POST-CLOSURE GROUNDWATER MONITORING – SEMIANNUAL REPORT - FINAL

# Post-Closure Groundwater Monitoring Report
# Coldwater Road Landfill
# Flint, Michigan
# MID 005 356 860

**RACER Trust**
**Ypsilanti, Michigan**

August 2012

O'BRIEN & GERE

15388 | 48630

# Post-Closure Groundwater Monitoring
# Coldwater Road Landfill
# Flint, Michigan
# MID 005 356 860

**Prepared for RACER Trust**
**Ypsilanti, Michigan**

SCOTT L. CORMIER, P.E.
VICE PRESIDENT
O'BRIEN & GERE ENGINEERS, INC.

August 29, 2012

**Mr. Richard Conforti, P.E.**
Environmental Engineer
Michigan Department of Environmental Quality
Waste and Hazardous Material Division
P.O. Box 30241
Lansing, Michigan 48909-7741

RE: Post-Closure Groundwater Monitoring 2012 Semiannual Report
Coldwater Road Landfill, Flint, Michigan
MID 005 356 860

FILE: 15388 /48630/rep

Dear Mr. Conforti:

On behalf of Revitalizing Auto Communities Environmental Response (RACER) Trust, O'Brien & Gere is pleased to present the results of the semiannual groundwater sampling event conducted in June 2012 for the Coldwater Road Landfill site (Figure 1). The groundwater samples were analyzed for total organic carbon (TOC, Method 415.1), total organic halogen (TOX, Method 9020A), specific conductivity (Method 120.1), chloride (Method 300.0), cyanide (CN, Method 335.4), sulfate (Method 300.0), phenols (Method 420.1), volatile organic compounds (VOCs, Method 8260B), dissolved metals (chromium (Cr), copper (Cu), nickel (Ni), zinc (Zn), iron (Fe), manganese (Mn)), and total sodium ((Na), Method 200.8).

The event also included field measurements for pH, specific conductivity, dissolved oxygen, oxidation reduction potential, temperature, and turbidity. Groundwater samples were collected using a bladder or peristaltic pump, and low-flow sampling techniques in accordance with O'Brien & Gere procedures and the site-specific Field Method Guide (Appendix A). Samples to be analyzed for dissolved metals were field filtered. Groundwater sampling logs are included in (Appendix B).

Gauging and sampling were conducted on June 25, 2012 through June 27, 2012. The results are presented in three separate tables: Table 1 - Depth to Groundwater Levels in Monitoring Wells; Table 2 - Post-Closure Monitoring - Historical Analytical Results (Physical Parameters, TOC, TOX, Metals, Chloride, Cyanide, Phenols and Sulfate); Table 3 - Post-Closure Monitoring - Analytical Results (Volatile Organics). Laboratory analytical reports are included in (Appendix C).

A site location map (Figure 1) and monitoring well location (*i.e.*, site layout) map (Figure 2) are also included. A groundwater elevation map was completed for the shallow wells (Figure 3) and a groundwater potentiometric surface map was completed for the deeper drift aquifer (Figure 4).

Contours were not plotted for groundwater in the shallow wells because the wells monitor discontinuous perched zones and therefore the water level elevations exhibited no pattern.

The drift aquifer static water elevations, which were calculated from depth to water measurements collected on June 26, 2012, were consistent with historical data. Groundwater in the drift aquifer flows in a southerly direction as shown on (Figure 4).

Groundwater samples were collected from six monitoring wells screened in perched zones and six monitoring wells screened in the drift aquifer during this sampling event.

A review of the analytical data presented in the attached tables indicates analytical results similar to previous sampling events, a summary of the data is provided below:

- Chromium concentrations were not detected above the method detection limits
- Copper concentrations were not detected above method detection limits
- Nickel concentrations were not detected above method detection limits, except in monitoring well B-9 where nickel slightly increased in concentration, but was similar to historic concentrations
- Zinc concentrations were not detected above method detection limits, except in monitoring well B-22D where the zinc concentrations decreased
- TOC concentrations were comparable to previous sample results
- TOX concentrations were not detected above method detection limits, except in monitoring well B-7 where TOX increased in concentration, but was within the previously detected range. Concentrations of TOX were detected in monitoring wells B-9, B-20D, and B-24r at below detection limits, and decreased in concentrations
- pH concentrations were comparable to previous sample results or decreased slightly, except in B-19Ar where concentrations increased, but was within the previously detected range
- Specific conductivity results were comparable to previous sample results or decreased slightly
- Iron concentrations decreased or were similar to previous sample results; except in monitoring wells, B-22D, B-23Dr, B-24R, and B-27D, where iron concentrations increased as compared to previous sample results, but were within the previously detected ranges
- Manganese concentrations were comparable to previous sample results or increased slightly
- Sodium concentrations were comparable to previous sample results or increased slightly
- Chloride concentrations were not detected above the method detection limits or comparable to previous sample results
- Sulfate concentrations were comparable to previous sample results or increased slightly
- Cyanide and phenols were not detected above method detection limits in the monitoring wells sampled during the June 2012 sampling event.

The duplicate sample results collected from monitoring well B-18A were comparable to the original sample. VOCs concentrations were not detected above method detection limits during this sampling event.

There were no exceedances of the Shewart control limits (SCL) during this sampling event (Appendix D). During this sampling event there was a spike of specific conductivity (849) in monitoring well B-28. There was also a spike of pH (7.78) in monitoring well B-19Ar. The spikes for specific conductivity and pH were not confirmed spikes (as defined in Section 5.7.2 of the Post-Closure Care Plan, O'Brien & Gere, 2008) and do not suggest there was a release from the landfill. The spikes will continue to be monitored during future sampling events. No other trends or spikes were observed during this monitoring event.

The next sampling event (annual event) is currently scheduled for November 2012. If you have any questions, please feel free to contact either of us at (248) 477-5701.

Very truly yours,

**O'BRIEN & GERE ENGINEERS, INC.**

Scott L. Cormier, PE
Vice President

Very truly yours,

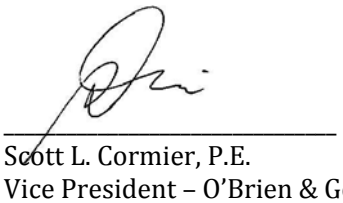
**O'BRIEN & GERE ENGINEERS, INC.**

Clifford S. Yantz
Technical Associate

cc: David Favero – RACER Trust
Kevin Schneider – O'Brien & Gere

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

On Behalf of RACER Trust



Scott L. Cormier, P.E.
Vice President – O'Brien & Gere Engineers, Inc.

Agent for RACER Trust

August 29, 2012

Date

cc: file

# *TABLES*

# Table 1
# RACER Trust - Coldwater Road Landfill Facility
# Depth to Ground Water Levels in Monitoring Wells
# June 26, 2012

| Well | Top Of Casing Elev. (ft) * | Depth To Water (ft) | Static Water Elev. (ft) |
|---|---|---|---|
| B-2D | 805.18 | 54.95 | 750.23 |
| B-7 | 815.20 | 23.89 | 791.31 |
| B-9 | 809.16 | 9.92 | 799.24 |
| B-18A | 812.25 | 25.15 | 787.10 |
| B-19A | 813.89 | N/A | N/A |
| B-19AR | 813.15 | 38.46 | 774.69 |
| B-20D | 816.61 | 71.92 | 744.69 |
| B-21D | 822.60 | 81.63 | 740.97 |
| B-22D | 823.73 | 85.94 | 737.79 |
| B-23DR | 813.72 | 82.97 | 730.75 |
| B-24R | 817.37 | 15.60 | 801.77 |
| B-27D** | 814.36 | 77.49 | 736.87 |
| B-28 | 818.07 | 8.93 | 809.14 |

**Notes**

Casing elevations were provided by Bartow & King Engineers and are in feet relative to National Geodetic Vertical Datum

* - Top of casing elevations were resurveyed in May 2005 after the installation of the replacement wells.

R - Indicates a replacement well location.

** - Top of casing elevation was surveyed in December 2005 after the installation of the new well.

**Table 2**
**RACER Trust - Coldwater Road Landfill Facility**
**Post-Closure Monitoring - Historical Analytical Results**
**Physical Parameters, TOC, TOX, Metals, Chloride, Cyanide, Phenols, and Sulfate**

| Well ID | Sample Date | Indicator Parameters | | | | | Dissolved Metals (µg/L) | | | | | | | Inorganics (mg/L) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | TOC (mg/L) | TOX (µg/L) | pH | SpC | T | Cr | Cu | Ni | Zn | Fe | Mn | Na | Chloride | Cyanide | Phenols | Sulfate |
| | | MDEQ Residential Drinking Water Criteria | | | | | 100 (A) | 1,000 (A) | 100 (A) | 2,400 | | | | | | | |
| | 6/21/1995 | 5.3 | <10 | 9.0 | 434 | 15.0 | <20 | <20 | <30 | <20 | -- | -- | -- | -- | -- | -- | -- |
| | 8/31/1995 | 6.3 | 130 | 8.3 | 479 | 14.4 | <20 | <20 | <40 | <20 | -- | -- | -- | -- | -- | -- | -- |
| | 2/9/1996 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 6/19/1996 | 5.2 | <100 | 7.5 | 580 | 12.4 | <20 | <20 | <20 | <20 | -- | -- | -- | -- | -- | -- | -- |
| **B-2D** | 8/21/1996 | 7.4 | <5 | 7.7 | 641 | 13.9 | <20 | <20 | <20 | 50 | -- | -- | -- | -- | -- | -- | -- |
| | 11/13/1996 | 11.0 | <5 | 7.3 | 769 | 7.6 | <20 | <20 | <20 | 30 | -- | -- | -- | -- | -- | -- | -- |
| | 5/6/1997 | 26.0 | <100 | 6.3 | 1500 | 7.0 | 10 | <10 | 28 | 30 | -- | -- | -- | -- | -- | -- | -- |
| | 11/6/1997 | 15.0 | <100 | 6.9 | 660 | 9.0 | <10 | <10 | 39 | <10 | 280 | 577 | -- | 12 | <0.005 | <0.020 | 79 |
| | 5/4/1998 | 29.0 | 12 | 6.7 | 549 | 12.4 | <10 | <10 | <5 | <10 | -- | -- | -- | -- | -- | -- | -- |
| | 11/5/1998 | 52.0 | 18 | 4.7 | 498 | 8.6 | <10 | <10 | <5 | 10 | <10 | 17 | 33,600 | -- | -- | -- | -- |
| | 12/23/1998 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 13 | <0.005 | <0.020 | 40 |
| | 4/26/1999 | 52.0 | <100 | 8.5 | 523 | 14.5 | <10 | <10 | <5 | <10 | -- | -- | -- | -- | -- | -- | -- |
| | 11/5/1999 | 6.4 | <100 | 7.4 | 405 | 12.8 | <10 | <10 | <5 | 40 | 70 | 21 | 35,100 | 4 | <0.005 | <0.020 | 42 |
| | 4/26/2000 | 5.4 | <100 | 8.0 | 770 | 17.4 | <10 | <10 | <5 | <10 | -- | -- | -- | -- | -- | -- | -- |
| | 12/8/2000 | 5.5 | <10 | 6.7 | 610 | 9.7 | <10 | <10 | 9 | <10 | 40 | -- | 22,900 | 7 | <0.005 | <0.020 | 81 |
| | 5/15/2001 | 5.5 | <100 | 7.8 | 890 | 13.2 | <10 | <10 | <5 | <10 | -- | -- | -- | -- | -- | -- | -- |
| | 10/18/2001 | 4.1 | <100 | 7.4 | 1830 | 9.4 | <10 | <10 | <5 | <10 | 230 | -- | 12,900 | 2 | <0.005 | <0.020 | 32 |
| Dup. | 10/18/2001 | 3.6 | <100 | 7.4 | 1780 | 7.8 | <10 | <10 | <5 | <10 | 210 | -- | 12,700 | 1 | <0.005 | <0.020 | 32 |
| | 5/16/2002 | 4.0 | <100 | 7.2 | 1000 | 11.6 | <10 | <10 | <5 | <10 | -- | -- | -- | -- | -- | -- | -- |
| | 11/7/2002 | 2.6 | <30 | 7.4 | 490 | 9.5 | <5 | <5 | <5 | <5 | 140 | 8 | 11,900 | 2 | <0.005 | <0.020 | 32 |
| Dup. | 11/7/2002 | 2.7 | <30 | -- | -- | -- | <5 | <5 | <5 | <5 | 140 | 6 | 11,200 | 2 | <0.005 | <0.020 | 30 |
| | 6/3/2003 | 4.4 | <30 | 6.9 | 530 | 12.9 | <5 | <5 | <5 | <5 | -- | -- | -- | -- | -- | -- | -- |
| | 11/13/2003 | 2.8 | <30 | 8.0 | 630 | 7.7 | <5 | <5 | <5 | <5 | 110 | 7 | -- | 2 | <0.005 | <0.010 | 31 |
| | 6/30/2004 | 4.2 | <30 | 6.3 | 570 | 15.8 | <5 | <5 | <5 | 7 | -- | -- | -- | -- | -- | -- | -- |
| | 12/10/2004 | 2.0 | <30 | 6.8 | 550 | 10.2 | <5 | <5 | <5 | 10 | 760 | 145 | 10,700 | 2 | <0.005 | <0.010 | 35 |
| | 6/8/2005 | 2.0 | <30 | 8.0 | 620 | 11.5 | <5 | <5 | <5 | <5 | 660 | 199 | 10,900 | <5 | <0.005 | <0.010 | 34 |
| | 12/8/2005 | 3.0 | <30 | 6.9 | 642 | 10.2 | 9 | <4 | <5 | <10 | 140 | 120 | 13,300 | -- | -- | -- | -- |
| | 6/28/2006 | 6.3 | <30 | 7.4 | 671 | 12.2 | <5 | <4 | <5 | 8 | 110 | 70 | 15,000 | 2 | <0.005 | <0.010 | 50 |
| Dup. | 6/28/2006 | 5.1 | <30 | 7.4 | 682 | 12.2 | <5 | <4 | <5 | 8 | 120 | 70 | 15,200 | 3 | <0.005 | <0.010 | 50 |
| | 11/30/2006 | 5.1 | 43.3 | 7.2 | 677 | 8.4 | <5 | <4 | <5 | 18 | -- | -- | -- | -- | -- | -- | -- |
| | 6/8/2007 | 2.4 | 69.1 | 6.8 | 644 | 14.1 | 8 | 2 | 1 | 6 | 110 | 104 | 14,800 | 4 | <0.005 | <0.010 | 44 |
| | 11/14/2007 | 5.2 | <30 | 7.1 | 783 | 14.9 | 1 | 1 | 4 | 9 | -- | -- | -- | -- | -- | -- | -- |
| | 6/25/2008 | 5.7 | <60 | 6.9 | 920 | 18.4 | <5 | 1 | 5 | 7 | 350 | 32 | 26,100 | 10 | <0.005 | <0.010 | 98 |
| | 11/20/2008 | 4.5 | <30 | 6.8 | 806 | 9.1 | <5 | <1 | <5 | <5 | -- | -- | -- | -- | -- | -- | -- |
| | 6/25/2009 | 5.6 | <30 | 7.0 | 924 | 23.7 | <5 | 203 | <5 | 113 | 22 | 77 | 29,700 | 10 | <0.005 | <0.010 | 104 |
| | 11/16/2009 | 4 | <30 | 7.2 | 835 | 10.2 | <5 | <4 | <5 | 6 | -- | -- | -- | -- | -- | -- | -- |
| | 6/16/2010 | 5 | <30 | 7.1 | 841 | 13.9 | <5 | <4 | <5 | <5 | 40 | 83 | 19,000 | 7 | <0.005 | <0.020 | 75 |
| | 11/10/2010 | 4 | <30 | 7.2 | 779 | 11.3 | 11 | <4 | <5 | <5 | -- | -- | -- | -- | -- | -- | -- |
| | 6/21/2011 | 2.9 | <30 | 7.0 | 742 | 19.3 | 9 | <4 | <5 | <5 | 250 | 55 | 16,900 | 6 | <0.005 | <0.010 | 57 |
| Replicate | 6/21/2011 | -- | -- | -- | -- | -- | <5 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 11/15/2011 | 3 | 16 | 7.1 | 751 | 11.3 | <5 | <4 | <5 | <5 | -- | -- | -- | -- | -- | -- | -- |
| | **6/27/2012** | **2.2** | **16** | **7.0** | **714** | **12.7** | **<5** | **<4** | **<5** | **<5** | **<20** | **25** | **17,300** | **<5** | **<0.005** | **<0.02** | **43** |

See notes on page 16.

**Table 2**
**RACER Trust - Coldwater Road Landfill Facility**
**Post-Closure Monitoring - Historical Analytical Results**
**Physical Parameters, TOC, TOX, Metals, Chloride, Cyanide, Phenols, and Sulfate**

| Well ID | Sample Date | Indicator Parameters | | | | | Dissolved Metals (µg/L) | | | | | | | Inorganics (mg/L) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | TOC (mg/L) | TOX (µg/L) | pH | SpC | T | Cr | Cu | Ni | Zn | Fe | Mn | Na | Chloride | Cyanide | Phenols | Sulfate |
| | | MDEQ Residential Drinking Water Criteria | | | | | 100 (A) | 1,000 (A) | 100 (A) | 2,400 | | | | | | | |
| B-7 | 6/21/1995 | 8.7 | 23 | 7.5 | 1509 | 13.8 | <20 | <20 | <30 | <20 | -- | -- | -- | -- | -- | -- | -- |
| | 8/31/1995 | -- | -- | -- | -- | -- | <20 | <20 | <40 | <20 | -- | -- | -- | -- | -- | -- | -- |
| | 2/9/1996 | 14.0 | 120 | -- | -- | -- | <20 | <20 | <40 | 22 | -- | -- | -- | -- | -- | -- | -- |
| | 6/19/1996 | 20.0 | <100 | 6.9 | 1,508 | 13.2 | <20 | <20 | <20 | 20 | -- | -- | -- | -- | -- | -- | -- |
| | 8/21/1996 | 55.0 | 26 | 7.6 | 1,567 | 17.1 | <20 | <20 | <20 | 60 | -- | -- | -- | -- | -- | -- | -- |
| | 11/13/1996 | 27.0 | <5 | 8.0 | 1,960 | 7.2 | <20 | <20 | <20 | 50 | -- | -- | -- | -- | -- | -- | -- |
| | 5/6/1997 | 16.0 | <100 | 7.2 | 780 | 11.0 | <10 | 10 | 14 | 10 | -- | -- | -- | -- | -- | -- | -- |
| | 11/6/1997 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 5/4/1998 | 6.0 | <5 | 6.6 | 1,270 | 10.7 | <10 | <10 | <5 | 20 | -- | -- | -- | -- | -- | -- | -- |
| | 11/5/1998 | 4.0 | <10 | 4.6 | 1,240 | 11.2 | <10 | <10 | 8 | 30 | 10 | 424 | 31,000 | -- | -- | -- | -- |
| | 12/23/1998 | -- | -- | -- | -- | -- | | -- | -- | -- | -- | -- | -- | 58 | <0.005 | <0.020 | 161 |
| | 4/26/1999 | 3.9 | <100 | 7.5 | 1,413 | 14.2 | <10 | <10 | 10 | <10 | -- | -- | -- | -- | -- | -- | -- |
| | 11/5/1999 | 5.1 | <100 | 6.5 | 1,230 | 14.2 | <10 | <10 | 8 | 30 | 260 | 313 | 41,800 | 64 | <0.005 | <0.020 | 301 |
| | 4/26/2000 | 4.8 | <100 | 7.6 | 1,450 | 10.2 | <10 | <10 | <5 | <10 | -- | -- | -- | -- | -- | -- | -- |
| Dup. | 4/26/2000 | 5.9 | <100 | NS | NS | NS | <10 | <10 | 6 | 10 | -- | -- | -- | -- | -- | -- | -- |
| | 12/8/2000 | 4.2 | <10 | 7.1 | 1,180 | 9.5 | <10 | <10 | 20 | 10 | 50 | -- | 58,900 | 79 | <0.005 | <0.020 | 227 |
| | 5/16/2001 | 5.0 | <100 | 7.3 | 1,330 | 13.0 | <10 | <10 | 7 | <10 | -- | -- | -- | -- | -- | -- | -- |
| | 10/18/2001 | 5.3 | <100 | 7.2 | 1,210 | 12.5 | <10 | <10 | 5 | <10 | 330 | -- | 60,800 | 81 | <0.005 | NA | 205 |
| | 5/16/2002 | 3.9 | <100 | 7.2 | 1,850 | 11.9 | <10 | <10 | <5 | 10 | -- | -- | -- | -- | -- | -- | -- |
| | 11/7/2002 | NR | NR | 7.4 | 1,120 | 10.3 | <5 | <5 | 5 | 5 | 250 | <5 | 65,500 | NA | NA | NA | NA |
| | 6/4/2003 | 3.3 | <30 | 6.9 | 1,460 | 12.6 | <5 | <5 | <5 | <5 | -- | -- | -- | -- | -- | -- | -- |
| | 11/13/2003 | 3.9 | <30 | 6.9 | 1,590 | 9.6 | <5 | <5 | <5 | 5 | 190 | <5 | -- | 85 | <0.005 | <0.010 | 279 |
| | 6/30/2004 | 4.3 | 43 | 7.1 | 1,353 | 16.0 | <5 | <5 | 9 | 7 | -- | -- | -- | -- | -- | -- | -- |
| | 12/9/2004 | 4.0 | <30 | 5.3 | 1,290 | 10.8 | <5 | <5 | 7 | 14 | 180 | 74 | 71,200 | 78 | <0.005 | <0.010 | 251 |
| | 6/8/2005 | 7.0 | 86 | 7.4 | 1,121 | 10.9 | 5 | <5 | 9 | 13 | 170 | 31 | 81,900 | 80 | <0.005 | <0.010 | 254 |
| | 12/7/2005 | 7.5 | <30 | 8.7 | 1,430 | 12.2 | 10 | <4 | 6 | 20 | 150 | 50 | 85,300 | -- | -- | -- | -- |
| | 6/29/2006 | 4.3 | <30 | 7.2 | 1,470 | 11.7 | 5 | <4 | 9 | 18 | 190 | 150 | 76,900 | 73 | <0.005 | <0.010 | 270 |
| | 11/29/2006 | 4.4 | <30 | 6.9 | 1,380 | 15.3 | <5 | <4 | 9 | 11 | -- | -- | -- | -- | -- | -- | -- |
| | 6/7/2007 | 3.9 | 23.7 | 6.9 | 1,400 | 13.4 | 11 | 27 | 5 | 14 | 130 | 42 | 87,300 | 72 | <0.005 | <0.010 | 208 |
| | 11/14/2007 | 3.5 | <30 | 6.9 | 1,350 | 13.4 | 14 | 6 | 16 | 20 | -- | -- | -- | -- | -- | -- | -- |
| | 6/25/2008 | 3.8 | 72.9 | 6.9 | 1,410 | 20.7 | <5 | 3 | 6 | <5 | 350 | 10 | 94,800 | 68 | <0.005 | <0.010 | 222 |
| | 11/17/2008 | 4.6 | 20.5 | 6.8 | 1,258 | 5.5 | <5 | 3 | 5 | 17 | -- | -- | -- | -- | -- | -- | -- |
| | 6/24/2009 | 4.5 | <30 | 6.9 | 1,184 | 20.0 | <5 | 3 | <5 | 14 | 67 | 36 | 84,500 | 40 | <0.005 | <0.010 | 154 |
| | 11/17/2009 | 8 | 25.3 | 7.3 | 1,090 | 10.3 | <5 | <4 | <5 | <5 | -- | -- | -- | -- | -- | -- | -- |
| | 6/17/2010 | 5 | <30 | 7.0 | 1,290 | 16.3 | <5 | <4 | <5 | <5 | <20 | 47 | 86,000 | 61 | <0.005 | <0.020 | 160 |
| | 11/8/2010 | 8 | 103 | 7.2 | 997 | 13.9 | 17 | <4 | <5 | <5 | -- | -- | -- | -- | -- | -- | -- |
| | 6/22/2011 | 4.3 | 25 | 7.3 | 910 | 13.7 | 10 | <4 | 5 | 6 | 220 | 6 | 55,200 | 26 | <0.005 | <0.010 | 88 |
| Replicate | 6/22/2011 | -- | -- | -- | -- | -- | <5 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 11/16/2011 | 5 | 28 | 7.0 | 974 | 12.8 | <5 | 6 | 8 | 11 | -- | -- | -- | -- | -- | -- | -- |
| | **6/27/2012** | **3.7** | **97** | **6.8** | **1,082** | **15.0** | **<5** | **<4** | **<5** | **<5** | **<20** | **58** | **64,900** | **40** | **<0.005** | **<0.02** | **134** |

See notes on page 16.

**Table 2**
**RACER Trust - Coldwater Road Landfill Facility**
**Post-Closure Monitoring - Historical Analytical Results**
**Physical Parameters, TOC, TOX, Metals, Chloride, Cyanide, Phenols, and Sulfate**

| Well ID | Sample Date | Indicator Parameters | | | | | Dissolved Metals (µg/L) | | | | | | | Inorganics (mg/L) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | TOC (mg/L) | TOX (µg/L) | pH | SpC | T | Cr | Cu | Ni | Zn | Fe | Mn | Na | Chloride | Cyanide | Phenols | Sulfate |
| | | MDEQ Residential Drinking Water Criteria | | | | | 100 (A) | 1,000 (A) | 100 (A) | 2,400 | | | | | | | |
| B-9 | 6/21/1995 | 3.5 | 34 | 7.7 | 2,400 | 14.6 | <20 | <20 | <30 | <20 | -- | -- | -- | -- | -- | -- | -- |
| | 8/31/1995 | 3.9 | <10 | 7.7 | 1,829 | 14.8 | 37 | 43 | <40 | <20 | -- | -- | -- | -- | -- | -- | -- |
| | 2/9/1996 | 3.1 | <10 | 7.3 | 2,860 | 8.0 | <20 | <20 | <40 | <20 | -- | -- | -- | -- | -- | -- | -- |
| | 6/19/1996 | 2.1 | <100 | 6.8 | 2,550 | 11.5 | <20 | <20 | <20 | <20 | -- | -- | -- | -- | -- | -- | -- |
| | 8/21/1996 | 2.3 | <5 | 8.0 | 2,310 | 16.4 | <20 | <20 | <20 | 70 | -- | -- | -- | -- | -- | -- | -- |
| | 11/13/1996 | 71.0 | <5 | 6.8 | 3,280 | 9.2 | <20 | <20 | <20 | 40 | -- | -- | -- | -- | -- | -- | -- |
| | 5/6/1997 | 3.0 | <100 | 6.8 | 2,600 | 10.0 | <10 | <10 | 51 | 20 | -- | -- | -- | -- | -- | -- | -- |
| | 11/6/1997 | 2.0 | <100 | 6.5 | 2,800 | 11.0 | <10 | <10 | 183 | 40 | 650 | 741 | -- | 141 | <0.005 | <0.020 | 1,178 |
| | 5/4/1998 | 3.0 | <5 | 6.6 | 2,400 | 14.5 | 10 | 10 | 18 | 40 | -- | -- | -- | -- | -- | -- | -- |
| | 11/5/1998 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- | -- | -- |
| | 12/23/1998 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | NS | NS | NS | NS |
| | 4/26/1999 | 4.0 | <100 | 7.7 | 1,860 | 12.2 | <10 | <10 | 19 | 20 | -- | -- | -- | -- | -- | -- | -- |
| | 11/5/1999 | 2.5 | <100 | 6.8 | 2,340 | 15.4 | <10 | <10 | 20 | 30 | 610 | 1280 | 47,100 | 128 | <0.005 | <0.020 | 1,222 |
| | 4/26/2000 | 5.5 | <100 | 7.6 | 2,780 | 9.5 | <10 | <10 | 12 | 30 | -- | -- | -- | -- | -- | -- | -- |
| | 12/8/2000 | 5.0 | <10 | 7.6 | 2,400 | 7.8 | <10 | <10 | 46 | <10 | 50 | -- | 69,500 | 142 | <0.005 | <0.020 | 1,246 |
| | 5/16/2001 | 4.8 | <100 | 7.4 | 1,070 | 12.6 | <10 | <10 | 7 | 10 | -- | -- | -- | -- | -- | -- | -- |
| | 10/17/2001 | 4.0 | <100 | 7.5 | 2,130 | 10.8 | <10 | <10 | 8 | 20 | 940 | -- | 66,000 | 122 | <0.005 | NA | 1,150 |
| | 5/16/2002 | 1.9 | <100 | 7.2 | 2,470 | 11.6 | <10 | <10 | 7 | 10 | -- | -- | -- | -- | -- | -- | -- |
| | 11/7/2002 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 6/4/2003 | 2.2 | 57 | 6.8 | 2,690 | 10.7 | <5 | <5 | 15 | 13 | -- | -- | -- | -- | -- | -- | -- |
| | 11/13/2003 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 6/30/2004 | 3.8 | NS | 6.9 | 2,379 | 12.7 | <5 | 8 | 19 | 28 | -- | -- | -- | -- | -- | -- | -- |
| | 12/9/2004 | 3.0 | <30 | 5.9 | 2,480 | 11.4 | <5 | <5 | 11 | 19 | 570 | 248 | 55,900 | 149 | <0.005 | <0.010 | 1,350 |
| | 6/8/2005 | 4.0 | <30 | 7.1 | 2,116 | 10.3 | 6 | 6 | 12 | 17 | 480 | 701 | 58,300 | 128 | <0.005 | <0.010 | 1,160 |
| | 12/7/2005 | 5.0 | <30 | 8.6 | 2,830 | 11.9 | 11 | 5 | 12 | 40 | 320 | 410 | 58,500 | -- | -- | -- | -- |
| | 6/29/2006 | 1.9 | <30 | 6.8 | 2,820 | 12.4 | 6 | 6 | 13 | 19 | 390 | 330 | 63,600 | 125 | <0.005 | <0.010 | 1,150 |
| | 11/30/2006 | 2.7 | 36.7 | 7.2 | 2,830 | 12.5 | <5 | 6 | <5 | 14 | -- | -- | -- | -- | -- | -- | -- |
| | 6/5/2007 | 2.1 | <30 | 6.7 | 2,770 | 11.0 | 12 | 6 | 24 | 21 | 320 | 1,900 | 67,300 | 112 | <0.005 | <0.010 | 1,120 |
| | 11/16/2007 | 2.0 | 27.4 | 6.7 | 3,000 | 9.4 | 2 | 6 | 24 | 18 | -- | -- | -- | -- | -- | -- | -- |
| | 7/2/2008 | 1.8 | 36.4 | 6.4 | 3,060 | 19.7 | <5 | 4 | 13 | 19 | 780 | 812 | 64,200 | 133 | <0.005 | <0.010 | 1,280 |
| | 11/20/2008 | 2.2 | 15.9 | 6.4 | 3,290 | 8.1 | <5 | <1 | 13 | <5 | -- | -- | -- | -- | -- | -- | -- |
| Dup. | 11/20/2008 | 2.0 | 127 | 6.4 | 3,280 | 8.1 | <5 | <1 | 13 | <5 | -- | -- | -- | -- | -- | -- | -- |
| | 6/25/2009 | 1.6 | <30 | 6.7 | 2,700 | 19.8 | <5 | <1 | <5 | <5 | 59 | 173 | 65,300 | 107 | <0.005 | <0.010 | 1,120 |
| | 11/16/2009 | 3 | 84.1 | 6.7 | 3,030 | 12.7 | <5 | <4 | 16 | 8 | -- | -- | -- | -- | -- | -- | -- |
| | 6/15/2010 | 3 | 27.5 | 6.7 | 3,030 | 13.0 | <5 | <4 | 7 | 6 | 460 | 475 | 70,700 | 117 | <0.005 | <0.020 | 1,230 |
| | 11/11/2010 | 3 | 37.5 | 6.4 | 2,910 | 12.9 | 19 | 4 | 7 | 15 | -- | -- | -- | -- | -- | -- | -- |
| | 6/22/2011 | 1.9 | <30 | 6.7 | 2,600 | 14.0 | 17 | 6 | 21 | 12 | 780 | 661 | 63,300 | 99 | <0.005 | <0.010 | 972 |
| Replicate | 6/22/2011 | -- | -- | -- | -- | -- | <5 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 11/16/2011 | 2 | 50 | 7.2 | 3,060 | 12.9 | <5 | <4 | 7 | <5 | -- | -- | -- | -- | -- | -- | -- |
| | **6/26/2012** | **2** | **21** | **6.5** | **2,770** | **14.0** | **<5** | **<4** | **8** | **<5** | **60** | **433** | **73,700** | **101** | **<0.005** | **<0.02** | **1,110** |

See notes on page 16.

**Table 2**
**RACER Trust - Coldwater Road Landfill Facility**
**Post-Closure Monitoring - Historical Analytical Results**
**Physical Parameters, TOC, TOX, Metals, Chloride, Cyanide, Phenols, and Sulfate**

| Well ID | Sample Date | Indicator Parameters | | | | | Dissolved Metals (µg/L) | | | | | | | Inorganics (mg/L) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | TOC (mg/L) | TOX (µg/L) | pH | SpC | T | Cr | Cu | Ni | Zn | Fe | Mn | Na | Chloride | Cyanide | Phenols | Sulfate |
| | | MDEQ Residential Drinking Water Criteria | | | | | 100 (A) | 1,000 (A) | 100 (A) | 2,400 | | | | | | | |
| B-14 | 6/21/1995 | 4.0 | <10 | -- | -- | -- | <20 | <20 | <30 | <20 | -- | -- | -- | -- | -- | -- | -- |
| | 8/31/1995 | -- | 25 | -- | -- | -- | <20 | <20 | <40 | <20 | -- | -- | -- | -- | -- | -- | -- |
| | 2/9/1996 | 3.0 | <10 | 7.6 | 776 | 8.9 | <20 | <20 | <40 | <20 | -- | -- | -- | -- | -- | -- | -- |
| | 6/19/1996 | 1.7 | <100 | 7.3 | 704 | 13.6 | <20 | <20 | <20 | <20 | -- | -- | -- | -- | -- | -- | -- |
| | 8/21/1996 | 2.6 | <5 | 8.9 | 748 | 13.1 | <20 | <20 | <20 | 60 | -- | -- | -- | -- | -- | -- | -- |
| | 11/13/1996 | 76.0 | <5 | 7.8 | 980 | 7.2 | <20 | <20 | <20 | 40 | -- | -- | -- | -- | -- | -- | -- |
| | 5/6/1997 | 3.0 | <100 | 7.0 | 670 | 10.0 | <10 | <10 | 11 | <10 | -- | -- | -- | -- | -- | -- | -- |
| | 11/6/1997 | 2.0 | <100 | 6.8 | 670 | 10.0 | <10 | <10 | 43 | 10 | 550 | 67 | -- | 12 | <0.005 | <0.020 | 61 |
| | 5/4/1998 | 6.0 | <5 | 6.7 | 558 | 13.3 | <10 | <10 | <5 | <10 | -- | -- | -- | -- | -- | -- | -- |
| | 11/5/1998 | 2.0 | <10 | 6.4 | 642 | 9.9 | <10 | <10 | <5 | 10 | <10 | <5 | 13,900 | -- | -- | -- | -- |
| | 12/23/1998 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 8 | <0.005 | <0.020 | 47 |
| | 4/26/1999 | 4.5 | <100 | 8.0 | 488 | 13.3 | <10 | <10 | <5 | 30 | -- | -- | -- | -- | -- | -- | -- |
| | 11/5/1999 | NS | NS | 7.3 | 609 | 14.2 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 4/26/2000 | 7.1 | <100 | 7.4 | 510 | 14.7 | <10 | <10 | <5 | 960 | -- | -- | -- | -- | -- | -- | -- |
| | 12/8/2000 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 5/15/2001 | 5.0 | -- | 7.8 | 510 | 13.2 | <10 | <10 | 6 | 380 | -- | -- | -- | -- | -- | -- | -- |
| | 10/18/2001 | 2.1 | <100 | 7.3 | 750 | 10.7 | <10 | <10 | 8 | 90 | 260 | -- | 21,500 | 6 | <0.005 | NA | 72 |
| | 5/16/2002 | 2.3 | NR | 7.1 | 1,790 | 12.1 | <10 | <10 | <5 | 60 | -- | -- | -- | -- | -- | -- | -- |
| | 11/7/2002 | NR | NR | 7.5 | 540 | 9.9 | <5 | <5 | <5 | 31 | 170 | 15 | 14,400 | NA | NA | NA | NA |
| | 6/3/2003 | 2.4 | <30 | 6.9 | 710 | 12.4 | <5 | <5 | <5 | 54 | -- | -- | -- | -- | -- | -- | -- |
| | 11/13/2003 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 6/29/2004 | 2.8 | <30 | 7.3 | 693 | 14.9 | <5 | <5 | <5 | 26 | -- | -- | -- | -- | -- | -- | -- |
| | 12/9/2004 | 5.0 | <30 | 6.6 | 560 | 10.5 | <5 | <5 | <5 | 1,260 | 160 | 62 | 4,390 | 5 | <0.005 | <0.010 | 84 |
| Re-sample | 2/10/2005 | -- | -- | -- | -- | -- | -- | -- | -- | 160 | -- | -- | -- | -- | -- | -- | -- |
| | 6/8/2005 | 4.0 | <30 | 7.6 | 647 | 11.4 | <5 | <5 | 12 | 40 | 110 | 56 | 18,500 | 8 | <0.005 | <0.010 | 79 |
| | 12/8/2005 | 4.6 | <30 | 6.1 | 818 | 1.6 | 8 | <4 | <5 | 30 | 210 | 40 | 16,000 | -- | -- | -- | -- |
| Re-sample | 2/14/2006 | -- | -- | 8.1 | 603 | 9.5 | -- | -- | -- | 100 | -- | -- | -- | -- | -- | -- | -- |
| | 6/27/2006 | 3.5 | <30 | 7.1 | 767 | 13.2 | <5 | <4 | <5 | 1,090 | 160 | 90 | 14,600 | 6 | <0.005 | <0.010 | 93 |
| Re-sample | 8/3/2006 | -- | -- | 7.5 | 840 | 12.4 | -- | -- | -- | 203 | -- | -- | -- | -- | -- | -- | -- |
| | 12/1/2006 | 3.2 | <30 | 7.4 | 873 | 12.3 | <5 | <5 | <5 | 1,440 | -- | -- | -- | -- | -- | -- | -- |
| Re-sample | 1/30/2007 | -- | -- | 8 | 607 | 10.1 | -- | -- | -- | 1,850 | -- | -- | -- | -- | -- | -- | -- |
| | 6/5/2007 | 1.6 | 26.1 | 7.0 | 849 | 11.0 | 9 | 3 | 1 | 355 | 520 | 245 | 15,200 | 10 | <0.005 | <0.010 | 82 |
| | 11/15/2007 | 1.2 | 16.1 | 7.1 | 803 | 7.8 | 2 | 1 | 4 | 134 | -- | -- | -- | -- | -- | -- | -- |

See notes on page 16.

