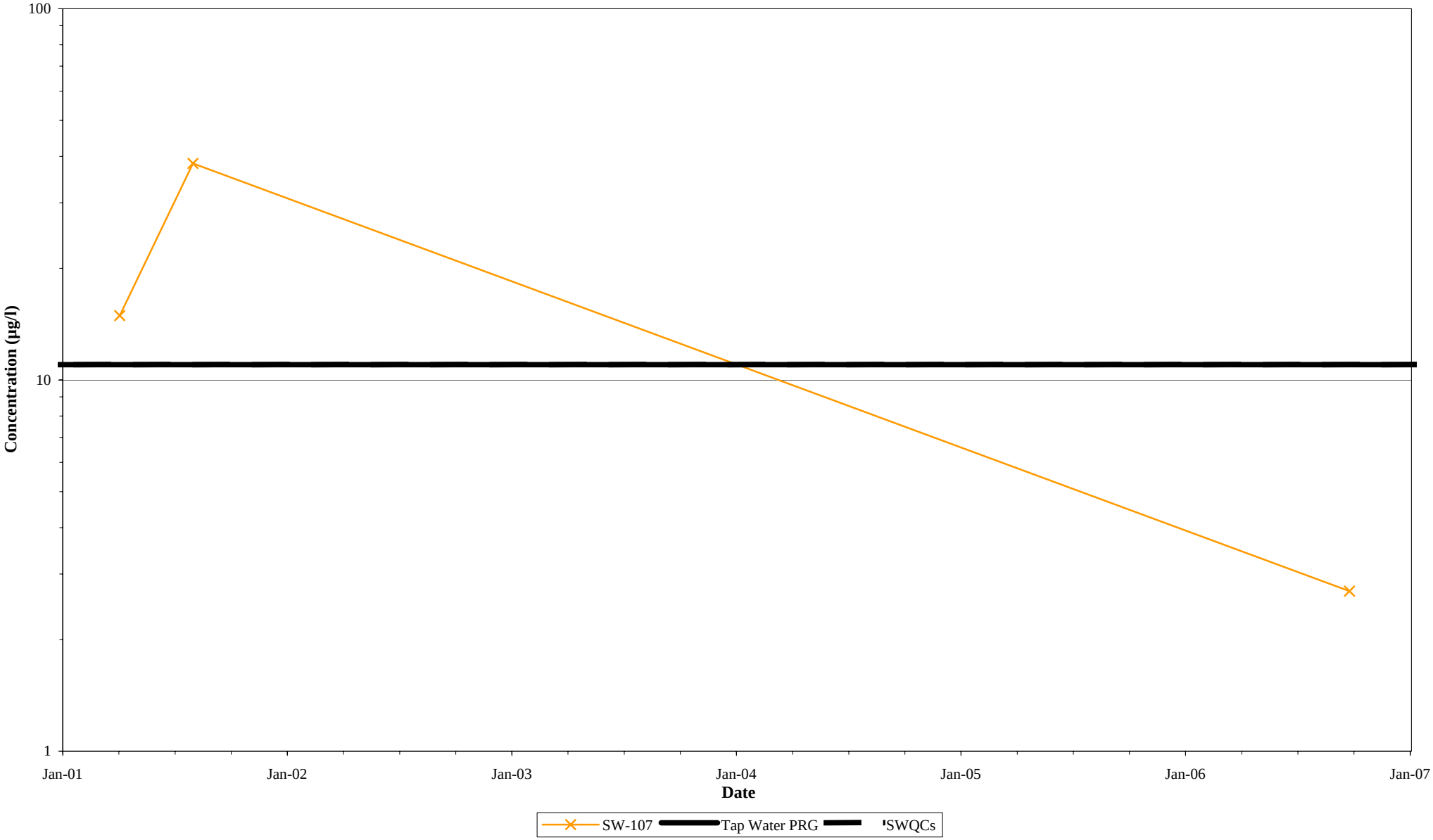
ND = ½RL

**FIGURE E.43b**
**Total Arsenic in Surface Water**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



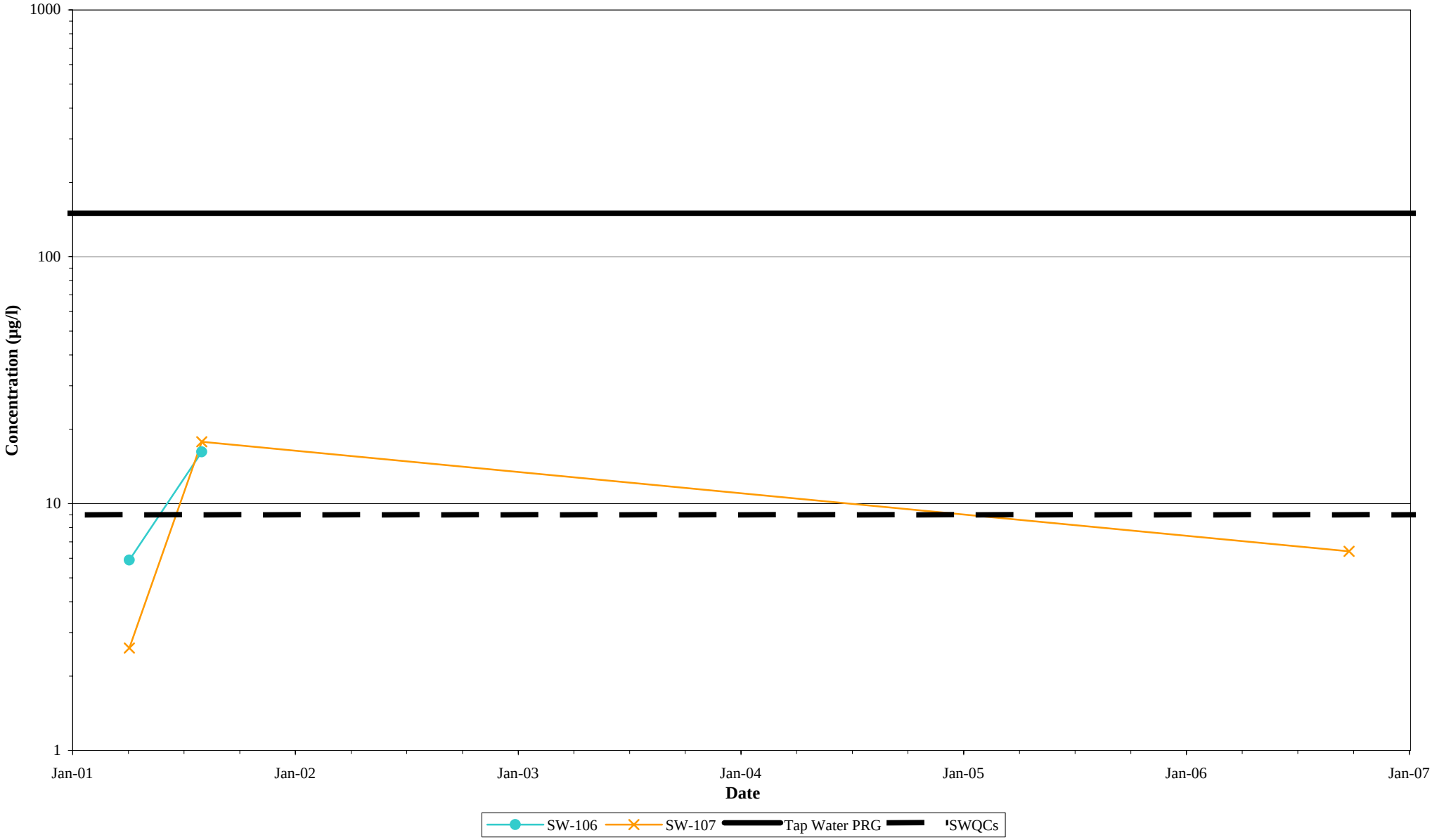
ND = ½RL

**FIGURE E.44**
**Total Chromium in Surface Water**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



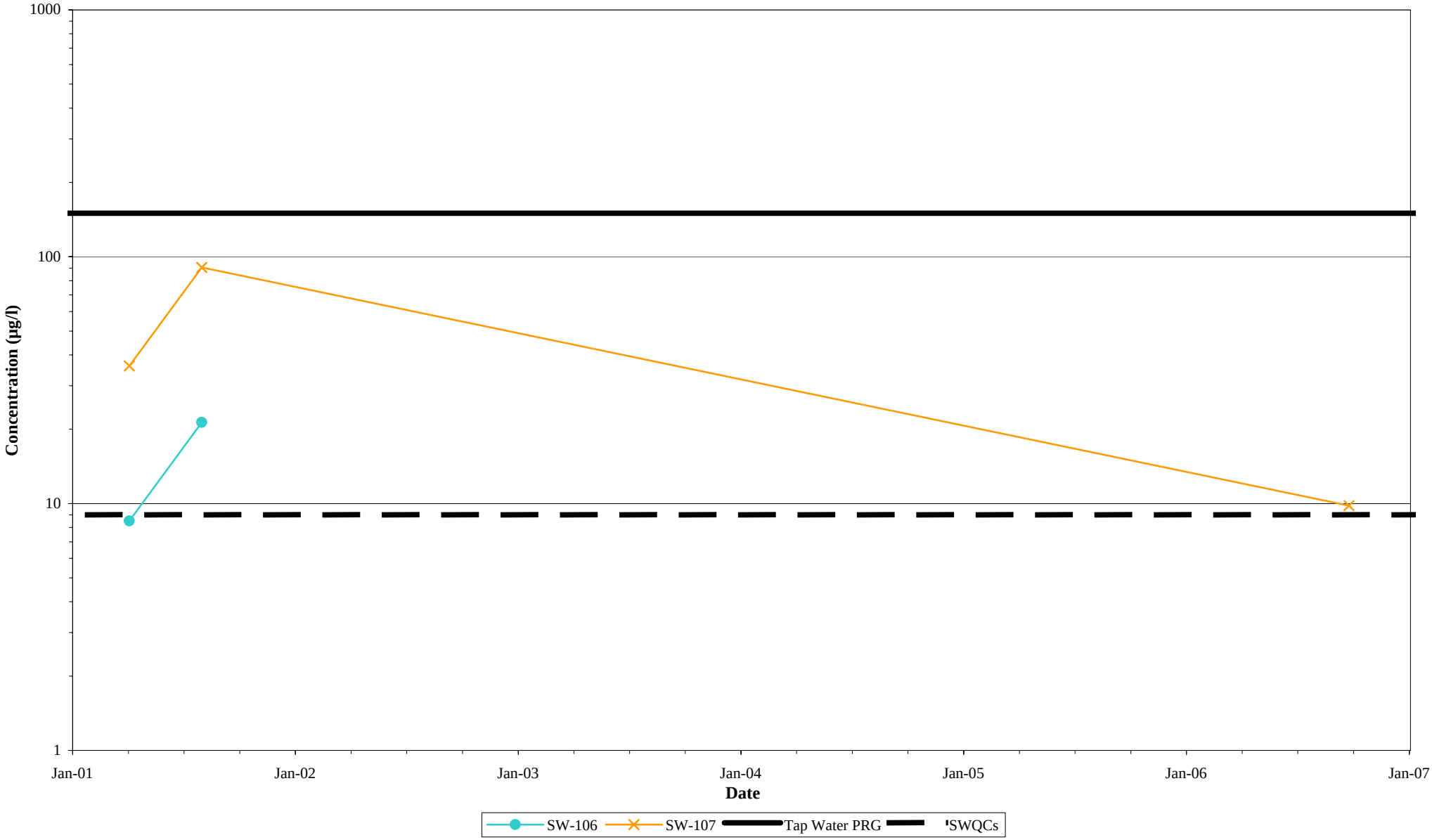