**Table 2**
**RACER Trust - Coldwater Road Landfill Facility**
**Post-Closure Monitoring - Historical Analytical Results**
**Physical Parameters, TOC, TOX, Metals, Chloride, Cyanide, Phenols, and Sulfate**

| Well ID | Sample Date | Indicator Parameters | | | | | Dissolved Metals (µg/L) | | | | | | | Inorganics (mg/L) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | TOC (mg/L) | TOX (µg/L) | pH | SpC | T | Cr | Cu | Ni | Zn | Fe | Mn | Na | Chloride | Cyanide | Phenols | Sulfate |
| | | MDEQ Residential Drinking Water Criteria | | | | | 100 (A) | 1,000 (A) | 100 (A) | 2,400 | | | | | | | |
| | 6/21/1995 | 2.7 | <10 | 7.5 | 1,048 | 13.3 | <20 | <20 | <30 | 150 | -- | -- | -- | -- | -- | -- | -- |
| | 8/31/1995 | 3.0 | <10 | 7.9 | 989 | 13.2 | <20 | <20 | <40 | <20 | -- | -- | -- | -- | -- | -- | -- |
| | 2/9/1996 | 2.3 | <10 | 7.4 | 1,021 | 9.3 | <20 | <20 | <40 | <20 | -- | -- | -- | -- | -- | -- | -- |
| | 6/19/1996 | 1.4 | <100 | 7.0 | 944 | 13.2 | <20 | <20 | <20 | <20 | -- | -- | -- | -- | -- | -- | -- |
| **B-18A** | 8/21/1996 | 2.4 | <5 | 7.5 | 1,041 | 12.8 | <20 | <20 | <20 | 60 | -- | -- | -- | -- | -- | -- | -- |
| | 11/13/1996 | 19.0 | <5 | 7.2 | 1,331 | 6.4 | <20 | <20 | <20 | 70 | -- | -- | -- | -- | -- | -- | -- |
| | 5/6/1997 | 2.0 | <100 | 6.5 | 900 | 10.0 | <10 | <10 | 13 | 10 | -- | -- | -- | -- | -- | -- | -- |
| | 11/6/1997 | 4.0 | <100 | 6.4 | 1,100 | 10.0 | <10 | <10 | 62 | 10 | 380 | 62 | -- | 12 | <0.005 | <0.020 | 130 |
| | 5/4/1998 | 2.0 | <5 | 6.7 | 862 | 11.8 | <10 | <10 | <5 | 20 | -- | -- | -- | -- | -- | -- | -- |
| | 11/5/1998 | 1.0 | <10 | 6.0 | 1,090 | 11.8 | <10 | <10 | <5 | 10 | 240 | 128 | 46,000 | -- | -- | -- | -- |
| | 12/23/1998 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 10 | <0.005 | <0.020 | 133 |
| | 4/26/1999 | 2.1 | <100 | 8.1 | 921 | 14.0 | <10 | <10 | <5 | 20 | -- | -- | -- | -- | -- | -- | -- |
| | 11/5/1999 | 4.3 | <100 | 7.1 | 832 | 14.0 | <10 | <10 | <5 | 60 | 180 | 155 | 39,200 | 8 | <0.005 | <0.020 | 130 |
| | 4/26/2000 | 2.4 | <100 | 7.5 | 980 | 10.4 | <10 | <10 | <5 | 30 | -- | -- | -- | -- | -- | -- | -- |
| | 12/8/2000 | 2.6 | <10 | 7.0 | 990 | 9.9 | <10 | <10 | 15 | <10 | <10 | -- | 34,500 | 7 | <0.005 | <0.020 | 126 |
| Dup. | 12/8/2000 | 2.6 | <10 | -- | -- | -- | <10 | <10 | 13 | <10 | 40 | -- | 35,100 | 7 | <0.005 | <0.020 | 112 |
| | 5/16/2001 | 2.4 | <100 | 7.9 | 1,160 | 12.9 | <10 | <10 | <5 | 10 | -- | -- | -- | -- | -- | -- | -- |
| | 10/17/2001 | 2.2 | <100 | 7.1 | 1,020 | 12.2 | <10 | <10 | <5 | <10 | 350 | -- | 35,400 | 7 | <0.005 | <0.020 | 132 |
| | 5/16/2002 | 1.5 | <100 | 7.2 | 2,080 | 12.2 | <10 | <10 | <5 | 10 | -- | -- | -- | -- | -- | -- | -- |
| | 11/7/2002 | 1.9 | <30 | 7.2 | 820 | 10.1 | <5 | <5 | <5 | <5 | 190 | 26 | 40,800 | 10 | <0.005 | <0.020 | 134 |
| | 6/4/2003 | 1.6 | <30 | 6.9 | 790 | 13.1 | <5 | <5 | <5 | 5 | -- | -- | -- | -- | -- | -- | -- |
| | 11/13/2003 | 1 | <30 | 7.7 | 1,180 | 7.1 | <5 | <5 | <5 | <5 | 160 | <5 | -- | 10 | <0.005 | <0.010 | 129 |
| Dup. | 11/13/2003 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 11 | <0.005 | <0.010 | 130 |
| | 6/29/2004 | 1.2 | <30 | 7.2 | 863 | 12.0 | <5 | <5 | 7 | 10 | -- | -- | -- | -- | -- | -- | -- |
| | 12/9/2004 | 3 | <30 | 6.2 | 960 | 10.5 | <5 | <5 | 9 | 12 | 900 | 363 | 37,900 | 14 | <0.005 | <0.010 | 127 |
| | 6/8/2005 | 2 | <30 | 7.4 | 819 | 10.9 | <5 | <5 | 6 | 16 | 170 | 80 | 40,000 | 11 | <0.005 | <0.010 | 120 |
| | 12/8/2005 | 2.6 | <30 | 9.7 | 1,120 | 10.1 | 11 | <4 | <5 | 10 | 390 | 170 | 47,000 | -- | -- | -- | -- |
| | 6/27/2006 | 1.2 | <30 | 7.1 | 1,110 | 13.2 | 5 | 4 | <5 | 46 | 170 | 50 | 48,200 | 13 | <0.005 | <0.010 | 125 |
| | 11/30/2006 | 1.4 | 119 | 7.2 | 1,100 | 11.5 | 5 | <4 | <5 | 9 | -- | -- | -- | -- | -- | -- | -- |
| | 6/4/2007 | 1 | 19.9 | 7.0 | 1,070 | 13.2 | 9 | 3 | 3 | 14 | 110 | 22 | 51,800 | 15 | <0.005 | <0.010 | 114 |
| | 11/14/2007 | <1 | 19 | 6.9 | 1,090 | 13.7 | 1 | 2 | 6 | 11 | -- | -- | -- | -- | -- | -- | -- |
| | 6/25/2008 | 12 | 34.1 | 7.1 | 1,060 | 20.4 | <5 | 2 | <5 | 11 | 310 | <5 | 54,800 | 15 | <0.005 | <0.010 | 110 |
| | 11/18/2008 | <1 | <30 | 6.6 | 1,088 | 2.9 | <5 | <1 | <5 | <5 | -- | -- | -- | -- | -- | -- | -- |
| | 6/24/2009 | <1 | <30 | 7.3 | 1,060 | 26.2 | <5 | 1 | <5 | 15 | <20 | <5 | 53,100 | 16 | <0.005 | <0.010 | 111 |
| | 11/18/2009 | 2 | <30 | 6.9 | 1,070 | 11.7 | <5 | <4 | <5 | 45 | -- | -- | -- | -- | -- | -- | -- |
| | 6/17/2010 | 1 | <30 | 7.2 | 1,080 | 17.5 | <5 | <4 | <5 | 8 | <20 | <5 | 45,500 | 15 | <0.005 | <0.020 | 109 |
| | 11/10/2010 | 2 | 28 | 6.9 | 1,065 | 9.5 | 12 | <4 | <5 | <5 | -- | -- | -- | -- | -- | -- | -- |
| | 6/21/2011 | 1.2 | <30 | 7.2 | 1,031 | 18.8 | 10 | <4 | 5 | 12 | 240 | <5 | 46,100 | 17 | <0.005 | <0.010 | 103 |
| Replicate | 6/21/2011 | -- | -- | -- | -- | -- | <5 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 11/15/2011 | 1 | 28 | 7.0 | 1,063 | 12.0 | <5 | <4 | <5 | <5 | -- | -- | -- | -- | -- | -- | -- |
| | **6/27/2012** | **1.2** | **<40** | **7.0** | **1,057** | **14.4** | **<5** | **<4** | **<5** | **<5** | **30** | **26** | **50,000** | **18** | **<0.005** | **<0.02** | **103** |
| **Dup.** | **6/27/2012** | **1.2** | **<40** | **7.0** | **1,054** | **14.4** | **<5** | **<4** | **<5** | **5** | **40** | **27** | **46,500** | **18** | **<0.005** | **<0.02** | **101** |

See notes on page 16.

**Table 2**
**RACER Trust - Coldwater Road Landfill Facility**
**Post-Closure Monitoring - Historical Analytical Results**
**Physical Parameters, TOC, TOX, Metals, Chloride, Cyanide, Phenols, and Sulfate**

| Well ID | Sample Date | Indicator Parameters | | | | | Dissolved Metals (µg/L) | | | | | | | Inorganics (mg/L) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | TOC (mg/L) | TOX (µg/L) | pH | SpC | T | Cr | Cu | Ni | Zn | Fe | Mn | Na | Chloride | Cyanide | Phenols | Sulfate |
| | | MDEQ Residential Drinking Water Criteria | | | | | 100 (A) | 1,000 (A) | 100 (A) | 2,400 | | | | | | | |
| | 6/21/1995 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- | -- | -- |
| | 8/31/1995 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- | -- | -- |
| | 2/9/1996 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- | -- | -- |
| | 6/19/1996 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- | -- | -- |
| **B-19A** | 8/21/1996 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- | -- | -- |
| | 11/13/1996 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- | -- | -- |
| | 5/6/1997 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- | -- | -- |
| | 11/6/1997 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | WD | WD | WD | WD |
| | 5/4/1998 | 3.0 | <5 | 6.8 | 1,480 | 10.1 | <10 | <10 | <5 | 30 | -- | -- | -- | -- | -- | -- | -- |
| | 11/5/1998 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- | -- | -- |
| | 12/23/1998 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | NS | NS | NS | NS |
| | 4/26/1999 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- | -- | -- |
| | 11/5/1999 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 4/26/2000 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- | -- | -- |
| | 12/8/2000 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 5/16/2001 | 4.0 | <100 | 7.1 | 1,050 | 11.8 | <10 | <10 | <5 | <10 | -- | -- | -- | -- | -- | -- | -- |
| | 10/17/2001 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 5/16/2002 | 6.0 | <100 | 7.2 | 1,740 | 10.6 | <10 | <10 | <5 | 10 | -- | -- | -- | -- | -- | -- | -- |
| | 11/7/2002 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 6/4/2003 | 5.8 | <30 | 6.9 | 1,350 | 12.9 | <5 | <5 | <5 | <5 | -- | -- | -- | -- | -- | -- | -- |
| | 11/13/2003 | 3.4 | <30 | 7.6 | 1,620 | 10.2 | <5 | <5 | <5 | <5 | 20 | <5 | -- | 148 | <0.005 | <0.010 | 229 |
| | 6/29/2004 | 3.9 | <30 | 7.2 | 1,316 | 14.7 | <5 | <5 | <5 | 8 | -- | -- | -- | -- | -- | -- | -- |
| | 12/9/2004 | 5.0 | 33 | 6.2 | 1,340 | 9.9 | <5 | <5 | <5 | 9 | 240 | 11 | 111,000 | 116 | <0.005 | <0.010 | 233 |
| Dup. | 12/9/2004 | 5.0 | <30 | -- | -- | -- | <5 | <5 | <5 | 7 | 170 | <5 | 114,000 | 116 | <0.005 | <0.010 | 233 |
| **B-19AR** | 6/7/2005 | 3.0 | <30 | 7.1 | 829 | 12.2 | <5 | <5 | 7 | <5 | 1,320 | 228 | 15,700 | 52 | <0.005 | <0.010 | 130 |
| Dup. | 12/8/2005 | 5.5 | <30 | -- | 1,390 | -- | 10 | <4 | <5 | 20 | 160 | <20 | 81,400 | -- | -- | -- | -- |
| | 12/8/2005 | 5.3 | <30 | 7.1 | 1,390 | 12.3 | 10 | <4 | <5 | <10 | 150 | <20 | 74,800 | -- | -- | -- | -- |
| Re-sample | 2/14/2006 | -- | -- | 8.0 | 840 | 5.9 | <5 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 6/29/2006 | 2.7 | <30 | 7.6 | 860 | 12.0 | <5 | <4 | 12 | 21 | 240 | 210 | 22,400 | 51 | <0.005 | <0.010 | 153 |
| | 11/30/2006 | 6.2 | 33.7 | 7.2 | 1,300 | 11.4 | 5 | <4 | <5 | <5 | -- | -- | -- | -- | -- | -- | -- |
| | 6/7/2007 | 2 | <30 | 7.0 | 899 | 11.4 | 6 | 4 | 4 | 9 | 70 | 21 | 19,700 | 58 | <0.005 | <0.010 | 136 |
| | 11/13/2007 | 1.5 | <30 | 7.3 | 1,070 | 12.1 | 3 | 7 | 26 | 11 | -- | -- | -- | -- | -- | -- | -- |
| | 6/25/2008 | 2.4 | 38.8 | 7.1 | 1,060 | 17.4 | <5 | 3 | <5 | 16 | 380 | 9 | 18,500 | 58 | <0.005 | <0.010 | 148 |
| | 11/18/2008 | 1.3 | <30 | 7.0 | 1,052 | 8.0 | <5 | 1 | <5 | 14 | -- | -- | -- | -- | -- | -- | -- |
| | 6/24/2009 | 1.0 | <30 | 7.7 | 911 | 17.3 | <5 | 2 | <5 | <5 | 36 | <5 | 21,200 | 60 | <0.005 | <0.010 | 147 |
| | 11/19/2009 | 2 | <30 | 7.4 | 994 | 10.4 | <5 | <4 | <5 | 7 | -- | -- | -- | -- | -- | -- | -- |
| | 6/15/2010 | 2 | <30 | 7.6 | 992 | 16.1 | <5 | <4 | <5 | <5 | <20 | <5 | 19,800 | 59 | <0.005 | <0.020 | 154 |
| | 11/10/2010 | 2 | <30 | 6.9 | 1,128 | 8.7 | 12 | <4 | <5 | <5 | -- | -- | -- | -- | -- | -- | -- |
| | 6/22/2011 | 1.5 | <30 | 7.4 | 902 | 17.2 | 5 | <4 | 5 | <5 | 240 | <5 | 22,400 | 64 | <0.005 | <0.010 | 140 |
| Replicate | 6/22/2011 | -- | -- | -- | -- | -- | <5 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 11/16/2011 | 2 | 26 | 7.1 | 1,091 | 8.4 | <5 | <4 | <5 | 5 | -- | -- | -- | -- | -- | -- | -- |
| | **6/27/2012** | **1.5** | **<40** | **7.8** | **1,005** | **13.3** | **<5** | **<4** | **<5** | **<5** | **<20** | **<5** | **23,200** | **62** | **<0.005** | **<0.02** | **145** |

See notes on page 16.

**Table 2**
**RACER Trust - Coldwater Road Landfill Facility**
**Post-Closure Monitoring - Historical Analytical Results**
**Physical Parameters, TOC, TOX, Metals, Chloride, Cyanide, Phenols, and Sulfate**

| Well ID | Sample Date | Indicator Parameters | | | | | Dissolved Metals (µg/L) | | | | | | | Inorganics (mg/L) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | TOC (mg/L) | TOX (µg/L) | pH | SpC | T | Cr | Cu | Ni | Zn | Fe | Mn | Na | Chloride | Cyanide | Phenols | Sulfate |
| | | MDEQ Residential Drinking Water Criteria | | | | | 100 (A) | 1,000 (A) | 100 (A) | 2,400 | | | | | | | |
| | 6/21/1995 | 2.8 | <10 | 8.3 | 771 | 15.1 | <20 | <20 | <30 | <20 | -- | -- | -- | -- | -- | -- | -- |
| | 8/31/1995 | 4.7 | 47 | 8.1 | 1,204 | 14.6 | <20 | 20 | <40 | <20 | -- | -- | -- | -- | -- | -- | -- |
| | 2/9/1996 | 21.0 | 38 | 7.1 | 801 | 9.1 | 32 | 28 | 54 | 120 | -- | -- | -- | -- | -- | -- | -- |
| | 6/19/1996 | 2.4 | <100 | 7.9 | 745 | 11.9 | <20 | <20 | <20 | <20 | -- | -- | -- | -- | -- | -- | -- |
| **B-20D** | 8/21/1996 | 3.0 | <5 | 8.0 | 750 | 13.1 | <20 | <20 | <20 | 40 | -- | -- | -- | -- | -- | -- | -- |
| | 11/13/1996 | 16.0 | <5 | 7.7 | 1,075 | 6.7 | <20 | <20 | <20 | 40 | -- | -- | -- | -- | -- | -- | -- |
| | 5/6/1997 | 3.0 | <100 | 6.8 | 640 | 10.0 | <10 | <10 | 15 | 10 | -- | -- | -- | -- | -- | -- | -- |
| | 11/6/1997 | 5.0 | <100 | 6.7 | 700 | 10.0 | <10 | 20 | 41 | <10 | 260 | 35 | -- | 5 | <0.005 | <0.020 | 101 |
| | 5/4/1998 | 4.0 | <5 | 6.8 | 579 | 12.2 | <10 | <10 | <5 | <10 | -- | -- | -- | -- | -- | -- | -- |
| | 11/5/1998 | 3.0 | 11 | 6.5 | 667 | 13.5 | <10 | <10 | <5 | 10 | <10 | 18 | 31,000 | -- | -- | -- | -- |
| Dup. | 11/5/1998 | 5.0 | 16 | 6.5 | 677 | 13.6 | <10 | <10 | <5 | 10 | 170 | 8 | 30,300 | -- | -- | -- | -- |
| | 12/23/1998 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 3 | <0.005 | <0.020 | 92 |
| Dup. | 12/23/1998 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 3 | <0.005 | <0.020 | 89 |
| | 4/26/1999 | 3.2 | <100 | 8.4 | 506 | 13.0 | <10 | <10 | <5 | 10 | -- | -- | -- | -- | -- | -- | -- |
| | 11/5/1999 | 5.3 | <100 | 7.5 | 677 | 12.5 | <10 | <10 | <5 | 60 | 130 | 60 | 31,400 | 33 | <0.005 | <0.020 | 105 |
| | 4/26/2000 | 3.2 | <100 | 7.4 | 760 | 14.9 | <10 | <10 | <5 | <10 | -- | -- | -- | -- | -- | -- | -- |
| | 12/8/2000 | 3.2 | <10 | 7.5 | 780 | 4.7 | <10 | <10 | 15 | <10 | 20 | -- | 19,700 | 2 | <0.005 | <0.020 | 113 |
| | 5/15/2001 | 2.7 | <100 | 7.0 | 590 | 13.0 | <10 | <10 | <5 | <10 | -- | -- | -- | -- | -- | -- | -- |
| | 10/18/2001 | 2.5 | <100 | 7.9 | 930 | 10.4 | <10 | <10 | <5 | <10 | 300 | -- | 20,600 | 2 | <0.005 | <0.020 | 105 |
| | 5/16/2002 | 3.2 | <100 | 7.2 | 780 | 11.9 | <10 | <10 | <5 | 10 | -- | -- | -- | -- | -- | -- | -- |
| | 11/7/2002 | 1.8 | <30 | 7.6 | 610 | 8.7 | <5 | <5 | <5 | <5 | 250 | 74 | 20,900 | 3 | <0.005 | <0.020 | 115 |
| | 6/3/2003 | 2.5 | <30 | 7.4 | 620 | 12.8 | <5 | <5 | <5 | <5 | -- | -- | -- | -- | -- | -- | -- |
| | 11/13/2003 | 1.3 | <30 | 8.0 | 630 | 7.7 | <5 | <5 | 5 | <5 | 200 | 15 | -- | 5 | <0.005 | <0.010 | 127 |
| | 6/29/2004 | 9.4 | <30 | 7.5 | 666 | 13.1 | <5 | <5 | 11 | <5 | -- | -- | -- | -- | -- | -- | -- |
| | 12/10/2004 | 2.0 | <30 | 6.6 | 830 | 10.8 | <5 | <5 | 11 | 10 | 2,110 | 92 | 16,800 | 3 | <0.005 | <0.010 | 148 |
| | 6/7/2005 | 4.0 | <30 | 7.3 | 707 | 11.9 | 7 | <5 | 5 | <5 | 2,140 | 66 | 16,500 | <5 | <0.005 | <0.010 | 155 |
| | 12/8/2005 | 4.1 | <30 | 4.8 | 957 | 11.1 | 11 | <4 | 26 | <10 | 120 | 120 | 20,600 | -- | -- | -- | -- |
| | 6/28/2006 | 1.7 | <30 | 7.4 | 979 | 12.5 | 7 | <4 | <5 | 5 | 2,120 | 60 | 17,600 | 2 | <0.005 | <0.010 | 169 |
| | 11/30/2006 | 3.4 | <30 | 7.5 | 980 | 12.5 | 6 | <4 | 6 | <5 | -- | -- | -- | -- | -- | -- | -- |
| | 6/8/2007 | 3.4 | 30.9 | 6.7 | 929 | 13.4 | 10 | 22 | 19 | 124 | 610 | 160 | 25,500 | 4 | <0.005 | 0.074 | 144 |
| | 11/13/2007 | 2.1 | <30 | 7.2 | 932 | 13.5 | 3 | 1 | 13 | 9 | -- | -- | -- | -- | -- | -- | -- |
| | 6/25/2008 | <1 | <60 | 7.0 | 946 | 15.5 | <5 | 2 | <5 | 7 | 2,400 | 55 | 19,500 | 4 | <0.005 | <0.010 | 164 |
| | 11/18/2008 | 1 | 36.1 | 6.9 | 1,006 | 12.6 | <5 | 4 | 6 | 22 | -- | -- | -- | -- | -- | -- | -- |
| | 6/24/2009 | 1.1 | <30 | 7.2 | 1,000 | 19.4 | <5 | <1 | <5 | <5 | 1,720 | 56 | 21,000 | 3 | <0.005 | <0.010 | 180 |
| Dup. | 6/24/2009 | <1 | <30 | 7.2 | 1,010 | 19.4 | <5 | <1 | <5 | <5 | 1,640 | 56 | 20,800 | 3 | <0.005 | <0.010 | 183 |
| | 11/18/2009 | 2 | <30 | 7.0 | 1,030 | 12.1 | <5 | <4 | <5 | 5 | -- | -- | -- | -- | -- | -- | -- |
| | 6/16/2010 | 2 | <30 | 7.3 | 1,020 | 15.1 | <5 | <4 | <5 | <5 | 1,930 | 49 | 19,000 | 2 | <0.005 | <0.020 | 177 |
| | 11/9/2010 | 3 | <30 | 7.0 | 998 | 11.7 | 11 | <4 | <5 | <5 | -- | -- | -- | -- | -- | -- | -- |
| | 6/22/2011 | 1.6 | <30 | 7.2 | 967 | 15.5 | 9 | <4 | <5 | 13 | 2,550 | 54 | 18,600 | <5 | <0.005 | <0.010 | 164 |
| Replicate | 6/22/2011 | -- | -- | -- | -- | -- | <5 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 11/16/2011 | 2 | 50 | 7.0 | 1,006 | 9.8 | <5 | <4 | <5 | 5 | -- | -- | -- | -- | -- | -- | -- |
| Dup. | 11/16/2011 | 2 | 26 | 7.0 | 1,002 | 9.8 | <5 | <4 | <5 | 6 | -- | -- | -- | -- | -- | -- | -- |
| | **6/25/2012** | **2** | **15** | **6.8** | **1,003** | **12.8** | **<5** | **<4** | **<5** | **<5** | **1,700** | **53** | **21,400** | **<5** | **<0.005** | **<0.02** | **183** |

See notes on page 16.

**Table 2**
**RACER Trust - Coldwater Road Landfill Facility**
**Post-Closure Monitoring - Historical Analytical Results**
**Physical Parameters, TOC, TOX, Metals, Chloride, Cyanide, Phenols, and Sulfate**

| Well ID | Sample Date | Indicator Parameters | | | | | Dissolved Metals (µg/L) | | | | | | | Inorganics (mg/L) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | TOC (mg/L) | TOX (µg/L) | pH | SpC | T | Cr | Cu | Ni | Zn | Fe | Mn | Na | Chloride | Cyanide | Phenols | Sulfate |
| | | MDEQ Residential Drinking Water Criteria | | | | | 100 (A) | 1,000 (A) | 100 (A) | 2,400 | | | | | | | |
| **B-21D** | 6/21/1995 | 4.2 | <10 | 8.3 | 870 | 14.5 | <20 | <20 | <30 | 61 | -- | -- | -- | -- | -- | -- | -- |
| | 8/31/1995 | 3.3 | 19 | 8.1 | 684 | 14.2 | <20 | 21 | <40 | <20 | -- | -- | -- | -- | -- | -- | -- |
| | 2/9/1996 | 4.1 | <10 | 7.7 | 646 | 8.6 | <20 | <20 | <40 | <20 | -- | -- | -- | -- | -- | -- | -- |
| | 6/19/1996 | 5.3 | <100 | 7.6 | 577 | 14.1 | <20 | <20 | <20 | <20 | -- | -- | -- | -- | -- | -- | -- |
| | 8/21/1996 | 2.5 | <5 | 7.9 | 576 | 13.8 | <20 | <20 | <20 | 50 | -- | -- | -- | -- | -- | -- | -- |
| | 11/13/1996 | 17.0 | <5 | 7.3 | 810 | 8.8 | <20 | <20 | <20 | 40 | -- | -- | -- | -- | -- | -- | -- |
| | 5/6/1997 | 2.0 | <100 | 6.8 | 530 | 10.2 | <10 | <10 | 8 | <10 | -- | -- | -- | -- | -- | -- | -- |
| | 11/6/1997 | 3.0 | <100 | 6.7 | 540 | 10.0 | <10 | <10 | 30 | <10 | 240 | 27 | -- | 2 | <0.005 | <0.020 | 33 |
| | 5/4/1998 | 16.0 | <5 | 6.9 | 480 | 11.5 | <10 | <10 | <5 | 20 | -- | -- | -- | -- | -- | -- | -- |
| | 11/5/1998 | 5.0 | <10 | 7.2 | 565 | 7.8 | <10 | <10 | <5 | 10 | 240 | 43 | 26,700 | -- | -- | -- | -- |
| | 12/23/1998 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 2 | <0.005 | <0.020 | 15 |
| | 4/26/1999 | 11.0 | <100 | 8.2 | 506 | 13.0 | <10 | <10 | <5 | 10 | -- | -- | -- | -- | -- | -- | -- |
| | 11/5/1999 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 4/26/2000 | 2.5 | <100 | 8.2 | 660 | 14.1 | <10 | <10 | <5 | <10 | -- | -- | -- | -- | -- | -- | -- |
| | 12/8/2000 | 4.2 | <10 | 8.4 | 680 | 7.1 | <10 | <10 | 11 | <10 | <10 | -- | 29,600 | 2 | <0.005 | <0.020 | 36 |
| | 5/15/2001 | 1.9 | <100 | 7.9 | 570 | 13.0 | <10 | <10 | <5 | 10 | -- | -- | -- | -- | -- | -- | -- |
| Dup | 5/15/2001 | 1.9 | <100 | 8.3 | 560 | 13.0 | <10 | <10 | <5 | 10 | -- | -- | -- | -- | -- | -- | -- |
| | 10/18/2001 | 3.4 | <100 | 7.6 | 570 | 13.7 | <10 | <10 | <5 | <10 | 200 | -- | 22,200 | 1 | <0.005 | <0.020 | 41 |
| | 5/16/2002 | 6.1 | <100 | 7.2 | 630 | 11.7 | <10 | <10 | <5 | <10 | -- | -- | -- | -- | -- | -- | -- |
| | 11/7/2002 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 6/3/2003 | 5.8 | <30 | 7.3 | 510 | 13.0 | <5 | <5 | <5 | 6 | -- | -- | -- | -- | -- | -- | -- |
| | 11/13/2003 | 1.0 | <30 | 7.8 | 710 | 8.7 | <5 | <5 | <5 | 9 | 100 | <5 | -- | 4 | <0.005 | <0.010 | 48 |
| | 6/30/2004 | 4.0 | <30 | 6.8 | 570 | 14.8 | <5 | <5 | <5 | 7 | -- | -- | -- | -- | -- | -- | -- |
| | 12/10/2004 | 2.0 | <30 | 6.4 | 600 | 9.9 | <5 | <5 | <5 | 7 | 1,330 | 44 | 20,100 | 2 | <0.005 | <0.010 | 50 |
| | 6/8/2005 | 3.0 | <30 | 7.7 | 560 | 14.2 | <5 | <5 | 12 | 6 | 1,350 | 72 | 21,000 | <5 | <0.005 | <0.010 | 44 |
| | 12/8/2005 | 4.4 | <30 | 5.5 | 741 | 11.4 | 8 | <4 | 8 | <10 | 1,070 | 60 | 21,500 | -- | -- | -- | -- |
| | 6/28/2006 | 1.5 | <30 | 7.4 | 718 | 12.8 | <5 | 6 | 5 | 13 | 430 | 60 | 23,500 | 2 | <0.005 | <0.010 | 53 |
| | 11/30/2006 | 1.8 | 49.1 | 7.6 | 693 | 11.5 | <5 | <4 | <5 | <5 | -- | -- | -- | -- | -- | -- | -- |
| | 6/8/2007 | 1.2 | <30 | 6.3 | 709 | 13.2 | 10 | 2 | 5 | 7 | 1,200 | 49 | 21,500 | 4 | <0.005 | <0.010 | 60 |
| | 11/14/2007 | <1 | <30 | 7.3 | 738 | 14.5 | 2 | 1 | 5 | 8 | -- | -- | -- | -- | -- | -- | -- |
| | 6/26/2008 | 1.8 | 16.8 | 7.1 | 738 | 16.9 | <5 | 1 | <5 | <5 | 1,390 | 40 | 22,700 | 3 | <0.005 | <0.010 | 60 |
| | 11/19/2008 | 1.1 | <30 | 6.9 | 739 | 11.0 | <5 | <1 | 5 | <5 | -- | -- | -- | -- | -- | -- | -- |
| | 6/25/2009 | <1 | <30 | 6.7 | 743 | 16.1 | <5 | <1 | <5 | <5 | 1,210 | 34 | 25,100 | 3 | <0.005 | <0.010 | 64 |
| | 11/19/2009 | 2 | 41.2 | 7.2 | 745 | 10.2 | <5 | <4 | <5 | 6 | -- | -- | -- | -- | -- | -- | -- |
| Dup | 11/19/2009 | 2 | <30 | 7.2 | 739 | 10.2 | <5 | <4 | <5 | <5 | -- | -- | -- | -- | -- | -- | -- |
| | 6/17/2010 | 2 | <30 | 7.4 | 736 | 13.2 | <5 | <4 | <5 | <5 | 980 | 34 | 23,700 | 3 | <0.005 | <0.020 | 58 |
| | 11/10/2010 | 1 | <30 | 7.3 | 739 | 11.0 | 11 | <4 | <5 | <5 | -- | -- | -- | -- | -- | -- | -- |
| | 6/22/2011 | 1.4 | <30 | 7.4 | 718 | 19.5 | 10 | <4 | <5 | <5 | 1,540 | 33 | 23,300 | <5 | <0.005 | <0.010 | 61 |
| Replicate | 6/22/2011 | -- | -- | -- | -- | -- | 7 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 11/16/2011 | 1 | 7.9 | 7.2 | 753 | 10.6 | <5 | <4 | <5 | <5 | -- | -- | -- | -- | -- | -- | -- |
| | **6/26/2012** | **1.3** | **<40** | **7.3** | **745** | **19.5** | **<5** | **<4** | **<5** | **<5** | **640** | **42** | **25,800** | **<5** | **<0.005** | **<0.02** | **66** |

See notes on page 16.

**Table 2**
**RACER Trust - Coldwater Road Landfill Facility**
**Post-Closure Monitoring - Historical Analytical Results**
**Physical Parameters, TOC, TOX, Metals, Chloride, Cyanide, Phenols, and Sulfate**

| Well ID | Sample Date | Indicator Parameters | | | | | Dissolved Metals (µg/L) | | | | | | | Inorganics (mg/L) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | TOC (mg/L) | TOX (µg/L) | pH | SpC | T | Cr | Cu | Ni | Zn | Fe | Mn | Na | Chloride | Cyanide | Phenols | Sulfate |
| | | MDEQ Residential Drinking Water Criteria | | | | | 100 (A) | 1,000 (A) | 100 (A) | 2,400 | | | | | | | |
| | 6/21/1995 | 2.6 | <10 | 7.7 | 573 | 15.5 | <20 | <20 | 370 | <20 | -- | -- | -- | -- | -- | -- | -- |
| | 8/31/1995 | 4.5 | 47 | 8.3 | 739 | 14.3 | <20 | <20 | <40 | 47 | -- | -- | -- | -- | -- | -- | -- |
| | 2/9/1996 | 6.9 | <10 | NS | NS | NS | <20 | <20 | <40 | 80 | -- | -- | -- | -- | -- | -- | -- |
| | 6/19/1996 | 1.8 | <100 | 7.5 | 600 | 13.4 | <20 | <20 | <20 | 20 | -- | -- | -- | -- | -- | -- | -- |
| **B-22D** | 8/21/1996 | 1.7 | <5 | 8.1 | 608 | 14.2 | <20 | <20 | <20 | 50 | -- | -- | -- | -- | -- | -- | -- |
| | 11/13/1996 | 10.0 | <5 | 7.2 | 817 | 7.7 | <20 | <20 | <20 | 50 | -- | -- | -- | -- | -- | -- | -- |
| | 5/6/1997 | 2.0 | <100 | 6.7 | 550 | 10.1 | <10 | <10 | <5 | <10 | -- | -- | -- | -- | -- | -- | -- |
| | 11/6/1997 | 7.0 | <100 | 6.9 | 550 | 10.0 | <10 | <10 | 29 | 10 | 1,360 | 55 | -- | 2 | <0.005 | <0.020 | 32 |
| | 5/4/1998 | 5.0 | <5 | 7.1 | 501 | 11.7 | <10 | <10 | <5 | <10 | -- | -- | -- | -- | -- | -- | -- |
| | 11/5/1998 | 6.0 | <10 | 6.6 | 559 | 9.8 | <10 | <10 | <5 | 10 | 1,180 | 47 | 23,800 | -- | -- | -- | -- |
| | 12/23/1998 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 2 | <0.005 | <0.020 | 28 |
| | 4/26/1999 | 18.0 | <100 | 8.2 | 485 | 13.2 | <10 | <10 | <5 | 10 | -- | -- | -- | -- | -- | -- | -- |
| | 11/5/1999 | 2.6 | <100 | 7.3 | 474 | 13.6 | <10 | <10 | <5 | 20 | 90 | 31 | 27,900 | 2 | <0.005 | <0.020 | 29 |
| | 4/26/2000 | 2.5 | <100 | 8.2 | 670 | 14.2 | <10 | <10 | <5 | <10 | -- | -- | -- | -- | -- | -- | -- |
| | 12/8/2000 | 2.5 | <10 | 7.5 | 510 | 5.4 | <10 | <10 | 8 | <10 | <10 | -- | 26,500 | 2 | <0.005 | <0.020 | 31 |
| | 5/15/2001 | 6.7 | <100 | 8.0 | 690 | 13.7 | <10 | <10 | 6 | 30 | -- | -- | -- | -- | -- | -- | -- |
| | 10/18/2001 | 1.7 | <100 | 7.6 | 2,610 | 10.2 | <10 | <10 | <5 | <10 | 200 | -- | 27,800 | 1 | <0.005 | <0.020 | 33 |
| | 5/16/2002 | 3.2 | <100 | 7.1 | 630 | 12.1 | <10 | <10 | <5 | <10 | -- | -- | -- | -- | -- | -- | -- |
| | 11/7/2002 | 1.5 | <30 | 7.4 | 480 | 8.8 | <5 | <5 | <5 | <5 | 120 | 11 | 25,200 | 2 | <0.005 | <0.020 | 35 |
| | 6/3/2003 | 2.3 | <30 | 6.8 | 570 | 13.1 | <5 | <5 | <5 | <5 | -- | -- | -- | -- | -- | -- | -- |
| | 11/14/2003 | 1.6 | <30 | 8.1 | 660 | 9.8 | <5 | <5 | <5 | 9 | 6 | <5 | -- | 3 | <0.005 | <0.010 | 37 |
| | 6/30/2004 | 1.7 | <30 | 6.3 | 610 | 15.5 | <5 | <5 | <5 | 6 | -- | -- | -- | -- | -- | -- | -- |
| | 12/10/2004 | 2.0 | <30 | 7.0 | 600 | 10.3 | <5 | <5 | <5 | 6 | 1,280 | 37 | 25,100 | 2 | <0.005 | <0.010 | 42 |
| | 6/8/2005 | 2.0 | <30 | 7.7 | 531 | 13.2 | 6 | <5 | <5 | <5 | 1,370 | 38 | 23,700 | <5 | <0.005 | <0.010 | 40 |
| | 12/8/2005 | 2.7 | <30 | 5.8 | 702 | 11.7 | 10 | <4 | 46 | <10 | 2,200 | 250 | 25,400 | -- | -- | -- | -- |
| | 6/28/2006 | <1 | <30 | 7.5 | 682 | 13.0 | <5 | <4 | <5 | <5 | 1,290 | 30 | 25,800 | 2 | <0.005 | <0.010 | 42 |
| | 11/30/2006 | 2.2 | <30 | 7.5 | 684 | 13.3 | <5 | <4 | <5 | 7 | -- | -- | -- | -- | -- | -- | -- |
| Dup. | 11/30/2006 | 5.3 | <30 | 7.5 | 676 | 13.3 | <5 | <4 | <5 | <5 | -- | -- | -- | -- | -- | -- | -- |
| | 6/8/2007 | 3.8 | <30 | 6.6 | 680 | 14.3 | 7 | 2 | 1 | 5 | 1,180 | 32 | 28,100 | 3 | <0.005 | <0.010 | 46 |
| Dup. | 6/8/2007 | 3.1 | 21.1 | 6.6 | 669 | 14.3 | 9 | 2 | 1 | 4 | 1,210 | 31 | 28,400 | 4 | <0.005 | <0.010 | 47 |
| | 11/14/2007 | 1.1 | <30 | 7.3 | 710 | 14.2 | 2 | 2 | 3 | 6 | -- | -- | -- | -- | -- | -- | -- |
| | 6/26/2008 | 1.7 | 22.6 | 7.1 | 694 | 19.3 | <5 | <1 | <5 | 5 | 1,100 | 33 | 25,900 | 3 | <0.005 | <0.010 | 46 |
| Dup. | 6/26/2008 | 2.6 | <30 | 7.1 | 710 | 19.3 | <5 | <1 | <5 | 7 | 1,150 | 34 | 26,400 | 3 | <0.005 | <0.010 | 46 |
| | 11/19/2008 | 8.9 | <30 | 6.9 | 699 | 8.2 | <5 | <1 | 8 | 8 | -- | -- | -- | -- | -- | -- | -- |
| | 6/25/2009 | 1.1 | <30 | 6.7 | 705 | 16.6 | <5 | <1 | <5 | <5 | 1,340 | 30 | 28,500 | 2 | <0.005 | <0.010 | 54 |
| | 11/18/2009 | 2 | <30 | 7.2 | 710 | 11.4 | <5 | <4 | <5 | <5 | -- | -- | -- | -- | -- | -- | -- |
| | 6/16/2010 | 2 | <30 | 7.4 | 715 | 15.7 | <5 | <4 | <5 | <5 | 1,100 | 28 | 26,000 | 2 | <0.005 | <0.020 | 51 |
| | 11/11/2010 | 2 | <30 | 7.3 | 704 | 10.3 | 11 | <4 | <5 | <5 | -- | -- | -- | -- | -- | -- | -- |
| | 6/21/2011 | 1.3 | <30 | 7.4 | 705 | 17.0 | 9 | <4 | <5 | <5 | 1,460 | 30 | 27,300 | <5 | <0.005 | <0.010 | 50 |
| Replicate | 6/21/2011 | -- | -- | -- | -- | -- | <5 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 11/14/2011 | 2 | 76 | 7.4 | 714 | 10.1 | <5 | <4 | <5 | 12 | -- | -- | -- | -- | -- | -- | -- |
| | **6/25/2012** | **2** | **<40** | **6.5** | **714** | **12.7** | **<5** | **<4** | **<5** | **8** | **1,830** | **42** | **30,000** | **<5** | **<0.005** | **<0.02** | **51** |

See notes on page 16.

**Table 2**
**RACER Trust - Coldwater Road Landfill Facility**
**Post-Closure Monitoring - Historical Analytical Results**
**Physical Parameters, TOC, TOX, Metals, Chloride, Cyanide, Phenols, and Sulfate**

| Well ID | Sample Date | Indicator Parameters | | | | | Dissolved Metals (µg/L) | | | | | | | Inorganics (mg/L) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | TOC (mg/L) | TOX (µg/L) | pH | SpC | T | Cr | Cu | Ni | Zn | Fe | Mn | Na | Chloride | Cyanide | Phenols | Sulfate |
| | | MDEQ Residential Drinking Water Criteria | | | | | 100 (A) | 1,000 (A) | 100 (A) | 2,400 | | | | | | | |
| | 6/21/1995 | 3.4 | <10 | 7.3 | 680 | 15.1 | <20 | <20 | <30 | <20 | -- | -- | -- | -- | -- | -- | -- |
| | 8/31/1995 | 3.9 | 96 | 8.2 | 845 | 15.4 | <20 | <20 | <40 | <20 | -- | -- | -- | -- | -- | -- | -- |
| | 2/9/1996 | 3.8 | 34 | 7.5 | 751 | 11.3 | <20 | <20 | <40 | <20 | -- | -- | -- | -- | -- | -- | -- |
| | 6/19/1996 | 2.2 | <100 | 8.3 | 632 | 14.2 | <20 | <20 | <20 | <20 | -- | -- | -- | -- | -- | -- | -- |
| **B-23D** | 8/21/1996 | 1.7 | <5 | 8.9 | 691 | 14.6 | <20 | <20 | <20 | 50 | -- | -- | -- | -- | -- | -- | -- |
| | 11/13/1996 | 40.0 | <5 | 7.7 | 977 | 7.6 | <20 | <20 | <20 | 40 | -- | -- | -- | -- | -- | -- | -- |
| | 5/6/1997 | 2.0 | <100 | 6.8 | 610 | 11.0 | <10 | <10 | 9 | <10 | -- | -- | -- | -- | -- | -- | -- |
| | 11/6/1997 | 3.0 | <100 | 6.0 | 620 | 10.0 | <10 | <10 | 31 | <10 | 160 | 15 | -- | 2 | <0.005 | <0.020 | 25 |
| | 5/4/1998 | 2.0 | <5 | 6.4 | 558 | 12.2 | <10 | <10 | <5 | <10 | -- | -- | -- | -- | -- | -- | -- |
| | 11/5/1998 | 5.0 | <10 | 6.5 | 639 | 9.8 | <10 | <10 | <5 | 70 | <10 | <5 | 29,700 | -- | -- | -- | -- |
| | 12/23/1998 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 2 | <0.005 | <0.020 | 21 |
| | 4/26/1999 | 3.6 | <100 | 8.1 | 552 | 13.3 | <10 | <10 | <5 | <10 | -- | -- | -- | -- | -- | -- | -- |
| Dup | 4/26/1999 | 3.0 | <100 | NS | NS | NS | <10 | <10 | <5 | <10 | -- | -- | -- | -- | -- | -- | -- |
| | 11/5/1999 | 3.4 | <100 | 7.4 | 546 | 13.3 | <10 | <10 | <5 | <10 | 80 | 14 | 34,700 | 3 | <0.005 | <0.020 | 26 |
| Dup | 11/5/1999 | 3.1 | <100 | NS | NS | NS | <10 | <10 | <5 | <10 | 90 | 15 | 33,300 | 3 | <0.005 | <0.020 | 25 |
| | 4/26/2000 | 3.2 | <100 | 7.9 | 800 | 13.7 | <10 | <10 | <5 | <10 | -- | -- | -- | -- | -- | -- | -- |
| | 12/8/2000 | 2.0 | <10 | 7.0 | 570 | 7.0 | <10 | <10 | 7 | <10 | 60 | -- | 35,400 | 2 | <0.005 | <0.020 | 22 |
| | 5/15/2001 | 3.2 | <100 | 7.9 | 790 | 13.1 | <10 | <10 | <5 | 10 | -- | -- | -- | -- | -- | -- | -- |
| | 10/17/2001 | 1.8 | <100 | 7.5 | 600 | 11.3 | <10 | <10 | <5 | <10 | 170 | -- | 32,800 | 2 | <0.005 | <0.020 | 23 |
| | 5/16/2002 | 5.4 | <100 | 7.2 | 1200 | 11.2 | <10 | <10 | <5 | 10 | -- | -- | -- | -- | -- | -- | -- |
| | 11/7/2002 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 6/3/2003 | 3.9 | <30 | 6.9 | 640 | 12.9 | <5 | <5 | <5 | <5 | -- | -- | -- | -- | -- | -- | -- |
| Dup | 6/3/2003 | 3.7 | <30 | -- | -- | -- | <5 | <5 | <5 | <5 | -- | -- | -- | -- | -- | -- | -- |
| | 11/13/2003 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 6/30/2004 | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- | -- | -- | -- | -- | -- |
| | 12/10/2004 | 2.0 | <30 | 6.7 | 640.0 | 11.3 | <5 | <5 | 11 | 10 | 500 | 65 | 30,500 | 2 | <0.005 | <0.010 | 25 |
| B-23DR | 6/7/2005 | 2.0 | <30 | 7.3 | 594.0 | 12.2 | <5 | <5 | <5 | <5 | 2,520 | 49 | 20,600 | 25 | <0.005 | <0.010 | 60 |
| Dup | 6/7/2005 | 2.0 | <30 | -- | -- | -- | <5 | <5 | <5 | <5 | 2,580 | 48 | 20,600 | 25 | <0.005 | <0.010 | 59 |
| B-23DR | 12/8/2005 | 3.8 | <30 | 6.2 | 700.0 | 6.1 | 7 | <4 | <5 | <10 | 370 | 60 | 39,200 | -- | -- | -- | -- |
| | 6/27/2006 | 1.2 | <30 | 7.1 | 760.0 | 13.4 | 5 | <4 | <5 | 5 | 2,280 | 50 | 20,500 | 26 | <0.005 | 0.010 | 67 |
| | 11/30/2006 | 2.2 | <30 | 7.6 | 568.0 | 11.8 | <5 | <4 | <5 | 6 | -- | -- | -- | -- | -- | -- | -- |
| | 6/8/2007 | 1.1 | 33.7 | 6.5 | 736 | 13.1 | 7 | 1 | 1 | 5 | 1,100 | 43 | 23,800 | 28 | <0.005 | <0.010 | 62 |
| | 11/16/2007 | <1 | <30 | 7.3 | 780 | 21.4 | 2 | 1 | 3 | 8 | -- | -- | -- | -- | -- | -- | -- |
| | 6/26/2008 | 2.0 | 27.2 | 7.0 | 753 | 18.2 | <5 | 1 | <5 | <5 | 1,850 | 44 | 23,700 | 22 | <0.005 | <0.010 | 54 |
| | 11/21/2008 | <1 | <30 | 6.7 | 763 | 6.0 | <5 | <1 | <5 | 19 | -- | -- | -- | -- | -- | -- | -- |
| | 6/25/2009 | <1 | <30 | 6.7 | 776 | 18.9 | <5 | <1 | <5 | <5 | 1,500 | 43 | 23,900 | 29 | <0.005 | <0.010 | 63 |
| | 11/18/2009 | 2 | <30 | 7.2 | 756 | 11.9 | <5 | <4 | <5 | 10 | -- | -- | -- | -- | -- | -- | -- |
| B-23DR | 6/16/2010 | 2 | <30 | 7.4 | 747 | 18.2 | <5 | <4 | <5 | <5 | 950 | 35 | 23,200 | 20 | <0.005 | <0.020 | 45 |
| | 11/11/2010 | 2 | 21.5 | 7.3 | 743 | 12.8 | 11 | <4 | <5 | <5 | -- | -- | -- | -- | -- | -- | -- |
| Dup | 11/11/2010 | 2 | <30 | 7.3 | 742 | 12.8 | 11 | <4 | <5 | <5 | -- | -- | -- | -- | -- | -- | -- |
| | 6/21/2011 | 1.2 | <30 | 7.3 | 721 | 18.0 | 8 | <4 | <5 | <5 | 1,520 | 37 | 22,400 | 22 | <0.005 | <0.010 | 48 |
| Replicate | 6/21/2011 | -- | -- | -- | -- | -- | <5 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 11/15/2011 | 1 | 49 | 7.2 | 721 | 13.1 | <5 | <4 | <5 | 8 | -- | -- | -- | -- | -- | -- | -- |
| | **6/26/2012** | **1** | **<40** | **6.8** | **748** | **12.7** | **<5** | **<4** | **<5** | **<5** | **1,810** | **42** | **25,100** | **25** | **<0.005** | **<0.02** | **50** |

See notes on page 16.

**Table 2**
**RACER Trust - Coldwater Road Landfill Facility**
**Post-Closure Monitoring - Historical Analytical Results**
**Physical Parameters, TOC, TOX, Metals, Chloride, Cyanide, Phenols, and Sulfate**

| Well ID | Sample Date | Indicator Parameters | | | | | Dissolved Metals (µg/L) | | | | | | | Inorganics (mg/L) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | TOC (mg/L) | TOX (µg/L) | pH | SpC | T | Cr | Cu | Ni | Zn | Fe | Mn | Na | Chloride | Cyanide | Phenols | Sulfate |
| | | MDEQ Residential Drinking Water Criteria | | | | | 100 (A) | 1,000 (A) | 100 (A) | 2,400 | | | | | | | |
| | 6/21/1995 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 8/31/1995 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 2/9/1996 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 6/19/1996 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| **B-24** | 8/21/1996 | 5.6 | <5 | 7.8 | 1,502 | 12.7 | <20 | <20 | <20 | 90 | -- | -- | -- | -- | -- | -- | -- |
| | 11/13/1996 | 20.0 | <5 | 7.1 | 2,030 | 7.8 | <20 | <20 | <20 | 50 | -- | -- | -- | -- | -- | -- | -- |
| | 5/6/1997 | 5.0 | <100 | 6.4 | 1,700 | 10.0 | <10 | <10 | 31 | 10 | -- | -- | -- | -- | -- | -- | -- |
| | 11/6/1997 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | NS | NS | NS | NS |
| | 5/4/1998 | 4.0 | <5 | 6.5 | 1,410 | 11.6 | <10 | <10 | 8 | 20 | -- | -- | -- | -- | -- | -- | -- |
| | 11/5/1998 | 4.0 | 23 | 5.5 | 1,595 | 10.4 | <10 | <10 | 9 | 20 | 60 | 120 | 27,700 | -- | -- | -- | -- |
| | 12/23/1998 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 163 | <0.005 | <0.020 | 205 |
| | 4/26/1999 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- | -- | -- |
| | 11/5/1999 | NS | NS | 7.2 | 1,152 | 13.8 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 4/26/2000 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- | -- | -- |
| | 12/8/2000 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 5/15/2001 | NS | NS | 6.4 | 1,450 | 12.9 | NS | NS | NS | NS | NS | NS | NS | -- | -- | -- | -- |
| | 10/17/2001 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 5/16/2002 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- | -- | -- |
| | 11/7/2002 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 6/3/2003 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- | -- | -- |
| | 11/13/2003 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 6/30/2004 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- | -- | -- |
| | 12/9/2004 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| B-24R | 6/7/2005 | 8.0 | <30 | 7.3 | 857 | 10.6 | 8 | <5 | <5 | <5 | 10,600 | 448 | 27,100 | 49 | <0.005 | <0.010 | 206 |
| B-24R | 12/8/2005 | 6.6 | <30 | 5.2 | 1,120 | 11.9 | 11 | <4 | <5 | 10 | 3,180 | 210 | 28,700 | -- | -- | -- | -- |
| | 6/28/2006 | 4.7 | <30 | 7.3 | 1,080 | 11.9 | 6 | <4 | <5 | <5 | 3,760 | 210 | 27,700 | 48 | <0.005 | <0.010 | 182 |
| | 11/30/2006 | 4.8 | 30 | 7.3 | 1,100 | 11.7 | 6 | <4 | <5 | <5 | -- | -- | -- | -- | -- | -- | -- |
| | 6/4/2007 | 4.5 | 110 | 7.2 | 1,080 | 11.0 | 9 | 2 | 2 | 19 | 2,400 | 194 | 27,900 | 47 | <0.005 | <0.010 | 184 |
| | 11/13/2007 | 4.1 | 30.1 | 7.1 | 1,130 | 14.0 | 3 | 1 | 5 | 7 | -- | -- | -- | -- | -- | -- | -- |
| | 6/26/2008 | 4.3 | <30 | 7.0 | 1,130 | 19.0 | <5 | 1 | <5 | 8 | 3,490 | 175 | 39,600 | 46 | <0.005 | <0.010 | 189 |
| | 11/18/2008 | 3.8 | <30 | 6.8 | 1,125 | 5.3 | <5 | <1 | <5 | <5 | -- | -- | -- | -- | -- | -- | -- |
| | 6/24/2009 | 5.2 | <30 | 6.6 | 1,120 | 17.4 | <5 | <1 | <5 | <5 | 4,000 | 155 | 38,400 | 48 | <0.005 | <0.010 | 201 |
| | 11/18/2009 | 5 | 86.4 | 7.1 | 1,140 | 12.9 | <5 | <4 | <5 | <5 | -- | -- | -- | -- | -- | -- | -- |
| | 6/16/2010 | 4 | 22.7 | 7.0 | 1,150 | 16.3 | <5 | <4 | <5 | <5 | 1,880 | 222 | 39,500 | 46 | <0.005 | <0.020 | 196 |
| | 11/9/2010 | 5 | 26.8 | 6.9 | 1,136 | 13.5 | 11 | <4 | <5 | <5 | -- | -- | -- | -- | -- | -- | -- |
| | 6/21/2011 | 3.7 | <30 | 7.1 | 1,136 | 17.5 | 10 | <4 | 6 | <5 | 1,130 | 255 | 51,700 | 45 | <0.005 | <0.010 | 206 |
| Dup. | 6/21/2011 | 3.7 | <30 | 7.1 | 1,137 | 17.5 | 8 | <4 | 6 | <5 | 1,070 | 255 | 52,000 | 45 | <0.005 | <0.010 | 206 |
| Replicate | 6/21/2011 | -- | -- | -- | -- | -- | <5 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Dup. Replicate | 6/21/2011 | -- | -- | -- | -- | -- | <5 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 11/16/2011 | 4 | 24 | 7.7 | 1,141 | 11.1 | <5 | <4 | <5 | <5 | -- | -- | -- | -- | -- | -- | -- |
| | **6/26/2012** | **3.5** | **16** | **6.8** | **1,219** | **13.7** | **<5** | **<4** | **<5** | **<5** | **1,200** | **242** | **72,000** | **45** | **<0.005** | **<0.02** | **219** |

See notes on page 16.

**Table 2**
**RACER Trust - Coldwater Road Landfill Facility**
**Post-Closure Monitoring - Historical Analytical Results**
**Physical Parameters, TOC, TOX, Metals, Chloride, Cyanide, Phenols, and Sulfate**

| Well ID | Sample Date | Indicator Parameters | | | | | Dissolved Metals (µg/L) | | | | | | | Inorganics (mg/L) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | TOC (mg/L) | TOX (µg/L) | pH | SpC | T | Cr | Cu | Ni | Zn | Fe | Mn | Na | Chloride | Cyanide | Phenols | Sulfate |
| | | MDEQ Residential Drinking Water Criteria | | | | | 100 (A) | 1,000 (A) | 100 (A) | 2,400 | | | | | | | |
| **B-27D** | 12/8/2005 | 3.7 | <30 | 5 | 714 | 4.8 | 9 | <4 | 6 | <10 | 240 | 140 | 34,200 | -- | -- | -- | -- |
| | 6/27/2006 | 1.3 | <30 | 7.1 | 644 | 13.5 | 6 | <4 | 7 | 6 | 1,050 | 110 | 32,300 | -- | -- | -- | -- |
| | 11/30/2006 | <1 | <30 | 7.5 | 540 | 11.7 | <5 | <4 | <5 | 6 | -- | -- | -- | -- | -- | -- | -- |
| | 6/8/2007 | 4 | 25.7 | 6.6 | 628 | 14.6 | 9 | 2 | 3 | 36 | 1,520 | 58 | 36,300 | 4 | <0.005 | <0.010 | 23 |
| | 11/15/2007 | 1.9 | <30 | 7.3 | 649 | 11.6 | 2 | 1 | 5 | 32 | -- | -- | -- | -- | -- | -- | -- |
| | 6/26/2008 | 1.7 | <30 | 7.1 | 659 | 16.3 | <5 | <1 | <5 | <5 | 300 | 59 | 33,900 | 2 | <0.005 | <0.010 | 23 |
| | 11/21/2008 | 1.3 | <30 | 6.8 | 667 | 6.6 | <5 | <1 | <5 | <5 | -- | -- | -- | -- | -- | -- | -- |
| | 6/25/2009 | <1 | <30 | 6.8 | 651 | 16.5 | <5 | 1 | <5 | <5 | 2,030 | 52 | 37,200 | 2 | <0.005 | <0.010 | 20 |
| | 11/18/2009 | 2 | <30 | 7.3 | 653 | 11.2 | <5 | <4 | <5 | <5 | -- | -- | -- | -- | -- | -- | -- |
| | 6/15/2010 | 2 | <30 | 7.4 | 646 | 15.7 | <5 | <4 | <5 | <5 | 1,250 | 36 | 32,200 | 2 | <0.005 | <0.020 | 19 |
| Dup. | 6/15/2010 | 2 | 31.2 | 7.4 | 652 | 15.7 | <5 | <4 | <5 | <5 | 1,220 | 35 | 31,700 | 2 | <0.005 | <0.020 | 20 |
| | 11/9/2010 | 2 | <30 | 7.2 | 651 | 13.3 | 10 | <4 | <5 | <5 | -- | -- | -- | -- | -- | -- | -- |
| | 6/21/2011 | 1.5 | <30 | 7.5 | 640 | 15.6 | 9 | <4 | <5 | <5 | 1,370 | 29 | 34,600 | <5 | <0.005 | <0.010 | 19 |
| Replicate | 6/21/2011 | -- | -- | -- | -- | -- | <5 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 11/15/2011 | 1 | 34 | 7.2 | 652 | 12.1 | <5 | <4 | 6 | 8 | -- | -- | -- | -- | -- | -- | -- |
| | **6/26/2012** | **1.5** | **<40** | **7.2** | **653** | **13.0** | **<5** | **<4** | **<5** | **<5** | **1,450** | **28** | **34,200** | **<5** | **<0.005** | **<0.02** | **20** |

See notes on page 16.

**Table 2**
**RACER Trust - Coldwater Road Landfill Facility**
**Post-Closure Monitoring - Historical Analytical Results**
**Physical Parameters, TOC, TOX, Metals, Chloride, Cyanide, Phenols, and Sulfate**

| Well ID | Sample Date | Indicator Parameters | | | | | Dissolved Metals (µg/L) | | | | | | | Inorganics (mg/L) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | TOC (mg/L) | TOX (µg/L) | pH | SpC | T | Cr | Cu | Ni | Zn | Fe | Mn | Na | Chloride | Cyanide | Phenols | Sulfate |
| | | MDEQ Residential Drinking Water Criteria | | | | | 100 (A) | 1,000 (A) | 100 (A) | 2,400 | | | | | | | |
| **B-28** | 11/21/2005 | -- | -- | 6.2 | 994 | 12.3 | -- | -- | -- | <5 | -- | -- | -- | -- | -- | -- | -- |
| Dup. | 11/21/2005 | -- | -- | 6.2 | -- | 12.3 | -- | -- | -- | 7 | -- | -- | -- | -- | -- | -- | -- |
| | 6/27/2006 | 3 | <30 | 7.1 | 828 | 13.2 | 5 | <4 | <5 | 18 | 2,380 | 210 | 17,000 | -- | -- | -- | -- |
| | 12/1/2006 | 2.4 | <30 | 7.5 | 812 | 12.3 | <5 | <4 | <5 | 5 | -- | -- | -- | -- | -- | -- | -- |
| Dup. | 12/1/2006 | 3.3 | <30 | 7.5 | 810 | 12.3 | <5 | <4 | <5 | <5 | -- | -- | -- | -- | -- | -- | -- |
| | 6/5/2007 | 2.1 | <30 | 6.8 | 845 | 10.6 | 9 | 2 | 3 | 6 | 1,690 | 160 | 25,100 | 12 | <0.005 | <0.010 | 87 |
| | 11/15/2007 | 2.5 | 15 | 6.8 | 816 | 9.1 | 3 | 2 | 5 | 11 | -- | -- | -- | -- | -- | -- | -- |
| | 6/27/2008 | 1.8 | <30 | 6.9 | 840 | 17.6 | <5 | 1 | <5 | 5 | 370 | 84 | 16,300 | 10 | <0.005 | <0.010 | 88 |
| | 11/19/2008 | 1.1 | <30 | 6.8 | 804 | 7.0 | <5 | <1 | <5 | <5 | -- | -- | -- | -- | -- | -- | -- |
| | 6/24/2009 | 1.1 | <30 | 7.0 | 822 | 19.5 | <5 | <1 | <5 | <5 | 204 | 132 | 14,600 | 10 | <0.005 | <0.010 | 84 |
| | 11/18/2009 | 2 | <30 | 6.9 | 814 | 11.6 | <5 | <4 | <5 | 20 | -- | -- | -- | -- | -- | -- | -- |
| | 6/16/2010 | 2 | <30 | 7.0 | 841 | 17.6 | <5 | <4 | <5 | <5 | 790 | 173 | 19,100 | 12 | <0.005 | <0.020 | 78 |
| | 11/10/2010 | 3 | <30 | 7.1 | 813 | 13.3 | 18 | <4 | <5 | <5 | -- | -- | -- | -- | -- | -- | -- |
| | 6/21/2011 | 1.5 | <30 | 7.2 | 837 | 14.1 | 9 | <4 | 5 | <5 | 1,380 | 130 | 23,400 | 12 | <0.005 | <0.010 | 80 |
| Replicate | 6/21/2011 | -- | -- | -- | -- | -- | <5 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 11/15/2011 | 2 | 160 | 7.2 | 823 | 12.5 | <5 | <4 | <5 | <5 | -- | -- | -- | -- | -- | -- | -- |
| | **6/26/2012** | **2** | **<40** | **6.5** | **849** | **13.0** | **<5** | **<4** | **<5** | **<5** | **1,960** | **84** | **29,800** | **12** | **<0.005** | **<0.02** | **80** |

See notes on page 16.

**Table 2**
**RACER Trust - Coldwater Road Landfill Facility**
**Post-Closure Monitoring - Historical Analytical Results**
**Physical Parameters, TOC, TOX, Metals, Chloride, Cyanide, Phenols, and Sulfate**

| Well ID | Sample Date | Indicator Parameters | | | | | Dissolved Metals (µg/L) | | | | | | | Inorganics (mg/L) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | TOC (mg/L) | TOX (µg/L) | pH | SpC | T | Cr | Cu | Ni | Zn | Fe | Mn | Na | Chloride | Cyanide | Phenols | Sulfate |
| | | MDEQ Residential Drinking Water Criteria | | | | | 100 (A) | 1,000 (A) | 100 (A) | 2,400 | | | | | | | |
| **B-29** | 11/21/2005 | -- | -- | 6.8 | 1,870 | 11.7 | -- | -- | -- | 11 | -- | -- | -- | -- | -- | -- | -- |
| | 6/27/2006 | -- | -- | 7.1 | 1,480 | 12.3 | 6 | <4 | <5 | 28 | 1,480 | 140 | 47,300 | -- | -- | -- | -- |
| | 12/1/2006 | -- | -- | 7.3 | -- | 11.4 | 8 | <4 | 5 | 9 | -- | -- | -- | -- | -- | -- | -- |
| | 6/5/2007 | 2.4 | 31.1 | 6.9 | 1,402 | 10.3 | 11 | 3 | 3 | 8 | 800 | 118 | 46,300 | 70 | <0.005 | <0.010 | 218 |
| | 11/15/2007 | 3.2 | 17.3 | 6.9 | 1,370 | 12.2 | 4 | 2 | 7 | 14 | -- | -- | -- | -- | -- | -- | -- |
| Dup. | 11/15/2007 | 2.7 | 16.5 | 6.9 | 1,380 | 12.2 | 3 | 2 | 7 | 10 | -- | -- | -- | -- | -- | -- | -- |

See notes on page 16.

**Table 2**
**RACER Trust - Coldwater Road Landfill Facility**
**Post-Closure Monitoring - Historical Analytical Results**
**Physical Parameters, TOC, TOX, Metals, Chloride, Cyanide, Phenols, and Sulfate**

| Well ID | Sample Date | Indicator Parameters | | | | | Dissolved Metals (µg/L) | | | | | | | Inorganics (mg/L) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | TOC (mg/L) | TOX (µg/L) | pH | SpC | T | Cr | Cu | Ni | Zn | Fe | Mn | Na | Chloride | Cyanide | Phenols | Sulfate |
| | | MDEQ Residential Drinking Water Criteria | | | | | 100 (A) | 1,000 (A) | 100 (A) | 2,400 | | | | | | | |
| **B-30** | 11/21/2005 | -- | -- | 6.8 | 1,450 | 12.1 | -- | -- | -- | 212 | -- | -- | -- | -- | -- | -- | -- |
| | 6/27/2006 | -- | -- | 7.1 | 1,330 | 12.3 | 6 | <4 | <5 | 16 | 2,690 | 100 | 21,300 | -- | -- | -- | -- |
| | 12/1/2006 | -- | -- | 7.3 | -- | 10.6 | 6 | <4 | <5 | 8 | -- | -- | -- | -- | -- | -- | -- |
| | 6/5/2007 | 2.7 | <30 | 7.0 | 1,542 | 10.9 | 11 | 4 | 4 | 17 | 1,260 | 171 | 25,000 | 35 | <0.005 | <0.010 | 452 |
| | 11/15/2007 | 2.4 | 17.4 | 7.0 | 1,510 | 9.3 | 4 | 3 | 7 | 14 | -- | -- | -- | -- | -- | -- | -- |

See notes on page 16.

**Table 2**
**RACER Trust - Coldwater Road Landfill Facility**
**Post-Closure Monitoring - Historical Analytical Results**
**Physical Parameters, TOC, TOX, Metals, Chloride, Cyanide, Phenols, and Sulfate**

| Well ID | Sample Date | Indicator Parameters | | | | | Dissolved Metals (µg/L) | | | | | | | Inorganics (mg/L) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | TOC (mg/L) | TOX (µg/L) | pH | SpC | T | Cr | Cu | Ni | Zn | Fe | Mn | Na | Chloride | Cyanide | Phenols | Sulfate |
| | | MDEQ Residential Drinking Water Criteria | | | | | 100 (A) | 1,000 (A) | 100 (A) | 2,400 | | | | | | | |
| **Equipment Blank** | 12/10/2004 | <1 | <30 | -- | -- | -- | <5 | <5 | <5 | 11 | <20 | 13 | 810 | <2 | <0.005 | <0.010 | <2 |
| | 6/8/2005 | <1 | <30 | -- | -- | -- | <5 | <5 | <5 | <5 | <20 | <5 | 120 | <5 | <0.005 | <0.010 | <5 |
| | 12/8/2005 | <1 | <30 | -- | 5 | -- | <5 | <4 | <5 | <10 | <100 | <20 | <1000 | -- | -- | -- | -- |
| | 6/28/2006 | <1 | <30 | -- | 12 | -- | <5 | <4 | <5 | <5 | <100 | <20 | <1000 | <1 | <0.005 | <0.010 | <1 |
| | 12/1/2006 | <1 | <30 | -- | 26 | -- | <5 | <4 | <5 | <5 | -- | -- | -- | -- | -- | -- | -- |
| | 6/8/2007 | <1 | 26 | -- | 13 | -- | <5 | 1 | 1 | 13 | <20 | 11 | 340 | <2 | <0.005 | <0.010 | <2 |
| | 11/15/2007 | <1 | <30 | -- | 4 | -- | <5 | 1 | 1 | 9 | -- | -- | -- | -- | -- | -- | -- |
| | 6/26/2008 | <1 | <30 | -- | 3 | -- | <5 | 1 | <5 | <5 | 100 | 7 | 420 | <2 | <0.005 | <0.010 | <2 |
| | 11/19/2008 | <1 | <30 | -- | 6 | -- | <5 | 1 | <5 | <5 | -- | -- | -- | -- | -- | -- | -- |
| | 6/25/2009 | <1 | <30 | -- | 24 | -- | <5 | <1 | <5 | <5 | 110 | <5 | 200 | <2 | <0.005 | <0.010 | <2 |
| | 11/19/2009 | 0.7 | <30 | -- | 5 | -- | <5 | <4 | <5 | <5 | -- | -- | -- | -- | -- | -- | -- |
| | 6/17/2010 | 0.4 | <30 | -- | 4 | -- | <5 | <4 | <5 | <5 | <20 | <5 | <200 | <2 | <0.005 | <0.020 | <2 |
| | 11/11/2010 | 1 | <30 | -- | 1.2 | -- | <5 | <4 | <5 | <5 | -- | -- | -- | -- | -- | -- | -- |
| | 6/22/2011 | 0.88 | <30 | -- | 3 | -- | <5 | <4 | <5 | <5 | <20 | <5 | 460 | <2 | <0.005 | <0.010 | <2 |
| | 11/16/2011 | <1 | 4.9 | -- | 1,330 | -- | <5 | <4 | <5 | <5 | -- | -- | -- | -- | -- | -- | -- |
| | **6/27/2012** | **<1** | **<20** | **--** | **3.2** | **--** | **<5** | **<4** | **<5** | **13** | **50** | **<5** | **6,350** | **<2** | **<0.005** | **<0.02** | **<2** |

Notes

1) < = Not detected.
2) NS = Not sampled, insufficient liquid encountered.
3) NR = No Result, insufficient sample volume.
4) T = Temperature in degrees Celsius.
5) -- = Not analyzed.
6) Dup = Duplicate sample.

Exceeds MDEQ Residential Drinking Water Criteria

7) A = Criterion is the state of Michigan drinking water standard established pursuant to Section 5 of 1976 PA 399, MCL 325.1005.
8) E = Criterion is the aesthetic drinking water value, as required by Section 20120a(5) of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA)

**Table 3**
**RACER Trust - Coldwater Road Landfill Facility**
**Post-Closure Monitoring - Analytical Results**
**Volatile Organics (VOC's)**

| Sample Tag | B-2D | B-7 | B-9 | B-18A | B-18A Dup | B-19AR | B-20D | B-21D | B-22D |
|---|---|---|---|---|---|---|---|---|---|
| Sample Date | 6/27/2012 | 6/27/2012 | 6/26/2012 | 6/27/2012 | 6/27/2012 | 6/27/2012 | 6/25/2012 | 6/26/2012 | 6/25/2012 |
| Volatile Organics (µg/L) | | | | | | | | | |
| Diethyl ether | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| Acetone | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 |
| Methyl iodide | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Carbon Disulfide | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| tert-Methyl butyl ether (MTBE) | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| Acrylonitrile | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 |
| 2-Butanone | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 |
| Dichlorodifluoromethane | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| Chloromethane | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| Vinyl chloride | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Bromomethane | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| Chloroethane | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| Trichlorofluoromethane | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| 1,1-Dichloroethene | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Methylene chloride | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| trans-1,2-Dichloroethene | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| 1,1-Dichloroethane | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| cis-1,2-Dichloroethene | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Tetrahydrofuran | <90 | <90 | <90 | <90 | <90 | <90 | <90 | <90 | <90 |
| Chloroform | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Bromochloromethane | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| 1,1,1-Trichloroethane | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| 4-Methyl-2-pentanone | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 |
| 2-Hexanone | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 |
| Carbon tetrachloride | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Benzene | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| 1,2-Dichloroethane | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Trichloroethene | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| 1,2-Dichloropropane | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Bromodichloromethane | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Dibromomethane | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| cis-1,3-Dichloropropene | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Toluene | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| trans-1,3-Dichloropropene | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| 1,1,2-Trichloroethane | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Tetrachloroethene | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| trans-1,4-Dichloro-2-butene | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Dibromochloromethane | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| 1,2-Dibromoethane | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Chlorobenzene | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| 1,1,1,2-Tetrachloroethane | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Ethylbenzene | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| p,m-Xylene | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 |
| o-Xylene | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Styrene | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Isopropylbenzene | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| Bromoform | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| 1,1,2,2-Tetrachloroethane | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| 1,2,3-Trichloropropane | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| n-Propylbenzene | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Bromobenzene | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| 1,3,5-Trimethylbenzene | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| tert-Butylbenzene | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| 1,2,4-Trimethylbenzene | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| sec-Butylbenzene | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| p-Isopropyltoluene | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| 1,3-Dichlorobenzene | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| 1,4-Dichlorobenzene | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| 1,2-Dichlorobenzene | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| 1,2,3-Trimethylbenzene | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| n-Butylbenzene | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Hexachloroethane | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| 1,2-Dibromo-3-chloropropane | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| 1,2,4-Trichlorobenzene | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| 1,2,3-Trichlorobenzene | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| Napthalene | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| 2-Methylnapthalene | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 |

Notes: EPA Method 8260 used for analysis.
Dup- Duplicate analysis

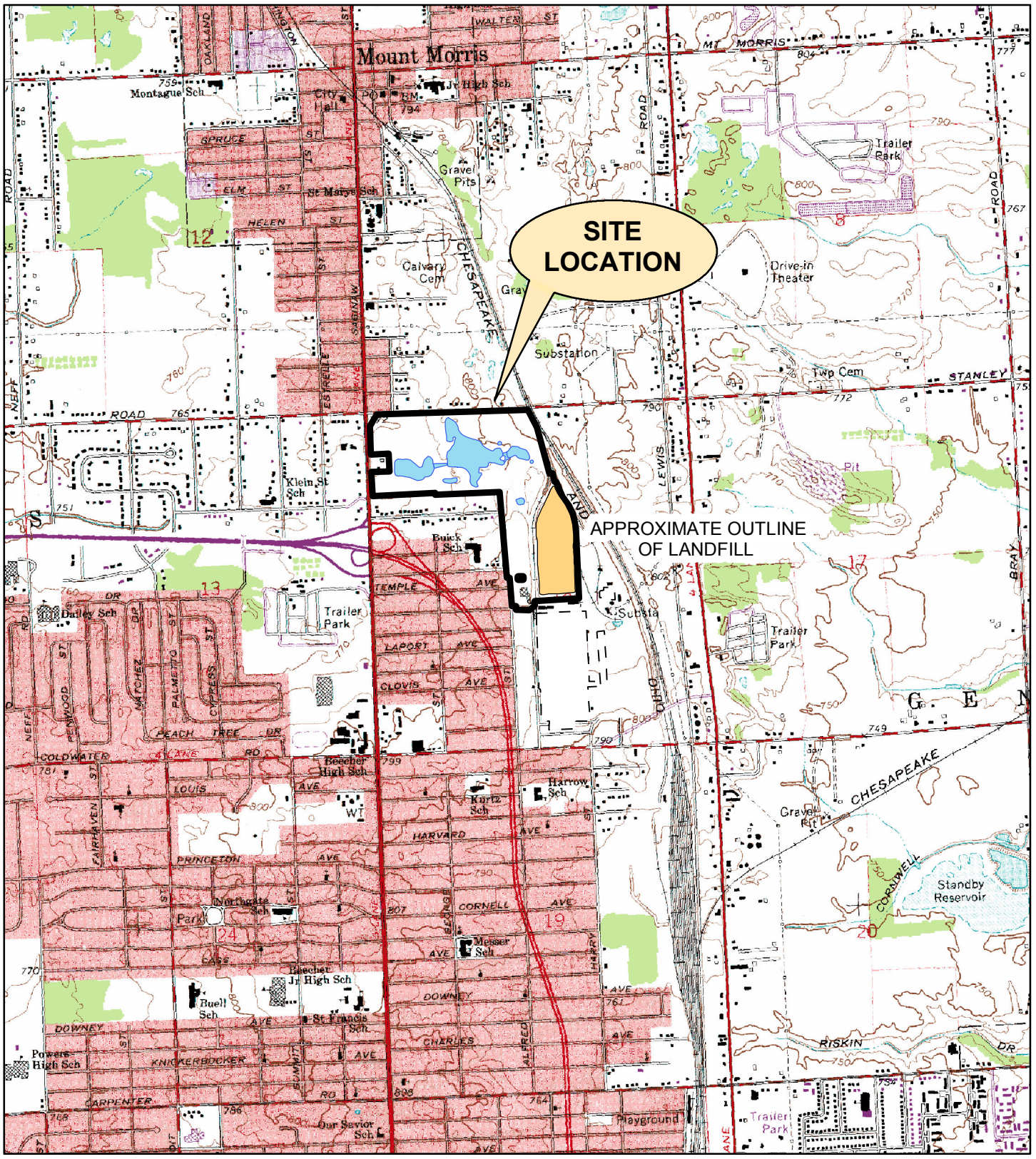
**Table 3**
**RACER Trust - Coldwater Road Landfill Facility**
**Post-Closure Monitoring - Analytical Results**
**Volatile Organics (VOC's)**

| Sample Tag | B-23DR | B-24R | B-27D | B-28 | TB-1 | TB-2 | EB-1 |
|---|---|---|---|---|---|---|---|
| Sample Date | 6/26/2012 | 6/26/2012 | 6/26/2012 | 6/26/2012 | 6/25/2012 | 6/27/2012 | 6/27/2012 |
| Volatile Organics (µg/L) | | | | | | | |
| Diethyl ether | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| Acetone | <50 | <50 | <50 | <50 | <50 | <50 | <50 |
| Methyl iodide | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Carbon Disulfide | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| tert-Methyl butyl ether (MTBE) | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| Acrylonitrile | <2 | <2 | <2 | <2 | <2 | <2 | <2 |
| 2-Butanone | <25 | <25 | <25 | <25 | <25 | <25 | <25 |
| Dichlorodifluoromethane | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| Chloromethane | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| Vinyl chloride | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Bromomethane | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| Chloroethane | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| Trichlorofluoromethane | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| 1,1-Dichloroethene | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Methylene chloride | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| trans-1,2-Dichloroethene | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| 1,1-Dichloroethane | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| cis-1,2-Dichloroethene | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Tetrahydrofuran | <90 | <90 | <90 | <90 | <90 | <90 | <90 |
| Chloroform | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Bromochloromethane | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| 1,1,1-Trichloroethane | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| 4-Methyl-2-pentanone | <50 | <50 | <50 | <50 | <50 | <50 | <50 |
| 2-Hexanone | <50 | <50 | <50 | <50 | <50 | <50 | <50 |
| Carbon tetrachloride | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Benzene | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| 1,2-Dichloroethane | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Trichloroethene | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| 1,2-Dichloropropane | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Bromodichloromethane | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Dibromomethane | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| cis-1,3-Dichloropropene | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Toluene | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| trans-1,3-Dichloropropene | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| 1,1,2-Trichloroethane | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Tetrachloroethene | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| trans-1,4-Dichloro-2-butene | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Dibromochloromethane | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| 1,2-Dibromoethane | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Chlorobenzene | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| 1,1,1,2-Tetrachloroethane | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Ethylbenzene | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| p,m-Xylene | <2 | <2 | <2 | <2 | <2 | <2 | <2 |
| o-Xylene | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Styrene | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Isopropylbenzene | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| Bromoform | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| 1,1,2,2-Tetrachloroethane | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| 1,2,3-Trichloropropane | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| n-Propylbenzene | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Bromobenzene | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| 1,3,5-Trimethylbenzene | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| tert-Butylbenzene | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| 1,2,4-Trimethylbenzene | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| sec-Butylbenzene | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| p-Isopropyltoluene | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| 1,3-Dichlorobenzene | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| 1,4-Dichlorobenzene | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| 1,2-Dichlorobenzene | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| 1,2,3-Trimethylbenzene | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| n-Butylbenzene | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Hexachloroethane | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| 1,2-Dibromo-3-chloropropane | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| 1,2,4-Trichlorobenzene | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| 1,2,3-Trichlorobenzene | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| Napthalene | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| 2-Methylnapthalene | <5 | <5 | <5 | <5 | <5 | <5 | <5 |

Notes: EPA Method 8260 used for analysis.
Dup- Duplicate analysis

# *FIGURES*

**FIGURE 1**

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PLOT DATE: 7/23/2012 kbs


RACER TRUST
COLDWATER ROAD LANDFILL FACILITY
FLINT, MICHIGAN

N

## SITE LOCATION MAP

0 1

Miles

JULY 2012
15388/48630/001

O'BRIEN & GERE ENGINEERS, INC.

M:\78\PROJECTS\15388 RACER Trust\48630\DOCS\REPORTS\2012-7 SEMI-ANNUAL FIGURES\002.MXD

STANLEY ROAD

DIRT ROAD / TRAIL

RAILROAD

WETLANDS

B-2D

B-19AR

B-19A

KLEIN STREET

B-20D

~ LANDFILL ~

B-24r

B-18A

DRAINAGE SWALE

B-21D

DRAINAGE CULVERT (TYP)

B-7

CONTROL BUILDING

B-9

ABANDONED RAILROAD

B-27D

B-28

B-22D

B-23Dr

B-14

B-30

B-29

FENCE

I-475

MORRIS HILLS

CONCRETE / GRAVEL ROAD

MAP USES DATA FROM THE MICHIGAN CENTER FOR GEOGRAPHIC INFORMATION

PLOT DATE: 7-23-2012 kbs

**FIGURE 2**

N

**LEGEND**

- LEACHATE COLLECTION SUMP
- ACCESS PORT FOR LEAK DETECTION VAULT
- MONITORING WELL
- ABANDONED WELL

RACER TRUST
COLDWATER ROAD
LANDFILL FACILITY
FLINT, MICHIGAN

**SITE LAYOUT**

0 150 300 450 600
Feet

O'BRIEN & GERE ENGINEERS, INC.

JULY 2012
15388/48630/002

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PLOT DATE: 7/23/2012 kbs

WETLANDS

RAILROAD

DIRT ROAD / TRAIL

B-19AR
(774.69)

B-19A

~ LANDFILL ~

B-24R
(801.77)

B-18A
(787.10)

CONTROL
BUILDING

B-7
(791.31)

B-9
(799.24)

B-28
(809.14)

ABANDONED
RAILROAD

B-30

B-14

B-29

FENCE

I-475

MORRIS HILLS

CONCRETE / GRAVEL ROAD

MAP USES DATA FROM THE MICHIGAN CENTER FOR GEOGRAPHIC INFORMATION

**FIGURE 3**

N

## LEGEND

- MONITORING WELL
- (803.71) GROUNDWATER ELEVATION
- ABANDONED WELL

RACER TRUST
COLDWATER ROAD
LANDFILL FACILITY
FLINT, MICHIGAN

# SHALLOW GROUNDWATER ELEVATION MAP JUNE 26, 2012

0 75 150 300 450 600
Feet

JULY 2012
15388/48630-003

O'BRIEN & GERE ENGINEERS, INC.

I:\078\PROJECTS\15388 RACER TRUST\48630\DOCS\REPORTS\2012-7 SA  FIGURES\004.MXD

WETLANDS

DIRT ROAD / TRAIL

B-2D
(750.23)

RAILROAD

750

749

748

747

746

745

744

743

742

741

740

739

738

737

B-20D
(744.69)

~ LANDFILL ~

B-21D
(740.97)

B-22D
(737.79)

B-23DR
(730.89)

B-27D
(736.87)

NOTE THAT THE WATER ELEVATION FOR MONITORING WELL B-23DR WAS NOT USED IN DEVELOPING THE GROUNDWATER POTENTIOMETRIC SURFACE

CONTROL BUILDING

ABANDONED RAILROAD

FENCE

CONCRETE / GRAVEL ROAD

MORRIS HILLS

I-475

MAP USES DATA FROM THE MICHIGAN CENTER FOR GEOGRAPHIC INFORMATION

PLOT DATE: 7/23/2012 kbs

# FIGURE 4

N

## LEGEND

⊕ MONITORING WELL

(748.45) GROUNDWATER ELEVATION

740 GROUNDWATER POTENTIOMETRIC SURFACE ELEVATION

RACER TRUST
COLDWATER ROAD
LANDFILL FACILITY
FLINT, MICHIGAN

# DRIFT AQUIFER GROUNDWATER POTENTIOMETRIC SURFACE MAP JUNE 26, 2012

0 75 150 300 450 600
Feet

JULY 2012
15388/48630-004

O'BRIEN & GERE ENGINEERS, INC.

# *APPENDICES*

# *APPENDIX A*

# *Sampling Procedures*

**GROUND WATER SAMPLING STANDARD OPERATING PROCEDURE**
**COLDWATER ROAD LANDFILL**
**FLINT, MICHIGAN**

# TABLE OF CONTENTS



**List of Forms** *(Following Text)*

Ground Water Sampling Log

# Introduction

This procedure is for the collection of ground water samples for laboratory analysis.

The objective of most ground water quality monitoring programs is to obtain samples that are representative of existing ground water conditions, or samples that retain the physical and chemical properties of the ground water within an aquifer.

One of the most important aspects of ground water sampling is acquiring samples that are free of suspended silt, sediment, or other fine grained particulates. Fine grain materials may often have a variety of chemical components sorbed to the particle or have the ability to sorb chemicals from the aqueous phase to the particle, which will bias the subsequent analytical results.

Constituents known to have an affinity for fine-grained particulates are: polychlorinated biphenyls (PCBs), semi-volatile organic compounds (SVOCs), and inorganics. Monitoring programs where these constituents are suspected or known to be prevalent must employ sampling methods that minimize particulate presence.

The sampling method of "preference" for sites where particulate sorption is an issue is the "low stress/low flow" technique described herein. Experience has shown that the "low stress/low flow" technique typically achieves representative ground water samples with minimal particulate interference.

Lastly, in “extreme” cases “ultra-low flow” techniques have been employed at select sites where “low stress/low flow” methods were used, yet particulate-sensitive constituents continue to bias the analytical results. Ultra-low flow techniques are conducted at purging rates below 100 mL per minute, and should only be utilized after careful review and a procedural variance has been approved.

# GM Procedures Referenced

- FMG 1.4 - Data Recording - Field Books/Digital Recording.
- FMG 5.1 - Water Level Measurements.
- FMG 8.0 - Field Instruments - Use/Calibration
- FMG 9.0 - Equipment Decontamination.

## Procedural Guidelines

The following describes the "Low Stress/Low Flow Methods" technique for ground water sampling.

"Low Stress/Low Flow Methods" will be employed at the Coldwater Road Landfill site to collect ground water samples truly representative of the ground water present, and to minimize the impact of sediment/ colloid presence. Analyses typically sensitive to turbidity/sediment issues are PCBs, SVOCs, and inorganic constituents.

Preparatory Requirements

1. Verify well identification and location using borehole log details and location layout figures. Note the condition of the well and inform the Project Manager of any required repair work.

2. For new wells, prior to opening the well cap, measure the breathing space above the well casing with a PID to establish baseline levels. Repeat this measurement once the well cap is opened. If either of these measurements exceeds the air quality criteria in the Health and Safety Plan, field personnel should adjust their PPE accordingly.