ND = ½RL

**FIGURE E.45a**
**Dissolved Copper in Surface Water**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



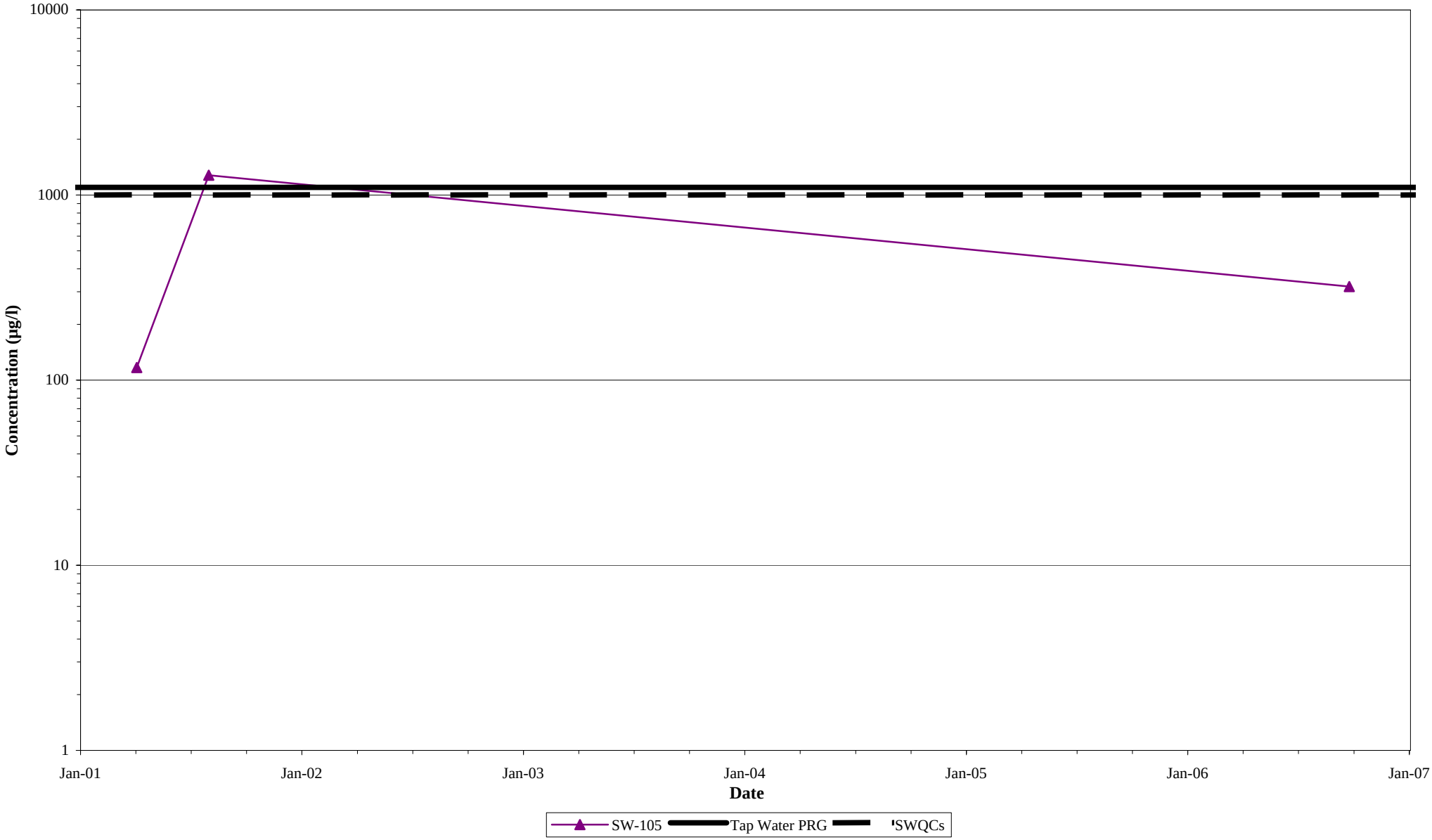
ND = ½RL

**FIGURE E.45b**
**Total Copper in Surface Water**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



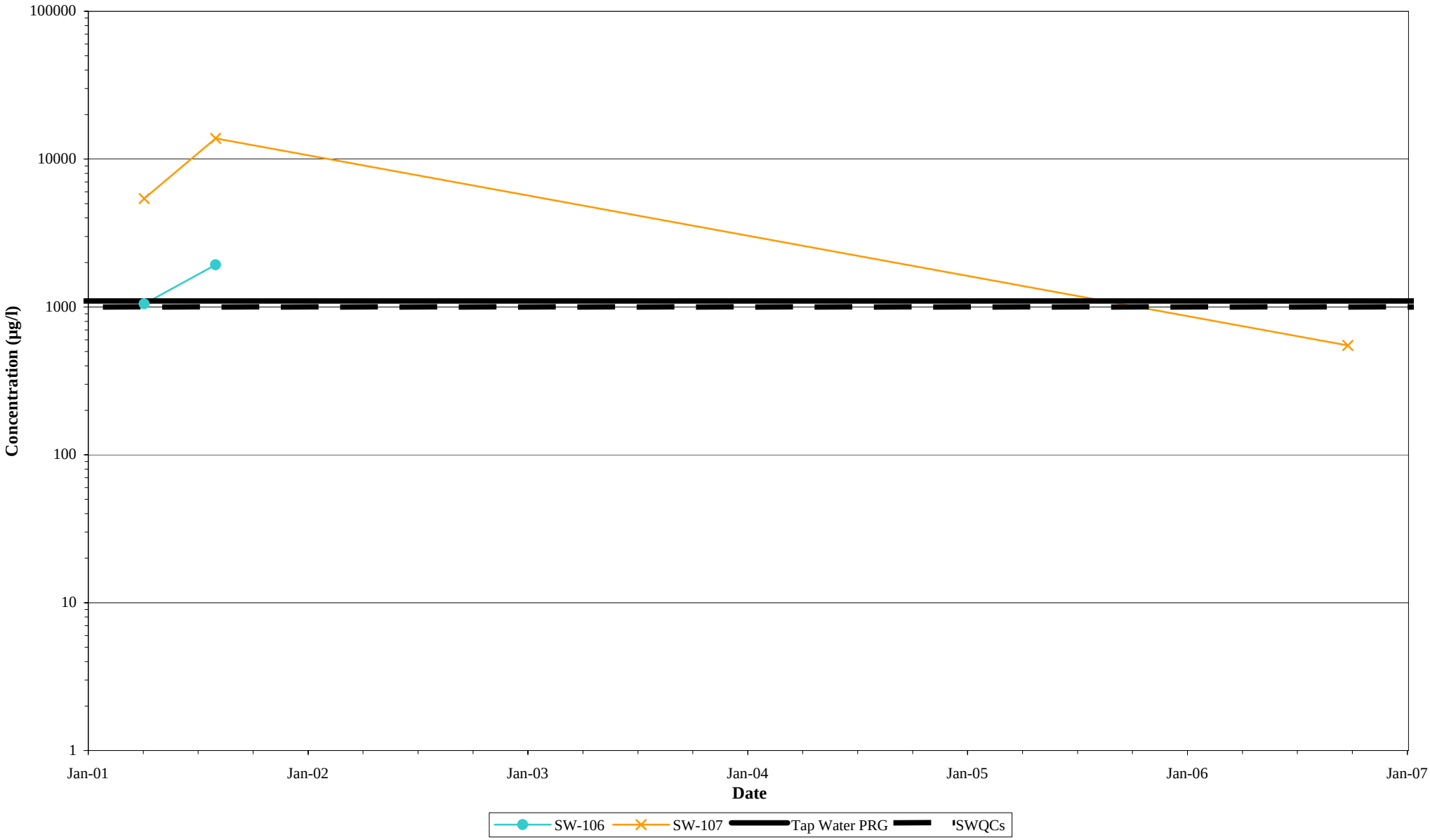