3. Prior to commencing the ground water purging/sampling tasks, water level and total well depth measurements must be obtained to determine the volume of water in the well. Refer to FMG 5.1 - Water Level Measurements for details, as necessary. In some settings it maybe necessary to allow time for the water level to equilibrate. This condition exists if a watertight seal exists at the well cap and the water level has fluctuated above the top of screen, creating a vacuum or pressurized area within the well casing. Three water level checks will verify static water level conditions or changing conditions.

4. Calculate the water volume in the well. Typically overburden well volumes consider only the quantity of water standing in the well screen and riser; bedrock well volumes are calculated on the quantity of water within the open core hole and within the overburden casing.

5. Estimate the natural ground water flow rate into well to determine the approximate pumping rate for purging/sampling activities.

Well Purging and Stabilization Monitoring (Low Stress/Low Flow Method)

1. The GM method of preference for ground water sampling will be the low stress/low flow method described below.

2. Bladder pumps/submersible variable rate pumps (i.e., Grundfos™ Rediflo or equivalent) or peristaltic pumps are typically employed.

3. Slowly lower the pump, safety cable, tubing and electrical lines into the well to the depth specified by the project requirements. The pump or tubing should be placed in the well as early as possible before sampling is initiated (this is to minimize well disturbance). Peristaltic tubing placement should include a tubing "clamp" at the well head, to minimize vibration transfer into

the water column. The pump or tubing intake must be at the mid-point of the well screen to prevent disturbance and re-suspension of any sediment in the screen base. Bedrock well sampling may require pump/tubing placement in specific fracture zone areas or other areas, which will be identified within the project Work Plan.

4. Before starting the pump, measure the water level again with the pump in the well leaving the water level measuring device in the well when completed.

5. Purge the well at 100 to a maximum of 500 milliliters per minute (mL/min). During purging, the water level should be monitored approximately every 5 minutes, or as appropriate. A steady flow rate should be maintained which results in drawdown of 0.3 ft or less. The rate of pumping should not exceed the natural flow rate conditions of the well being sampled. Care should be taken to maintain pump suction and to avoid entrainment of air in the tubing. Record adjustments made to the pumping rates and water levels immediately after each adjustment.

   If drawdowns of 0.3 feet or less can not be maintained because of the permeability of the formation at a particular well location, "ultra-low flow" purge techniques will be employed. Ultra-low flow purge rates are rates below 100 mL/min. However, if ultra-low flow purging still results in the well purging "dry," the well will be allowed to recharge for the balance of the day. As a sufficient volume of water enters the well, field parameter measurements will be collected and purging will continue up to a maximum of 24 hours from the beginning of purging, at which time the ground water sample from the well will be collected.

6. Calibrate field instrument and document calibration activity. Calibration shall be performed in accordance with manufacturer's recommendations and FMG 8.0 - Field Instruments - Use/Calibration.

7. During the purging of the well, monitor and record the field indicator parameters (pH, temperature, conductivity, oxidation-reduction (redox) reaction potential (ORP), dissolved oxygen (DO), and turbidity) approximately every 5 minutes. Stabilization is considered achieved when the final ground water flow rate is achieved, and three consecutive readings for each parameter are within the following limits:

   - pH ±0.1 pH units of the average value of the three readings;
   - temperature ±3 percent of the average value of the three readings;
   - conductivity ±0.005 milliSiemen per centimeter (mS/cm) of the average value of the three readings for conductivity <1 mS/cm and ±0.01 mS/cm of the average value of the three readings for conductivity >1 MS/cm;
   - ORP ±10 millivolts (mV) of the average value of the three readings;
   - DO ±10 percent of the average value of the three readings; and
   - turbidity ±10 percent of the average value of the three readings, or a final value of less than 5 nephelometric turbidity units (NTU).

8. Should stabilization not be achieved for all field parameters, purging is continued until a maximum of 3 well volumes have been purged from the well. After purging 3 well volumes, purging is continued if the purge water remains visually turbid and appears to be clearing, or if stabilization parameters are varying slightly outside of the stabilization criteria listed above and appear to be approaching stabilization.

9. The pump must not be removed from the well between purging and sampling.

Sampling Techniques

1. Samples are typically collected directly from the pump with the ground water being discharged directly into the appropriate sample container. Avoid handling the interior of the bottle or bottle cap and don new gloves for each well sampled to avoid contamination of the sample.

2. Order of sample collection:
   - VOCs;
   - SVOCs and PCBs;
   - Total organic carbon (TOC);
   - Total organic halogens (TOX);
   - Extractable organics;
   - Total metals;
   - Dissolved metals;
   - Phenols;
   - Cyanide;
   - Sulfate and chloride; and
   - Nitrate and ammonia.

3. For low stress/low flow sampling, samples should be collected at a flow rate between 100 and 250 mL/min and such that drawdown of the water level within the well does not exceed the maximum allowable drawdown of 0.3 ft, except as noted in item 5. under well purging and stabilization monitoring.

4. The pumping rate used to collect a sample for VOCs should not exceed 100 mL/min. Samples should be transferred directly to the final container 40 mL glass vials completely full and topped with a teflon cap. Once capped the vial must be inverted and tapped to check for headspace/air presence (bubbles). If air is present the sample vial will be discarded, and re-collected until free of air.

5. Field filtration will be performed as indicated in the Post-Closure Care Plan. Sediment presence can interfere or bias sample results; false positive findings have been observed when turbid samples for inorganic (and other analytes) are analyzed. Field filtration can eliminate this concern; generally applicable to only inorganic/PCB analysis. In-line disposable filter cartridges are generally the easiest and quickest method for field filtration.

6. Sample labels/sample identification. All samples must be labeled with:

   - A unique sample number;
   - Date and time;
   - Parameters to be analyzed;
   - Project Reference ID; and
   - Sampler's initials.

7. Labels should be secured to the bottle(s) and should be written in indelible inks.

## Equipment/Materials

1. pH, conductivity, nephlometric (i.e., turbidity), ORP, DO, and temperature multimeter. A separate turbidity meter may be utilized if necessary.

2. Flow-through cell for multimeter.

3. Field filtration units (if required).

4. Purging/sampling equipment:
   - Peristaltic pump (not suitable for VOCs [1]/SVOCs, or drawing water from depths greater than 25 ft [2]);
   - Suction pumps (not suitable for VOCs/SVOCs, or depths greater than 25 ft);
   - Submersible pumps (suitable for VOCs/SVOCs only at low flow rates); and
   - Bladder pumps (suitable for VOCs/SVOCs).

5. Water level probe.

6. Sampling materials (containers, log book/forms, coolers, chain-of-custody).

7. Post-Closure Care Plan.

8. Health and Safety Plan.

*Note[1]: Peristaltic pump use for VOC collection is acceptable on select EPA/RCRA and MDEQ sites; this technique has gained acceptance in select areas (MDEQ allows VOC sampling with the peristaltic pump).*

*Note[2]: Exception is noted in locations that the suction line can be placed at the desired sample depth (i.e., 100 ft), and the natural recharge maintains a water level within 25 feet of the ground surface.*

Field Notes

Field notes must document field activities and measurements collected during the sampling activities. FMG 1.4 - Data Recording - Field Books/Digital Recording describes the data/recording procedure for field activities. The log book/field file should document the following for each well sampled:

- Identification of well.
- PID readings before and after well opening (if required).
- Well depth.
- Static water level depth and measurement technique.
- Sounded well depth.
- Presence of immiscible layers and detection/collection method.
- Well yield – high or low.
- Purge volume, pumping rate, and final disposition.
- Time well purged.
- Measured field parameters and meter calibration records.
- Purge/sampling device used.
- Well sampling sequence.
- Sample appearance.
- Sample odors.
- Sample volume.
- Types of sample containers and sample identification.
- Preservative(s) used.
- Parameters requested for analysis.
- Field analysis data and method(s).
- Sample distribution and transporter.
- Analytical laboratory.
- Chain-of-custody number for shipment to laboratory.
- Field observations on sampling event.
- Name(s) of sampling personnel.
- Climatic conditions including air temperature.
- Problems encountered and any deviations made from the established sampling protocol.

A standard ground water sampling log form for documentation and reporting ground water purging and sampling events will be utilized.

Ground water/Decontamination Fluid Disposal

The Post-Closure Care Plan will identify the required disposal procedures for ground water and decontamination fluids. Ground water disposal methods will vary on a case-by-case basis but may range from:

1. Off-site treatment at private treatment/disposal facilities or public owned treatment facilities.

2. On-site treatment at Facility-operated facilities.

3. Direct discharge to the surrounding ground surface, allowing ground water infiltration to the underlying subsurface regime.

Decontamination fluids should be segregated and collected separately from wash waters/ground water containers.

## References

*ASTM D5474 - Guide for Selection of Data Elements for Ground water Investigations.*

*ASTM D4696 - Guide for Pore-Liquid Sampling from the Vadose Zone.*

*ASTM D5979 - Guide for Conceptualization and Characterization of Ground water Systems.*

*ASTM D5903 - Guide for Planning and Preparing for a Ground water Sampling Event.*

*ASTM D4448 - Standard Guide for Sampling Ground water Wells.*

*ASTM D6001 - Standard Guide for Direct Push Water Sampling for Geo-Environmental Investigations.*

*USEPA Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedures (EPA/540/S -95/504).*

*USEPA RCRA Ground water Monitoring: Draft Technical Guidance (EPA/530-R-93-001).*

*MDEQ RRD Operational Memorandum No. 2: Sampling and Analysis.*

# *APPENDIX B*

# *Groundwater Sampling Logs*

**O'Brien & Gere Engineers, Inc.** — **Ground Water Sampling Log**

| | | | |
|---|---|---|---|
| Date | 6/27/12 | | |
| Site Name | Coldwater Road Landfill | Weather | Sunny, 80° |
| Location | Flint, MI | Well # | B-2D |
| Project No. | 48630 | Evacuation Method | submersible pump |
| Personnel | C. Cox / K. Schneider | Sampling Method | Low-flow |

**Well Information:**

| | | |
|---|---|---|
| Depth of Well * | 72.97 ft. | Water Volume /ft. for: |
| Depth to Water * | 54.95 ft. | X 2" Diameter Well = 0.163 X LWC |
| Length of Water Column | 18.02 ft. | 4" Diameter Well = 0.653 X LWC |
| Volume of Water in Well | 2.93 gal.(s) | 6" Diameter Well = 1.469 X LWC |

Volume removed before sampling: 1.5 gal.(s)
Did well go dry? No

* Measurements taken from: [X] Well Casing [ ] Protective Casing [ ] (Other, Specify)

**Instrument Calibration:** Calibrated within Range

| | |
|---|---|
| pH | Yes |
| ORP | Yes |
| Conductivity | Yes |
| DO | Yes |

**Water parameters:**

| Time | Pumping Rate (ml/min.) | Drawdown (ft) 0.3 feet or less | Temperature (Celsius) ±3 percent | Conductivity (mS/cm) ±0.005 (mS/cm) | Dissolved Oxygen (mg/L) ±10 percent | pH ±0.1 pH units | ORP (mV) ±10 millivolts | Turbidity (NTUs) ±10 percent |
|---|---|---|---|---|---|---|---|---|
| 1040 initial | 100 initial | 54.95 initial | 17.30 initial | 0.882 initial | 11.91 initial | 7.50 initial | 85.7 initial | 23.0 initial |
| 1045 | 100 | 54.95 | 12.99 | 0.936 | 6.02 | 6.77 | 56.6 | 22.5 |
| 1050 | 100 | 54.95 | 12.61 | 0.919 | 5.00 | 6.64 | 44.4 | 21.8 |
| 1055 | 100 | 54.95 | 12.66 | 0.878 | 3.89 | 6.66 | 36.7 | 14.3 |
| 1100 | 100 | 54.96 | 12.60 | 0.835 | 2.98 | 6.73 | 27.6 | 9.29 |
| 1105 | 100 | 54.96 | 12.68 | 0.802 | 2.28 | 6.83 | 15.9 | 8.04 |
| 1110 | 100 | 54.96 | 12.71 | 0.782 | 1.89 | 6.96 | 4.6 | 6.96 |
| 1115 | 100 | 54.96 | 12.68 | 0.774 | 1.68 | 6.99 | -3.4 | 6.72 |
| 1120 | 100 | 54.96 | 12.70 | 0.772 | 1.62 | 7.00 | -3.0 | 6.31 |
| 1125 | 100 | 54.96 | 12.69 | 0.770 | 1.60 | 7.00 | -3.2 | 5.99 |

**Water Sample:**
Time Collected: 1130

| Physical Appearance at Start | | Physical Appearance at Sampling | |
|---|---|---|---|
| Color | Clear | Color | Clear |
| Odor | — | Odor | — |
| Turbidity (> 100 NTU) | Low | Turbidity (> 100 NTU) | Low |
| Sheen/Free Product | — | Sheen/Free Product | — |

**Samples collected:**

| Analyses | # Bottles | Bottle Size/Type | Preservative | Field Filtered |
|---|---|---|---|---|
| VOCs | 2 | 40 ml Glass | HCL | |
| Dissolved Metals - Cu, Cr, Ni, Zn, Fe, Mn, Na | 1 | 125 ml Plastic | $HNO_3$ | yes |
| Cyanide | 1 | 125 ml Plastic | NAOH | |
| Phenols | 1 | 125 ml Plastic | $H_2SO_4$ | |
| TOC | 2 | 40 ml Glass | $H_2SO_4$ | |
| TOX | 1 | 125 ml Plastic | $H_2SO_4$ | |
| Sulfate, Chlorides, SpC | 1 | 500 ml Plasitc | None | |

Notes:

**O'Brien & Gere Engineers, Inc.** — **Ground Water Sampling Log**

| | | | |
|---|---|---|---|
| Date | 6/26/12 | | |
| Site Name | Coldwater Road Landfill | Weather | Sunny 70°F |
| Location | Flint, MI | Well # | B-7 |
| Project No. | 48630 | Evacuation Method | peristaltic pump |
| Personnel | KBS | Sampling Method | Low-flow |

**Well Information:**

| | | | |
|---|---|---|---|
| Depth of Well * | 6/27/12: 31.59 | ft. | Water Volume /ft. for: |
| Depth to Water * | 25.76: 23.89 | ft. | X 2" Diameter Well = 0.163 X LWC |
| Length of Water Column | | ft. | 4" Diameter Well = 0.653 X LWC |
| Volume of Water in Well | | gal.(s) | 6" Diameter Well = 1.469 X LWC |

Volume removed before sampling: 1 gal.(s)
Did well go dry? Yes

* Measurements taken from: [X] Well Casing [ ] Protective Casing [ ] (Other, Specify)

**Instrument Calibration:**

| | Calibrated within Range |
|---|---|
| pH | Yes |
| ORP | Yes |
| Conductivity | Yes |
| DO | Yes |

**Water parameters:**

| Time | Pumping Rate (ml/min.) | Drawdown (ft) 0.3 feet or less | Temperature (Celsius) ±3 percent | Conductivity (mS/cm) ±0.005 (mS/cm) | Dissolved Oxygen (mg/L) ±10 percent | pH ±0.1 pH units | ORP (mV) ±10 millivolts | Turbidity (NTUs) ±10 percent |
|---|---|---|---|---|---|---|---|---|
| 1030 | initial 100 | initial 24.80 | initial 16.93 | initial 1.225 | initial 9.24 | initial 6.97 | initial -60.9 | initial 116 |
| 1035 | < 100 | 25.17 | 15.52 | 1.087 | 2.84 | 5.73 | 14.0 | 74 |
| 1040 | | 25.70 | 15.31 | 1.020 | 3.88 | 5.87 | 18.5 | 62 |
| 1045 | | 26.09 | 15.09 | 0.955 | 5.15 | 6.42 | -5.1 | 59 |
| 1050 | | 26.73 | 14.96 | 0.940 | 5.25 | 6.49 | -8.5 | 41 |
| 1055 | | 26.78 | 14.98 | 1.075 | 5.14 | 6.38 | -14.8 | 28 |
| 1100 | | 26.85 | 15.20 | 1.172 | 1.68 | 6.04 | -53.9 | 26 |
| 1105 | | 26.95 | 15.07 | 1.210 | 1.39 | 6.74 | -69.3 | 20 |
| 1110 | | 27.02 | 15.02 | 1.236 | 0.95 | 6.77 | -85.3 | 18 |
| | | | | | | | | |

**Water Sample:** Time Collected 6/27/12 845

| Physical Appearance at Start | | Physical Appearance at Sampling | |
|---|---|---|---|
| Color | Slightly cloudy | Color | Clear |
| Odor | None | Odor | None |
| Turbidity (> 100 NTU) | MED | Turbidity (> 100 NTU) | Low |
| Sheen/Free Product | None | Sheen/Free Product | None |

**Samples collected:**

| Analyses | # Bottles | Bottle Size/Type | Preservative | Field Filtered |
|---|---|---|---|---|
| VOCs | 2 | 40 ml Glass | HCL | |
| Dissolved Metals - Cu, Cr, Ni, Zn, Fe, Mn, Na | 1 | 125 ml Plastic | $HNO_3$ | yes |
| Cyanide | 1 | 125 ml Plastic | NAOH | |
| Phenols | 1 | 125 ml Plastic | $H_2SO_4$ | |
| TOC | 2 | 40 ml Glass | $H_2SO_4$ | |
| TOX | 1 | 125 ml Plastic | $H_2SO_4$ | |
| Sulfate, Chlorides, SpC | 1 | 500 ml Plasitc | None | |

Notes: Well pumped Dry Collected Sample on 6/27/12 - 845 am

**O'Brien & Gere Engineers, Inc.** — **Ground Water Sampling Log**

| | | | |
|---|---|---|---|
| Date | 6/26/12 | | |
| Site Name | Coldwater Road Landfill | Weather | Sunny 80°F |
| Location | Flint, MI | Well # | B-9 |
| Project No. | 48630 | Evacuation Method | peristaltic pump |
| Personnel | ABS | Sampling Method | Low-flow |

**Well Information:**

| | | | |
|---|---|---|---|
| Depth of Well * | 25.35 ft. | Water Volume /ft. for: | |
| Depth to Water * | 9.92 ft. | X | 2" Diameter Well = 0.163 X LWC |
| Length of Water Column | ft. | | 4" Diameter Well = 0.653 X LWC |
| Volume of Water in Well | gal.(s) | | 6" Diameter Well = 1.469 X LWC |

Volume removed before sampling: 1 1/2 gal.(s)

Did well go dry? NO

* Measurements taken from: [X] Well Casing [ ] Protective Casing [ ] (Other, Specify)

**Instrument Calibration:** Calibrated within Range

| | |
|---|---|
| pH | Yes |
| ORP | Yes |
| Conductivity | Yes |
| DO | Yes |

**Water parameters:**

| Time | Pumping Rate (ml/min.) | Drawdown (ft) | Temperature (Celsius) | Conductivity (mS/cm) | Dissolved Oxygen (mg/L) | pH | ORP (mV) | Turbidity (NTUs) |
|---|---|---|---|---|---|---|---|---|
| | 100 | 0.3 feet or less | ±3 percent | ±0.005 (mS/cm) | ±10 percent | ±0.1 pH units | ±10 millivolts | ±10 percent |
| 1345 initial | 100 | 11.15 initial | 13.64 initial | 3.140 initial | 1.02 initial | 6.00 initial | -125.8 initial | 128 |
| 1350 | | 11.48 | 13.87 | 3.122 | 0.86 | 5.98 | -127.2 | 48 |
| 1355 | | 12.28 | 13.55 | 3.118 | 0.64 | 5.94 | -139.0 | 19 |
| 1400 | | 13.29 | 13.17 | 3.106 | 0.52 | 5.99 | -152.3 | 16 |
| 1405 | | 14.51 | 13.30 | 3.084 | 0.39 | 6.23 | -151.2 | 14 |
| 1410 | | 15.22 | 13.87 | 3.050 | 0.29 | 6.44 | -152.2 | 10 |
| 1415 | | 15.99 | 14.06 | 3.047 | 0.29 | 6.50 | -137.8 | 12 |
| 1420 | | 16.45 | 13.95 | 3.048 | 0.26 | 6.53 | -141.7 | 10 |
| | | | | | | | | |
| | | | | | | | | |

**Water Sample:**
Time Collected: 1420

| Physical Appearance at Start | | Physical Appearance at Sampling | |
|---|---|---|---|
| Color | Cloudy | Color | Clear |
| Odor | NONE | Odor | NONE |
| Turbidity (> 100 NTU) | HIGH | Turbidity (> 100 NTU) | LOW |
| Sheen/Free Product | NONE | Sheen/Free Product | NONE |

**Samples collected:**

| Analyses | # Bottles | Bottle Size/Type | Preservative | Field Filtered |
|---|---|---|---|---|
| VOCs | 2 | 40 ml Glass | HCL | |
| Dissolved Metals - Cu, Cr, Ni, Zn, Fe, Mn, Na | 1 | 125 ml Plastic | $HNO_3$ | yes |
| Cyanide | 1 | 125 ml Plastic | NAOH | |
| Phenols | 1 | 125 ml Plastic | $H_2SO_4$ | |
| TOC | 2 | 40 ml Glass | $H_2SO_4$ | |
| TOX | 1 | 125 ml Plastic | $H_2SO_4$ | |
| Sulfate, Chlorides, SpC | 1 | 500 ml Plasitc | None | |

Notes:

**O'Brien & Gere Engineers, Inc.** — **Ground Water Sampling Log**

| | | | |
|---|---|---|---|
| Date | 6/27/12 | Weather | Sunny 80's °F |
| Site Name | Coldwater Road Landfill | Well # | B-18A |
| Location | Flint, MI | Evacuation Method | peristaltic pump |
| Project No. | 48630 | Sampling Method | Low-flow |
| Personnel | ABS / | | |

**Well Information:**

| | | | |
|---|---|---|---|
| Depth of Well * | 43.4 ft. | Water Volume /ft. for: | |
| Depth to Water * | 25.15 ft. | X | 2" Diameter Well = 0.163 X LWC |
| Length of Water Column | ft. | | 4" Diameter Well = 0.653 X LWC |
| Volume of Water in Well | gal.(s) | | 6" Diameter Well = 1.469 X LWC |

Volume removed before sampling: 1 gal.(s)

Did well go dry? NO

* Measurements taken from: [X] Well Casing [ ] Protective Casing [ ] (Other, Specify)

**Instrument Calibration:** Calibrated within Range

| | |
|---|---|
| pH | yes |
| ORP | yes |
| Conductivity | yes |
| DO | yes |

**Water parameters:**

| Time | Pumping Rate (ml/min.) | Drawdown (ft) 0.3 feet or less | Temperature (Celsius) ±3 percent | Conductivity (mS/cm) ±0.005 (mS/cm) | Dissolved Oxygen (mg/L) ±10 percent | pH ±0.1 pH units | ORP (mV) ±10 millivolts | Turbidity (NTUs) ±10 percent |
|---|---|---|---|---|---|---|---|---|
| 940 initial | 25.79 | 100 | 14.60 | 1.203 | 5.85 | 6.88 | 189.0 | 5 |
| 945 | 26.18 | <100 | 13.98 | 1.154 | 3.62 | 5.59 | 226.4 | 4 |
| 950 | 26.71 | \| | 14.40 | 1.144 | 2.73 | 5.70 | 172.6 | 2 |
| 955 | 27.21 | \| | 14.41 | 1.138 | 2.69 | 6.25 | 109.5 | 2 |
| 1000 | 27.69 | \| | 14.07 | 1.140 | 2.57 | 6.54 | 62.8 | 1 |
| 1005 | 28.22 | \| | 14.00 | 1.132 | 2.44 | 6.48 | 37.7 | 2 |
| 1010 | 28.74 | \| | 14.22 | 1.131 | 2.37 | 6.74 | 3.4 | 1 |
| 1015 | 29.30 | \| | 14.16 | 1.133 | 2.37 | 6.93 | -23.1 | 2 |
| 1020 | 29.59 | \| | 14.24 | 1.131 | 2.20 | 6.94 | -29.3 | 0 |
| 1025 | 29.95 | ↓ | 14.39 | 1.131 | 2.15 | 6.99 | -32.8 | 0 |

**Water Sample:**
Time Collected: 1025

| Physical Appearance at Start | | Physical Appearance at Sampling | |
|---|---|---|---|
| Color | Clear | Color | Clear |
| Odor | NONE | Odor | NONE |
| Turbidity (> 100 NTU) | Low | Turbidity (> 100 NTU) | Low |
| Sheen/Free Product | NONE | Sheen/Free Product | NONE |

**Samples collected:**

| Analyses | # Bottles | Bottle Size/Type | Preservative | Field Filtered |
|---|---|---|---|---|
| VOCs | 2 | 40 ml Glass | HCL | |
| Dissolved Metals - Cu, Cr, Ni, Zn, Fe, Mn, Na | 1 | 125 ml Plastic | $HNO_3$ | yes |
| Cyanide | 1 | 125 ml Plastic | NAOH | |
| Phenols | 1 | 125 ml Plastic | $H_2SO_4$ | |
| TOC | 2 | 40 ml Glass | $H_2SO_4$ | |
| TOX | 1 | 125 ml Plastic | $H_2SO_4$ | |
| Sulfate, Chlorides, SpC | 1 | 500 ml Plasitc | None | |

Notes: DUP-3 collected well pumped dry during sampling

**O'Brien & Gere Engineers, Inc.** — **Ground Water Sampling Log**

| | | | |
|---|---|---|---|
| Date | 6/27/12 | Weather | Sunny, 80s |
| Site Name | Coldwater Road Landfill | Well # | B-19Ar |
| Location | Flint, MI | Evacuation Method | submersible pump |
| Project No. | 48630 | Sampling Method | Low-flow |
| Personnel | C. Cox/K. Schneider | | |

**Well Information:**

| | | |
|---|---|---|
| Depth of Well * | 46.5 | ft. |
| Depth to Water * | 38.46 | ft. |
| Length of Water Column | 8.04 | ft. |
| Volume of Water in Well | 1.31 | gal.(s) |

Water Volume /ft. for:
- X 2" Diameter Well = 0.163 X LWC
- 4" Diameter Well = 0.653 X LWC
- 6" Diameter Well = 1.469 X LWC

Volume removed before sampling: 2.0 gal.(s)
Did well go dry? No

* Measurements taken from: [X] Well Casing [ ] Protective Casing [ ] (Other, Specify)

**Instrument Calibration:** Calibrated within Range

| | |
|---|---|
| pH | Yes |
| ORP | Yes |
| Conductivity | Yes |
| DO | Yes |

**Water parameters:**

| Time | Pumping Rate (ml/min.) | Drawdown (ft) 0.3 feet or less | Temperature (Celsius) ±3 percent | Conductivity (mS/cm) ±0.005 (mS/cm) | Dissolved Oxygen (mg/L) ±10 percent | pH ±0.1 pH units | ORP (mV) ±10 millivolts | Turbidity (NTUs) ±10 percent |
|---|---|---|---|---|---|---|---|---|
| 0850 initial | 100 | 38.89 | 15.94 | 1.024 | 11.71 | 8.08 | 193.4 | Over limit |
| 0855 | 100 | 39.56 | 13.16 | 1.083 | 4.67 | 7.44 | 219.9 | Over limit |
| 0900 | 100 | 39.56 | 12.35 | 0.961 | 3.18 | 7.04 | 228.4 | over limit |
| 0905 | 100 | 39.56 | 12.32 | 1.003 | 3.33 | 6.66 | 218.1 | 464 |
| 0910 | 100 | 39.56 | 13.10 | 1.078 | 2.74 | 6.41 | 190.6 | 262 |
| 0915 | 100 | 39.56 | ~~13.78~~ 13.12 | 1.075 | 2.92 | 6.84 | 142.9 | 148 |
| 0920 | 100 | 39.56 | 13.15 | 1.079 | 2.40 | 7.51 | 97.0 | 108 |
| 0925 | 100 | 39.57 | 13.18 | 1.082 | 2.42 | 7.76 | 72.4 | 105 |
| 0930 | 100 | 39.57 | 13.20 | 1.073 | 2.21 | 7.78 | 50.5 | 91.5 |
| 0935 | 100 | 39.57 | 13.21 | 1.068 | 2.03 | 7.78 | 35.6 | 71.9 |

**Water Sample:**
Time Collected: 0955

| Physical Appearance at Start | | Physical Appearance at Sampling | |
|---|---|---|---|
| Color | Cloudy | Color | Clear |
| Odor | — | Odor | — |
| Turbidity (> 100 NTU) | High | Turbidity (> 100 NTU) | Low |
| Sheen/Free Product | | Sheen/Free Product | |

**Samples collected:**

| Analyses | # Bottles | Bottle Size/Type | Preservative | Field Filtered |
|---|---|---|---|---|
| VOCs | 2 | 40 ml Glass | HCL | |
| Dissolved Metals - Cu, Cr, Ni, Zn, Fe, Mn, Na | 1 | 125 ml Plastic | $HNO_3$ | yes |
| Cyanide | 1 | 125 ml Plastic | NAOH | |
| Phenols | 1 | 125 ml Plastic | $H_2SO_4$ | |
| TOC | 2 | 40 ml Glass | $H_2SO_4$ | |
| TOX | 1 | 125 ml Plastic | $H_2SO_4$ | |
| Sulfate, Chlorides, SpC | 1 | 500 ml Plasitc | None | |

Notes:

38.46

B-19Ac

| Time | Rate | Drawdown | Temp | Cond | DO | pH | ORP | Turb |
|---|---|---|---|---|---|---|---|---|
| 0940 | 100 | 39.57 | 13.23 | 1.069 | 1.97 | 7.79 | 24.6 | 65.8 |
| 0945 | 100 | 39.57 | 13.24 | 1.070 | 1.93 | 7.78 | 18.6 | 62.5 |
| 0950 | 100 | 39.57 | 13.25 | 1.070 | 1.92 | 7.78 | 16.6 | 59.6 |

**O'Brien & Gere Engineers, Inc.** — **Ground Water Sampling Log**

| | | | |
|---|---|---|---|
| Date | 6/25/12 | | |
| Site Name | Coldwater Road Landfill | Weather | Sunny, 70s |
| Location | Flint, MI | Well # | B-20D |
| Project No. | 486030 | Evacuation Method | submersible pump |
| Personnel | C. Cox/K. Schneider | Sampling Method | Low-flow |

**Well Information:**

| | | | |
|---|---|---|---|
| Depth of Well * | 84.97 ft. | Water Volume /ft. for: | |
| Depth to Water * | 71.92 ft. | X | 2" Diameter Well = 0.163 X LWC |
| Length of Water Column | 13.05 ft. | | 4" Diameter Well = 0.653 X LWC |
| Volume of Water in Well | 2.127 gal.(s) | | 6" Diameter Well = 1.469 X LWC |

Volume removed before sampling: 2.5 gal.(s)
Did well go dry? No

* Measurements taken from: [X] Well Casing [ ] Protective Casing [ ] (Other, Specify)

**Instrument Calibration:**

| | Calibrated within Range |
|---|---|
| pH | Yes |
| ORP | Yes |
| Conductivity | Yes |
| DO | Yes |

**Water parameters:**

| Time | Pumping Rate (ml/min.) | Drawdown (ft) 0.3 feet or less | Temperature (Celsius) ±3 percent | Conductivity (mS/cm) ±0.005 (mS/cm) | Dissolved Oxygen (mg/L) ±10 percent | pH ±0.1 pH units | ORP (mV) ±10 millivolts | Turbidity (NTUs) ±10 percent |
|---|---|---|---|---|---|---|---|---|
| 1230 initial | 100 initial | 70.50 initial | 21.55 initial | 0.507 initial | 13.55 initial | 7.84 initial | 46.1 initial | 8.92 |
| 1235 | 100 | 70.86 | 14.98 | 1.017 | 6.84 | 6.78 | 23.0 | 124 |
| 1240 | 100 | 70.82 | 14.05 | 1.015 | 3.93 | 6.58 | 13.3 | 129 |
| 1245 | 100 | 70.76 | 13.08 | 1.022 | 3.94 | 6.51 | 7.9 | 204 |
| 1250 | 100 | 70.75 | 12.76 | 1.012 | 4.98 | 6.56 | 9.9 | 229 |
| 1255 | 100 | 70.75 | 12.89 | 1.010 | 4.72 | 6.60 | 6.8 | 133 |
| 1300 | 100 | 70.75 | 12.78 | 1.010 | 4.27 | 6.70 | -0.7 | 128 |
| 1305 | 100 | 70.75 | 12.63 | 1.010 | 4.06 | 6.70 | -2.5 | 87.6 |
| 1310 | 100 | 70.75 | 12.54 | 1.007 | 3.99 | 6.73 | -4.6 | 63.7 |
| 1315 | 100 | 70.75 | 12.43 | 1.002 | 3.89 | 6.69 | -3.9 | 59.4 |

**Water Sample:**
Time Collected: 1335

| Physical Appearance at Start | | Physical Appearance at Sampling | |
|---|---|---|---|
| Color | Slightly Cloudy | Color | Clear |
| Odor | — | Odor | |
| Turbidity (> 100 NTU) | High | Turbidity (> 100 NTU) | Low |
| Sheen/Free Product | — | Sheen/Free Product | |

**Samples collected:**

| Analyses | # Bottles | Bottle Size/Type | Preservative | Field Filtered |
|---|---|---|---|---|
| VOCs | 2 | 40 ml Glass | HCL | |
| Dissolved Metals - Cu, Cr, Ni, Zn, Fe, Mn, Na | 1 | 125 ml Plastic | $HNO_3$ | yes |
| Cyanide | 1 | 125 ml Plastic | NAOH | |
| Phenols | 1 | 125 ml Plastic | $H_2SO_4$ | |
| TOC | 2 | 40 ml Glass | $H_2SO_4$ | |
| TOX | 1 | 125 ml Plastic | $H_2SO_4$ | |
| Sulfate, Chlorides, SpC | 1 | 500 ml Plasitc | None | |

Notes:

B-20D

| Time | Pump | Drawdown | Temp | Cond | DO | pH | ORP | Turb |
|---|---|---|---|---|---|---|---|---|
| 1320 | 100 | 70.75 | 12.76 | 1.003 | 3.67 | 6.77 | -8.8 | 52.0 |
| 1325 | 100 | 70.75 | 12.77 | 1.004 | 3.64 | 6.78 | -9.1 | 51.2 |
| 1330 | 100 | 70.75 | 12.77 | 1.005 | 3.62 | 6.79 | -9.5 | 48.7 |

**O'Brien & Gere Engineers, Inc.** — **Ground Water Sampling Log**

| | | | |
|---|---|---|---|
| Date | 6/26/12 | | |
| Site Name | Coldwater Road Landfill | Weather | Sunny, 80s |
| Location | Flint, MI | Well # | B-21D |
| Project No. | 48630 | Evacuation Method | submersible pump |
| Personnel | C. Cox / K. Schneider | Sampling Method | Low-flow |

**Well Information:**

| | | | Water Volume /ft. for: |
|---|---|---|---|
| Depth of Well * | 97.44 | ft. | |
| Depth to Water * | 81.63 | ft. | X 2" Diameter Well = 0.163 X LWC |
| Length of Water Column | 15.81 | ft. | 4" Diameter Well = 0.653 X LWC |
| Volume of Water in Well | 2.58 | gal.(s) | 6" Diameter Well = 1.469 X LWC |

Volume removed before sampling: 3 1/2 gal.(s)

Did well go dry? No

* Measurements taken from: [X] Well Casing [ ] Protective Casing [ ] (Other, Specify)

**Instrument Calibration:**

| | Calibrated within Range |
|---|---|
| pH | Yes |
| ORP | Yes |
| Conductivity | Yes |
| DO | Yes |

**Water parameters:**

| Time | Pumping Rate (ml/min.) | Drawdown (ft) 0.3 feet or less | Temperature (Celsius) ±3 percent | Conductivity (mS/cm) ±0.005 (mS/cm) | Dissolved Oxygen (mg/L) ±10 percent | pH ±0.1 pH units | ORP (mV) ±10 millivolts | Turbidity (NTUs) ±10 percent |
|---|---|---|---|---|---|---|---|---|
| 1305 initial | 100 initial | 82.85 initial | 17.57 initial | 0.782 initial | 7.29 initial | 7.35 initial | -4.7 initial | 48.0 |
| 1310 | 100 | 83.34 | 14.38 | 0.749 | ~~2.80~~ 2.20 | 6.93 | -3.3 | 74.5 |
| 1315 | 100 | ~~Flow-Through Cell was leaking~~ | | | | | | |
| 1320 | 100 | | | | | | | |
| 1325 | 100 | 82.72 | 15.41 | 0.798 | 1.01 | 7.30 | -51.3 | 81.0 |
| 1330 | 100 | 82.72 | 16.28 | 0.800 | 0.44 | 7.17 | -61.5 | 87.3 |
| 1335 | 100 | 82.72 | 16.56 | 0.802 | 0.42 | 7.19 | -65.7 | 75.3 |
| 1340 | 100 | 82.72 | 16.66 | 0.811 | 0.47 | 7.21 | -72.9 | 91.0 |
| 1345 | 100 | 82.72 | 16.89 | 0.822 | 0.41 | 7.21 | -76.5 | 124 |
| 1350 | 100 | 82.72 | 16.87 | 0.833 | 0.37 | 7.21 | -80.1 | 159 |

**Water Sample:**

Time Collected: 1515

| Physical Appearance at Start | | Physical Appearance at Sampling | |
|---|---|---|---|
| Color | Cloudy | Color | Clear |
| Odor | | Odor | |
| Turbidity (> 100 NTU) | High | Turbidity (> 100 NTU) | Low |
| Sheen/Free Product | | Sheen/Free Product | |

**Samples collected:**

| Analyses | # Bottles | Bottle Size/Type | Preservative | Field Filtered |
|---|---|---|---|---|
| VOCs | 2 | 40 ml Glass | HCL | |
| Dissolved Metals - Cu, Cr, Ni, Zn, Fe, Mn, Na | 1 | 125 ml Plastic | $HNO_3$ | yes |
| Cyanide | 1 | 125 ml Plastic | NAOH | |
| Phenols | 1 | 125 ml Plastic | $H_2SO_4$ | |
| TOC | 2 | 40 ml Glass | $H_2SO_4$ | |
| TOX | 1 | 125 ml Plastic | $H_2SO_4$ | |
| Sulfate, Chlorides, SpC | 1 | 500 ml Plasitc | None | |

Notes:

B-21D

| Time | Pump Rate | Drawdown | Temp | Cond | DO | pH | ORP | Turb |
|---|---|---|---|---|---|---|---|---|
| 1355 | 100 | 82.72 | 17.38 | 0.840 | 0.34 | 7.22 | -85.1 | 178 |
| 1400 | 100 | 82.72 | 17.27 | 0.847 | 0.30 | 7.23 | -88.0 | 173 |
| 1405 | 100 | 82.72 | 18.00 | 0.850 | 0.29 | 7.23 | -90.9 | 161 |
| 1410 | 100 | 82.72 | 18.37 | 0.850 | 0.27 | 7.24 | -91.1 | 150 |
| 1415 | 100 | 82.72 | 18.67 | 0.855 | 0.28 | 7.26 | -92.9 | 151 |
| 1420 | 100 | 82.72 | 18.78 | 0.854 | 0.28 | 7.26 | -93.6 | 143 |
| 1425 | 100 | 82.72 | 18.86 | 0.857 | 0.27 | 7.27 | -95.9 | 129 |
| 1430 | 100 | 82.72 | 19.00 | 0.858 | 0.29 | 7.27 | -97.8 | 104 |
| 1435 | 100 | 82.72 | 19.12 | 0.860 | 0.28 | 7.26 | -99.7 | 98.5 |
| 1440 | 100 | 82.72 | 19.18 | 0.864 | 0.30 | 7.26 | -102.3 | 84.8 |
| 1445 | 100 | 82.72 | 19.32 | 0.863 | 0.29 | 7.25 | -102.9 | 77.8 |
| 1450 | 100 | 82.72 | 19.41 | 0.860 | 0.27 | 7.25 | -103.2 | 70.4 |
| 1455 | 100 | 82.72 | 19.45 | 0.860 | 0.27 | 7.26 | -102.3 | 65.7 |
| 1500 | 100 | 82.72 | 19.48 | 0.860 | 0.27 | 7.26 | -100.1 | 60.4 |
| 1505 | 100 | 82.72 | 19.51 | 0.860 | 0.27 | 7.26 | -99.4 | 58.7 |
| 1510 | 100 | 82.72 | 19.53 | 0.860 | 0.27 | 7.26 | -98.1 | 57.3 |

**O'Brien & Gere Engineers, Inc.** — **Ground Water Sampling Log**

| | | | |
|---|---|---|---|
| Date | 6/25/12 | | |
| Site Name | Coldwater Road Landfill | Weather | Sunny, 70s |
| Location | Flint, MI | Well # | B-22D |
| Project No. | 48030 | Evacuation Method | submersible pump |
| Personnel | C. Cox / K. Schneider | Sampling Method | Low-flow |

**Well Information:**

| | | |
|---|---|---|
| Depth of Well * | 97.24 ft. | Water Volume /ft. for: |
| Depth to Water * | 85.94 ft. | X 2" Diameter Well = 0.163 X LWC |
| Length of Water Column | 11.3 ft. | 4" Diameter Well = 0.653 X LWC |
| Volume of Water in Well | 1.84 gal.(s) | 6" Diameter Well = 1.469 X LWC |

Volume removed before sampling: 3 gal.(s)
Did well go dry? No

* Measurements taken from: [X] Well Casing [ ] Protective Casing [ ] (Other, Specify)

**Instrument Calibration:**

| | Calibrated within Range |
|---|---|
| pH | Yes |
| ORP | Yes |
| Conductivity | Yes |
| DO | Yes |