ND = ½RL

**FIGURE E.46a**
**Dissolved Iron in Surface Water**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



ND = ½RL

**FIGURE E.46b**
**Total Iron in Surface Water**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



ND = ½RL

**FIGURE E.47a**
**Dissolved Manganese in Surface Water**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**

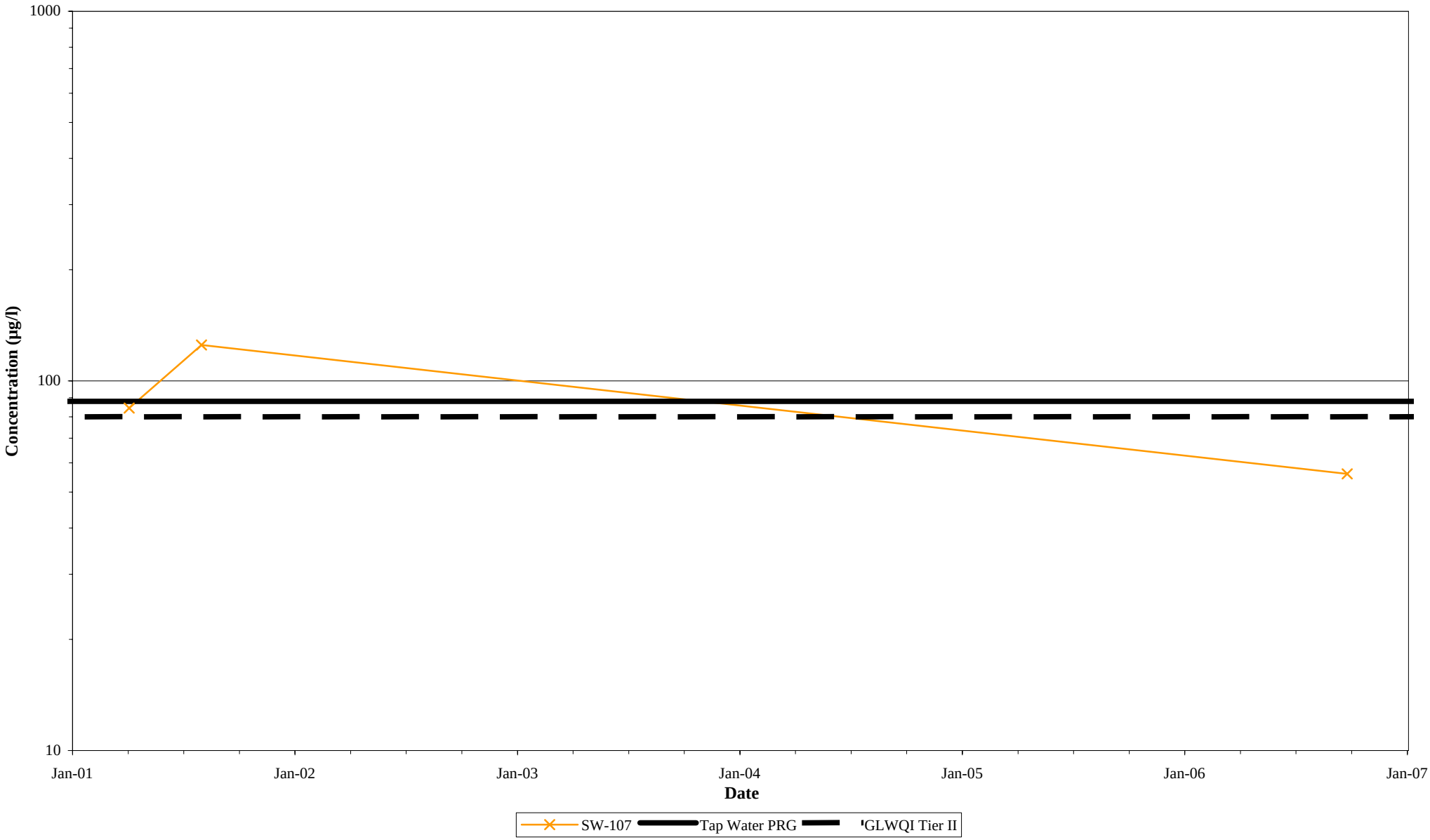


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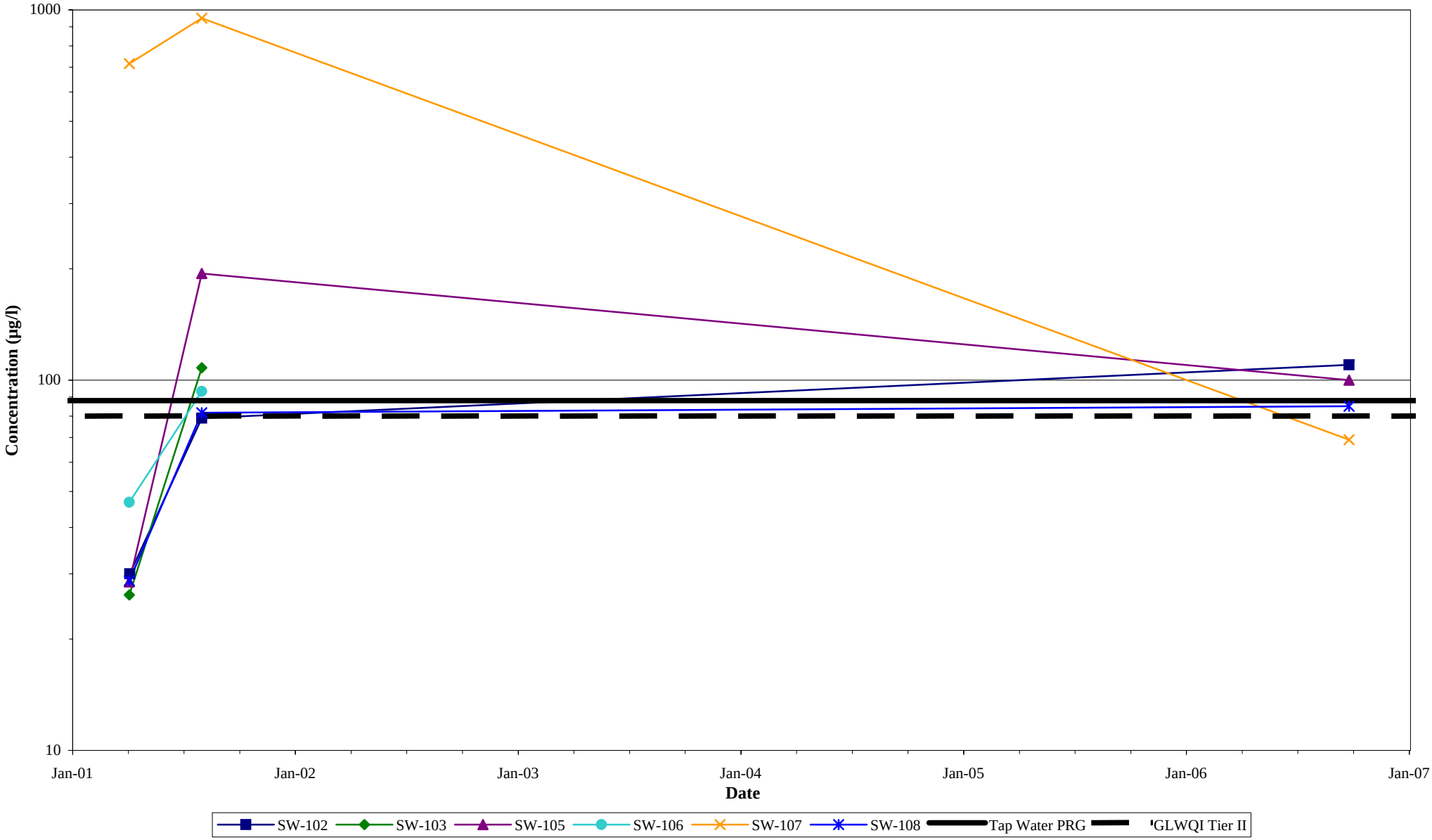
**FIGURE E.47b**
**Total Manganese in Surface Water**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