**Water parameters:**

| Time | Pumping Rate (ml/min.) | Drawdown (ft) 0.3 feet or less | Temperature (Celsius) ±3 percent | Conductivity (mS/cm) ±0.005 (mS/cm) | Dissolved Oxygen (mg/L) ±10 percent | pH ±0.1 pH units | ORP (mV) ±10 millivolts | Turbidity (NTUs) ±10 percent |
|---|---|---|---|---|---|---|---|---|
| 1455 initial | 200 initial | 86.41 initial | 15.87 initial | 0.758 initial | 7.75 initial | 7.91 initial | -53.1 initial | 327 |
| 1500 | 200 | 86.61 | 13.88 | 0.735 | 3.69 | 6.31 | -28.4 | 206.2 |
| 1505 | 200 | 86.74 | 12.98 | 0.707 | 0.42 | 5.98 | 13.0 | 38.4 |
| 1510 | 200 | 86.62 | 13.00 | 0.706 | 0.34 | 6.05 | 8.6 | 26.9 |
| 1515 | 200 | 86.62 | 13.06 | 0.706 | 0.36 | 6.32 | -3.9 | 24.3 |
| 1520 | 200 | 86.63 | 12.95 | 0.708 | 0.38 | 6.58 | -19.6 | 22.0 |
| 1525 | 200 | 86.63 | 12.67 | 0.706 | 0.36 | 6.43 | -10.5 | 18.5 |
| 1530 | 200 | 86.63 | 12.68 | 0.704 | 0.35 | 6.43 | -12.8 | 11.2 |
| 1535 | 200 | 86.63 | 12.68 | 0.704 | 0.34 | 6.45 | -15.2 | 10.8 |
| 1540 | 200 | 86.63 | 12.69 | 0.704 | 0.34 | 6.45 | -13.8 | 10.5 |

**Water Sample:**
Time Collected: 1545

| Physical Appearance at Start | | Physical Appearance at Sampling | |
|---|---|---|---|
| Color | Slightly Cloudy | Color | Clear |
| Odor | — | Odor | — |
| Turbidity (> 100 NTU) | High | Turbidity (> 100 NTU) | low |
| Sheen/Free Product | — | Sheen/Free Product | — |

**Samples collected:**

| Analyses | # Bottles | Bottle Size/Type | Preservative | Field Filtered |
|---|---|---|---|---|
| VOCs | 2 | 40 ml Glass | HCL | |
| Dissolved Metals - Cu, Cr, Ni, Zn, Fe, Mn, Na | 1 | 125 ml Plastic | $HNO_3$ | yes |
| Cyanide | 1 | 125 ml Plastic | NAOH | |
| Phenols | 1 | 125 ml Plastic | $H_2SO_4$ | |
| TOC | 2 | 40 ml Glass | $H_2SO_4$ | |
| TOX | 1 | 125 ml Plastic | $H_2SO_4$ | |
| Sulfate, Chlorides, SpC | 1 | 500 ml Plasitc | None | |

Notes:

**O'Brien & Gere Engineers, Inc.** — **Ground Water Sampling Log**

| | | | |
|---|---|---|---|
| Date | 6/26/12 | | |
| Site Name | Coldwater Road Landfill | Weather | Sunny, 80° |
| Location | Flint, MI | Well # | B-23Dr |
| Project No. | 48630 | Evacuation Method | submersible pump |
| Personnel | C Cox/K. Schneider | Sampling Method | Low-flow |

**Well Information:**

| | | | |
|---|---|---|---|
| Depth of Well * | 107 | ft. | Water Volume /ft. for: |
| Depth to Water * | 82.97 | ft. | X 2" Diameter Well = 0.163 X LWC |
| Length of Water Column | 24.03 | ft. | 4" Diameter Well = 0.653 X LWC |
| Volume of Water in Well | 3.91 | gal.(s) | 6" Diameter Well = 1.469 X LWC |

Volume removed before sampling: 2 gal.(s)
Did well go dry? No

* Measurements taken from: [X] Well Casing [ ] Protective Casing [ ] (Other, Specify)

**Instrument Calibration:**

| | Calibrated within Range |
|---|---|
| pH | Yes |
| ORP | Yes |
| Conductivity | Yes |
| DO | Yes |

**Water parameters:**

| Time | | Pumping Rate (ml/min.) | | Drawdown (ft) 0.3 feet or less | | Temperature (Celsius) ±3 percent | | Conductivity (mS/cm) ±0.005 (mS/cm) | | Dissolved Oxygen (mg/L) ±10 percent | | pH ±0.1 pH units | | ORP (mV) ±10 millivolts | | Turbidity (NTUs) ±10 percent |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0835 | initial | 100 | initial | 82.97 | initial | 17.20 | initial | 0.222 | initial | 11.34 | initial | 6.84 | initial | 164.9 | initial | 48.6 |
| 0840 | | 100 | | 82.98 | | 16.08 | | 0.481 | | 5.96 | | 6.43 | | 32.2 | | 52.3 |
| 0845 | | 100 | | 82.98 | | 15.10 | | 0.851 | | 1.87 | | 6.08 | | -17.3 | | 55.7 |
| 0850 | | 100 | | 82.98 | | 12.95 | | 0.895 | | 0.65 | | 6.20 | | -47.0 | | 143 |
| 0855 | | 100 | | 82.98 | | 12.69 | | 0.858 | | 0.42 | | 6.46 | | -69.8 | | 381 |
| 0900 | | 100 | | 82.98 | | 12.66 | | 0.829 | | 0.33 | | 6.56 | | -78.2 | | 103 |
| 0905 | | 100 | | 82.98 | | 12.66 | | 0.829 | | 0.36 | | 6.63 | | -84.1 | | 51.8 |
| 0910 | | 100 | | 82.98 | | 12.65 | | 0.830 | | 0.35 | | 6.74 | | -87.8 | | 28.1 |
| 0915 | | 100 | | 82.98 | | 12.68 | | 0.829 | | 0.36 | | 6.76 | | -90.8 | | 22.7 |
| 0920 | | 100 | | 82.98 | | 12.69 | | 0.830 | | 0.36 | | 6.78 | | -91.2 | | 21.4 |

**Water Sample:**
Time Collected: 0925

| Physical Appearance at Start | | Physical Appearance at Sampling | |
|---|---|---|---|
| Color | Slightly Cloudy | Color | Clear |
| Odor | | Odor | |
| Turbidity (> 100 NTU) | High | Turbidity (> 100 NTU) | Low |
| Sheen/Free Product | | Sheen/Free Product | |

**Samples collected:**

| Analyses | # Bottles | Bottle Size/Type | Preservative | Field Filtered |
|---|---|---|---|---|
| VOCs | 2 | 40 ml Glass | HCL | |
| Dissolved Metals - Cu, Cr, Ni, Zn, Fe, Mn, Na | 1 | 125 ml Plastic | $HNO_3$ | yes |
| Cyanide | 1 | 125 ml Plastic | NAOH | |
| Phenols | 1 | 125 ml Plastic | $H_2SO_4$ | |
| TOC | 2 | 40 ml Glass | $H_2SO_4$ | |
| TOX | 1 | 125 ml Plastic | $H_2SO_4$ | |
| Sulfate, Chlorides, SpC | 1 | 500 ml Plastic | None | |

Notes:

**O'Brien & Gere Engineers, Inc.** — **Ground Water Sampling Log**

| | | | |
|---|---|---|---|
| Date | 6/26/12 | | |
| Site Name | Coldwater Road Landfill | Weather | sunny 80°F |
| Location | Flint, MI | Well # | B-24r |
| Project No. | 486730 | Evacuation Method | peristaltic pump |
| Personnel | RSS | Sampling Method | Low-flow |

**Well Information:**

| | | | |
|---|---|---|---|
| Depth of Well * | 29.5 ft. | Water Volume /ft. for: | |
| Depth to Water * | 15.60 ft. | X | 2" Diameter Well = 0.163 X LWC |
| Length of Water Column | ft. | | 4" Diameter Well = 0.653 X LWC |
| Volume of Water in Well | gal.(s) | | 6" Diameter Well = 1.469 X LWC |

Volume removed before sampling: 2 gal.(s)

Did well go dry? NO

* Measurements taken from: [X] Well Casing [ ] Protective Casing [ ] (Other, Specify)

**Instrument Calibration:** Calibrated within Range

| | |
|---|---|
| pH | yes |
| ORP | yes |
| Conductivity | yes |
| DO | yes |

**Water parameters:** Drawdown / Pumping Rate

| Time | Pumping Rate (ml/min.) | Drawdown (ft) 0.3 feet or less | Temperature (Celsius) ±3 percent | Conductivity (mS/cm) ±0.005 (mS/cm) | Dissolved Oxygen (mg/L) ±10 percent | pH ±0.1 pH units | ORP (mV) ±10 millivolts | Turbidity (NTUs) ±10 percent |
|---|---|---|---|---|---|---|---|---|
| 1210 initial | 16.50 initial | 100 initial | 14.88 initial | 1.325 initial | 1.27 initial | 6.16 initial | -78.6 initial | 45 initial |
| 1215 | 17.09 | <100 | 13.87 | 1.331 | 0.48 | 5.79 | -80.7 | 50 |
| 1220 | 18.34 | | 13.76 | 1.325 | 0.36 | 5.74 | -71.3 | 36 |
| 1225 | 19.17 | | 13.82 | 1.322 | 0.30 | 6.07 | -97.5 | 40 |
| 1230 | 19.58 | | 13.77 | 1.317 | 0.27 | 6.48 | -128.0 | 28 |
| 1235 | 20.35 | | 13.73 | 1.312 | 0.23 | 6.62 | -157.1 | 28 |
| 1240 | 20.55 | | 13.93 | 1.300 | 0.23 | 6.71 | -114.1 | 8 |
| 1245 | 20.50 | | 13.92 | 1.298 | 0.25 | 6.76 | -110.8 | 10 |
| 1250 | 20.56 | ↓ | 13.71 | 1.295 | 0.23 | 6.80 | -128.9 | 9 |

**Water Sample:**
Time Collected: 1250

| Physical Appearance at Start | | Physical Appearance at Sampling | |
|---|---|---|---|
| Color | slightly cloudy | Color | clear |
| Odor | NONE | Odor | NONE |
| Turbidity (> 100 NTU) | MED | Turbidity (> 100 NTU) | LOW |
| Sheen/Free Product | NONE | Sheen/Free Product | NONE |

**Samples collected:**

| Analyses | # Bottles | Bottle Size/Type | Preservative | Field Filtered |
|---|---|---|---|---|
| VOCs | 2 | 40 ml Glass | HCL | |
| Dissolved Metals - Cu, Cr, Ni, Zn, Fe, Mn, Na | 1 | 125 ml Plastic | $HNO_3$ | yes |
| Cyanide | 1 | 125 ml Plastic | NAOH | |
| Phenols | 1 | 125 ml Plastic | $H_2SO_4$ | |
| TOC | 2 | 40 ml Glass | $H_2SO_4$ | |
| TOX | 1 | 125 ml Plastic | $H_2SO_4$ | |
| Sulfate, Chlorides, SpC | 1 | 500 ml Plasitc | None | |

Notes:

**O'Brien & Gere Engineers, Inc.** — **Ground Water Sampling Log**

| | | | |
|---|---|---|---|
| Date | 6/26/12 | Weather | Sunny, 80's |
| Site Name | Coldwater Road Landfill | Well # | B-27D |
| Location | Flint, MI | Evacuation Method | submersible pump |
| Project No. | 48630 | Sampling Method | Low-flow |
| Personnel | C. Cox / K. Schneider | | |

**Well Information:**

| | | | Water Volume /ft. for: |
|---|---|---|---|
| Depth of Well * | 89 | ft. | |
| Depth to Water * | 77.49 | ft. | X 2" Diameter Well = 0.163 X LWC |
| Length of Water Column | 11.51 | ft. | 4" Diameter Well = 0.653 X LWC |
| Volume of Water in Well | 1.88 | gal.(s) | 6" Diameter Well = 1.469 X LWC |

Volume removed before sampling: 2 1/2 gal.(s)

Did well go dry? No

* Measurements taken from: [X] Well Casing [ ] Protective Casing [ ] (Other, Specify)

**Instrument Calibration:**

| | Calibrated within Range |
|---|---|
| pH | Yes |
| ORP | Yes |
| Conductivity | Yes |
| DO | Yes |

**Water parameters:**

| Time | Pumping Rate (ml/min.) | Drawdown (ft) 0.3 feet or less | Temperature (Celsius) ±3 percent | Conductivity (mS/cm) ±0.005 (mS/cm) | Dissolved Oxygen (mg/L) ±10 percent | pH ±0.1 pH units | ORP (mV) ±10 millivolts | Turbidity (NTUs) ±10 percent |
|---|---|---|---|---|---|---|---|---|
| 1010 initial | 100 initial | 77.97 initial | 22.03 initial | 0.806 initial | 14.21 initial | 7.82 initial | -17.6 initial | over range initial |
| 1015 | 100 | 77.97 | 13.33 | 0.706 | 0.88 | 6.96 | -58.6 | over range |
| 1020 | 100 | 77.98 | 13.13 | 0.703 | 0.29 | 6.49 | -53.1 | over range |
| 1025 | 100 | 77.98 | 12.86 | 0.704 | 0.21 | 6.47 | -60.4 | over range |
| 1030 | 100 | 77.98 | 12.68 | 0.706 | 0.19 | 6.54 | -70.8 | 539 |
| 1035 | 100 | 77.98 | 12.85 | 0.708 | 0.21 | 6.64 | -78.1 | 628 |
| 1040 | 100 | 77.98 | 12.75 | 0.712 | 0.23 | 6.81 | -90.4 | 262 |
| 1045 | 100 | 77.98 | 12.85 | 0.711 | 0.21 | 6.91 | -97.2 | 223 |
| 1050 | 100 | 77.98 | 12.85 | 0.710 | 0.21 | 6.98 | -102.2 | 161 |
| 1055 | 100 | 77.98 | 12.93 | 0.713 | 0.19 | 6.99 | -104.6 | 132 |

**Water Sample:**
Time Collected: 1145

| Physical Appearance at Start | | Physical Appearance at Sampling | |
|---|---|---|---|
| Color | Cloudy | Color | Clear |
| Odor | — | Odor | — |
| Turbidity (> 100 NTU) | High | Turbidity (> 100 NTU) | Low |
| Sheen/Free Product | | Sheen/Free Product | — |

**Samples collected:**

| Analyses | # Bottles | Bottle Size/Type | Preservative | Field Filtered |
|---|---|---|---|---|
| VOCs | 2 | 40 ml Glass | HCL | |
| Dissolved Metals - Cu, Cr, Ni, Zn, Fe, Mn, Na | 1 | 125 ml Plastic | $HNO_3$ | yes |
| Cyanide | 1 | 125 ml Plastic | NAOH | |
| Phenols | 1 | 125 ml Plastic | $H_2SO_4$ | |
| TOC | 2 | 40 ml Glass | $H_2SO_4$ | |
| TOX | 1 | 125 ml Plastic | $H_2SO_4$ | |
| Sulfate, Chlorides, SpC | 1 | 500 ml Plasitc | None | |

Notes:

| Time | Pump | Drawdown | Temp | Cond | D.O. | pH | ORP | Turb |
|---|---|---|---|---|---|---|---|---|
| 1100 | 100 | 77.98 | 13.00 | 0.714 | 0.19 | 7.07 | -108.8 | 123 |
| 1105 | 100 | 77.98 | 12.95 | 0.713 | 0.18 | 7.10 | -111.4 | 108.7 |
| 1110 | 100 | 77.98 | 13.00 | 0.715 | 0.16 | 7.10 | -112.3 | 83.1 |
| 1115 | 100 | 77.98 | 12.99 | 0.714 | 0.16 | 7.11 | -113.9 | 74.4 |
| 1120 | 100 | 77.98 | 13.00 | 0.715 | 0.15 | 7.12 | -115.1 | 74.6 |
| 1125 | 100 | 77.98 | 13.01 | 0.717 | 0.15 | 7.13 | -117.2 | 57.3 |
| 1130 | 100 | 77.98 | 13.02 | 0.716 | 0.15 | 7.15 | -118.9 | 59.9 |
| 1135 | 100 | 77.98 | 13.03 | 0.717 | 0.13 | 7.18 | -120.3 | 61.3 |
| 1140 | 100 | 77.98 | 13.04 | 0.717 | 0.12 | 7.17 | -121.5 | 58.7 |

**O'Brien & Gere Engineers, Inc.** — **Ground Water Sampling Log**

| | | | |
|---|---|---|---|
| Date | 6/26/12 | | |
| Site Name | Coldwater Road Landfill | Weather | Sunny 70's °F |
| Location | Flint, MI | Well # | B-28 |
| Project No. | 48630 | Evacuation Method | peristaltic pump |
| Personnel | KBS | Sampling Method | Low-flow |

**Well Information:**

| | | | |
|---|---|---|---|
| Depth of Well * | 31.5 ft. | Water Volume /ft. for: | |
| Depth to Water * | 8.93 ft. | X | 2" Diameter Well = 0.163 X LWC |
| Length of Water Column | ft. | | 4" Diameter Well = 0.653 X LWC |
| Volume of Water in Well | gal.(s) | | 6" Diameter Well = 1.469 X LWC |

Volume removed before sampling: 1 gal.(s)
Did well go dry? NO

* Measurements taken from: [X] Well Casing [ ] Protective Casing [ ] (Other, Specify)

**Instrument Calibration:** Calibrated within Range

| | |
|---|---|
| pH | Yes |
| ORP | Yes |
| Conductivity | Yes |
| DO | Yes |

**Water parameters:**

| Time | Pumping Rate (ml/min.) | Drawdown (ft) 0.3 feet or less | Temperature (Celsius) ±3 percent | Conductivity (mS/cm) ±0.005 (mS/cm) | Dissolved Oxygen (mg/L) ±10 percent | pH ±0.1 pH units | ORP (mV) ±10 millivolts | Turbidity (NTUs) ±10 percent |
|---|---|---|---|---|---|---|---|---|
| 845 initial | <100 | 9.74 | 13.74 | 1.053 | 1.31 | 5.48 | 101.1 | 13 |
| 850 | | 10.21 | 13.98 | 0.989 | 0.78 | 5.66 | 66.3 | 9 |
| 855 | | 10.50 | 13.54 | 0.973 | 0.72 | 5.63 | 39.5 | 7 |
| 900 | | 11.23 | 12.99 | 0.945 | 0.56 | 5.46 | 21.8 | 5 |
| 905 | | 11.93 | 13.05 | 0.939 | 0.45 | 6.20 | -17.4 | 8 |
| 910 | | 12.25 | 12.83 | 0.936 | 0.41 | 6.32 | -33.7 | 9 |
| 915 | | 12.57 | 12.98 | 0.934 | 0.36 | 6.38 | -35.2 | 10 |
| 920 | ↓ | 12.98 | 13.01 | 0.935 | 0.34 | 6.45 | -42.8 | 8 |
| | | | | | | | | |
| | | | | | | | | |

**Water Sample:**
Time Collected: 920

| Physical Appearance at Start | | Physical Appearance at Sampling | |
|---|---|---|---|
| Color | clear | Color | clear |
| Odor | NONE | Odor | NONE |
| Turbidity (> 100 NTU) | Low | Turbidity (> 100 NTU) | LOW |
| Sheen/Free Product | NONE | Sheen/Free Product | NONE |

**Samples collected:**

| Analyses | # Bottles | Bottle Size/Type | Preservative | Field Filtered |
|---|---|---|---|---|
| VOCs | 2 | 40 ml Glass | HCL | |
| Dissolved Metals - Cu, Cr, Ni, Zn, Fe, Mn, Na | 1 | 125 ml Plastic | $HNO_3$ | yes |
| Cyanide | 1 | 125 ml Plastic | NAOH | |
| Phenols | 1 | 125 ml Plastic | $H_2SO_4$ | |
| TOC | 2 | 40 ml Glass | $H_2SO_4$ | |
| TOX | 1 | 125 ml Plastic | $H_2SO_4$ | |
| Sulfate, Chlorides, SpC | 1 | 500 ml Plasitc | None | |

Notes:

# *APPENDIX C*

# *Analytical Results*

# Analytical Laboratory Report

Report ID: S52989.01(01)
Generated on 07/10/2012

Report to

Attention: Clifford Yantz
O'Brien & Gere Engineers, Inc.
37000 Grand River Ave.
Suite 260
Farmington, MI 48335

Phone: 248-477-5701 FAX:
Email: YantzCS@obg.com

Report produced by

Merit Laboratories
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Report Summary

Lab Sample ID(s): S52989.01-S52989.18
Project: Coldwater Road Landfill Semi-Annual Sampling #48630
Collected Date: 06/25/2012 - 06/26/2012
Submitted Date/Time: 06/26/2012 14:20
Sampled by: Kevin Schneider
P.O. #: PO124782

Report Notes

Results relate only to items tested as received by the laboratory.
Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
"Not detected" indicates that parameter was not found at a level equal to or greater than the RL.
Samples are held by the lab for 30 days from the sample submittal date unless a written request to hold longer is provided by the client.


Laboratory Certifications:
Michigan DNRE (#9956), DOD/ISO 17025 (#L11-184), WBENC (#2005110032)
Ohio EPA (#CL0002), IN Drinking Water (#C-MI-07), NELAC NY (#11814), NELAC FL (#E871045)
Some analytes reported may not be certified. Full certification lists are available upon request.

Violetta F. Murshak
Laboratory Director

# Analytical Laboratory Report

Sample Summary (18 samples)

| Sample ID | Sample Tag | Matrix | Collected Date/Time |
|---|---|---|---|
| S52989.01 | TB-1 (Trip Blank) | Wastewater | 06/25/2012 00:01 |
| S52989.02 | Sump A | Sump Water | 06/25/2012 10:00 |
| S52989.03 | DUP-1 | Sump Water | 06/25/2012 00:01 |
| S52989.04 | Vault A | Wastewater | 06/25/2012 10:40 |
| S52989.05 | DUP-2 | Wastewater | 06/25/2012 00:01 |
| S52989.06 | Sump B | Sump Water | 06/25/2012 11:45 |
| S52989.07 | Vault B | Wastewater | 06/25/2012 12:05 |
| S52989.08 | Sump C | Sump Water | 06/25/2012 12:30 |
| S52989.09 | Vault C | Wastewater | 06/25/2012 13:10 |
| S52989.10 | Sump D | Sump Water | 06/25/2012 13:40 |
| S52989.11 | Vault D | Wastewater | 06/25/2012 14:15 |
| S52989.12 | Sump E | Sump Water | 06/25/2012 15:00 |
| S52989.13 | Vault E | Wastewater | 06/25/2012 16:00 |
| S52989.14 | Sump F | Sump Water | 06/25/2012 16:40 |
| S52989.15 | B-20D | Groundwater | 06/25/2012 13:35 |
| S52989.16 | B-22D | Groundwater | 06/25/2012 15:45 |
| S52989.17 | B-28 | Groundwater | 06/26/2012 09:20 |
| S52989.18 | B-23Dr | Groundwater | 06/26/2012 09:25 |

# Analytical Laboratory Report

Lab Sample ID: S52989.01
Sample Tag: TB-1 (Trip Blank)
Collected Date/Time: 06/25/2012 00:01
Matrix: Wastewater
COC Reference: 62586

Sample Containers

| # | Type | Preservative(s) | Refrigerated? | Arrival Temp. (C) | Thermometer # |
|---|---|---|---|---|---|
| 1 | 40ml Glass | HCL | Yes | 5.5 | IR |

| Analysis | Results | Units | RL | Method | Run Date/Time | Analyst | CAS # | Flags |
|---|---|---|---|---|---|---|---|---|
| ***Organics - Volatiles*** | | | | | | | | |
| **Volatile Organics - DEQ List** | | | | | | | | |
| Diethyl ether | Not detected | ug/L | 10 | 8260B | 06/28/12 13:29 | WAT | 60-29-7 | |
| Acetone | Not detected | ug/L | 50 | 8260B | 06/28/12 13:29 | WAT | 67-64-1 | |
| Methyl iodide | Not detected | ug/L | 1 | 8260B | 06/28/12 13:29 | WAT | 74-88-4 | |
| Carbon disulfide | Not detected | ug/L | 5 | 8260B | 06/28/12 13:29 | WAT | 75-15-0 | |
| tert-Methyl butyl ether (MTBE) | Not detected | ug/L | 5 | 8260B | 06/28/12 13:29 | WAT | 1634-04-4 | |
| Acrylonitrile | Not detected | ug/L | 2 | 8260B | 06/28/12 13:29 | WAT | 107-13-1 | |
| 2-Butanone (MEK) | Not detected | ug/L | 25 | 8260B | 06/28/12 13:29 | WAT | 78-93-3 | |
| Dichlorodifluoromethane | Not detected | ug/L | 5 | 8260B | 06/28/12 13:29 | WAT | 75-71-8 | |
| Chloromethane | Not detected | ug/L | 5 | 8260B | 06/28/12 13:29 | WAT | 74-87-3 | |
| Vinyl chloride | Not detected | ug/L | 1 | 8260B | 06/28/12 13:29 | WAT | 75-01-4 | |
| Bromomethane | Not detected | ug/L | 5 | 8260B | 06/28/12 13:29 | WAT | 74-83-9 | |
| Chloroethane | Not detected | ug/L | 5 | 8260B | 06/28/12 13:29 | WAT | 75-00-3 | |
| Trichlorofluoromethane | Not detected | ug/L | 1 | 8260B | 06/28/12 13:29 | WAT | 75-69-4 | |
| 1,1-Dichloroethene | Not detected | ug/L | 1 | 8260B | 06/28/12 13:29 | WAT | 75-35-4 | |
| Methylene chloride | Not detected | ug/L | 5 | 8260B | 06/28/12 13:29 | WAT | 75-09-2 | |
| trans-1,2-Dichloroethene | Not detected | ug/L | 1 | 8260B | 06/28/12 13:29 | WAT | 156-60-5 | |
| 1,1-Dichloroethane | Not detected | ug/L | 1 | 8260B | 06/28/12 13:29 | WAT | 75-34-3 | |
| cis-1,2-Dichloroethene | Not detected | ug/L | 1 | 8260B | 06/28/12 13:29 | WAT | 156-59-2 | |
| Tetrahydrofuran | Not detected | ug/L | 90 | 8260B | 06/28/12 13:29 | WAT | 109-99-9 | |
| Chloroform | Not detected | ug/L | 1 | 8260B | 06/28/12 13:29 | WAT | 67-66-3 | |
| Bromochloromethane | Not detected | ug/L | 1 | 8260B | 06/28/12 13:29 | WAT | 74-97-5 | |
| 1,1,1-Trichloroethane | Not detected | ug/L | 1 | 8260B | 06/28/12 13:29 | WAT | 71-55-6 | |
| 4-Methyl-2-pentanone (MIBK) | Not detected | ug/L | 50 | 8260B | 06/28/12 13:29 | WAT | 108-10-1 | |
| 2-Hexanone | Not detected | ug/L | 50 | 8260B | 06/28/12 13:29 | WAT | 591-78-6 | |
| Carbon tetrachloride | Not detected | ug/L | 1 | 8260B | 06/28/12 13:29 | WAT | 56-23-5 | |
| Benzene | Not detected | ug/L | 1 | 8260B | 06/28/12 13:29 | WAT | 71-43-2 | |
| 1,2-Dichloroethane | Not detected | ug/L | 1 | 8260B | 06/28/12 13:29 | WAT | 107-06-2 | |
| Trichloroethene | Not detected | ug/L | 1 | 8260B | 06/28/12 13:29 | WAT | 79-01-6 | |
| 1,2-Dichloropropane | Not detected | ug/L | 1 | 8260B | 06/28/12 13:29 | WAT | 78-87-5 | |
| Bromodichloromethane | Not detected | ug/L | 1 | 8260B | 06/28/12 13:29 | WAT | 75-27-4 | |
| Dibromomethane | Not detected | ug/L | 5 | 8260B | 06/28/12 13:29 | WAT | 74-95-3 | |
| cis-1,3-Dichloropropene | Not detected | ug/L | 1 | 8260B | 06/28/12 13:29 | WAT | 10061-01-5 | |
| Toluene | Not detected | ug/L | 1 | 8260B | 06/28/12 13:29 | WAT | 108-88-3 | |
| trans-1,3-Dichloropropene | Not detected | ug/L | 1 | 8260B | 06/28/12 13:29 | WAT | 10061-02-6 | |
| 1,1,2-Trichloroethane | Not detected | ug/L | 1 | 8260B | 06/28/12 13:29 | WAT | 79-00-5 | |
| Tetrachloroethene | Not detected | ug/L | 1 | 8260B | 06/28/12 13:29 | WAT | 127-18-4 | |
| trans-1,4-Dichloro-2-butene | Not detected | ug/L | 1 | 8260B | 06/28/12 13:29 | WAT | 110-57-6 | |
| Dibromochloromethane | Not detected | ug/L | 5 | 8260B | 06/28/12 13:29 | WAT | 124-48-1 | |
| 1,2-Dibromoethane | Not detected | ug/L | 1 | 8260B | 06/28/12 13:29 | WAT | 106-93-4 | |
| Chlorobenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 13:29 | WAT | 108-90-7 | |
| 1,1,1,2-Tetrachloroethane | Not detected | ug/L | 1 | 8260B | 06/28/12 13:29 | WAT | 630-20-6 | |
| Ethylbenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 13:29 | WAT | 100-41-4 | |

Lab Sample ID: S52989.01 (continued)
Sample Tag: TB-1 (Trip Blank)

| Analysis | Results | Units | RL | Method | Run Date/Time | Analyst | CAS # | Flags |
|---|---|---|---|---|---|---|---|---|
| ***Organics - Volatiles (continued)*** | | | | | | | | |
| **Volatile Organics - DEQ List (continued)** | | | | | | | | |
| p,m-Xylene | Not detected | ug/L | 2 | 8260B | 06/28/12 13:29 | WAT | | |
| o-Xylene | Not detected | ug/L | 1 | 8260B | 06/28/12 13:29 | WAT | 95-47-6 | |
| Styrene | Not detected | ug/L | 1 | 8260B | 06/28/12 13:29 | WAT | 100-42-5 | |
| Isopropylbenzene | Not detected | ug/L | 5 | 8260B | 06/28/12 13:29 | WAT | 98-82-8 | |
| Bromoform | Not detected | ug/L | 1 | 8260B | 06/28/12 13:29 | WAT | 75-25-2 | |
| 1,1,2,2-Tetrachloroethane | Not detected | ug/L | 1 | 8260B | 06/28/12 13:29 | WAT | 79-34-5 | |
| 1,2,3-Trichloropropane | Not detected | ug/L | 1 | 8260B | 06/28/12 13:29 | WAT | 96-18-4 | |
| n-Propylbenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 13:29 | WAT | 103-65-1 | |
| Bromobenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 13:29 | WAT | 108-86-1 | |
| 1,3,5-Trimethylbenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 13:29 | WAT | 108-67-8 | |
| tert-Butylbenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 13:29 | WAT | 98-06-6 | |
| 1,2,4-Trimethylbenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 13:29 | WAT | 95-63-6 | |
| sec-Butylbenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 13:29 | WAT | 135-98-8 | |
| p-Isopropyltoluene | Not detected | ug/L | 5 | 8260B | 06/28/12 13:29 | WAT | 99-87-6 | |
| 1,3-Dichlorobenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 13:29 | WAT | 541-73-1 | |
| 1,4-Dichlorobenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 13:29 | WAT | 106-46-7 | |
| 1,2-Dichlorobenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 13:29 | WAT | 95-50-1 | |
| 1,2,3-Trimethylbenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 13:29 | WAT | 526-73-8 | |
| n-Butylbenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 13:29 | WAT | 104-51-8 | |
| Hexachloroethane | Not detected | ug/L | 5 | 8260B | 06/28/12 13:29 | WAT | 67-72-1 | |
| 1,2-Dibromo-3-chloropropane | Not detected | ug/L | 5 | 8260B | 06/28/12 13:29 | WAT | 96-12-8 | |
| 1,2,4-Trichlorobenzene | Not detected | ug/L | 5 | 8260B | 06/28/12 13:29 | WAT | 120-82-1 | |
| 1,2,3-Trichlorobenzene | Not detected | ug/L | 5 | 8260B | 06/28/12 13:29 | WAT | 87-61-6 | |
| Naphthalene | Not detected | ug/L | 5 | 8260B | 06/28/12 13:29 | WAT | 91-20-3 | |
| 2-Methylnaphthalene | Not detected | ug/L | 5 | 8260B | 06/28/12 13:29 | WAT | 91-57-6 | |

# Analytical Laboratory Report

Lab Sample ID: S52989.15
Sample Tag: B-20D
Collected Date/Time: 06/25/2012 13:35
Matrix: Groundwater
COC Reference: 65459

Sample Containers

| # | Type | Preservative(s) | Refrigerated? | Arrival Temp. (C) | Thermometer # |
|---|---|---|---|---|---|
| 1 | 250ml Plastic | None | Yes | 5.5 | IR |
| 2 | 125ml Plastic | HNO3 | Yes | 5.5 | IR |
| 2 | 40ml Glass | H2SO4 | Yes | 5.5 | IR |
| 2 | 40ml Glass | HCL | Yes | 5.5 | IR |
| 2 | 125ml Amber | H2SO4 | Yes | 5.5 | IR |
| 1 | 125ml Plastic | NaOH | Yes | 5.5 | IR |

| Analysis | Results | Units | RL | Method | Run Date/Time | Analyst | CAS # | Flags |
|---|---|---|---|---|---|---|---|---|
| ***Extraction / Prep.*** | | | | | | | | |
| Metal Digestion | Completed | | | 3015A | 07/03/12 01:00 | SLR | | |
| Metal Digestion | Completed | | | 3015A | 07/02/12 01:00 | SLR | | |
| ***Inorganics*** | | | | | | | | |
| Chloride | Not detected | mg/L | 5 | 300.0 | 07/03/12 12:20 | JDP | 16887-00-6 | |
| Conductivity | 1,003 | umhos/cm | | 120.1 | 06/28/12 10:38 | JKB | | |
| Cyanide | Not detected | mg/L | 0.005 | 335.4/4500-CN-E | 07/03/12 15:53 | JDP | 57-12-5 | |
| Phenols | Not detected | mg/L | 0.02 | 420.1 | 06/29/12 13:16 | JKB | | |
| Sulfate | 183 | mg/L | 10 | 300.0 | 07/03/12 11:13 | JDP | 14808-79-8 | |
| TOC | 2 | mg/L | 1 | EPA 415.1 | 07/02/12 18:45 | JKB | | |
| ***Metals*** | | | | | | | | |
| Chromium, Dissolved | Not detected | mg/L | 0.005 | 200.8 | 07/05/12 15:09 | SLS | 7440-47-3 | |
| Copper, Dissolved | Not detected | mg/L | 0.004 | 200.8 | 07/05/12 15:09 | SLS | 7440-50-8 | |
| Iron, Dissolved | 1.70 | mg/L | 0.02 | 200.8 | 07/05/12 15:09 | SLS | 7439-89-6 | |
| Manganese, Dissolved | 0.053 | mg/L | 0.005 | 200.8 | 07/05/12 15:09 | SLS | 7439-96-5 | |
| Nickel, Dissolved | Not detected | mg/L | 0.005 | 200.8 | 07/05/12 15:09 | SLS | 7440-02-0 | |
| Sodium | 21.4 | mg/L | 1.0 | E200.8 | 07/03/12 13:37 | SLS | 7440-23-5 | |
| Zinc, Dissolved | Not detected | mg/L | 0.005 | 200.8 | 07/05/12 15:09 | SLS | 7440-66-6 | |
| ***Organics - Volatiles*** | | | | | | | | |
| **Volatile Organics - DEQ List** | | | | | | | | |
| Diethyl ether | Not detected | ug/L | 10 | 8260B | 06/28/12 16:54 | WAT | 60-29-7 | |
| Acetone | Not detected | ug/L | 50 | 8260B | 06/28/12 16:54 | WAT | 67-64-1 | |
| Methyl iodide | Not detected | ug/L | 1 | 8260B | 06/28/12 16:54 | WAT | 74-88-4 | |
| Carbon disulfide | Not detected | ug/L | 5 | 8260B | 06/28/12 16:54 | WAT | 75-15-0 | |
| tert-Methyl butyl ether (MTBE) | Not detected | ug/L | 5 | 8260B | 06/28/12 16:54 | WAT | 1634-04-4 | |
| Acrylonitrile | Not detected | ug/L | 2 | 8260B | 06/28/12 16:54 | WAT | 107-13-1 | |
| 2-Butanone (MEK) | Not detected | ug/L | 25 | 8260B | 06/28/12 16:54 | WAT | 78-93-3 | |
| Dichlorodifluoromethane | Not detected | ug/L | 5 | 8260B | 06/28/12 16:54 | WAT | 75-71-8 | |
| Chloromethane | Not detected | ug/L | 5 | 8260B | 06/28/12 16:54 | WAT | 74-87-3 | |
| Vinyl chloride | Not detected | ug/L | 1 | 8260B | 06/28/12 16:54 | WAT | 75-01-4 | |
| Bromomethane | Not detected | ug/L | 5 | 8260B | 06/28/12 16:54 | WAT | 74-83-9 | |
| Chloroethane | Not detected | ug/L | 5 | 8260B | 06/28/12 16:54 | WAT | 75-00-3 | |
| Trichlorofluoromethane | Not detected | ug/L | 1 | 8260B | 06/28/12 16:54 | WAT | 75-69-4 | |
| 1,1-Dichloroethene | Not detected | ug/L | 1 | 8260B | 06/28/12 16:54 | WAT | 75-35-4 | |
| Methylene chloride | Not detected | ug/L | 5 | 8260B | 06/28/12 16:54 | WAT | 75-09-2 | |
| trans-1,2-Dichloroethene | Not detected | ug/L | 1 | 8260B | 06/28/12 16:54 | WAT | 156-60-5 | |

Lab Sample ID: S52989.15 (continued)
Sample Tag: B-20D

| Analysis | Results | Units | RL | Method | Run Date/Time | Analyst | CAS # | Flags |
|---|---|---|---|---|---|---|---|---|
| ***Organics - Volatiles (continued)*** | | | | | | | | |
| **Volatile Organics - DEQ List (continued)** | | | | | | | | |
| 1,1-Dichloroethane | Not detected | ug/L | 1 | 8260B | 06/28/12 16:54 | WAT | 75-34-3 | |
| cis-1,2-Dichloroethene | Not detected | ug/L | 1 | 8260B | 06/28/12 16:54 | WAT | 156-59-2 | |
| Tetrahydrofuran | Not detected | ug/L | 90 | 8260B | 06/28/12 16:54 | WAT | 109-99-9 | |
| Chloroform | Not detected | ug/L | 1 | 8260B | 06/28/12 16:54 | WAT | 67-66-3 | |
| Bromochloromethane | Not detected | ug/L | 1 | 8260B | 06/28/12 16:54 | WAT | 74-97-5 | |
| 1,1,1-Trichloroethane | Not detected | ug/L | 1 | 8260B | 06/28/12 16:54 | WAT | 71-55-6 | |
| 4-Methyl-2-pentanone (MIBK) | Not detected | ug/L | 50 | 8260B | 06/28/12 16:54 | WAT | 108-10-1 | |
| 2-Hexanone | Not detected | ug/L | 50 | 8260B | 06/28/12 16:54 | WAT | 591-78-6 | |
| Carbon tetrachloride | Not detected | ug/L | 1 | 8260B | 06/28/12 16:54 | WAT | 56-23-5 | |
| Benzene | Not detected | ug/L | 1 | 8260B | 06/28/12 16:54 | WAT | 71-43-2 | |
| 1,2-Dichloroethane | Not detected | ug/L | 1 | 8260B | 06/28/12 16:54 | WAT | 107-06-2 | |
| Trichloroethene | Not detected | ug/L | 1 | 8260B | 06/28/12 16:54 | WAT | 79-01-6 | |
| 1,2-Dichloropropane | Not detected | ug/L | 1 | 8260B | 06/28/12 16:54 | WAT | 78-87-5 | |
| Bromodichloromethane | Not detected | ug/L | 1 | 8260B | 06/28/12 16:54 | WAT | 75-27-4 | |
| Dibromomethane | Not detected | ug/L | 5 | 8260B | 06/28/12 16:54 | WAT | 74-95-3 | |
| cis-1,3-Dichloropropene | Not detected | ug/L | 1 | 8260B | 06/28/12 16:54 | WAT | 10061-01-5 | |
| Toluene | Not detected | ug/L | 1 | 8260B | 06/28/12 16:54 | WAT | 108-88-3 | |
| trans-1,3-Dichloropropene | Not detected | ug/L | 1 | 8260B | 06/28/12 16:54 | WAT | 10061-02-6 | |
| 1,1,2-Trichloroethane | Not detected | ug/L | 1 | 8260B | 06/28/12 16:54 | WAT | 79-00-5 | |
| Tetrachloroethene | Not detected | ug/L | 1 | 8260B | 06/28/12 16:54 | WAT | 127-18-4 | |
| trans-1,4-Dichloro-2-butene | Not detected | ug/L | 1 | 8260B | 06/28/12 16:54 | WAT | 110-57-6 | |
| Dibromochloromethane | Not detected | ug/L | 5 | 8260B | 06/28/12 16:54 | WAT | 124-48-1 | |
| 1,2-Dibromoethane | Not detected | ug/L | 1 | 8260B | 06/28/12 16:54 | WAT | 106-93-4 | |
| Chlorobenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 16:54 | WAT | 108-90-7 | |
| 1,1,1,2-Tetrachloroethane | Not detected | ug/L | 1 | 8260B | 06/28/12 16:54 | WAT | 630-20-6 | |
| Ethylbenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 16:54 | WAT | 100-41-4 | |
| p,m-Xylene | Not detected | ug/L | 2 | 8260B | 06/28/12 16:54 | WAT | | |
| o-Xylene | Not detected | ug/L | 1 | 8260B | 06/28/12 16:54 | WAT | 95-47-6 | |
| Styrene | Not detected | ug/L | 1 | 8260B | 06/28/12 16:54 | WAT | 100-42-5 | |
| Isopropylbenzene | Not detected | ug/L | 5 | 8260B | 06/28/12 16:54 | WAT | 98-82-8 | |
| Bromoform | Not detected | ug/L | 1 | 8260B | 06/28/12 16:54 | WAT | 75-25-2 | |
| 1,1,2,2-Tetrachloroethane | Not detected | ug/L | 1 | 8260B | 06/28/12 16:54 | WAT | 79-34-5 | |
| 1,2,3-Trichloropropane | Not detected | ug/L | 1 | 8260B | 06/28/12 16:54 | WAT | 96-18-4 | |
| n-Propylbenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 16:54 | WAT | 103-65-1 | |
| Bromobenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 16:54 | WAT | 108-86-1 | |
| 1,3,5-Trimethylbenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 16:54 | WAT | 108-67-8 | |
| tert-Butylbenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 16:54 | WAT | 98-06-6 | |
| 1,2,4-Trimethylbenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 16:54 | WAT | 95-63-6 | |
| sec-Butylbenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 16:54 | WAT | 135-98-8 | |
| p-Isopropyltoluene | Not detected | ug/L | 5 | 8260B | 06/28/12 16:54 | WAT | 99-87-6 | |
| 1,3-Dichlorobenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 16:54 | WAT | 541-73-1 | |
| 1,4-Dichlorobenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 16:54 | WAT | 106-46-7 | |
| 1,2-Dichlorobenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 16:54 | WAT | 95-50-1 | |
| 1,2,3-Trimethylbenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 16:54 | WAT | 526-73-8 | |
| n-Butylbenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 16:54 | WAT | 104-51-8 | |
| Hexachloroethane | Not detected | ug/L | 5 | 8260B | 06/28/12 16:54 | WAT | 67-72-1 | |
| 1,2-Dibromo-3-chloropropane | Not detected | ug/L | 5 | 8260B | 06/28/12 16:54 | WAT | 96-12-8 | |
| 1,2,4-Trichlorobenzene | Not detected | ug/L | 5 | 8260B | 06/28/12 16:54 | WAT | 120-82-1 | |
| 1,2,3-Trichlorobenzene | Not detected | ug/L | 5 | 8260B | 06/28/12 16:54 | WAT | 87-61-6 | |