ND = ½RL

**FIGURE E.48a**
**Dissolved Lead in Surface Water**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**

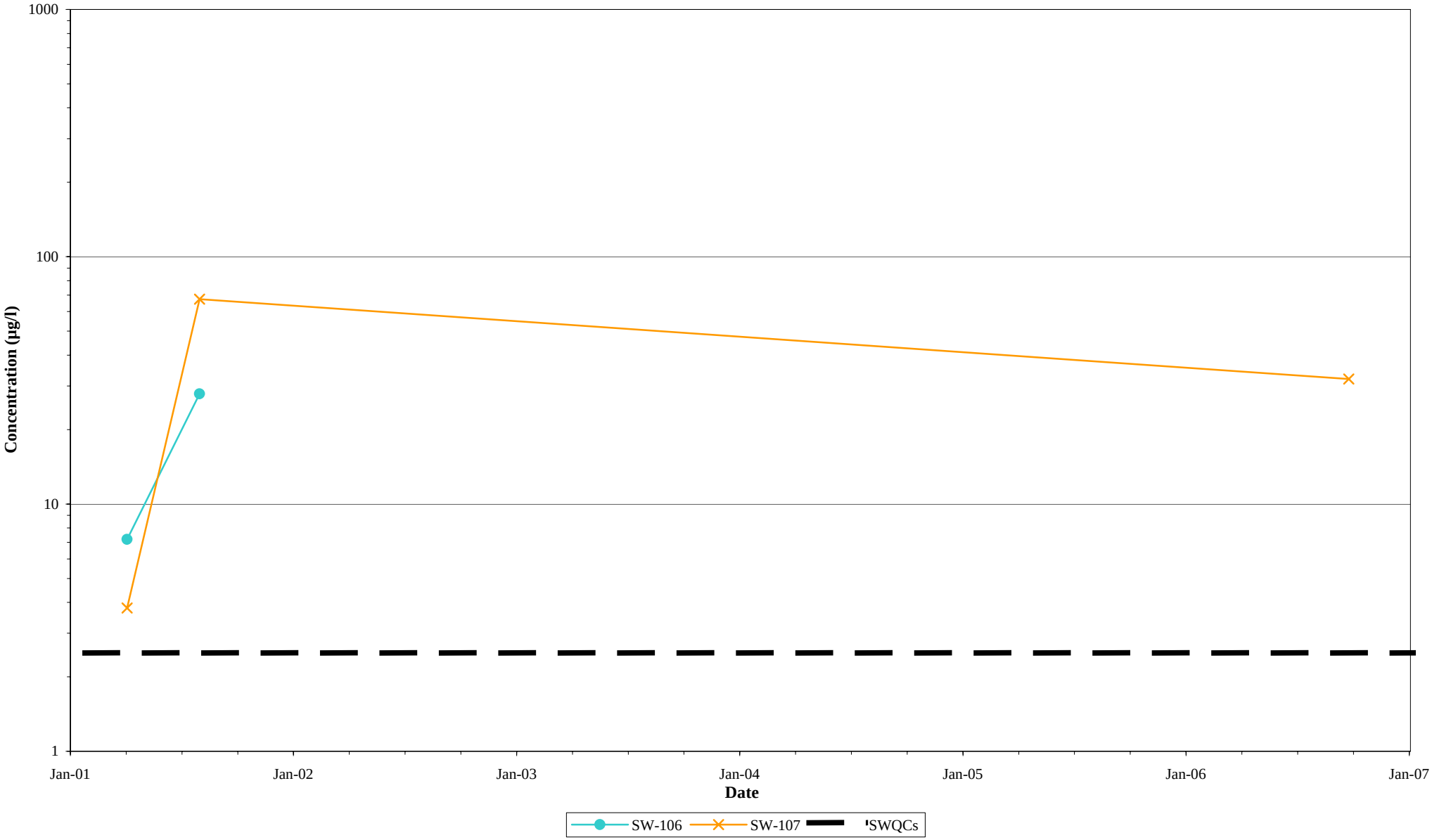


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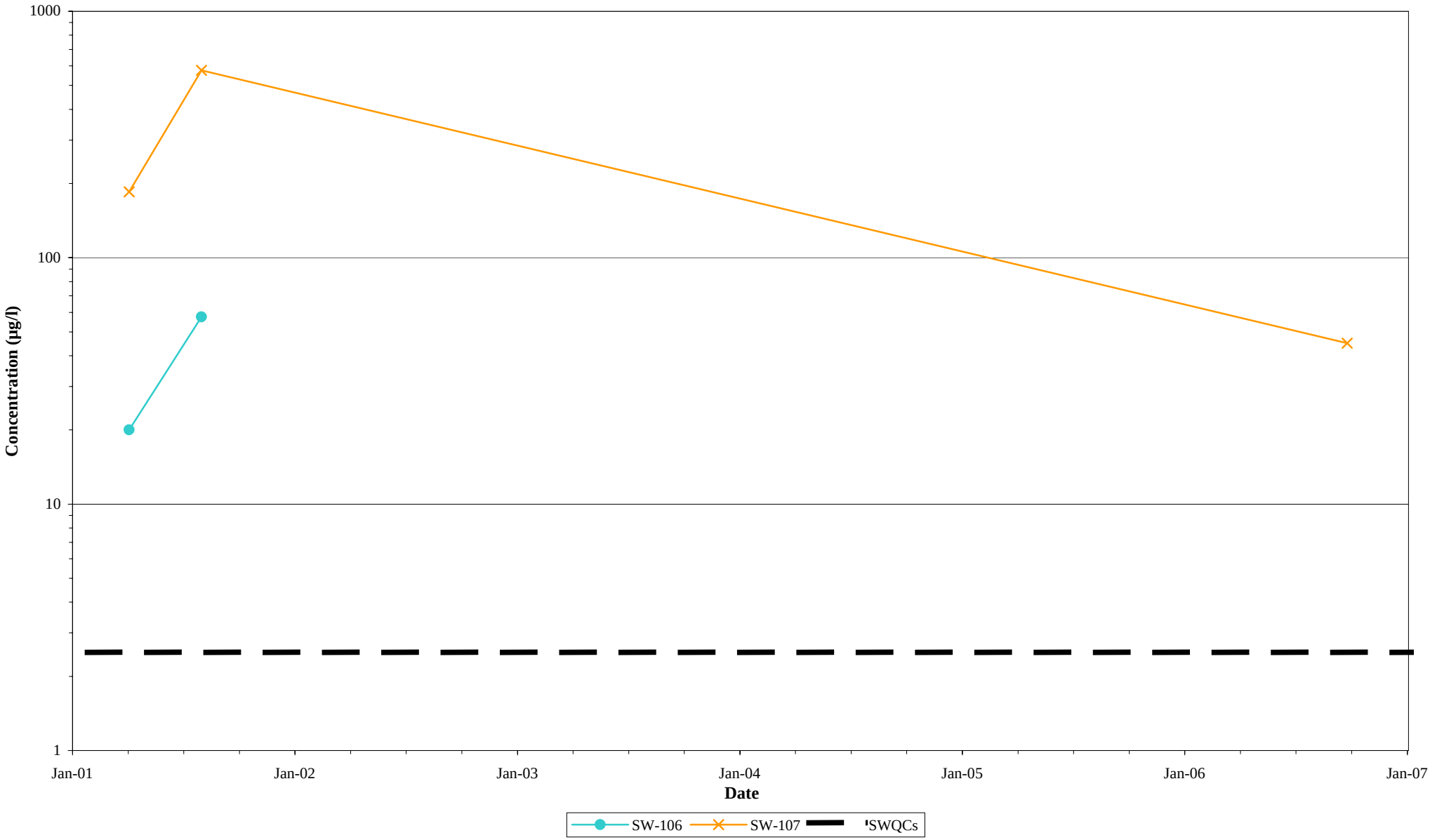
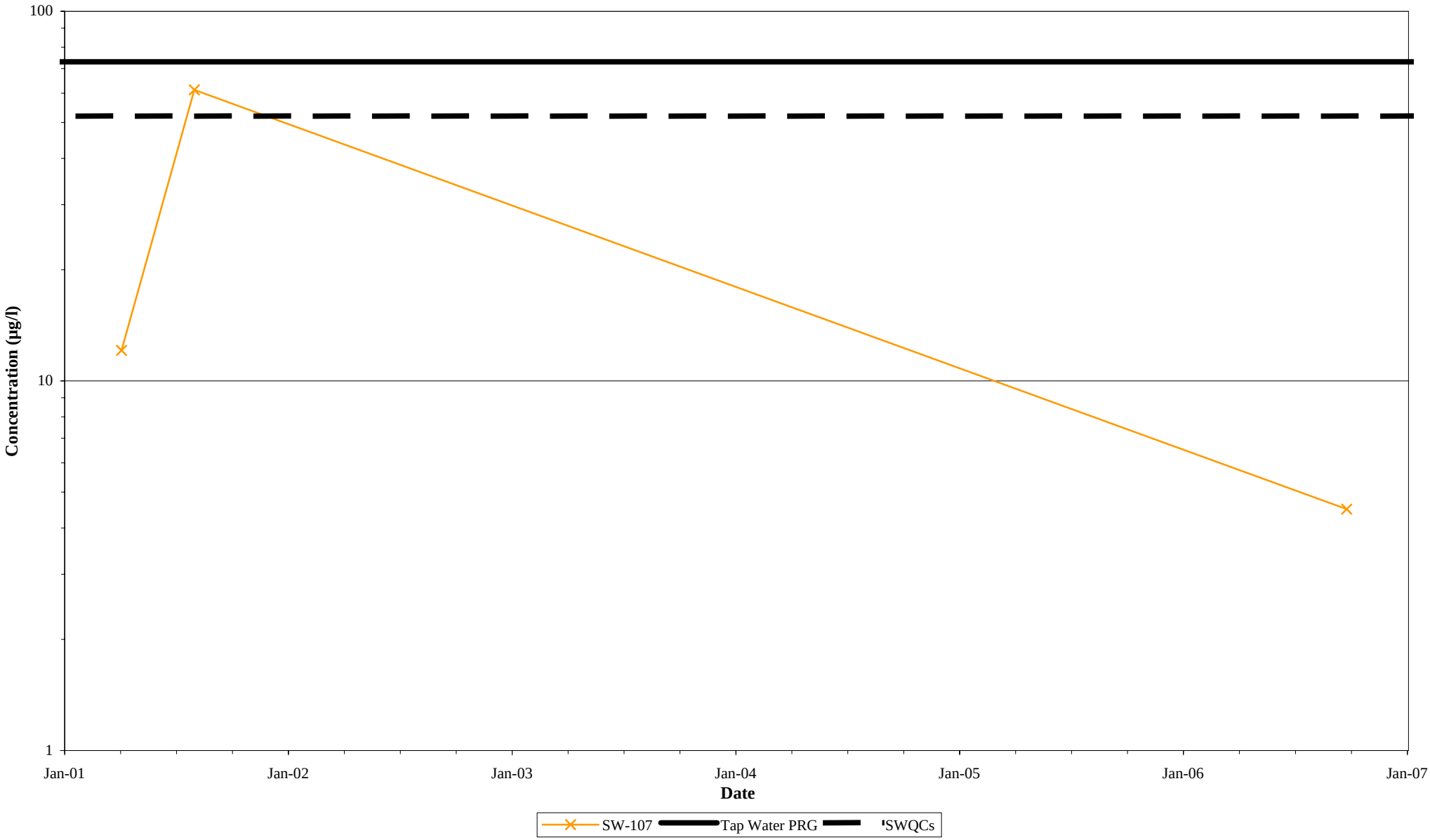
**FIGURE E.48b**
**Total Lead in Surface Water**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