Lab Sample ID: S52989.15 (continued)
Sample Tag: B-20D

| Analysis | Results | Units | RL | Method | Run Date/Time | Analyst | CAS # | Flags |
|---|---|---|---|---|---|---|---|---|
| ***Organics - Volatiles (continued)*** | | | | | | | | |
| **Volatile Organics - DEQ List (continued)** | | | | | | | | |
| Naphthalene | Not detected | ug/L | 5 | 8260B | 06/28/12 16:54 | WAT | 91-20-3 | |
| 2-Methylnaphthalene | Not detected | ug/L | 5 | 8260B | 06/28/12 16:54 | WAT | 91-57-6 | |
| ***Organics*** | | | | | | | | |
| TOX | 15 | ug/L | 40 | 9020A | 07/06/12 12:48 | TestA | | O1 |

O-Analysis performed by outside laboratory. See attached report. 1-Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

# Analytical Laboratory Report

Lab Sample ID: S52989.16
Sample Tag: B-22D
Collected Date/Time: 06/25/2012 15:45
Matrix: Groundwater
COC Reference: 65459

Sample Containers

| # | Type | Preservative(s) | Refrigerated? | Arrival Temp. (C) | Thermometer # |
|---|---|---|---|---|---|
| 1 | 250ml Plastic | None | Yes | 5.5 | IR |
| 2 | 125ml Plastic | HNO3 | Yes | 5.5 | IR |
| 2 | 40ml Glass | H2SO4 | Yes | 5.5 | IR |
| 2 | 40ml Glass | HCL | Yes | 5.5 | IR |
| 2 | 125ml Amber | H2SO4 | Yes | 5.5 | IR |
| 1 | 125ml Plastic | NaOH | Yes | 5.5 | IR |

| Analysis | Results | Units | RL | Method | Run Date/Time | Analyst | CAS # | Flags |
|---|---|---|---|---|---|---|---|---|
| ***Extraction / Prep.*** | | | | | | | | |
| Metal Digestion | Completed | | | 3015A | 07/03/12 01:00 | SLR | | |
| Metal Digestion | Completed | | | 3015A | 07/02/12 01:00 | SLR | | |
| ***Inorganics*** | | | | | | | | |
| Chloride | Not detected | mg/L | 5 | 300.0 | 07/03/12 12:32 | JDP | 16887-00-6 | |
| Conductivity | 714 | umhos/cm | | 120.1 | 06/28/12 10:40 | JKB | | |
| Cyanide | Not detected | mg/L | 0.005 | 335.4/4500-CN-E | 07/03/12 16:01 | JDP | 57-12-5 | |
| Phenols | Not detected | mg/L | 0.02 | 420.1 | 06/29/12 13:18 | JKB | | |
| Sulfate | 51 | mg/L | 10 | 300.0 | 07/03/12 11:24 | JDP | 14808-79-8 | |
| TOC | 2 | mg/L | 1 | EPA 415.1 | 07/02/12 19:05 | JKB | | |
| ***Metals*** | | | | | | | | |
| Chromium, Dissolved | Not detected | mg/L | 0.005 | 200.8 | 07/05/12 15:12 | SLS | 7440-47-3 | |
| Copper, Dissolved | Not detected | mg/L | 0.004 | 200.8 | 07/05/12 15:12 | SLS | 7440-50-8 | |
| Iron, Dissolved | 1.83 | mg/L | 0.02 | 200.8 | 07/05/12 15:12 | SLS | 7439-89-6 | |
| Manganese, Dissolved | 0.042 | mg/L | 0.005 | 200.8 | 07/05/12 15:12 | SLS | 7439-96-5 | |
| Nickel, Dissolved | Not detected | mg/L | 0.005 | 200.8 | 07/05/12 15:12 | SLS | 7440-02-0 | |
| Sodium | 30.0 | mg/L | 1.0 | E200.8 | 07/03/12 13:39 | SLS | 7440-23-5 | |
| Zinc, Dissolved | 0.008 | mg/L | 0.005 | 200.8 | 07/05/12 15:12 | SLS | 7440-66-6 | |
| ***Organics - Volatiles*** | | | | | | | | |
| **Volatile Organics - DEQ List** | | | | | | | | |
| Diethyl ether | Not detected | ug/L | 10 | 8260B | 06/28/12 18:59 | WAT | 60-29-7 | |
| Acetone | Not detected | ug/L | 50 | 8260B | 06/28/12 18:59 | WAT | 67-64-1 | |
| Methyl iodide | Not detected | ug/L | 1 | 8260B | 06/28/12 18:59 | WAT | 74-88-4 | |
| Carbon disulfide | Not detected | ug/L | 5 | 8260B | 06/28/12 18:59 | WAT | 75-15-0 | |
| tert-Methyl butyl ether (MTBE) | Not detected | ug/L | 5 | 8260B | 06/28/12 18:59 | WAT | 1634-04-4 | |
| Acrylonitrile | Not detected | ug/L | 2 | 8260B | 06/28/12 18:59 | WAT | 107-13-1 | |
| 2-Butanone (MEK) | Not detected | ug/L | 25 | 8260B | 06/28/12 18:59 | WAT | 78-93-3 | |
| Dichlorodifluoromethane | Not detected | ug/L | 5 | 8260B | 06/28/12 18:59 | WAT | 75-71-8 | |
| Chloromethane | Not detected | ug/L | 5 | 8260B | 06/28/12 18:59 | WAT | 74-87-3 | |
| Vinyl chloride | Not detected | ug/L | 1 | 8260B | 06/28/12 18:59 | WAT | 75-01-4 | |
| Bromomethane | Not detected | ug/L | 5 | 8260B | 06/28/12 18:59 | WAT | 74-83-9 | |
| Chloroethane | Not detected | ug/L | 5 | 8260B | 06/28/12 18:59 | WAT | 75-00-3 | |
| Trichlorofluoromethane | Not detected | ug/L | 1 | 8260B | 06/28/12 18:59 | WAT | 75-69-4 | |
| 1,1-Dichloroethene | Not detected | ug/L | 1 | 8260B | 06/28/12 18:59 | WAT | 75-35-4 | |
| Methylene chloride | Not detected | ug/L | 5 | 8260B | 06/28/12 18:59 | WAT | 75-09-2 | |
| trans-1,2-Dichloroethene | Not detected | ug/L | 1 | 8260B | 06/28/12 18:59 | WAT | 156-60-5 | |

Lab Sample ID: S52989.16 (continued)
Sample Tag: B-22D

| Analysis | Results | Units | RL | Method | Run Date/Time | Analyst | CAS # | Flags |
|---|---|---|---|---|---|---|---|---|
| ***Organics - Volatiles (continued)*** | | | | | | | | |
| **Volatile Organics - DEQ List (continued)** | | | | | | | | |
| 1,1-Dichloroethane | Not detected | ug/L | 1 | 8260B | 06/28/12 18:59 | WAT | 75-34-3 | |
| cis-1,2-Dichloroethene | Not detected | ug/L | 1 | 8260B | 06/28/12 18:59 | WAT | 156-59-2 | |
| Tetrahydrofuran | Not detected | ug/L | 90 | 8260B | 06/28/12 18:59 | WAT | 109-99-9 | |
| Chloroform | Not detected | ug/L | 1 | 8260B | 06/28/12 18:59 | WAT | 67-66-3 | |
| Bromochloromethane | Not detected | ug/L | 1 | 8260B | 06/28/12 18:59 | WAT | 74-97-5 | |
| 1,1,1-Trichloroethane | Not detected | ug/L | 1 | 8260B | 06/28/12 18:59 | WAT | 71-55-6 | |
| 4-Methyl-2-pentanone (MIBK) | Not detected | ug/L | 50 | 8260B | 06/28/12 18:59 | WAT | 108-10-1 | |
| 2-Hexanone | Not detected | ug/L | 50 | 8260B | 06/28/12 18:59 | WAT | 591-78-6 | |
| Carbon tetrachloride | Not detected | ug/L | 1 | 8260B | 06/28/12 18:59 | WAT | 56-23-5 | |
| Benzene | Not detected | ug/L | 1 | 8260B | 06/28/12 18:59 | WAT | 71-43-2 | |
| 1,2-Dichloroethane | Not detected | ug/L | 1 | 8260B | 06/28/12 18:59 | WAT | 107-06-2 | |
| Trichloroethene | Not detected | ug/L | 1 | 8260B | 06/28/12 18:59 | WAT | 79-01-6 | |
| 1,2-Dichloropropane | Not detected | ug/L | 1 | 8260B | 06/28/12 18:59 | WAT | 78-87-5 | |
| Bromodichloromethane | Not detected | ug/L | 1 | 8260B | 06/28/12 18:59 | WAT | 75-27-4 | |
| Dibromomethane | Not detected | ug/L | 5 | 8260B | 06/28/12 18:59 | WAT | 74-95-3 | |
| cis-1,3-Dichloropropene | Not detected | ug/L | 1 | 8260B | 06/28/12 18:59 | WAT | 10061-01-5 | |
| Toluene | Not detected | ug/L | 1 | 8260B | 06/28/12 18:59 | WAT | 108-88-3 | |
| trans-1,3-Dichloropropene | Not detected | ug/L | 1 | 8260B | 06/28/12 18:59 | WAT | 10061-02-6 | |
| 1,1,2-Trichloroethane | Not detected | ug/L | 1 | 8260B | 06/28/12 18:59 | WAT | 79-00-5 | |
| Tetrachloroethene | Not detected | ug/L | 1 | 8260B | 06/28/12 18:59 | WAT | 127-18-4 | |
| trans-1,4-Dichloro-2-butene | Not detected | ug/L | 1 | 8260B | 06/28/12 18:59 | WAT | 110-57-6 | |
| Dibromochloromethane | Not detected | ug/L | 5 | 8260B | 06/28/12 18:59 | WAT | 124-48-1 | |
| 1,2-Dibromoethane | Not detected | ug/L | 1 | 8260B | 06/28/12 18:59 | WAT | 106-93-4 | |
| Chlorobenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 18:59 | WAT | 108-90-7 | |
| 1,1,1,2-Tetrachloroethane | Not detected | ug/L | 1 | 8260B | 06/28/12 18:59 | WAT | 630-20-6 | |
| Ethylbenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 18:59 | WAT | 100-41-4 | |
| p,m-Xylene | Not detected | ug/L | 2 | 8260B | 06/28/12 18:59 | WAT | | |
| o-Xylene | Not detected | ug/L | 1 | 8260B | 06/28/12 18:59 | WAT | 95-47-6 | |
| Styrene | Not detected | ug/L | 1 | 8260B | 06/28/12 18:59 | WAT | 100-42-5 | |
| Isopropylbenzene | Not detected | ug/L | 5 | 8260B | 06/28/12 18:59 | WAT | 98-82-8 | |
| Bromoform | Not detected | ug/L | 1 | 8260B | 06/28/12 18:59 | WAT | 75-25-2 | |
| 1,1,2,2-Tetrachloroethane | Not detected | ug/L | 1 | 8260B | 06/28/12 18:59 | WAT | 79-34-5 | |
| 1,2,3-Trichloropropane | Not detected | ug/L | 1 | 8260B | 06/28/12 18:59 | WAT | 96-18-4 | |
| n-Propylbenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 18:59 | WAT | 103-65-1 | |
| Bromobenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 18:59 | WAT | 108-86-1 | |
| 1,3,5-Trimethylbenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 18:59 | WAT | 108-67-8 | |
| tert-Butylbenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 18:59 | WAT | 98-06-6 | |
| 1,2,4-Trimethylbenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 18:59 | WAT | 95-63-6 | |
| sec-Butylbenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 18:59 | WAT | 135-98-8 | |
| p-Isopropyltoluene | Not detected | ug/L | 5 | 8260B | 06/28/12 18:59 | WAT | 99-87-6 | |
| 1,3-Dichlorobenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 18:59 | WAT | 541-73-1 | |
| 1,4-Dichlorobenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 18:59 | WAT | 106-46-7 | |
| 1,2-Dichlorobenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 18:59 | WAT | 95-50-1 | |
| 1,2,3-Trimethylbenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 18:59 | WAT | 526-73-8 | |
| n-Butylbenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 18:59 | WAT | 104-51-8 | |
| Hexachloroethane | Not detected | ug/L | 5 | 8260B | 06/28/12 18:59 | WAT | 67-72-1 | |
| 1,2-Dibromo-3-chloropropane | Not detected | ug/L | 5 | 8260B | 06/28/12 18:59 | WAT | 96-12-8 | |
| 1,2,4-Trichlorobenzene | Not detected | ug/L | 5 | 8260B | 06/28/12 18:59 | WAT | 120-82-1 | |
| 1,2,3-Trichlorobenzene | Not detected | ug/L | 5 | 8260B | 06/28/12 18:59 | WAT | 87-61-6 | |

Lab Sample ID: S52989.16 (continued)
Sample Tag: B-22D

| Analysis | Results | Units | RL | Method | Run Date/Time | Analyst | CAS # | Flags |
|---|---|---|---|---|---|---|---|---|
| ***Organics - Volatiles (continued)*** | | | | | | | | |
| **Volatile Organics - DEQ List (continued)** | | | | | | | | |
| Naphthalene | Not detected | ug/L | 5 | 8260B | 06/28/12 18:59 | WAT | 91-20-3 | |
| 2-Methylnaphthalene | Not detected | ug/L | 5 | 8260B | 06/28/12 18:59 | WAT | 91-57-6 | |
| ***Organics*** | | | | | | | | |
| TOX | Not detected | ug/L | 40 | 9020A | 07/06/12 12:48 | TestA | | O |

O-Analysis performed by outside laboratory. See attached report.

# Analytical Laboratory Report

Lab Sample ID: S52989.17
Sample Tag: B-28
Collected Date/Time: 06/26/2012 09:20
Matrix: Groundwater
COC Reference: 65459

Sample Containers

| # | Type | Preservative(s) | Refrigerated? | Arrival Temp. (C) | Thermometer # |
|---|---|---|---|---|---|
| 1 | 250ml Plastic | None | Yes | 5.5 | IR |
| 2 | 125ml Plastic | HNO3 | Yes | 5.5 | IR |
| 2 | 40ml Glass | H2SO4 | Yes | 5.5 | IR |
| 2 | 40ml Glass | HCL | Yes | 5.5 | IR |
| 2 | 125ml Amber | H2SO4 | Yes | 5.5 | IR |
| 1 | 125ml Plastic | NaOH | Yes | 5.5 | IR |

| Analysis | Results | Units | RL | Method | Run Date/Time | Analyst | CAS # | Flags |
|---|---|---|---|---|---|---|---|---|
| ***Extraction / Prep.*** | | | | | | | | |
| Metal Digestion | Completed | | | 3015A | 07/03/12 01:00 | SLR | | |
| Metal Digestion | Completed | | | 3015A | 07/02/12 01:00 | SLR | | |
| ***Inorganics*** | | | | | | | | |
| Chloride | 12 | mg/L | 10 | 300.0 | 07/03/12 11:36 | JDP | 16887-00-6 | |
| Conductivity | 849 | umhos/cm | | 120.1 | 06/28/12 10:42 | JKB | | |
| Cyanide | Not detected | mg/L | 0.005 | 335.4/4500-CN-E | 07/03/12 16:03 | JDP | 57-12-5 | |
| Phenols | Not detected | mg/L | 0.02 | 420.1 | 06/29/12 13:20 | JKB | | |
| Sulfate | 80 | mg/L | 10 | 300.0 | 07/03/12 11:36 | JDP | 14808-79-8 | |
| TOC | 2 | mg/L | 1 | EPA 415.1 | 07/02/12 19:24 | JKB | | |
| ***Metals*** | | | | | | | | |
| Chromium, Dissolved | Not detected | mg/L | 0.005 | 200.8 | 07/05/12 15:14 | SLS | 7440-47-3 | |
| Copper, Dissolved | Not detected | mg/L | 0.004 | 200.8 | 07/05/12 15:14 | SLS | 7440-50-8 | |
| Iron, Dissolved | 1.96 | mg/L | 0.02 | 200.8 | 07/05/12 15:14 | SLS | 7439-89-6 | |
| Manganese, Dissolved | 0.084 | mg/L | 0.005 | 200.8 | 07/05/12 15:14 | SLS | 7439-96-5 | |
| Nickel, Dissolved | Not detected | mg/L | 0.005 | 200.8 | 07/05/12 15:14 | SLS | 7440-02-0 | |
| Sodium | 29.8 | mg/L | 1.0 | E200.8 | 07/03/12 13:42 | SLS | 7440-23-5 | |
| Zinc, Dissolved | Not detected | mg/L | 0.005 | 200.8 | 07/05/12 15:14 | SLS | 7440-66-6 | |
| ***Organics - Volatiles*** | | | | | | | | |
| **Volatile Organics - DEQ List** | | | | | | | | |
| Diethyl ether | Not detected | ug/L | 10 | 8260B | 06/28/12 19:19 | WAT | 60-29-7 | |
| Acetone | Not detected | ug/L | 50 | 8260B | 06/28/12 19:19 | WAT | 67-64-1 | |
| Methyl iodide | Not detected | ug/L | 1 | 8260B | 06/28/12 19:19 | WAT | 74-88-4 | |
| Carbon disulfide | Not detected | ug/L | 5 | 8260B | 06/28/12 19:19 | WAT | 75-15-0 | |
| tert-Methyl butyl ether (MTBE) | Not detected | ug/L | 5 | 8260B | 06/28/12 19:19 | WAT | 1634-04-4 | |
| Acrylonitrile | Not detected | ug/L | 2 | 8260B | 06/28/12 19:19 | WAT | 107-13-1 | |
| 2-Butanone (MEK) | Not detected | ug/L | 25 | 8260B | 06/28/12 19:19 | WAT | 78-93-3 | |
| Dichlorodifluoromethane | Not detected | ug/L | 5 | 8260B | 06/28/12 19:19 | WAT | 75-71-8 | |
| Chloromethane | Not detected | ug/L | 5 | 8260B | 06/28/12 19:19 | WAT | 74-87-3 | |
| Vinyl chloride | Not detected | ug/L | 1 | 8260B | 06/28/12 19:19 | WAT | 75-01-4 | |
| Bromomethane | Not detected | ug/L | 5 | 8260B | 06/28/12 19:19 | WAT | 74-83-9 | |
| Chloroethane | Not detected | ug/L | 5 | 8260B | 06/28/12 19:19 | WAT | 75-00-3 | |
| Trichlorofluoromethane | Not detected | ug/L | 1 | 8260B | 06/28/12 19:19 | WAT | 75-69-4 | |
| 1,1-Dichloroethene | Not detected | ug/L | 1 | 8260B | 06/28/12 19:19 | WAT | 75-35-4 | |
| Methylene chloride | Not detected | ug/L | 5 | 8260B | 06/28/12 19:19 | WAT | 75-09-2 | |
| trans-1,2-Dichloroethene | Not detected | ug/L | 1 | 8260B | 06/28/12 19:19 | WAT | 156-60-5 | |

Lab Sample ID: S52989.17 (continued)
Sample Tag: B-28

| Analysis | Results | Units | RL | Method | Run Date/Time | Analyst | CAS # | Flags |
|---|---|---|---|---|---|---|---|---|
| ***Organics - Volatiles (continued)*** | | | | | | | | |
| **Volatile Organics - DEQ List (continued)** | | | | | | | | |
| 1,1-Dichloroethane | Not detected | ug/L | 1 | 8260B | 06/28/12 19:19 | WAT | 75-34-3 | |
| cis-1,2-Dichloroethene | Not detected | ug/L | 1 | 8260B | 06/28/12 19:19 | WAT | 156-59-2 | |
| Tetrahydrofuran | Not detected | ug/L | 90 | 8260B | 06/28/12 19:19 | WAT | 109-99-9 | |
| Chloroform | Not detected | ug/L | 1 | 8260B | 06/28/12 19:19 | WAT | 67-66-3 | |
| Bromochloromethane | Not detected | ug/L | 1 | 8260B | 06/28/12 19:19 | WAT | 74-97-5 | |
| 1,1,1-Trichloroethane | Not detected | ug/L | 1 | 8260B | 06/28/12 19:19 | WAT | 71-55-6 | |
| 4-Methyl-2-pentanone (MIBK) | Not detected | ug/L | 50 | 8260B | 06/28/12 19:19 | WAT | 108-10-1 | |
| 2-Hexanone | Not detected | ug/L | 50 | 8260B | 06/28/12 19:19 | WAT | 591-78-6 | |
| Carbon tetrachloride | Not detected | ug/L | 1 | 8260B | 06/28/12 19:19 | WAT | 56-23-5 | |
| Benzene | Not detected | ug/L | 1 | 8260B | 06/28/12 19:19 | WAT | 71-43-2 | |
| 1,2-Dichloroethane | Not detected | ug/L | 1 | 8260B | 06/28/12 19:19 | WAT | 107-06-2 | |
| Trichloroethene | Not detected | ug/L | 1 | 8260B | 06/28/12 19:19 | WAT | 79-01-6 | |
| 1,2-Dichloropropane | Not detected | ug/L | 1 | 8260B | 06/28/12 19:19 | WAT | 78-87-5 | |
| Bromodichloromethane | Not detected | ug/L | 1 | 8260B | 06/28/12 19:19 | WAT | 75-27-4 | |
| Dibromomethane | Not detected | ug/L | 5 | 8260B | 06/28/12 19:19 | WAT | 74-95-3 | |
| cis-1,3-Dichloropropene | Not detected | ug/L | 1 | 8260B | 06/28/12 19:19 | WAT | 10061-01-5 | |
| Toluene | Not detected | ug/L | 1 | 8260B | 06/28/12 19:19 | WAT | 108-88-3 | |
| trans-1,3-Dichloropropene | Not detected | ug/L | 1 | 8260B | 06/28/12 19:19 | WAT | 10061-02-6 | |
| 1,1,2-Trichloroethane | Not detected | ug/L | 1 | 8260B | 06/28/12 19:19 | WAT | 79-00-5 | |
| Tetrachloroethene | Not detected | ug/L | 1 | 8260B | 06/28/12 19:19 | WAT | 127-18-4 | |
| trans-1,4-Dichloro-2-butene | Not detected | ug/L | 1 | 8260B | 06/28/12 19:19 | WAT | 110-57-6 | |
| Dibromochloromethane | Not detected | ug/L | 5 | 8260B | 06/28/12 19:19 | WAT | 124-48-1 | |
| 1,2-Dibromoethane | Not detected | ug/L | 1 | 8260B | 06/28/12 19:19 | WAT | 106-93-4 | |
| Chlorobenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 19:19 | WAT | 108-90-7 | |
| 1,1,1,2-Tetrachloroethane | Not detected | ug/L | 1 | 8260B | 06/28/12 19:19 | WAT | 630-20-6 | |
| Ethylbenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 19:19 | WAT | 100-41-4 | |
| p,m-Xylene | Not detected | ug/L | 2 | 8260B | 06/28/12 19:19 | WAT | | |
| o-Xylene | Not detected | ug/L | 1 | 8260B | 06/28/12 19:19 | WAT | 95-47-6 | |
| Styrene | Not detected | ug/L | 1 | 8260B | 06/28/12 19:19 | WAT | 100-42-5 | |
| Isopropylbenzene | Not detected | ug/L | 5 | 8260B | 06/28/12 19:19 | WAT | 98-82-8 | |
| Bromoform | Not detected | ug/L | 1 | 8260B | 06/28/12 19:19 | WAT | 75-25-2 | |
| 1,1,2,2-Tetrachloroethane | Not detected | ug/L | 1 | 8260B | 06/28/12 19:19 | WAT | 79-34-5 | |
| 1,2,3-Trichloropropane | Not detected | ug/L | 1 | 8260B | 06/28/12 19:19 | WAT | 96-18-4 | |
| n-Propylbenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 19:19 | WAT | 103-65-1 | |
| Bromobenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 19:19 | WAT | 108-86-1 | |
| 1,3,5-Trimethylbenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 19:19 | WAT | 108-67-8 | |
| tert-Butylbenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 19:19 | WAT | 98-06-6 | |
| 1,2,4-Trimethylbenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 19:19 | WAT | 95-63-6 | |
| sec-Butylbenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 19:19 | WAT | 135-98-8 | |
| p-Isopropyltoluene | Not detected | ug/L | 5 | 8260B | 06/28/12 19:19 | WAT | 99-87-6 | |
| 1,3-Dichlorobenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 19:19 | WAT | 541-73-1 | |
| 1,4-Dichlorobenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 19:19 | WAT | 106-46-7 | |
| 1,2-Dichlorobenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 19:19 | WAT | 95-50-1 | |
| 1,2,3-Trimethylbenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 19:19 | WAT | 526-73-8 | |
| n-Butylbenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 19:19 | WAT | 104-51-8 | |
| Hexachloroethane | Not detected | ug/L | 5 | 8260B | 06/28/12 19:19 | WAT | 67-72-1 | |
| 1,2-Dibromo-3-chloropropane | Not detected | ug/L | 5 | 8260B | 06/28/12 19:19 | WAT | 96-12-8 | |
| 1,2,4-Trichlorobenzene | Not detected | ug/L | 5 | 8260B | 06/28/12 19:19 | WAT | 120-82-1 | |
| 1,2,3-Trichlorobenzene | Not detected | ug/L | 5 | 8260B | 06/28/12 19:19 | WAT | 87-61-6 | |

Lab Sample ID: S52989.17 (continued)
Sample Tag: B-28

| Analysis | Results | Units | RL | Method | Run Date/Time | Analyst | CAS # | Flags |
|---|---|---|---|---|---|---|---|---|
| ***Organics - Volatiles (continued)*** | | | | | | | | |
| **Volatile Organics - DEQ List (continued)** | | | | | | | | |
| Naphthalene | Not detected | ug/L | 5 | 8260B | 06/28/12 19:19 | WAT | 91-20-3 | |
| 2-Methylnaphthalene | Not detected | ug/L | 5 | 8260B | 06/28/12 19:19 | WAT | 91-57-6 | |
| ***Organics*** | | | | | | | | |
| TOX | Not detected | ug/L | 40 | 9020A | 07/06/12 12:48 | TestA | | O |

O-Analysis performed by outside laboratory. See attached report.

# Analytical Laboratory Report

Lab Sample ID: S52989.18
Sample Tag: B-23Dr
Collected Date/Time: 06/26/2012 09:25
Matrix: Groundwater
COC Reference: 65459

Sample Containers

| # | Type | Preservative(s) | Refrigerated? | Arrival Temp. (C) | Thermometer # |
|---|---|---|---|---|---|
| 1 | 250ml Plastic | None | Yes | 5.5 | IR |
| 2 | 125ml Plastic | HNO3 | Yes | 5.5 | IR |
| 2 | 40ml Glass | H2SO4 | Yes | 5.5 | IR |
| 2 | 40ml Glass | HCL | Yes | 5.5 | IR |
| 2 | 125ml Amber | H2SO4 | Yes | 5.5 | IR |
| 1 | 125ml Plastic | NaOH | Yes | 5.5 | IR |

| Analysis | Results | Units | RL | Method | Run Date/Time | Analyst | CAS # | Flags |
|---|---|---|---|---|---|---|---|---|
| ***Extraction / Prep.*** | | | | | | | | |
| Metal Digestion | Completed | | | 3015A | 07/03/12 01:00 | SLR | | |
| Metal Digestion | Completed | | | 3015A | 07/02/12 01:00 | SLR | | |
| ***Inorganics*** | | | | | | | | |
| Chloride | 25 | mg/L | 10 | 300.0 | 07/03/12 11:47 | JDP | 16887-00-6 | |
| Conductivity | 748 | umhos/cm | | 120.1 | 06/28/12 10:44 | JKB | | |
| Cyanide | Not detected | mg/L | 0.005 | 335.4/4500-CN-E | 07/03/12 16:05 | JDP | 57-12-5 | |
| Phenols | Not detected | mg/L | 0.02 | 420.1 | 06/29/12 13:22 | JKB | | |
| Sulfate | 50 | mg/L | 10 | 300.0 | 07/03/12 11:47 | JDP | 14808-79-8 | |
| TOC | 1 | mg/L | 1 | EPA 415.1 | 07/02/12 19:44 | JKB | | |
| ***Metals*** | | | | | | | | |
| Chromium, Dissolved | Not detected | mg/L | 0.005 | 200.8 | 07/05/12 15:17 | SLS | 7440-47-3 | |
| Copper, Dissolved | Not detected | mg/L | 0.004 | 200.8 | 07/05/12 15:17 | SLS | 7440-50-8 | |
| Iron, Dissolved | 1.81 | mg/L | 0.02 | 200.8 | 07/05/12 15:17 | SLS | 7439-89-6 | |
| Manganese, Dissolved | 0.042 | mg/L | 0.005 | 200.8 | 07/05/12 15:17 | SLS | 7439-96-5 | |
| Nickel, Dissolved | Not detected | mg/L | 0.005 | 200.8 | 07/05/12 15:17 | SLS | 7440-02-0 | |
| Sodium | 25.1 | mg/L | 1.0 | E200.8 | 07/03/12 13:44 | SLS | 7440-23-5 | |
| Zinc, Dissolved | Not detected | mg/L | 0.005 | 200.8 | 07/05/12 15:17 | SLS | 7440-66-6 | |
| ***Organics - Volatiles*** | | | | | | | | |
| **Volatile Organics - DEQ List** | | | | | | | | |
| Diethyl ether | Not detected | ug/L | 10 | 8260B | 06/28/12 19:40 | WAT | 60-29-7 | |
| Acetone | Not detected | ug/L | 50 | 8260B | 06/28/12 19:40 | WAT | 67-64-1 | |
| Methyl iodide | Not detected | ug/L | 1 | 8260B | 06/28/12 19:40 | WAT | 74-88-4 | |
| Carbon disulfide | Not detected | ug/L | 5 | 8260B | 06/28/12 19:40 | WAT | 75-15-0 | |
| tert-Methyl butyl ether (MTBE) | Not detected | ug/L | 5 | 8260B | 06/28/12 19:40 | WAT | 1634-04-4 | |
| Acrylonitrile | Not detected | ug/L | 2 | 8260B | 06/28/12 19:40 | WAT | 107-13-1 | |
| 2-Butanone (MEK) | Not detected | ug/L | 25 | 8260B | 06/28/12 19:40 | WAT | 78-93-3 | |
| Dichlorodifluoromethane | Not detected | ug/L | 5 | 8260B | 06/28/12 19:40 | WAT | 75-71-8 | |
| Chloromethane | Not detected | ug/L | 5 | 8260B | 06/28/12 19:40 | WAT | 74-87-3 | |
| Vinyl chloride | Not detected | ug/L | 1 | 8260B | 06/28/12 19:40 | WAT | 75-01-4 | |
| Bromomethane | Not detected | ug/L | 5 | 8260B | 06/28/12 19:40 | WAT | 74-83-9 | |
| Chloroethane | Not detected | ug/L | 5 | 8260B | 06/28/12 19:40 | WAT | 75-00-3 | |
| Trichlorofluoromethane | Not detected | ug/L | 1 | 8260B | 06/28/12 19:40 | WAT | 75-69-4 | |
| 1,1-Dichloroethene | Not detected | ug/L | 1 | 8260B | 06/28/12 19:40 | WAT | 75-35-4 | |
| Methylene chloride | Not detected | ug/L | 5 | 8260B | 06/28/12 19:40 | WAT | 75-09-2 | |
| trans-1,2-Dichloroethene | Not detected | ug/L | 1 | 8260B | 06/28/12 19:40 | WAT | 156-60-5 | |

Lab Sample ID: S52989.18 (continued)
Sample Tag: B-23Dr

| Analysis | Results | Units | RL | Method | Run Date/Time | Analyst | CAS # | Flags |
|---|---|---|---|---|---|---|---|---|
| ***Organics - Volatiles (continued)*** | | | | | | | | |
| **Volatile Organics - DEQ List (continued)** | | | | | | | | |
| 1,1-Dichloroethane | Not detected | ug/L | 1 | 8260B | 06/28/12 19:40 | WAT | 75-34-3 | |
| cis-1,2-Dichloroethene | Not detected | ug/L | 1 | 8260B | 06/28/12 19:40 | WAT | 156-59-2 | |
| Tetrahydrofuran | Not detected | ug/L | 90 | 8260B | 06/28/12 19:40 | WAT | 109-99-9 | |
| Chloroform | Not detected | ug/L | 1 | 8260B | 06/28/12 19:40 | WAT | 67-66-3 | |
| Bromochloromethane | Not detected | ug/L | 1 | 8260B | 06/28/12 19:40 | WAT | 74-97-5 | |
| 1,1,1-Trichloroethane | Not detected | ug/L | 1 | 8260B | 06/28/12 19:40 | WAT | 71-55-6 | |
| 4-Methyl-2-pentanone (MIBK) | Not detected | ug/L | 50 | 8260B | 06/28/12 19:40 | WAT | 108-10-1 | |
| 2-Hexanone | Not detected | ug/L | 50 | 8260B | 06/28/12 19:40 | WAT | 591-78-6 | |
| Carbon tetrachloride | Not detected | ug/L | 1 | 8260B | 06/28/12 19:40 | WAT | 56-23-5 | |
| Benzene | Not detected | ug/L | 1 | 8260B | 06/28/12 19:40 | WAT | 71-43-2 | |
| 1,2-Dichloroethane | Not detected | ug/L | 1 | 8260B | 06/28/12 19:40 | WAT | 107-06-2 | |
| Trichloroethene | Not detected | ug/L | 1 | 8260B | 06/28/12 19:40 | WAT | 79-01-6 | |
| 1,2-Dichloropropane | Not detected | ug/L | 1 | 8260B | 06/28/12 19:40 | WAT | 78-87-5 | |
| Bromodichloromethane | Not detected | ug/L | 1 | 8260B | 06/28/12 19:40 | WAT | 75-27-4 | |
| Dibromomethane | Not detected | ug/L | 5 | 8260B | 06/28/12 19:40 | WAT | 74-95-3 | |
| cis-1,3-Dichloropropene | Not detected | ug/L | 1 | 8260B | 06/28/12 19:40 | WAT | 10061-01-5 | |
| Toluene | Not detected | ug/L | 1 | 8260B | 06/28/12 19:40 | WAT | 108-88-3 | |
| trans-1,3-Dichloropropene | Not detected | ug/L | 1 | 8260B | 06/28/12 19:40 | WAT | 10061-02-6 | |
| 1,1,2-Trichloroethane | Not detected | ug/L | 1 | 8260B | 06/28/12 19:40 | WAT | 79-00-5 | |
| Tetrachloroethene | Not detected | ug/L | 1 | 8260B | 06/28/12 19:40 | WAT | 127-18-4 | |
| trans-1,4-Dichloro-2-butene | Not detected | ug/L | 1 | 8260B | 06/28/12 19:40 | WAT | 110-57-6 | |
| Dibromochloromethane | Not detected | ug/L | 5 | 8260B | 06/28/12 19:40 | WAT | 124-48-1 | |
| 1,2-Dibromoethane | Not detected | ug/L | 1 | 8260B | 06/28/12 19:40 | WAT | 106-93-4 | |
| Chlorobenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 19:40 | WAT | 108-90-7 | |
| 1,1,1,2-Tetrachloroethane | Not detected | ug/L | 1 | 8260B | 06/28/12 19:40 | WAT | 630-20-6 | |
| Ethylbenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 19:40 | WAT | 100-41-4 | |
| p,m-Xylene | Not detected | ug/L | 2 | 8260B | 06/28/12 19:40 | WAT | | |
| o-Xylene | Not detected | ug/L | 1 | 8260B | 06/28/12 19:40 | WAT | 95-47-6 | |
| Styrene | Not detected | ug/L | 1 | 8260B | 06/28/12 19:40 | WAT | 100-42-5 | |
| Isopropylbenzene | Not detected | ug/L | 5 | 8260B | 06/28/12 19:40 | WAT | 98-82-8 | |
| Bromoform | Not detected | ug/L | 1 | 8260B | 06/28/12 19:40 | WAT | 75-25-2 | |
| 1,1,2,2-Tetrachloroethane | Not detected | ug/L | 1 | 8260B | 06/28/12 19:40 | WAT | 79-34-5 | |
| 1,2,3-Trichloropropane | Not detected | ug/L | 1 | 8260B | 06/28/12 19:40 | WAT | 96-18-4 | |
| n-Propylbenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 19:40 | WAT | 103-65-1 | |
| Bromobenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 19:40 | WAT | 108-86-1 | |
| 1,3,5-Trimethylbenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 19:40 | WAT | 108-67-8 | |
| tert-Butylbenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 19:40 | WAT | 98-06-6 | |
| 1,2,4-Trimethylbenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 19:40 | WAT | 95-63-6 | |
| sec-Butylbenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 19:40 | WAT | 135-98-8 | |
| p-Isopropyltoluene | Not detected | ug/L | 5 | 8260B | 06/28/12 19:40 | WAT | 99-87-6 | |
| 1,3-Dichlorobenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 19:40 | WAT | 541-73-1 | |
| 1,4-Dichlorobenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 19:40 | WAT | 106-46-7 | |
| 1,2-Dichlorobenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 19:40 | WAT | 95-50-1 | |
| 1,2,3-Trimethylbenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 19:40 | WAT | 526-73-8 | |
| n-Butylbenzene | Not detected | ug/L | 1 | 8260B | 06/28/12 19:40 | WAT | 104-51-8 | |
| Hexachloroethane | Not detected | ug/L | 5 | 8260B | 06/28/12 19:40 | WAT | 67-72-1 | |
| 1,2-Dibromo-3-chloropropane | Not detected | ug/L | 5 | 8260B | 06/28/12 19:40 | WAT | 96-12-8 | |
| 1,2,4-Trichlorobenzene | Not detected | ug/L | 5 | 8260B | 06/28/12 19:40 | WAT | 120-82-1 | |
| 1,2,3-Trichlorobenzene | Not detected | ug/L | 5 | 8260B | 06/28/12 19:40 | WAT | 87-61-6 | |

Lab Sample ID: S52989.18 (continued)
Sample Tag: B-23Dr

| Analysis | Results | Units | RL | Method | Run Date/Time | Analyst | CAS # | Flags |
|---|---|---|---|---|---|---|---|---|
| ***Organics - Volatiles (continued)*** | | | | | | | | |
| **Volatile Organics - DEQ List (continued)** | | | | | | | | |
| Naphthalene | Not detected | ug/L | 5 | 8260B | 06/28/12 19:40 | WAT | 91-20-3 | |
| 2-Methylnaphthalene | Not detected | ug/L | 5 | 8260B | 06/28/12 19:40 | WAT | 91-57-6 | |
| ***Organics*** | | | | | | | | |
| TOX | Not detected | ug/L | 40 | 9020A | 07/06/12 12:48 | TestA | | O |

O-Analysis performed by outside laboratory. See attached report.