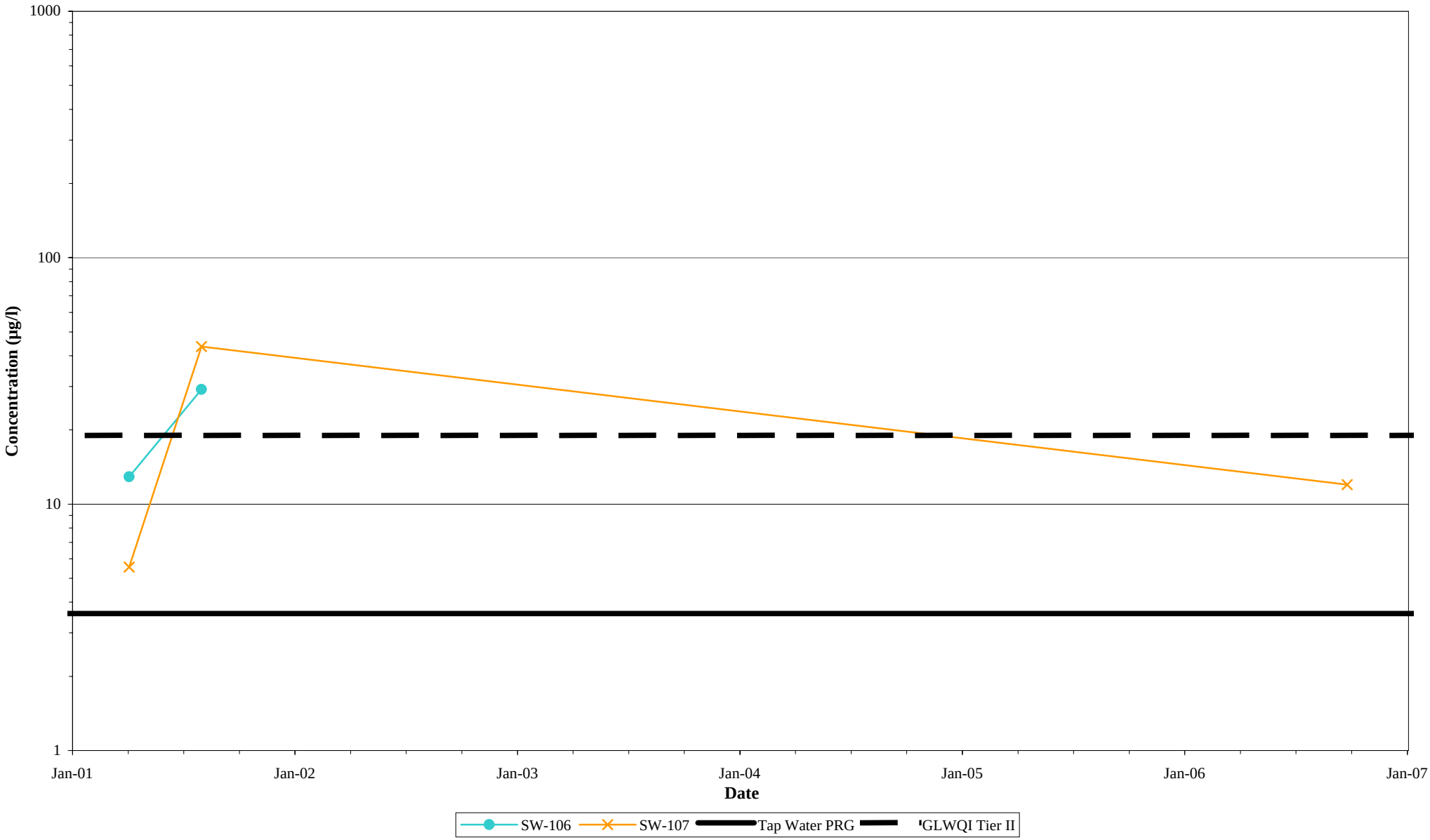
ND = ½RL

**FIGURE E.49**
**Total Nickel in Surface Water**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



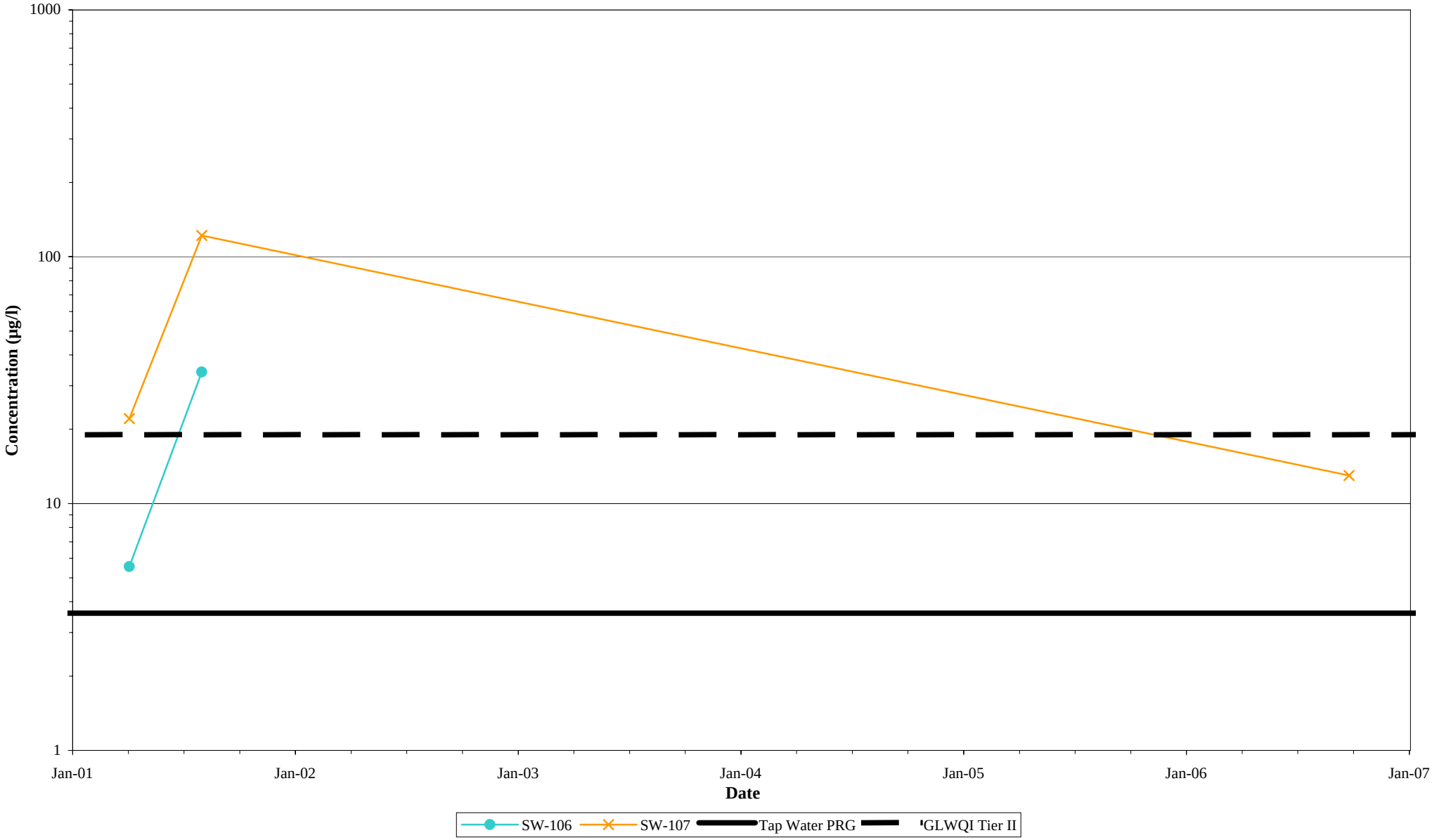
ND = ½RL

**FIGURE E.50a**
**Dissolved Vanadium in Surface Water**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



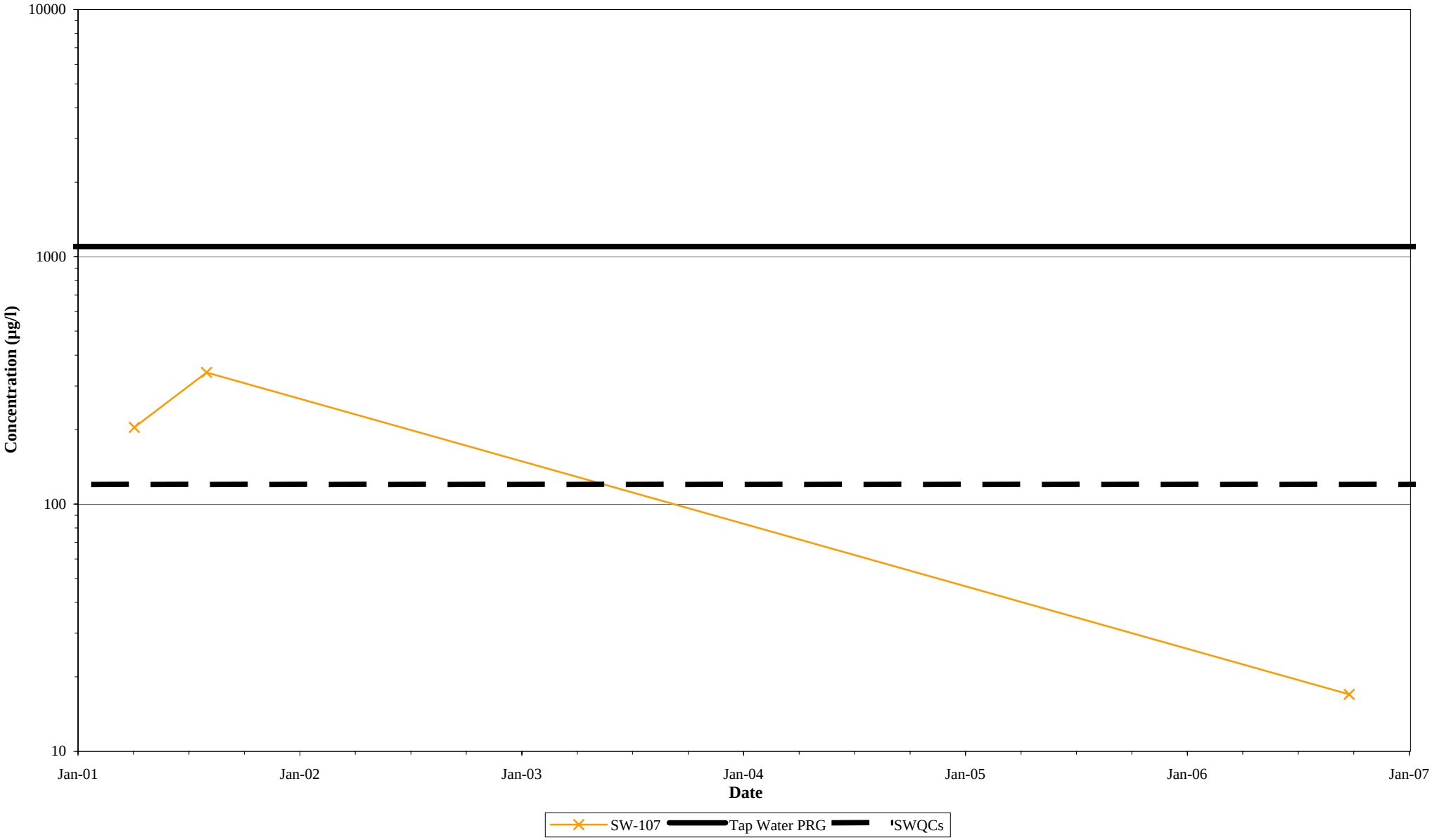
ND = ½RL

**FIGURE E.50b**
**Total Vanadium in Surface Water**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



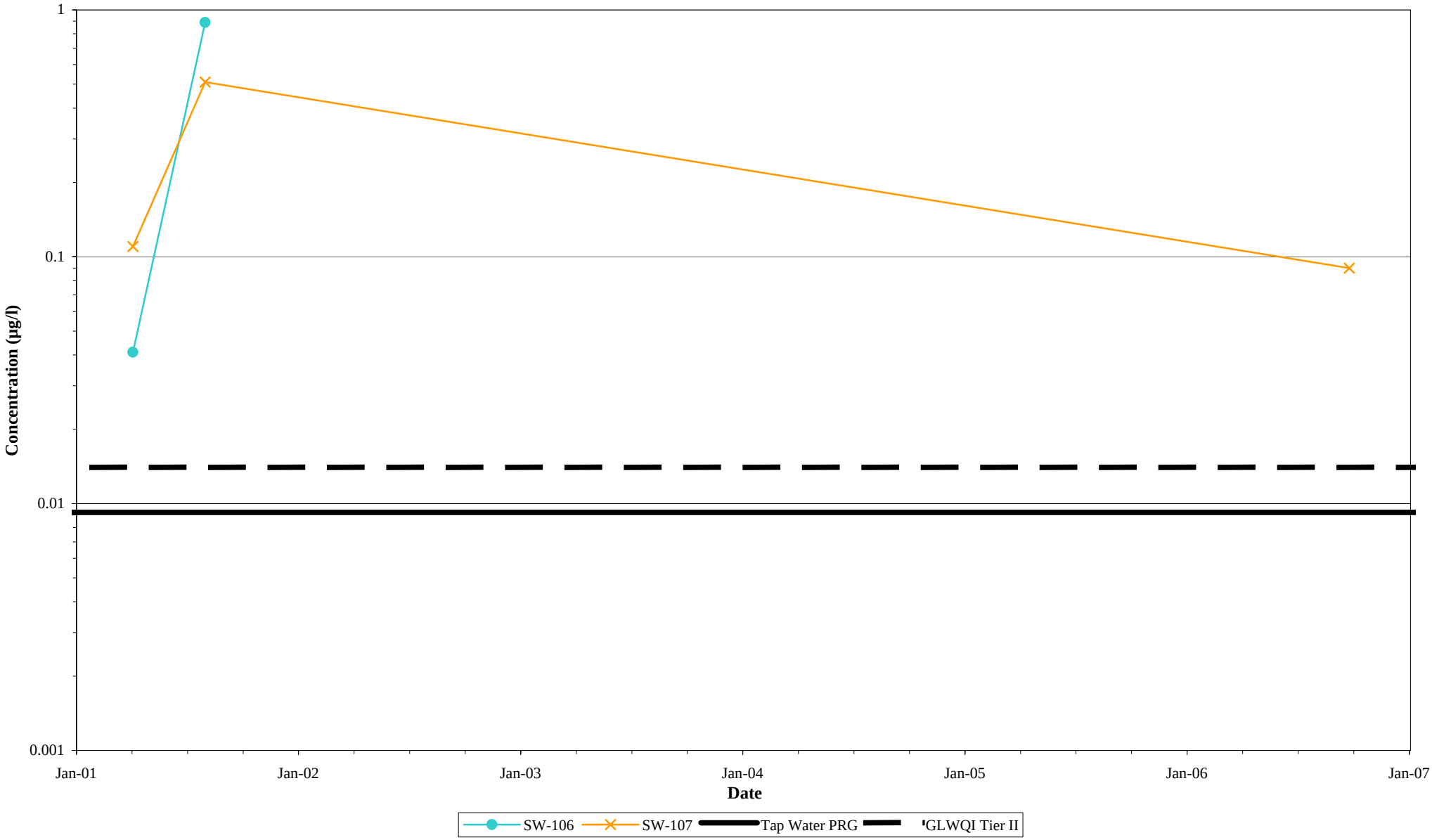
ND = ½RL

**FIGURE E.51**
**Total Zinc in Surface Water**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



ND = ½RL