**Merit Laboratories, Inc.**

2680 East Lansing Dr., East Lansing, MI 48823
Phone (517) 332-0167 Fax (517) 332-6333
www.meritlabs.com

C.O.C. PAGE # 1 OF 2

62586

# CHAIN OF CUSTODY RECORD

## REPORT TO

CONTACT NAME: Cliff Yantz
COMPANY: O'Brien & Gere
ADDRESS: 37000 Grand River ste 2600
CITY: Farmington Hills STATE: MI ZIP CODE: 48335
PHONE NO.: 248-477-5701 FAX NO.:
P.O. NO.: 124782.001
E-MAIL ADDRESS: clifford.yantz@obg.com
QUOTE NO.:

## INVOICE TO

CONTACT NAME: David Favero
COMPANY: RACER Trust
ADDRESS: 2930 Fcorse Rd.
CITY: Ypsilanti STATE: MI ZIP CODE: 48198
PHONE NO.: 001 734 741 6235 FAX NO.:
P.O. NO.: 124782.001.001

SAME

6/27/12

PROJECT NO./NAME: RACER Coldwater Rd Landfill Semi Annual sampling # 48630
SAMPLER(S) - PLEASE PRINT/SIGN NAME: Kevin Schneider

TURNAROUND TIME REQUIRED: ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ STANDARD ☐ OTHER

DELIVERABLES REQUIRED: ☒ STANDARD ☐ LEVEL II ☐ LEVEL III ☐ OTHER

MATRIX CODE: GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID SL=SLUDGE O=OIL A=AIR W=WASTE M=MISC

ANALYSIS (ATTACH LIST IF MORE SPACE REQUIRED)

SPECIAL INSTRUCTIONS/NOTES: Metals Are for Groundwater; Cu, Cr, Ni, Zn, Fe, Mn

Metals For Sumps/Vaults; Cu, Cr, Ni, Zn

| MERIT LAB NO. | YEAR DATE | YEAR TIME | SAMPLE TAG IDENTIFICATION-DESCRIPTION | MATRIX | # OF BOTTLES | # Containers & Preservatives: NONE | HCL | $HNO_3$ | $H_2SO_4$ | NaOH | MeOH | OTHER | TOC | Specific Conductivity | Dissolved Metals | TSS | VOCs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 52989.01 | 6/25/12 | — | TB-1 (Trip Blank) | QC | 1 | | 1 | | | | | | | | | | X |
| .02 | | 1000 | Sump A | WSW | 6 | 1 | 2 | 1 | 2 | | | | X | X | X | X | X |
| .03 | | — | DUP-1 | WSW | 6 | 1 | 2 | 1 | 2 | | | | X | X | X | X | X |
| .04 | | 1040 | Vault A | WW | 4 | 1 | | 1 | 2 | | | | X | X | X | X | |
| .05 | | — | DUP-2 | WW | 4 | 1 | | 1 | 2 | | | | X | X | X | X | |
| .06 | | 1145 | Sump B | WSW | 6 | 1 | 2 | 1 | 2 | | | | X | X | X | X | X |
| .07 | | 1205 | Vault B | WW | 4 | 1 | | 1 | 2 | | | | X | X | X | X | |
| .08 | | 1230 | Sump C | WSW | 6 | 1 | 2 | 1 | 2 | | | | X | X | X | X | X |
| .09 | | 1310 | Vault C | WW | 4 | 1 | | 1 | 2 | | | | X | X | X | X | |
| .10 | | 1340 | Sump D | WSW | 6 | 1 | 2 | 1 | 2 | | | | X | X | X | X | X |
| .11 | | 1415 | Vault D | WW | 4 | 1 | | 1 | 2 | | | | X | X | X | X | |
| .12 | ✓ | 1500 | Sump E | WSW | 6 | 1 | 2 | 1 | 2 | | | | X | X | X | X | X |

| | | | |
|---|---|---|---|
| RELINQUISHED BY: SIGNATURE/ORGANIZATION: O'Brien Gere | DATE: 6/26/12 | TIME: 1130 | RELINQUISHED BY: SIGNATURE/ORGANIZATION: |
| RECEIVED BY: SIGNATURE/ORGANIZATION: | DATE: 6-26-12 | TIME: 1130 | RECEIVED BY: SIGNATURE/ORGANIZATION: |
| RELINQUISHED BY: SIGNATURE/ORGANIZATION: | DATE: | TIME: | SEAL NO.: SEAL INTACT YES ☐ NO ☐ INITIALS: NOTES: TEMP. ON ARRIVAL 3.5 |
| RECEIVED BY: SIGNATURE/ORGANIZATION: | DATE: | TIME: | SEAL NO.: SEAL INTACT YES ☐ NO ☐ INITIALS: |

RELINQUISHED BY: SIGNATURE/ORGANIZATION: DATE: 6/26/12 TIME: 1420
RECEIVED BY: SIGNATURE/ORGANIZATION: DATE: 26JUN12 TIME: 1420

PLEASE NOTE: SIGNING ACKNOWLEDGES ACCEPTANCE OF TERMS & CONDITIONS ON REVERSE SIDE

**Merit Laboratories, Inc.**

2680 East Lansing Dr., East Lansing, MI 48823
Phone (517) 332-0167 Fax (517) 332-6333
www.meritlabs.com

C.O.C. PAGE # 2 OF 2

65459

# CHAIN OF CUSTODY RECORD

## REPORT TO

| | |
|---|---|
| CONTACT NAME | Cliff Yantz |
| COMPANY | O'Brien & Gere |
| ADDRESS | 37000 Grand River ste 260 |
| CITY | Farmington Hills |
| STATE | MI |
| ZIP CODE | 48335 |
| PHONE NO. | 248-477-5201 |
| FAX NO. | |
| P.O. NO. | |
| E-MAIL ADDRESS | Clifford.Yantz@obg.com |
| QUOTE NO. | 124782.001 |

## INVOICE TO

| | |
|---|---|
| CONTACT NAME | David Favero |
| SAME | |
| COMPANY | RACER Trust |
| ADDRESS | 2930 Horse Rd |
| CITY | Ypsilanti |
| STATE | MI |
| ZIP CODE | 48198 |
| PHONE NO. | 217 741 6235 |
| FAX NO. | |
| P.O. NO. | 124782.001.001 |

.001 DF 6/27/12

PROJECT NO./NAME: RACER Coldwater Rd Landfill Semi Annual sampling #48630

SAMPLER(S) - PLEASE PRINT/SIGN NAME: Kevin Schneider

TURNAROUND TIME REQUIRED: ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ STANDARD ☐ OTHER

DELIVERABLES REQUIRED: ☒ STANDARD ☐ LEVEL II ☐ LEVEL III ☐ OTHER

MATRIX CODE: GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID SL=SLUDGE O=OIL A=AIR W=WASTE M=MISC

ANALYSIS (ATTACH LIST IF MORE SPACE REQUIRED)

SPECIAL INSTRUCTIONS/NOTES

Metals Are for VOCs Groundwater
Cu, Cr, Ni, Zn
Fe, Mn
Metals For sumps/vaults
Cu, Cr, Ni, Zn

| MERIT LAB NO. | YEAR DATE | YEAR TIME | SAMPLE TAG IDENTIFICATION-DESCRIPTION | MATRIX | # OF BOTTLES | # Containers & Preservatives: NONE | HCL | $HNO_3$ | $H_2SO_4$ | NaOH | MeOH | OTHER | VOCs | TDC | TDX | Phenols | Cyanide | Sulfate / Chlorides | Specific Conductivity | Dissolved Metals | Sodium | TSS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 52989.13 | 6/25/12 | 1600 | Vault E | WW | 4 | 1 | | 1 | 2 | | | | | X | | | | | X | X | | X |
| .14 | ↓ | 1640 | Sump F | WW | 6 | 1 | 2 | 1 | 2 | | | | X | X | | | | | X | X | | X |
| .15 | ↓ | 1335 | B-20D | GW | 10 | 1 | 2 | 2 | 4 | 1 | | | X | X | X | X | X | X | X | X | X | |
| .16 | ↓ | 1545 | B-22D | GW | 10 | 1 | 2 | 2 | 4 | 1 | | | X | X | X | X | X | X | X | X | X | |
| .17 | 6/26/12 | 920 | B-28 | GW | 10 | 1 | 2 | 2 | 4 | 1 | | | X | X | X | X | X | X | X | X | X | |
| .18 | ↓ | 925 | B-23Dr | GW | 10 | 1 | 2 | 2 | 4 | 1 | | | X | X | X | X | X | X | X | X | X | |

| | | | |
|---|---|---|---|
| RELINQUISHED BY: SIGNATURE/ORGANIZATION | O'Brien & Gere | DATE 6/26/12 | TIME 1130 |
| RECEIVED BY: SIGNATURE/ORGANIZATION | | DATE 6/26/12 | TIME 1130 |
| RELINQUISHED BY: SIGNATURE/ORGANIZATION | | DATE | TIME |
| RECEIVED BY: SIGNATURE/ORGANIZATION | | DATE | TIME |

| | | | |
|---|---|---|---|
| RELINQUISHED BY: SIGNATURE/ORGANIZATION | | DATE 6/26/12 | TIME 1920 |
| RECEIVED BY: SIGNATURE/ORGANIZATION | Andrew Bell | DATE 26 Jun 12 | TIME 1420 |
| SEAL NO. | SEAL INTACT YES ☐ NO ☐ | INITIALS | NOTES: TEMP. ON ARRIVAL 5.5 |
| SEAL NO. | SEAL INTACT YES ☐ NO ☐ | INITIALS | |

PLEASE NOTE: SIGNING ACKNOWLEDGES ACCEPTANCE OF TERMS & CONDITIONS ON REVERSE SIDE

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

# ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

TestAmerica Job ID: 240-12812-1
Client Project/Site: 52989

For:
Merit Laboratories
2680 E Lansing Drive
East Lansing, Michigan 48823

Attn: Paula Shaw

Denise D Heckler

*Authorized for release by:*
*7/9/2012 8:07:24 AM*

Denise Heckler
Project Manager II
denise.heckler@testamericainc.com

# Table of Contents

# Definitions/Glossary

Client: Merit Laboratories
Project/Site: 52989

TestAmerica Job ID: 240-12812-1

## Qualifiers

### General Chemistry

| Qualifier | Qualifier Description |
|---|---|
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |
| U | Indicates the analyte was analyzed for but not detected. |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ☼ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CNF | Contains no Free Liquid |
| DL, RA, RE, IN | Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| EDL | Estimated Detection Limit |
| EPA | United States Environmental Protection Agency |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| ND | Not detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RL | Reporting Limit |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

# Case Narrative

Client: Merit Laboratories
Project/Site: 52989

TestAmerica Job ID: 240-12812-1

## Job ID: 240-12812-1

### Laboratory: TestAmerica Canton

**Narrative**

**Job Narrative**
**240-12812-1**

**Comments**
No additional comments.

**Receipt**
The samples were received on 6/29/2012 10:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.2º C.

**General Chemistry**
No analytical or quality issues were noted.

# Method Summary

Client: Merit Laboratories
Project/Site: 52989

TestAmerica Job ID: 240-12812-1

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 9020B | Organic Halides, Total (TOX) | SW846 | TAL SAV |

**Protocol References:**

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

# Sample Summary

Client: Merit Laboratories
Project/Site: 52989

TestAmerica Job ID: 240-12812-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| 240-12812-1 | 52989.15 | Water | 06/25/12 13:35 | 06/29/12 10:00 |
| 240-12812-2 | 52989.16 | Water | 06/25/12 15:45 | 06/29/12 10:00 |
| 240-12812-3 | 52989.17 | Water | 06/26/12 09:20 | 06/29/12 10:00 |
| 240-12812-4 | 52989.18 | Water | 06/26/12 09:25 | 06/29/12 10:00 |

# Detection Summary

Client: Merit Laboratories
Project/Site: 52989

TestAmerica Job ID: 240-12812-1

## Client Sample ID: 52989.15 — Lab Sample ID: 240-12812-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Halogens, Total Organic | 0.015 | J | 0.040 | 0.014 | mg/L | 4 | | 9020B | Total/NA |
| TOX Result 2 | 0.016 | J | 0.040 | 0.014 | mg/L | 4 | | 9020B | Total/NA |

## Client Sample ID: 52989.16 — Lab Sample ID: 240-12812-2

No Detections

## Client Sample ID: 52989.17 — Lab Sample ID: 240-12812-3

No Detections

## Client Sample ID: 52989.18 — Lab Sample ID: 240-12812-4

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| TOX Result 1 | 0.014 | J | 0.040 | 0.014 | mg/L | 4 | | 9020B | Total/NA |

# Client Sample Results

Client: Merit Laboratories
Project/Site: 52989

TestAmerica Job ID: 240-12812-1

**Client Sample ID: 52989.15**
**Date Collected: 06/25/12 13:35**
**Date Received: 06/29/12 10:00**

**Lab Sample ID: 240-12812-1**
**Matrix: Water**

## General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Halogens, Total Organic** | **0.015** | **J** | 0.040 | 0.014 | mg/L | | 07/05/12 07:00 | 07/06/12 12:48 | 4 |
| TOX Result 1 | 0.040 | U | 0.040 | 0.014 | mg/L | | 07/05/12 07:00 | 07/06/12 12:48 | 4 |
| **TOX Result 2** | **0.016** | **J** | 0.040 | 0.014 | mg/L | | 07/05/12 07:00 | 07/06/12 12:48 | 4 |

Client: Merit Laboratories
Project/Site: 52989

TestAmerica Job ID: 240-12812-1

**Client Sample ID: 52989.16**
**Date Collected: 06/25/12 15:45**
**Date Received: 06/29/12 10:00**

**Lab Sample ID: 240-12812-2**
**Matrix: Water**

## General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Halogens, Total Organic | 0.040 | U | 0.040 | 0.014 | mg/L | | 07/05/12 07:00 | 07/06/12 12:48 | 4 |
| TOX Result 1 | 0.040 | U | 0.040 | 0.014 | mg/L | | 07/05/12 07:00 | 07/06/12 12:48 | 4 |
| TOX Result 2 | 0.040 | U | 0.040 | 0.014 | mg/L | | 07/05/12 07:00 | 07/06/12 12:48 | 4 |

# Client Sample Results

Client: Merit Laboratories
Project/Site: 52989

TestAmerica Job ID: 240-12812-1

**Client Sample ID: 52989.17**
**Date Collected: 06/26/12 09:20**
**Date Received: 06/29/12 10:00**

**Lab Sample ID: 240-12812-3**
**Matrix: Water**

## General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Halogens, Total Organic | 0.040 | U | 0.040 | 0.014 | mg/L | | 07/05/12 07:00 | 07/06/12 12:48 | 4 |
| TOX Result 1 | 0.040 | U | 0.040 | 0.014 | mg/L | | 07/05/12 07:00 | 07/06/12 12:48 | 4 |
| TOX Result 2 | 0.040 | U | 0.040 | 0.014 | mg/L | | 07/05/12 07:00 | 07/06/12 12:48 | 4 |

Client: Merit Laboratories
Project/Site: 52989

TestAmerica Job ID: 240-12812-1

**Client Sample ID: 52989.18**
**Date Collected: 06/26/12 09:25**
**Date Received: 06/29/12 10:00**

**Lab Sample ID: 240-12812-4**
**Matrix: Water**

## General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Halogens, Total Organic | 0.040 | U | 0.040 | 0.014 | mg/L | | 07/05/12 07:00 | 07/06/12 12:48 | 4 |
| **TOX Result 1** | **0.014** | **J** | 0.040 | 0.014 | mg/L | | 07/05/12 07:00 | 07/06/12 12:48 | 4 |
| TOX Result 2 | 0.040 | U | 0.040 | 0.014 | mg/L | | 07/05/12 07:00 | 07/06/12 12:48 | 4 |

Client: Merit Laboratories
Project/Site: 52989

TestAmerica Job ID: 240-12812-1

## Method: 9020B - Organic Halides, Total (TOX)

**Lab Sample ID: MB 680-242542/1-A**
**Matrix: Water**
**Analysis Batch: 242546**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 242542**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Halogens, Total Organic | 0.010 | U | 0.010 | 0.0035 | mg/L | | 07/05/12 07:00 | 07/06/12 12:48 | 1 |
| TOX Result 1 | 0.010 | U | 0.010 | 0.0035 | mg/L | | 07/05/12 07:00 | 07/06/12 12:48 | 1 |
| TOX Result 2 | 0.010 | U | 0.010 | 0.0035 | mg/L | | 07/05/12 07:00 | 07/06/12 12:48 | 1 |

**Lab Sample ID: LCS 680-242542/2-A**
**Matrix: Water**
**Analysis Batch: 242546**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 242542**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| TOX Result 1 | 0.0984 | 0.0940 | | mg/L | | 96 | 60 - 140 |
| TOX Result 2 | 0.0984 | 0.0940 | | mg/L | | 96 | 60 - 140 |

# QC Association Summary

Client: Merit Laboratories
Project/Site: 52989

TestAmerica Job ID: 240-12812-1

## General Chemistry

### Prep Batch: 242542

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-12812-1 | 52989.15 | Total/NA | Water | Carbon Trap | |
| 240-12812-2 | 52989.16 | Total/NA | Water | Carbon Trap | |
| 240-12812-3 | 52989.17 | Total/NA | Water | Carbon Trap | |
| 240-12812-4 | 52989.18 | Total/NA | Water | Carbon Trap | |
| LCS 680-242542/2-A | Lab Control Sample | Total/NA | Water | Carbon Trap | |
| MB 680-242542/1-A | Method Blank | Total/NA | Water | Carbon Trap | |

### Analysis Batch: 242546

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-12812-1 | 52989.15 | Total/NA | Water | 9020B | 242542 |
| 240-12812-2 | 52989.16 | Total/NA | Water | 9020B | 242542 |
| 240-12812-3 | 52989.17 | Total/NA | Water | 9020B | 242542 |
| 240-12812-4 | 52989.18 | Total/NA | Water | 9020B | 242542 |
| LCS 680-242542/2-A | Lab Control Sample | Total/NA | Water | 9020B | 242542 |
| MB 680-242542/1-A | Method Blank | Total/NA | Water | 9020B | 242542 |

# Lab Chronicle

Client: Merit Laboratories
Project/Site: 52989

TestAmerica Job ID: 240-12812-1

## Client Sample ID: 52989.15

**Lab Sample ID: 240-12812-1**

**Date Collected: 06/25/12 13:35**

**Matrix: Water**

**Date Received: 06/29/12 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | Carbon Trap | | | 242542 | 07/05/12 07:00 | CN | TAL SAV |
| Total/NA | Analysis | 9020B | | 4 | 242546 | 07/06/12 12:48 | CN | TAL SAV |

## Client Sample ID: 52989.16

**Lab Sample ID: 240-12812-2**

**Date Collected: 06/25/12 15:45**

**Matrix: Water**

**Date Received: 06/29/12 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | Carbon Trap | | | 242542 | 07/05/12 07:00 | CN | TAL SAV |
| Total/NA | Analysis | 9020B | | 4 | 242546 | 07/06/12 12:48 | CN | TAL SAV |

## Client Sample ID: 52989.17

**Lab Sample ID: 240-12812-3**

**Date Collected: 06/26/12 09:20**

**Matrix: Water**

**Date Received: 06/29/12 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | Carbon Trap | | | 242542 | 07/05/12 07:00 | CN | TAL SAV |
| Total/NA | Analysis | 9020B | | 4 | 242546 | 07/06/12 12:48 | CN | TAL SAV |

## Client Sample ID: 52989.18

**Lab Sample ID: 240-12812-4**

**Date Collected: 06/26/12 09:25**

**Matrix: Water**

**Date Received: 06/29/12 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | Carbon Trap | | | 242542 | 07/05/12 07:00 | CN | TAL SAV |
| Total/NA | Analysis | 9020B | | 4 | 242546 | 07/06/12 12:48 | CN | TAL SAV |

**Laboratory References:**

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

# Certification Summary

Client: Merit Laboratories
Project/Site: 52989

TestAmerica Job ID: 240-12812-1

| Laboratory | Authority | Program | EPA Region | Certification ID |
|---|---|---|---|---|
| TestAmerica Canton | California | NELAC | 9 | 01144CA |
| TestAmerica Canton | Connecticut | State Program | 1 | PH-0590 |
| TestAmerica Canton | Florida | NELAC | 4 | E87225 |
| TestAmerica Canton | Georgia | State Program | 4 | N/A |
| TestAmerica Canton | Illinois | NELAC | 5 | 200004 |
| TestAmerica Canton | Kansas | NELAC | 7 | E-10336 |
| TestAmerica Canton | Kentucky | State Program | 4 | 58 |
| TestAmerica Canton | L-A-B | DoD ELAP | | L2315 |
| TestAmerica Canton | Minnesota | NELAC | 5 | 039-999-348 |
| TestAmerica Canton | Nevada | State Program | 9 | OH-000482008A |
| TestAmerica Canton | New Jersey | NELAC | 2 | OH001 |
| TestAmerica Canton | New York | NELAC | 2 | 10975 |
| TestAmerica Canton | Ohio VAP | State Program | 5 | CL0024 |
| TestAmerica Canton | Pennsylvania | NELAC | 3 | 68-00340 |
| TestAmerica Canton | USDA | Federal | | P330-11-00328 |
| TestAmerica Canton | Virginia | NELAC | 3 | 460175 |
| TestAmerica Canton | Washington | State Program | 10 | C971 |
| TestAmerica Canton | West Virginia DEP | State Program | 3 | 210 |
| TestAmerica Canton | Wisconsin | State Program | 5 | 999518190 |
| | | | | |
| TestAmerica Savannah | A2LA | DoD ELAP | | 0399-01 |
| TestAmerica Savannah | A2LA | ISO/IEC 17025 | | 399.01 |
| TestAmerica Savannah | Alabama | State Program | 4 | 41450 |
| TestAmerica Savannah | Alaska (UST) | State Program | 10 | UST-104 |
| TestAmerica Savannah | Arkansas DEQ | State Program | 6 | 88-0692 |
| TestAmerica Savannah | California | NELAC | 9 | 3217CA |
| TestAmerica Savannah | Colorado | State Program | 8 | N/A |
| TestAmerica Savannah | Connecticut | State Program | 1 | PH-0161 |
| TestAmerica Savannah | Florida | NELAC | 4 | E87052 |
| TestAmerica Savannah | GA Dept. of Agriculture | State Program | 4 | N/A |
| TestAmerica Savannah | Georgia | State Program | 4 | 803 |
| TestAmerica Savannah | Georgia | State Program | 4 | N/A |
| TestAmerica Savannah | Guam | State Program | 9 | 09-005r |
| TestAmerica Savannah | Hawaii | State Program | 9 | N/A |
| TestAmerica Savannah | Illinois | NELAC | 5 | 200022 |
| TestAmerica Savannah | Indiana | State Program | 5 | N/A |
| TestAmerica Savannah | Iowa | State Program | 7 | 353 |
| TestAmerica Savannah | Kentucky | State Program | 4 | 90084 |
| TestAmerica Savannah | Kentucky (UST) | State Program | 4 | 18 |
| TestAmerica Savannah | Louisiana | NELAC | 6 | 30690 |
| TestAmerica Savannah | Louisiana | NELAC | 6 | LA100015 |
| TestAmerica Savannah | Maine | State Program | 1 | GA00006 |
| TestAmerica Savannah | Maryland | State Program | 3 | 250 |
| TestAmerica Savannah | Massachusetts | State Program | 1 | M-GA006 |
| TestAmerica Savannah | Michigan | State Program | 5 | 9925 |
| TestAmerica Savannah | Mississippi | State Program | 4 | N/A |
| TestAmerica Savannah | Montana | State Program | 8 | CERT0081 |
| TestAmerica Savannah | Nebraska | State Program | 7 | TestAmerica-Savannah |
| TestAmerica Savannah | New Jersey | NELAC | 2 | GA769 |
| TestAmerica Savannah | New Mexico | State Program | 6 | N/A |
| TestAmerica Savannah | New York | NELAC | 2 | 10842 |
| TestAmerica Savannah | North Carolina DENR | State Program | 4 | 269 |
| TestAmerica Savannah | North Carolina DHHS | State Program | 4 | 13701 |
| TestAmerica Savannah | Oklahoma | State Program | 6 | 9984 |

# Certification Summary

Client: Merit Laboratories
Project/Site: 52989

TestAmerica Job ID: 240-12812-1

| Laboratory | Authority | Program | EPA Region | Certification ID |
|---|---|---|---|---|
| TestAmerica Savannah | Pennsylvania | NELAC | 3 | 68-00474 |
| TestAmerica Savannah | Puerto Rico | State Program | 2 | GA00006 |
| TestAmerica Savannah | Rhode Island | State Program | 1 | LAO00244 |
| TestAmerica Savannah | South Carolina | State Program | 4 | 98001 |
| TestAmerica Savannah | Tennessee | State Program | 4 | TN02961 |
| TestAmerica Savannah | Texas | NELAC | 6 | T104704185-08-TX |
| TestAmerica Savannah | USDA | Federal | | SAV 3-04 |
| TestAmerica Savannah | Vermont | State Program | 1 | 87052 |
| TestAmerica Savannah | Virginia | NELAC | 3 | 460161 |
| TestAmerica Savannah | Washington | State Program | 10 | C1794 |
| TestAmerica Savannah | West Virginia | State Program | 3 | 9950C |
| TestAmerica Savannah | West Virginia DEP | State Program | 3 | 94 |
| TestAmerica Savannah | Wisconsin | State Program | 5 | 999819810 |
| TestAmerica Savannah | Wyoming | State Program | 8 | 8TMS-Q |

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

Merit Laboratories, Inc.

2680 East Lansing Dr., East Lansing, MI 48823
Phone (517) 332-0167 Fax (517) 332-4034
www.meritlabs.com

C.O.C. PAGE # 1 OF 1

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# CHAIN OF CUSTODY RECORD

## REPORT TO

CONTACT NAME: Paula Shaw
COMPANY: Merit Labs
ADDRESS:
CITY: STATE: ZIP CODE:
PHONE NO.: FAX NO.: P.O. NO.:
E-MAIL ADDRESS: QUOTE NO.:

## INVOICE TO

CONTACT NAME: Julie Teagere ☐ SAME
COMPANY:
ADDRESS:
CITY: STATE: ZIP CODE:
PHONE NO.: E-MAIL ADDRESS:

PROJECT NO./NAME: 52989
SAMPLER(S) - PLEASE PRINT/SIGN NAME:

TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER

DELIVERABLES REQUIRED ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER

MATRIX CODE: GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIPE A=AIR W=WASTE

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

Certifications
☐ OHIO VAP ☐ Drinking Water
☐ DoD ☐ NPDES

Project Locations
☐ Detroit ☐ New York
☐ Other

Special Instructions

| MERIT LAB NO. (FOR LAB USE ONLY) | YEAR DATE | YEAR TIME | SAMPLE TAG IDENTIFICATION DESCRIPTION | MATRIX | # OF BOTTLES | # Containers & Preservatives: NONE | HCl | $HNO_3$ | $H_2SO_4$ | NaOH | MeOH | OTHER | TOX | Special Instructions |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 6-25 | 1335 | 52989.15 | GW | | | | | 1 | | | | X | *Subd to Test America |
| | ↓ | 1545 | .16 | | | | | | | | | | X | |
| | 6-26 | 0920 | .17 | | | | | | | | | | X | |
| | ↓ | 0925 | .18 | ↓ | | | | | ↓ | | | | X | |

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| RELINQUISHED BY: SIGNATURE/ORGANIZATION | ☐ Sampler | DATE | TIME |
|---|---|---|---|
| Paula Shaw | | 6-28-12 | 1600 |
| RELINQUISHED BY: SIGNATURE/ORGANIZATION: Rec'd by Gary Burns | | 6/29/12 | 1000 |
| RELINQUISHED BY: SIGNATURE/ORGANIZATION | | DATE | TIME |
| RELINQUISHED BY: SIGNATURE/ORGANIZATION | | DATE | TIME |

| RELINQUISHED BY: SIGNATURE/ORGANIZATION | DATE | TIME |
|---|---|---|
| RELINQUISHED BY: SIGNATURE/ORGANIZATION | DATE | TIME |
| RELINQUISHED BY: SIGNATURE/ORGANIZATION | DATE | TIME |

SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS
SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS

NOTES: TEMP. ON ARRIVAL

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE

Rev. 1.15.12

7/9/2012

**TestAmerica North Canton Sample Receipt Form/Narrative** Login # : 12812

Client MERIT Site Name _____ By: Ch Lyn (Signature)

Cooler Received on 6-29-12 Opened on 6-29-12

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

TestAmerica Cooler # 241-637 Foam Box Client Cooler Box Other _____

Packing material used: ~~Bubble Wrap~~ Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

| | | | | |
|---|---|---|---|---|
| IR GUN# 1 | (CF 0°C) | Observed Sample Temp. ____ °C | Corrected Sample Temp. ____ °C | ☐ Multiple on Back |
| IR GUN# 4G | (CF –1°C) | Observed Sample Temp. 2.2 °C | Corrected Sample Temp. 1.2 °C | |
| IR GUN# 5G | (CF –1°C) | Observed Sample Temp. ____ °C | Corrected Sample Temp. ____ °C | |
| IR GUN# 8 | (CF 0°C) | Observed Sample Temp. ____ °C | Corrected Sample Temp. ____ °C | |

| | | |
|---|---|---|
| 2. Were custody seals on the outside of the cooler(s)? If Yes Quantity ____ | Yes | (No) |
| -Were custody seals on the outside of the cooler(s) signed & dated? | Yes No | (NA) |
| -Were custody seals on the bottle(s)? | Yes | (No) |
| 3. Shippers' packing slip attached to the cooler(s)? | ~~Yes~~ | No |
| 4. Did custody papers accompany the sample(s)? | ~~Yes~~ | No |
| 5. Were the custody papers relinquished & signed in the appropriate place? | (Yes) | No |
| 6. Did all bottles arrive in good condition (Unbroken)? | (Yes) | No |
| 7. Could all bottle labels be reconciled with the COC? | ~~Yes~~ | No |
| 8. Were correct bottle(s) used for the test(s) indicated? | ~~Yes~~ | No |
| 9. Sufficient quantity received to perform indicated analyses? | (Yes) | No |
| 10. Were sample(s) at the correct pH upon receipt? | (Yes) | No NA |
| 11. Were VOAs on the COC? | Yes | (No) |
| 12. Were air bubbles >6 mm in any VOA vials? | Yes No | (NA) |
| 13. Was a trip blank present in the cooler(s)? | Yes | (No) |

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

**14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES**

**15. SAMPLE CONDITION**

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

## 16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in Sample Receiving to meet recommended pH level(s). Nitric Acid Lot# 110410-HNO3; Sulfuric Acid Lot# 041911-H2SO4; Sodium Hydroxide Lot# 121809 - NaOH; Hydrochloric Acid Lot# 041911-HCl; Sodium Hydroxide and Zinc Acetate Lot# 100108-(CH3COO)2ZN/NaOH. What time was preservative added to sample(s)? _____

| Client ID | pH | Date | Initials |
|---|---|---|---|
| 15 | <2 | 6/29/12 | CSG |
| 16 | <2 | " | " |
| 17 | <2 | " | " |
| 18 | <2 | " | " |

| Cooler # | Observed Sample Temp. °C | Corrected Sample Temp. °C | IR # | Coolant |
|---|---|---|---|---|

# Login Sample Receipt Checklist

Client: Merit Laboratories

Job Number: 240-12812-1

**Login Number: 12812**

**List Source: TestAmerica Canton**

**List Number: 1**

**Creator: Livengood, Chris**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity either was not measured or, if measured, is at or below background | N/A | |
| The cooler's custody seal, if present, is intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the sample IDs on the containers and the COC. | True | |
| Samples are received within Holding Time. | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter. | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |

# Login Sample Receipt Checklist

Client: Merit Laboratories

Job Number: 240-12812-1

**Login Number: 12812**
**List Number: 1**
**Creator: Howard, Brandon L**

**List Source: TestAmerica Savannah**
**List Creation: 06/30/12 11:48 AM**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity either was not measured or, if measured, is at or below background | N/A | |
| The cooler's custody seal, if present, is intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | N/A | |
| There are no discrepancies between the sample IDs on the containers and the COC. | True | |
| Samples are received within Holding Time. | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | N/A | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter. | N/A | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |

# Analytical Laboratory Report

Revised Report

Report ID: S53009.01(02)
Generated on 07/25/2012
Replaces report S53009.01(01) generated on 07/11/2012

Report to

Attention: Clifford Yantz
O'Brien & Gere Engineers, Inc.
37000 Grand River Ave.
Suite 260
Farmington, MI 48335

Phone: 248-477-5701 FAX:
Email: YantzCS@obg.com/SecresME@obg.com

Report produced by

Merit Laboratories
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Report Summary

Lab Sample ID(s): S53009.01-S53009.11
Project: Coldwater Road Landfill Semi-Annual Sampling #48630
Collected Date: 06/26/2012 - 06/27/2012
Submitted Date/Time: 06/27/2012 15:10
Sampled by: Kevin Schneider
P.O. #: PO124782

Sample .08 had dissolved metals re-reported.

Report Notes

Results relate only to items tested as received by the laboratory.
Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
"Not detected" indicates that parameter was not found at a level equal to or greater than the RL.
Samples are held by the lab for 30 days from the sample submittal date unless a written request to hold longer is provided by the client.


Laboratory Certifications:
Michigan DNRE (#9956), DOD/ISO 17025 (#L11-184), WBENC (#2005110032)
Ohio EPA (#CL0002), IN Drinking Water (#C-MI-07), NELAC NY (#11814), NELAC FL (#E871045)
Some analytes reported may not be certified. Full certification lists are available upon request.

Violetta F. Murshak
Laboratory Director

Sample Summary (11 samples)

| Sample ID | Sample Tag | Matrix | Collected Date/Time |
|---|---|---|---|
| S53009.01 | B-27D | Groundwater | 06/26/2012 11:45 |
| S53009.02 | B-24r | Groundwater | 06/26/2012 12:50 |
| S53009.03 | B-9 | Groundwater | 06/26/2012 14:20 |
| S53009.04 | B-21D | Groundwater | 06/26/2012 15:15 |
| S53009.05 | EB-1 | Quality Control | 06/27/2012 08:15 |
| S53009.06 | B-7 | Groundwater | 06/27/2012 08:45 |
| S53009.07 | B-19Ar | Groundwater | 06/27/2012 09:55 |
| S53009.08 | B-18A | Groundwater | 06/27/2012 10:25 |
| S53009.09 | DUP-3 | Groundwater | 06/27/2012 00:01 |
| S53009.10 | B-2D | Groundwater | 06/27/2012 11:30 |
| S53009.11 | TB-2 (Trip Blank) | Quality Control | 06/27/2012 00:01 |

Lab Sample ID: S53009.01
Sample Tag: B-27D
Collected Date/Time: 06/26/2012 11:45
Matrix: Groundwater
COC Reference: 65461

Sample Containers

| # | Type | Preservative(s) | Refrigerated? | Arrival Temp. (C) | Thermometer # |
|---|---|---|---|---|---|
| 1 | 250ml Plastic | None | Yes | 5.4 | IR |
| 2 | 125ml Plastic | HNO3 | Yes | 5.4 | IR |
| 2 | 40ml Glass | H2SO4 | Yes | 5.4 | IR |
| 2 | 40ml Glass | HCL | Yes | 5.4 | IR |
| 2 | 125ml Amber | H2SO4 | Yes | 5.4 | IR |
| 1 | 125ml Plastic | NaOH | Yes | 5.4 | IR |

| Analysis | Results | Units | RL | Method | Run Date/Time | Analyst | CAS # | Flags |
|---|---|---|---|---|---|---|---|---|
| ***Extraction / Prep.*** | | | | | | | | |
| Metal Digestion | Completed | | | 3015A | 07/03/12 01:00 | SLR | | |
| Metal Digestion | Completed | | | 3015A | 07/02/12 01:00 | SLR | | |
| ***Inorganics*** | | | | | | | | |
| Chloride | Not detected | mg/L | 5 | 300.0 | 07/07/12 10:46 | JDP | 16887-00-6 | |
| Conductivity | 653 | umhos/cm | | 120.1 | 06/29/12 11:53 | JKB | | |
| Cyanide | Not detected | mg/L | 0.005 | 335.4/4500-CN-E | 07/09/12 11:08 | JDP | 57-12-5 | |
| Phenols | Not detected | mg/L | 0.02 | 420.1 | 07/09/12 13:38 | JKB | | |
| Sulfate | 20 | mg/L | 5 | 300.0 | 07/07/12 10:46 | JDP | 14808-79-8 | |
| TOC | 1.5 | mg/L | 1 | EPA 415.1 | 07/03/12 13:49 | JKB | | |
| ***Metals*** | | | | | | | | |
| Chromium, Dissolved | Not detected | mg/L | 0.005 | 200.8 | 07/05/12 15:19 | SLS | 7440-47-3 | |
| Copper, Dissolved | Not detected | mg/L | 0.004 | 200.8 | 07/05/12 15:19 | SLS | 7440-50-8 | |
| Iron, Dissolved | 1.45 | mg/L | 0.02 | 200.8 | 07/05/12 15:19 | SLS | 7439-89-6 | |
| Manganese, Dissolved | 0.028 | mg/L | 0.005 | 200.8 | 07/05/12 15:19 | SLS | 7439-96-5 | |
| Nickel, Dissolved | Not detected | mg/L | 0.005 | 200.8 | 07/05/12 15:19 | SLS | 7440-02-0 | |
| Sodium | 34.2 | mg/L | 1.0 | E200.8 | 07/03/12 13:54 | SLS | 7440-23-5 | |
| Zinc, Dissolved | Not detected | mg/L | 0.005 | 200.8 | 07/05/12 15:19 | SLS | 7440-66-6 | |
| ***Organics - Volatiles*** | | | | | | | | |
| **Volatile Organics - DEQ List** | | | | | | | | |
| Diethyl ether | Not detected | ug/L | 10 | 8260B | 07/02/12 15:02 | WAT | 60-29-7 | |
| Acetone | Not detected | ug/L | 50 | 8260B | 07/02/12 15:02 | WAT | 67-64-1 | |
| Methyl iodide | Not detected | ug/L | 1 | 8260B | 07/02/12 15:02 | WAT | 74-88-4 | |
| Carbon disulfide | Not detected | ug/L | 5 | 8260B | 07/02/12 15:02 | WAT | 75-15-0 | |
| tert-Methyl butyl ether (MTBE) | Not detected | ug/L | 5 | 8260B | 07/02/12 15:02 | WAT | 1634-04-4 | |
| Acrylonitrile | Not detected | ug/L | 2 | 8260B | 07/02/12 15:02 | WAT | 107-13-1 | |
| 2-Butanone (MEK) | Not detected | ug/L | 25 | 8260B | 07/02/12 15:02 | WAT | 78-93-3 | |
| Dichlorodifluoromethane | Not detected | ug/L | 5 | 8260B | 07/02/12 15:02 | WAT | 75-71-8 | |
| Chloromethane | Not detected | ug/L | 5 | 8260B | 07/02/12 15:02 | WAT | 74-87-3 | |
| Vinyl chloride | Not detected | ug/L | 1 | 8260B | 07/02/12 15:02 | WAT | 75-01-4 | |
| Bromomethane | Not detected | ug/L | 5 | 8260B | 07/02/12 15:02 | WAT | 74-83-9 | |
| Chloroethane | Not detected | ug/L | 5 | 8260B | 07/02/12 15:02 | WAT | 75-00-3 | |
| Trichlorofluoromethane | Not detected | ug/L | 1 | 8260B | 07/02/12 15:02 | WAT | 75-69-4 | |
| 1,1-Dichloroethene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:02 | WAT | 75-35-4 | |
| Methylene chloride | Not detected | ug/L | 5 | 8260B | 07/02/12 15:02 | WAT | 75-09-2 | |
| trans-1,2-Dichloroethene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:02 | WAT | 156-60-5 | |

Lab Sample ID: S53009.01 (continued)
Sample Tag: B-27D

| Analysis | Results | Units | RL | Method | Run Date/Time | Analyst | CAS # | Flags |
|---|---|---|---|---|---|---|---|---|
| ***Organics - Volatiles (continued)*** | | | | | | | | |
| **Volatile Organics - DEQ List (continued)** | | | | | | | | |
| 1,1-Dichloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 15:02 | WAT | 75-34-3 | |
| cis-1,2-Dichloroethene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:02 | WAT | 156-59-2 | |
| Tetrahydrofuran | Not detected | ug/L | 90 | 8260B | 07/02/12 15:02 | WAT | 109-99-9 | |
| Chloroform | Not detected | ug/L | 1 | 8260B | 07/02/12 15:02 | WAT | 67-66-3 | |
| Bromochloromethane | Not detected | ug/L | 1 | 8260B | 07/02/12 15:02 | WAT | 74-97-5 | |
| 1,1,1-Trichloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 15:02 | WAT | 71-55-6 | |
| 4-Methyl-2-pentanone (MIBK) | Not detected | ug/L | 50 | 8260B | 07/02/12 15:02 | WAT | 108-10-1 | |
| 2-Hexanone | Not detected | ug/L | 50 | 8260B | 07/02/12 15:02 | WAT | 591-78-6 | |
| Carbon tetrachloride | Not detected | ug/L | 1 | 8260B | 07/02/12 15:02 | WAT | 56-23-5 | |
| Benzene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:02 | WAT | 71-43-2 | |
| 1,2-Dichloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 15:02 | WAT | 107-06-2 | |
| Trichloroethene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:02 | WAT | 79-01-6 | |
| 1,2-Dichloropropane | Not detected | ug/L | 1 | 8260B | 07/02/12 15:02 | WAT | 78-87-5 | |
| Bromodichloromethane | Not detected | ug/L | 1 | 8260B | 07/02/12 15:02 | WAT | 75-27-4 | |
| Dibromomethane | Not detected | ug/L | 5 | 8260B | 07/02/12 15:02 | WAT | 74-95-3 | |
| cis-1,3-Dichloropropene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:02 | WAT | 10061-01-5 | |
| Toluene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:02 | WAT | 108-88-3 | |
| trans-1,3-Dichloropropene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:02 | WAT | 10061-02-6 | |
| 1,1,2-Trichloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 15:02 | WAT | 79-00-5 | |
| Tetrachloroethene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:02 | WAT | 127-18-4 | |
| trans-1,4-Dichloro-2-butene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:02 | WAT | 110-57-6 | |
| Dibromochloromethane | Not detected | ug/L | 5 | 8260B | 07/02/12 15:02 | WAT | 124-48-1 | |
| 1,2-Dibromoethane | Not detected | ug/L | 1 | 8260B | 07/02/12 15:02 | WAT | 106-93-4 | |
| Chlorobenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:02 | WAT | 108-90-7 | |
| 1,1,1,2-Tetrachloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 15:02 | WAT | 630-20-6 | |
| Ethylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:02 | WAT | 100-41-4 | |
| p,m-Xylene | Not detected | ug/L | 2 | 8260B | 07/02/12 15:02 | WAT | | |
| o-Xylene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:02 | WAT | 95-47-6 | |
| Styrene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:02 | WAT | 100-42-5 | |
| Isopropylbenzene | Not detected | ug/L | 5 | 8260B | 07/02/12 15:02 | WAT | 98-82-8 | |
| Bromoform | Not detected | ug/L | 1 | 8260B | 07/02/12 15:02 | WAT | 75-25-2 | |
| 1,1,2,2-Tetrachloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 15:02 | WAT | 79-34-5 | |
| 1,2,3-Trichloropropane | Not detected | ug/L | 1 | 8260B | 07/02/12 15:02 | WAT | 96-18-4 | |
| n-Propylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:02 | WAT | 103-65-1 | |
| Bromobenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:02 | WAT | 108-86-1 | |
| 1,3,5-Trimethylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:02 | WAT | 108-67-8 | |
| tert-Butylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:02 | WAT | 98-06-6 | |
| 1,2,4-Trimethylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:02 | WAT | 95-63-6 | |
| sec-Butylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:02 | WAT | 135-98-8 | |
| p-Isopropyltoluene | Not detected | ug/L | 5 | 8260B | 07/02/12 15:02 | WAT | 99-87-6 | |
| 1,3-Dichlorobenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:02 | WAT | 541-73-1 | |
| 1,4-Dichlorobenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:02 | WAT | 106-46-7 | |
| 1,2-Dichlorobenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:02 | WAT | 95-50-1 | |
| 1,2,3-Trimethylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:02 | WAT | 526-73-8 | |
| n-Butylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:02 | WAT | 104-51-8 | |
| Hexachloroethane | Not detected | ug/L | 5 | 8260B | 07/02/12 15:02 | WAT | 67-72-1 | |
| 1,2-Dibromo-3-chloropropane | Not detected | ug/L | 5 | 8260B | 07/02/12 15:02 | WAT | 96-12-8 | |
| 1,2,4-Trichlorobenzene | Not detected | ug/L | 5 | 8260B | 07/02/12 15:02 | WAT | 120-82-1 | |
| 1,2,3-Trichlorobenzene | Not detected | ug/L | 5 | 8260B | 07/02/12 15:02 | WAT | 87-61-6 | |

Lab Sample ID: S53009.01 (continued)
Sample Tag: B-27D

| Analysis | Results | Units | RL | Method | Run Date/Time | Analyst | CAS # | Flags |
|---|---|---|---|---|---|---|---|---|
| ***Organics - Volatiles (continued)*** | | | | | | | | |
| **Volatile Organics - DEQ List (continued)** | | | | | | | | |
| Naphthalene | Not detected | ug/L | 5 | 8260B | 07/02/12 15:02 | WAT | 91-20-3 | |
| 2-Methylnaphthalene | Not detected | ug/L | 5 | 8260B | 07/02/12 15:02 | WAT | 91-57-6 | |
| ***Organics*** | | | | | | | | |
| TOX | Not detected | ug/L | 40 | 9020A | 07/03/12 11:08 | TestA | | O |

O-Analysis performed by outside laboratory. See attached report.