**FIGURE E.52**
**Benzo(a)pyrene in Surface Water**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**



ND = ½RL

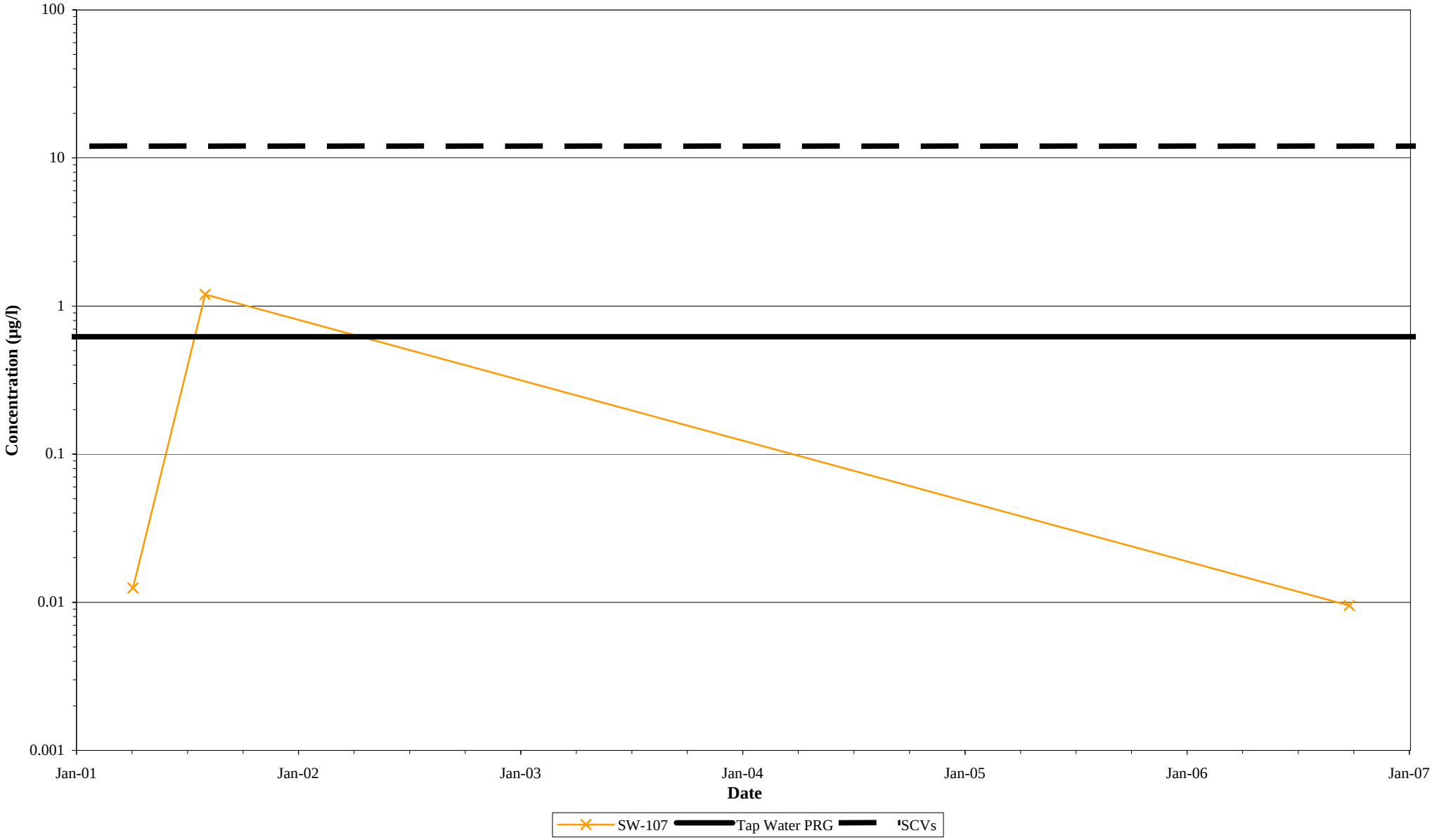



**FIGURE E.53**
**Naphthalene in Surface Water**
**Blackburn & Union Privileges Superfund Site**
**Walpole, Massachusetts**