Lab Sample ID: S53009.02
Sample Tag: B-24r
Collected Date/Time: 06/26/2012 12:50
Matrix: Groundwater
COC Reference: 65461

Sample Containers

| # | Type | Preservative(s) | Refrigerated? | Arrival Temp. (C) | Thermometer # |
|---|---|---|---|---|---|
| 1 | 250ml Plastic | None | Yes | 5.4 | IR |
| 2 | 125ml Plastic | HNO3 | Yes | 5.4 | IR |
| 2 | 40ml Glass | H2SO4 | Yes | 5.4 | IR |
| 2 | 40ml Glass | HCL | Yes | 5.4 | IR |
| 2 | 125ml Amber | H2SO4 | Yes | 5.4 | IR |
| 1 | 125ml Plastic | NaOH | Yes | 5.4 | IR |

| Analysis | Results | Units | RL | Method | Run Date/Time | Analyst | CAS # | Flags |
|---|---|---|---|---|---|---|---|---|
| ***Extraction / Prep.*** | | | | | | | | |
| Metal Digestion | Completed | | | 3015A | 07/03/12 01:00 | SLR | | |
| Metal Digestion | Completed | | | 3015A | 07/02/12 01:00 | SLR | | |
| ***Inorganics*** | | | | | | | | |
| Chloride | 45 | mg/L | 10 | 300.0 | 07/07/12 10:29 | JDP | 16887-00-6 | |
| Conductivity | 1,219 | umhos/cm | | 120.1 | 06/29/12 11:57 | JKB | | |
| Cyanide | Not detected | mg/L | 0.005 | 335.4/4500-CN-E | 07/09/12 11:16 | JDP | 57-12-5 | |
| Phenols | Not detected | mg/L | 0.02 | 420.1 | 07/09/12 13:42 | JKB | | |
| Sulfate | 219 | mg/L | 10 | 300.0 | 07/07/12 10:29 | JDP | 14808-79-8 | |
| TOC | 3.5 | mg/L | 1 | EPA 415.1 | 07/03/12 14:08 | JKB | | |
| ***Metals*** | | | | | | | | |
| Chromium, Dissolved | Not detected | mg/L | 0.005 | 200.8 | 07/05/12 15:22 | SLS | 7440-47-3 | |
| Copper, Dissolved | Not detected | mg/L | 0.004 | 200.8 | 07/05/12 15:22 | SLS | 7440-50-8 | |
| Iron, Dissolved | 1.20 | mg/L | 0.02 | 200.8 | 07/05/12 15:22 | SLS | 7439-89-6 | |
| Manganese, Dissolved | 0.242 | mg/L | 0.005 | 200.8 | 07/05/12 15:22 | SLS | 7439-96-5 | |
| Nickel, Dissolved | Not detected | mg/L | 0.005 | 200.8 | 07/05/12 15:22 | SLS | 7440-02-0 | |
| Sodium | 72.0 | mg/L | 1.0 | E200.8 | 07/03/12 13:56 | SLS | 7440-23-5 | |
| Zinc, Dissolved | Not detected | mg/L | 0.005 | 200.8 | 07/05/12 15:22 | SLS | 7440-66-6 | |
| ***Organics - Volatiles*** | | | | | | | | |
| **Volatile Organics - DEQ List** | | | | | | | | |
| Diethyl ether | Not detected | ug/L | 10 | 8260B | 07/02/12 15:22 | WAT | 60-29-7 | |
| Acetone | Not detected | ug/L | 50 | 8260B | 07/02/12 15:22 | WAT | 67-64-1 | |
| Methyl iodide | Not detected | ug/L | 1 | 8260B | 07/02/12 15:22 | WAT | 74-88-4 | |
| Carbon disulfide | Not detected | ug/L | 5 | 8260B | 07/02/12 15:22 | WAT | 75-15-0 | |
| tert-Methyl butyl ether (MTBE) | Not detected | ug/L | 5 | 8260B | 07/02/12 15:22 | WAT | 1634-04-4 | |
| Acrylonitrile | Not detected | ug/L | 2 | 8260B | 07/02/12 15:22 | WAT | 107-13-1 | |
| 2-Butanone (MEK) | Not detected | ug/L | 25 | 8260B | 07/02/12 15:22 | WAT | 78-93-3 | |
| Dichlorodifluoromethane | Not detected | ug/L | 5 | 8260B | 07/02/12 15:22 | WAT | 75-71-8 | |
| Chloromethane | Not detected | ug/L | 5 | 8260B | 07/02/12 15:22 | WAT | 74-87-3 | |
| Vinyl chloride | Not detected | ug/L | 1 | 8260B | 07/02/12 15:22 | WAT | 75-01-4 | |
| Bromomethane | Not detected | ug/L | 5 | 8260B | 07/02/12 15:22 | WAT | 74-83-9 | |
| Chloroethane | Not detected | ug/L | 5 | 8260B | 07/02/12 15:22 | WAT | 75-00-3 | |
| Trichlorofluoromethane | Not detected | ug/L | 1 | 8260B | 07/02/12 15:22 | WAT | 75-69-4 | |
| 1,1-Dichloroethene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:22 | WAT | 75-35-4 | |
| Methylene chloride | Not detected | ug/L | 5 | 8260B | 07/02/12 15:22 | WAT | 75-09-2 | |
| trans-1,2-Dichloroethene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:22 | WAT | 156-60-5 | |

Lab Sample ID: S53009.02 (continued)
Sample Tag: B-24r

| Analysis | Results | Units | RL | Method | Run Date/Time | Analyst | CAS # | Flags |
|---|---|---|---|---|---|---|---|---|
| ***Organics - Volatiles (continued)*** | | | | | | | | |
| **Volatile Organics - DEQ List (continued)** | | | | | | | | |
| 1,1-Dichloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 15:22 | WAT | 75-34-3 | |
| cis-1,2-Dichloroethene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:22 | WAT | 156-59-2 | |
| Tetrahydrofuran | Not detected | ug/L | 90 | 8260B | 07/02/12 15:22 | WAT | 109-99-9 | |
| Chloroform | Not detected | ug/L | 1 | 8260B | 07/02/12 15:22 | WAT | 67-66-3 | |
| Bromochloromethane | Not detected | ug/L | 1 | 8260B | 07/02/12 15:22 | WAT | 74-97-5 | |
| 1,1,1-Trichloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 15:22 | WAT | 71-55-6 | |
| 4-Methyl-2-pentanone (MIBK) | Not detected | ug/L | 50 | 8260B | 07/02/12 15:22 | WAT | 108-10-1 | |
| 2-Hexanone | Not detected | ug/L | 50 | 8260B | 07/02/12 15:22 | WAT | 591-78-6 | |
| Carbon tetrachloride | Not detected | ug/L | 1 | 8260B | 07/02/12 15:22 | WAT | 56-23-5 | |
| Benzene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:22 | WAT | 71-43-2 | |
| 1,2-Dichloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 15:22 | WAT | 107-06-2 | |
| Trichloroethene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:22 | WAT | 79-01-6 | |
| 1,2-Dichloropropane | Not detected | ug/L | 1 | 8260B | 07/02/12 15:22 | WAT | 78-87-5 | |
| Bromodichloromethane | Not detected | ug/L | 1 | 8260B | 07/02/12 15:22 | WAT | 75-27-4 | |
| Dibromomethane | Not detected | ug/L | 5 | 8260B | 07/02/12 15:22 | WAT | 74-95-3 | |
| cis-1,3-Dichloropropene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:22 | WAT | 10061-01-5 | |
| Toluene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:22 | WAT | 108-88-3 | |
| trans-1,3-Dichloropropene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:22 | WAT | 10061-02-6 | |
| 1,1,2-Trichloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 15:22 | WAT | 79-00-5 | |
| Tetrachloroethene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:22 | WAT | 127-18-4 | |
| trans-1,4-Dichloro-2-butene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:22 | WAT | 110-57-6 | |
| Dibromochloromethane | Not detected | ug/L | 5 | 8260B | 07/02/12 15:22 | WAT | 124-48-1 | |
| 1,2-Dibromoethane | Not detected | ug/L | 1 | 8260B | 07/02/12 15:22 | WAT | 106-93-4 | |
| Chlorobenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:22 | WAT | 108-90-7 | |
| 1,1,1,2-Tetrachloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 15:22 | WAT | 630-20-6 | |
| Ethylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:22 | WAT | 100-41-4 | |
| p,m-Xylene | Not detected | ug/L | 2 | 8260B | 07/02/12 15:22 | WAT | | |
| o-Xylene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:22 | WAT | 95-47-6 | |
| Styrene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:22 | WAT | 100-42-5 | |
| Isopropylbenzene | Not detected | ug/L | 5 | 8260B | 07/02/12 15:22 | WAT | 98-82-8 | |
| Bromoform | Not detected | ug/L | 1 | 8260B | 07/02/12 15:22 | WAT | 75-25-2 | |
| 1,1,2,2-Tetrachloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 15:22 | WAT | 79-34-5 | |
| 1,2,3-Trichloropropane | Not detected | ug/L | 1 | 8260B | 07/02/12 15:22 | WAT | 96-18-4 | |
| n-Propylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:22 | WAT | 103-65-1 | |
| Bromobenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:22 | WAT | 108-86-1 | |
| 1,3,5-Trimethylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:22 | WAT | 108-67-8 | |
| tert-Butylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:22 | WAT | 98-06-6 | |
| 1,2,4-Trimethylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:22 | WAT | 95-63-6 | |
| sec-Butylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:22 | WAT | 135-98-8 | |
| p-Isopropyltoluene | Not detected | ug/L | 5 | 8260B | 07/02/12 15:22 | WAT | 99-87-6 | |
| 1,3-Dichlorobenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:22 | WAT | 541-73-1 | |
| 1,4-Dichlorobenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:22 | WAT | 106-46-7 | |
| 1,2-Dichlorobenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:22 | WAT | 95-50-1 | |
| 1,2,3-Trimethylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:22 | WAT | 526-73-8 | |
| n-Butylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:22 | WAT | 104-51-8 | |
| Hexachloroethane | Not detected | ug/L | 5 | 8260B | 07/02/12 15:22 | WAT | 67-72-1 | |
| 1,2-Dibromo-3-chloropropane | Not detected | ug/L | 5 | 8260B | 07/02/12 15:22 | WAT | 96-12-8 | |
| 1,2,4-Trichlorobenzene | Not detected | ug/L | 5 | 8260B | 07/02/12 15:22 | WAT | 120-82-1 | |
| 1,2,3-Trichlorobenzene | Not detected | ug/L | 5 | 8260B | 07/02/12 15:22 | WAT | 87-61-6 | |

Lab Sample ID: S53009.02 (continued)
Sample Tag: B-24r

| Analysis | Results | Units | RL | Method | Run Date/Time | Analyst | CAS # | Flags |
|---|---|---|---|---|---|---|---|---|
| ***Organics - Volatiles (continued)*** | | | | | | | | |
| **Volatile Organics - DEQ List (continued)** | | | | | | | | |
| Naphthalene | Not detected | ug/L | 5 | 8260B | 07/02/12 15:22 | WAT | 91-20-3 | |
| 2-Methylnaphthalene | Not detected | ug/L | 5 | 8260B | 07/02/12 15:22 | WAT | 91-57-6 | |
| ***Organics*** | | | | | | | | |
| TOX | 16 | ug/L | 40 | 9020A | 07/03/12 11:08 | TestA | | O1 |

O-Analysis performed by outside laboratory. See attached report. 1-Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Lab Sample ID: S53009.03
Sample Tag: B-9
Collected Date/Time: 06/26/2012 14:20
Matrix: Groundwater
COC Reference: 65461

Sample Containers

| # | Type | Preservative(s) | Refrigerated? | Arrival Temp. (C) | Thermometer # |
|---|---|---|---|---|---|
| 1 | 250ml Plastic | None | Yes | 5.4 | IR |
| 2 | 125ml Plastic | HNO3 | Yes | 5.4 | IR |
| 2 | 40ml Glass | H2SO4 | Yes | 5.4 | IR |
| 2 | 40ml Glass | HCL | Yes | 5.4 | IR |
| 2 | 125ml Amber | H2SO4 | Yes | 5.4 | IR |
| 1 | 125ml Plastic | NaOH | Yes | 5.4 | IR |

| Analysis | Results | Units | RL | Method | Run Date/Time | Analyst | CAS # | Flags |
|---|---|---|---|---|---|---|---|---|
| ***Extraction / Prep.*** | | | | | | | | |
| Metal Digestion | Completed | | | 3015A | 07/03/12 01:00 | SLR | | |
| Metal Digestion | Completed | | | 3015A | 07/02/12 01:00 | SLR | | |
| ***Inorganics*** | | | | | | | | |
| Chloride | 101 | mg/L | 10 | 300.0 | 07/07/12 11:32 | JDP | 16887-00-6 | |
| Conductivity | 2,770 | umhos/cm | | 120.1 | 06/29/12 11:59 | JKB | | |
| Cyanide | Not detected | mg/L | 0.005 | 335.4/4500-CN-E | 07/09/12 11:18 | JDP | 57-12-5 | |
| Phenols | Not detected | mg/L | 0.02 | 420.1 | 07/09/12 13:46 | JKB | | |
| Sulfate | 1,110 | mg/L | 250 | 300.0 | 07/07/12 12:42 | JDP | 14808-79-8 | |
| TOC | 2.0 | mg/L | 1 | EPA 415.1 | 07/03/12 14:28 | JKB | | |
| ***Metals*** | | | | | | | | |
| Chromium, Dissolved | Not detected | mg/L | 0.005 | 200.8 | 07/05/12 15:24 | SLS | 7440-47-3 | |
| Copper, Dissolved | Not detected | mg/L | 0.004 | 200.8 | 07/05/12 15:24 | SLS | 7440-50-8 | |
| Iron, Dissolved | 0.06 | mg/L | 0.02 | 200.8 | 07/05/12 15:24 | SLS | 7439-89-6 | |
| Manganese, Dissolved | 0.433 | mg/L | 0.005 | 200.8 | 07/05/12 15:24 | SLS | 7439-96-5 | |
| Nickel, Dissolved | 0.008 | mg/L | 0.005 | 200.8 | 07/05/12 15:24 | SLS | 7440-02-0 | |
| Sodium | 73.7 | mg/L | 1.0 | E200.8 | 07/03/12 13:58 | SLS | 7440-23-5 | |
| Zinc, Dissolved | Not detected | mg/L | 0.005 | 200.8 | 07/05/12 15:24 | SLS | 7440-66-6 | |
| ***Organics - Volatiles*** | | | | | | | | |
| **Volatile Organics - DEQ List** | | | | | | | | |
| Diethyl ether | Not detected | ug/L | 10 | 8260B | 07/02/12 15:42 | WAT | 60-29-7 | |
| Acetone | Not detected | ug/L | 50 | 8260B | 07/02/12 15:42 | WAT | 67-64-1 | |
| Methyl iodide | Not detected | ug/L | 1 | 8260B | 07/02/12 15:42 | WAT | 74-88-4 | |
| Carbon disulfide | Not detected | ug/L | 5 | 8260B | 07/02/12 15:42 | WAT | 75-15-0 | |
| tert-Methyl butyl ether (MTBE) | Not detected | ug/L | 5 | 8260B | 07/02/12 15:42 | WAT | 1634-04-4 | |
| Acrylonitrile | Not detected | ug/L | 2 | 8260B | 07/02/12 15:42 | WAT | 107-13-1 | |
| 2-Butanone (MEK) | Not detected | ug/L | 25 | 8260B | 07/02/12 15:42 | WAT | 78-93-3 | |
| Dichlorodifluoromethane | Not detected | ug/L | 5 | 8260B | 07/02/12 15:42 | WAT | 75-71-8 | |
| Chloromethane | Not detected | ug/L | 5 | 8260B | 07/02/12 15:42 | WAT | 74-87-3 | |
| Vinyl chloride | Not detected | ug/L | 1 | 8260B | 07/02/12 15:42 | WAT | 75-01-4 | |
| Bromomethane | Not detected | ug/L | 5 | 8260B | 07/02/12 15:42 | WAT | 74-83-9 | |
| Chloroethane | Not detected | ug/L | 5 | 8260B | 07/02/12 15:42 | WAT | 75-00-3 | |
| Trichlorofluoromethane | Not detected | ug/L | 1 | 8260B | 07/02/12 15:42 | WAT | 75-69-4 | |
| 1,1-Dichloroethene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:42 | WAT | 75-35-4 | |
| Methylene chloride | Not detected | ug/L | 5 | 8260B | 07/02/12 15:42 | WAT | 75-09-2 | |
| trans-1,2-Dichloroethene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:42 | WAT | 156-60-5 | |

Lab Sample ID: S53009.03 (continued)
Sample Tag: B-9

| Analysis | Results | Units | RL | Method | Run Date/Time | Analyst | CAS # | Flags |
|---|---|---|---|---|---|---|---|---|
| ***Organics - Volatiles (continued)*** | | | | | | | | |
| **Volatile Organics - DEQ List (continued)** | | | | | | | | |
| 1,1-Dichloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 15:42 | WAT | 75-34-3 | |
| cis-1,2-Dichloroethene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:42 | WAT | 156-59-2 | |
| Tetrahydrofuran | Not detected | ug/L | 90 | 8260B | 07/02/12 15:42 | WAT | 109-99-9 | |
| Chloroform | Not detected | ug/L | 1 | 8260B | 07/02/12 15:42 | WAT | 67-66-3 | |
| Bromochloromethane | Not detected | ug/L | 1 | 8260B | 07/02/12 15:42 | WAT | 74-97-5 | |
| 1,1,1-Trichloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 15:42 | WAT | 71-55-6 | |
| 4-Methyl-2-pentanone (MIBK) | Not detected | ug/L | 50 | 8260B | 07/02/12 15:42 | WAT | 108-10-1 | |
| 2-Hexanone | Not detected | ug/L | 50 | 8260B | 07/02/12 15:42 | WAT | 591-78-6 | |
| Carbon tetrachloride | Not detected | ug/L | 1 | 8260B | 07/02/12 15:42 | WAT | 56-23-5 | |
| Benzene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:42 | WAT | 71-43-2 | |
| 1,2-Dichloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 15:42 | WAT | 107-06-2 | |
| Trichloroethene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:42 | WAT | 79-01-6 | |
| 1,2-Dichloropropane | Not detected | ug/L | 1 | 8260B | 07/02/12 15:42 | WAT | 78-87-5 | |
| Bromodichloromethane | Not detected | ug/L | 1 | 8260B | 07/02/12 15:42 | WAT | 75-27-4 | |
| Dibromomethane | Not detected | ug/L | 5 | 8260B | 07/02/12 15:42 | WAT | 74-95-3 | |
| cis-1,3-Dichloropropene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:42 | WAT | 10061-01-5 | |
| Toluene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:42 | WAT | 108-88-3 | |
| trans-1,3-Dichloropropene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:42 | WAT | 10061-02-6 | |
| 1,1,2-Trichloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 15:42 | WAT | 79-00-5 | |
| Tetrachloroethene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:42 | WAT | 127-18-4 | |
| trans-1,4-Dichloro-2-butene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:42 | WAT | 110-57-6 | |
| Dibromochloromethane | Not detected | ug/L | 5 | 8260B | 07/02/12 15:42 | WAT | 124-48-1 | |
| 1,2-Dibromoethane | Not detected | ug/L | 1 | 8260B | 07/02/12 15:42 | WAT | 106-93-4 | |
| Chlorobenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:42 | WAT | 108-90-7 | |
| 1,1,1,2-Tetrachloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 15:42 | WAT | 630-20-6 | |
| Ethylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:42 | WAT | 100-41-4 | |
| p,m-Xylene | Not detected | ug/L | 2 | 8260B | 07/02/12 15:42 | WAT | | |
| o-Xylene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:42 | WAT | 95-47-6 | |
| Styrene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:42 | WAT | 100-42-5 | |
| Isopropylbenzene | Not detected | ug/L | 5 | 8260B | 07/02/12 15:42 | WAT | 98-82-8 | |
| Bromoform | Not detected | ug/L | 1 | 8260B | 07/02/12 15:42 | WAT | 75-25-2 | |
| 1,1,2,2-Tetrachloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 15:42 | WAT | 79-34-5 | |
| 1,2,3-Trichloropropane | Not detected | ug/L | 1 | 8260B | 07/02/12 15:42 | WAT | 96-18-4 | |
| n-Propylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:42 | WAT | 103-65-1 | |
| Bromobenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:42 | WAT | 108-86-1 | |
| 1,3,5-Trimethylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:42 | WAT | 108-67-8 | |
| tert-Butylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:42 | WAT | 98-06-6 | |
| 1,2,4-Trimethylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:42 | WAT | 95-63-6 | |
| sec-Butylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:42 | WAT | 135-98-8 | |
| p-Isopropyltoluene | Not detected | ug/L | 5 | 8260B | 07/02/12 15:42 | WAT | 99-87-6 | |
| 1,3-Dichlorobenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:42 | WAT | 541-73-1 | |
| 1,4-Dichlorobenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:42 | WAT | 106-46-7 | |
| 1,2-Dichlorobenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:42 | WAT | 95-50-1 | |
| 1,2,3-Trimethylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:42 | WAT | 526-73-8 | |
| n-Butylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 15:42 | WAT | 104-51-8 | |
| Hexachloroethane | Not detected | ug/L | 5 | 8260B | 07/02/12 15:42 | WAT | 67-72-1 | |
| 1,2-Dibromo-3-chloropropane | Not detected | ug/L | 5 | 8260B | 07/02/12 15:42 | WAT | 96-12-8 | |
| 1,2,4-Trichlorobenzene | Not detected | ug/L | 5 | 8260B | 07/02/12 15:42 | WAT | 120-82-1 | |
| 1,2,3-Trichlorobenzene | Not detected | ug/L | 5 | 8260B | 07/02/12 15:42 | WAT | 87-61-6 | |

Lab Sample ID: S53009.03 (continued)
Sample Tag: B-9

| Analysis | Results | Units | RL | Method | Run Date/Time | Analyst | CAS # | Flags |
|---|---|---|---|---|---|---|---|---|
| ***Organics - Volatiles (continued)*** | | | | | | | | |
| **Volatile Organics - DEQ List (continued)** | | | | | | | | |
| Naphthalene | Not detected | ug/L | 5 | 8260B | 07/02/12 15:42 | WAT | 91-20-3 | |
| 2-Methylnaphthalene | Not detected | ug/L | 5 | 8260B | 07/02/12 15:42 | WAT | 91-57-6 | |
| ***Organics*** | | | | | | | | |
| TOX | 21 | ug/L | 40 | 9020A | 07/03/12 11:08 | TestA | | O1 |

O-Analysis performed by outside laboratory. See attached report. 1-Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Lab Sample ID: S53009.04
Sample Tag: B-21D
Collected Date/Time: 06/26/2012 15:15
Matrix: Groundwater
COC Reference: 65461

Sample Containers

| # | Type | Preservative(s) | Refrigerated? | Arrival Temp. (C) | Thermometer # |
|---|---|---|---|---|---|
| 1 | 250ml Plastic | None | Yes | 5.4 | IR |
| 2 | 125ml Plastic | HNO3 | Yes | 5.4 | IR |
| 2 | 40ml Glass | H2SO4 | Yes | 5.4 | IR |
| 2 | 40ml Glass | HCL | Yes | 5.4 | IR |
| 2 | 125ml Amber | H2SO4 | Yes | 5.4 | IR |
| 1 | 125ml Plastic | NaOH | Yes | 5.4 | IR |

| Analysis | Results | Units | RL | Method | Run Date/Time | Analyst | CAS # | Flags |
|---|---|---|---|---|---|---|---|---|
| ***Extraction / Prep.*** | | | | | | | | |
| Metal Digestion | Completed | | | 3015A | 07/03/12 01:00 | SLR | | |
| Metal Digestion | Completed | | | 3015A | 07/02/12 01:00 | SLR | | |
| ***Inorganics*** | | | | | | | | |
| Chloride | Not detected | mg/L | 5 | 300.0 | 07/07/12 12:54 | JDP | 16887-00-6 | |
| Conductivity | 745 | umhos/cm | | 120.1 | 06/29/12 12:01 | JKB | | |
| Cyanide | Not detected | mg/L | 0.005 | 335.4/4500-CN-E | 07/09/12 11:20 | JDP | 57-12-5 | |
| Phenols | Not detected | mg/L | 0.02 | 420.1 | 07/09/12 13:48 | JKB | | |
| Sulfate | 66 | mg/L | 10 | 300.0 | 07/07/12 11:43 | JDP | 14808-79-8 | |
| TOC | 1.3 | mg/L | 1 | EPA 415.1 | 07/03/12 14:48 | JKB | | |
| ***Metals*** | | | | | | | | |
| Chromium, Dissolved | Not detected | mg/L | 0.005 | 200.8 | 07/05/12 15:47 | SLS | 7440-47-3 | |
| Copper, Dissolved | Not detected | mg/L | 0.004 | 200.8 | 07/05/12 15:47 | SLS | 7440-50-8 | |
| Iron, Dissolved | 0.64 | mg/L | 0.02 | 200.8 | 07/05/12 15:47 | SLS | 7439-89-6 | |
| Manganese, Dissolved | 0.042 | mg/L | 0.005 | 200.8 | 07/05/12 15:47 | SLS | 7439-96-5 | |
| Nickel, Dissolved | Not detected | mg/L | 0.005 | 200.8 | 07/05/12 15:47 | SLS | 7440-02-0 | |
| Sodium | 25.8 | mg/L | 1.0 | E200.8 | 07/03/12 14:00 | SLS | 7440-23-5 | |
| Zinc, Dissolved | Not detected | mg/L | 0.005 | 200.8 | 07/05/12 15:47 | SLS | 7440-66-6 | |
| ***Organics - Volatiles*** | | | | | | | | |
| **Volatile Organics - DEQ List** | | | | | | | | |
| Diethyl ether | Not detected | ug/L | 10 | 8260B | 07/02/12 16:03 | WAT | 60-29-7 | |
| Acetone | Not detected | ug/L | 50 | 8260B | 07/02/12 16:03 | WAT | 67-64-1 | |
| Methyl iodide | Not detected | ug/L | 1 | 8260B | 07/02/12 16:03 | WAT | 74-88-4 | |
| Carbon disulfide | Not detected | ug/L | 5 | 8260B | 07/02/12 16:03 | WAT | 75-15-0 | |
| tert-Methyl butyl ether (MTBE) | Not detected | ug/L | 5 | 8260B | 07/02/12 16:03 | WAT | 1634-04-4 | |
| Acrylonitrile | Not detected | ug/L | 2 | 8260B | 07/02/12 16:03 | WAT | 107-13-1 | |
| 2-Butanone (MEK) | Not detected | ug/L | 25 | 8260B | 07/02/12 16:03 | WAT | 78-93-3 | |
| Dichlorodifluoromethane | Not detected | ug/L | 5 | 8260B | 07/02/12 16:03 | WAT | 75-71-8 | |
| Chloromethane | Not detected | ug/L | 5 | 8260B | 07/02/12 16:03 | WAT | 74-87-3 | |
| Vinyl chloride | Not detected | ug/L | 1 | 8260B | 07/02/12 16:03 | WAT | 75-01-4 | |
| Bromomethane | Not detected | ug/L | 5 | 8260B | 07/02/12 16:03 | WAT | 74-83-9 | |
| Chloroethane | Not detected | ug/L | 5 | 8260B | 07/02/12 16:03 | WAT | 75-00-3 | |
| Trichlorofluoromethane | Not detected | ug/L | 1 | 8260B | 07/02/12 16:03 | WAT | 75-69-4 | |
| 1,1-Dichloroethene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:03 | WAT | 75-35-4 | |
| Methylene chloride | Not detected | ug/L | 5 | 8260B | 07/02/12 16:03 | WAT | 75-09-2 | |
| trans-1,2-Dichloroethene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:03 | WAT | 156-60-5 | |

Lab Sample ID: S53009.04 (continued)
Sample Tag: B-21D

| Analysis | Results | Units | RL | Method | Run Date/Time | Analyst | CAS # | Flags |
|---|---|---|---|---|---|---|---|---|
| ***Organics - Volatiles (continued)*** | | | | | | | | |
| **Volatile Organics - DEQ List (continued)** | | | | | | | | |
| 1,1-Dichloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 16:03 | WAT | 75-34-3 | |
| cis-1,2-Dichloroethene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:03 | WAT | 156-59-2 | |
| Tetrahydrofuran | Not detected | ug/L | 90 | 8260B | 07/02/12 16:03 | WAT | 109-99-9 | |
| Chloroform | Not detected | ug/L | 1 | 8260B | 07/02/12 16:03 | WAT | 67-66-3 | |
| Bromochloromethane | Not detected | ug/L | 1 | 8260B | 07/02/12 16:03 | WAT | 74-97-5 | |
| 1,1,1-Trichloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 16:03 | WAT | 71-55-6 | |
| 4-Methyl-2-pentanone (MIBK) | Not detected | ug/L | 50 | 8260B | 07/02/12 16:03 | WAT | 108-10-1 | |
| 2-Hexanone | Not detected | ug/L | 50 | 8260B | 07/02/12 16:03 | WAT | 591-78-6 | |
| Carbon tetrachloride | Not detected | ug/L | 1 | 8260B | 07/02/12 16:03 | WAT | 56-23-5 | |
| Benzene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:03 | WAT | 71-43-2 | |
| 1,2-Dichloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 16:03 | WAT | 107-06-2 | |
| Trichloroethene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:03 | WAT | 79-01-6 | |
| 1,2-Dichloropropane | Not detected | ug/L | 1 | 8260B | 07/02/12 16:03 | WAT | 78-87-5 | |
| Bromodichloromethane | Not detected | ug/L | 1 | 8260B | 07/02/12 16:03 | WAT | 75-27-4 | |
| Dibromomethane | Not detected | ug/L | 5 | 8260B | 07/02/12 16:03 | WAT | 74-95-3 | |
| cis-1,3-Dichloropropene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:03 | WAT | 10061-01-5 | |
| Toluene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:03 | WAT | 108-88-3 | |
| trans-1,3-Dichloropropene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:03 | WAT | 10061-02-6 | |
| 1,1,2-Trichloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 16:03 | WAT | 79-00-5 | |
| Tetrachloroethene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:03 | WAT | 127-18-4 | |
| trans-1,4-Dichloro-2-butene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:03 | WAT | 110-57-6 | |
| Dibromochloromethane | Not detected | ug/L | 5 | 8260B | 07/02/12 16:03 | WAT | 124-48-1 | |
| 1,2-Dibromoethane | Not detected | ug/L | 1 | 8260B | 07/02/12 16:03 | WAT | 106-93-4 | |
| Chlorobenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:03 | WAT | 108-90-7 | |
| 1,1,1,2-Tetrachloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 16:03 | WAT | 630-20-6 | |
| Ethylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:03 | WAT | 100-41-4 | |
| p,m-Xylene | Not detected | ug/L | 2 | 8260B | 07/02/12 16:03 | WAT | | |
| o-Xylene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:03 | WAT | 95-47-6 | |
| Styrene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:03 | WAT | 100-42-5 | |
| Isopropylbenzene | Not detected | ug/L | 5 | 8260B | 07/02/12 16:03 | WAT | 98-82-8 | |
| Bromoform | Not detected | ug/L | 1 | 8260B | 07/02/12 16:03 | WAT | 75-25-2 | |
| 1,1,2,2-Tetrachloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 16:03 | WAT | 79-34-5 | |
| 1,2,3-Trichloropropane | Not detected | ug/L | 1 | 8260B | 07/02/12 16:03 | WAT | 96-18-4 | |
| n-Propylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:03 | WAT | 103-65-1 | |
| Bromobenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:03 | WAT | 108-86-1 | |
| 1,3,5-Trimethylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:03 | WAT | 108-67-8 | |
| tert-Butylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:03 | WAT | 98-06-6 | |
| 1,2,4-Trimethylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:03 | WAT | 95-63-6 | |
| sec-Butylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:03 | WAT | 135-98-8 | |
| p-Isopropyltoluene | Not detected | ug/L | 5 | 8260B | 07/02/12 16:03 | WAT | 99-87-6 | |
| 1,3-Dichlorobenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:03 | WAT | 541-73-1 | |
| 1,4-Dichlorobenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:03 | WAT | 106-46-7 | |
| 1,2-Dichlorobenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:03 | WAT | 95-50-1 | |
| 1,2,3-Trimethylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:03 | WAT | 526-73-8 | |
| n-Butylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:03 | WAT | 104-51-8 | |
| Hexachloroethane | Not detected | ug/L | 5 | 8260B | 07/02/12 16:03 | WAT | 67-72-1 | |
| 1,2-Dibromo-3-chloropropane | Not detected | ug/L | 5 | 8260B | 07/02/12 16:03 | WAT | 96-12-8 | |
| 1,2,4-Trichlorobenzene | Not detected | ug/L | 5 | 8260B | 07/02/12 16:03 | WAT | 120-82-1 | |
| 1,2,3-Trichlorobenzene | Not detected | ug/L | 5 | 8260B | 07/02/12 16:03 | WAT | 87-61-6 | |

Lab Sample ID: S53009.04 (continued)
Sample Tag: B-21D

| Analysis | Results | Units | RL | Method | Run Date/Time | Analyst | CAS # | Flags |
|---|---|---|---|---|---|---|---|---|
| ***Organics - Volatiles (continued)*** | | | | | | | | |
| **Volatile Organics - DEQ List (continued)** | | | | | | | | |
| Naphthalene | Not detected | ug/L | 5 | 8260B | 07/02/12 16:03 | WAT | 91-20-3 | |
| 2-Methylnaphthalene | Not detected | ug/L | 5 | 8260B | 07/02/12 16:03 | WAT | 91-57-6 | |
| ***Organics*** | | | | | | | | |
| TOX | Not detected | ug/L | 40 | 9020A | 07/03/12 11:08 | TestA | | O |

O-Analysis performed by outside laboratory. See attached report.

Lab Sample ID: S53009.05
Sample Tag: EB-1
Collected Date/Time: 06/27/2012 08:15
Matrix: Quality Control
COC Reference: 65461

Sample Containers

| # | Type | Preservative(s) | Refrigerated? | Arrival Temp. (C) | Thermometer # |
|---|---|---|---|---|---|
| 1 | 250ml Plastic | None | Yes | 5.4 | IR |
| 1 | 125ml Plastic | HNO3 | Yes | 5.4 | IR |
| 2 | 40ml Glass | H2SO4 | Yes | 5.4 | IR |
| 2 | 40ml Glass | HCL | Yes | 5.4 | IR |
| 2 | 125ml Amber | H2SO4 | Yes | 5.4 | IR |
| 1 | 125ml Plastic | NaOH | Yes | 5.4 | IR |

| Analysis | Results | Units | RL | Method | Run Date/Time | Analyst | CAS # | Flags |
|---|---|---|---|---|---|---|---|---|
| ***Extraction / Prep.*** | | | | | | | | |
| Metal Digestion | Completed | | | 3015A | 07/02/12 01:00 | SLR | | |
| ***Inorganics*** | | | | | | | | |
| Chloride | Not detected | mg/L | 2 | 300.0 | 07/07/12 13:05 | JDP | 16887-00-6 | |
| Conductivity | 3.2 | umhos/cm | | 120.1 | 06/29/12 12:03 | JKB | | |
| Cyanide | Not detected | mg/L | 0.005 | 335.4/4500-CN-E | 07/09/12 11:22 | JDP | 57-12-5 | |
| Phenols | Not detected | mg/L | 0.02 | 420.1 | 07/09/12 13:50 | JKB | | |
| Sulfate | Not detected | mg/L | 2 | 300.0 | 07/07/12 13:05 | JDP | 14808-79-8 | |
| TOC | Not detected | mg/L | 1 | EPA 415.1 | 07/03/12 15:07 | JKB | | |
| ***Metals*** | | | | | | | | |
| Chromium | Not detected | mg/L | 0.005 | E200.8 | 07/05/12 15:49 | SLS | 7440-47-3 | |
| Copper | Not detected | mg/L | 0.004 | E200.8 | 07/05/12 15:49 | SLS | 7440-50-8 | |
| Iron | 0.05 | mg/L | 0.02 | E200.8 | 07/05/12 15:49 | SLS | 7439-89-6 | |
| Manganese | Not detected | mg/L | 0.005 | E200.8 | 07/05/12 15:49 | SLS | 7439-96-5 | |
| Nickel | Not detected | mg/L | 0.005 | E200.8 | 07/05/12 15:49 | SLS | 7440-02-0 | |
| Sodium | 6.35 | mg/L | 1.0 | E200.8 | 07/03/12 14:02 | SLS | 7440-23-5 | |
| Zinc | 0.013 | mg/L | 0.005 | E200.8 | 07/05/12 15:49 | SLS | 7440-66-6 | |
| ***Organics - Volatiles*** | | | | | | | | |
| **Volatile Organics - DEQ List** | | | | | | | | |
| Diethyl ether | Not detected | ug/L | 10 | 8260B | 07/02/12 16:23 | WAT | 60-29-7 | |
| Acetone | Not detected | ug/L | 50 | 8260B | 07/02/12 16:23 | WAT | 67-64-1 | |
| Methyl iodide | Not detected | ug/L | 1 | 8260B | 07/02/12 16:23 | WAT | 74-88-4 | |
| Carbon disulfide | Not detected | ug/L | 5 | 8260B | 07/02/12 16:23 | WAT | 75-15-0 | |
| tert-Methyl butyl ether (MTBE) | Not detected | ug/L | 5 | 8260B | 07/02/12 16:23 | WAT | 1634-04-4 | |
| Acrylonitrile | Not detected | ug/L | 2 | 8260B | 07/02/12 16:23 | WAT | 107-13-1 | |
| 2-Butanone (MEK) | Not detected | ug/L | 25 | 8260B | 07/02/12 16:23 | WAT | 78-93-3 | |
| Dichlorodifluoromethane | Not detected | ug/L | 5 | 8260B | 07/02/12 16:23 | WAT | 75-71-8 | |
| Chloromethane | Not detected | ug/L | 5 | 8260B | 07/02/12 16:23 | WAT | 74-87-3 | |
| Vinyl chloride | Not detected | ug/L | 1 | 8260B | 07/02/12 16:23 | WAT | 75-01-4 | |
| Bromomethane | Not detected | ug/L | 5 | 8260B | 07/02/12 16:23 | WAT | 74-83-9 | |
| Chloroethane | Not detected | ug/L | 5 | 8260B | 07/02/12 16:23 | WAT | 75-00-3 | |
| Trichlorofluoromethane | Not detected | ug/L | 1 | 8260B | 07/02/12 16:23 | WAT | 75-69-4 | |
| 1,1-Dichloroethene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:23 | WAT | 75-35-4 | |
| Methylene chloride | Not detected | ug/L | 5 | 8260B | 07/02/12 16:23 | WAT | 75-09-2 | |
| trans-1,2-Dichloroethene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:23 | WAT | 156-60-5 | |
| 1,1-Dichloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 16:23 | WAT | 75-34-3 | |

Lab Sample ID: S53009.05 (continued)
Sample Tag: EB-1

| Analysis | Results | Units | RL | Method | Run Date/Time | Analyst | CAS # | Flags |
|---|---|---|---|---|---|---|---|---|
| ***Organics - Volatiles (continued)*** | | | | | | | | |
| **Volatile Organics - DEQ List (continued)** | | | | | | | | |
| cis-1,2-Dichloroethene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:23 | WAT | 156-59-2 | |
| Tetrahydrofuran | Not detected | ug/L | 90 | 8260B | 07/02/12 16:23 | WAT | 109-99-9 | |
| Chloroform | Not detected | ug/L | 1 | 8260B | 07/02/12 16:23 | WAT | 67-66-3 | |
| Bromochloromethane | Not detected | ug/L | 1 | 8260B | 07/02/12 16:23 | WAT | 74-97-5 | |
| 1,1,1-Trichloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 16:23 | WAT | 71-55-6 | |
| 4-Methyl-2-pentanone (MIBK) | Not detected | ug/L | 50 | 8260B | 07/02/12 16:23 | WAT | 108-10-1 | |
| 2-Hexanone | Not detected | ug/L | 50 | 8260B | 07/02/12 16:23 | WAT | 591-78-6 | |
| Carbon tetrachloride | Not detected | ug/L | 1 | 8260B | 07/02/12 16:23 | WAT | 56-23-5 | |
| Benzene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:23 | WAT | 71-43-2 | |
| 1,2-Dichloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 16:23 | WAT | 107-06-2 | |
| Trichloroethene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:23 | WAT | 79-01-6 | |
| 1,2-Dichloropropane | Not detected | ug/L | 1 | 8260B | 07/02/12 16:23 | WAT | 78-87-5 | |
| Bromodichloromethane | Not detected | ug/L | 1 | 8260B | 07/02/12 16:23 | WAT | 75-27-4 | |
| Dibromomethane | Not detected | ug/L | 5 | 8260B | 07/02/12 16:23 | WAT | 74-95-3 | |
| cis-1,3-Dichloropropene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:23 | WAT | 10061-01-5 | |
| Toluene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:23 | WAT | 108-88-3 | |
| trans-1,3-Dichloropropene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:23 | WAT | 10061-02-6 | |
| 1,1,2-Trichloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 16:23 | WAT | 79-00-5 | |
| Tetrachloroethene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:23 | WAT | 127-18-4 | |
| trans-1,4-Dichloro-2-butene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:23 | WAT | 110-57-6 | |
| Dibromochloromethane | Not detected | ug/L | 5 | 8260B | 07/02/12 16:23 | WAT | 124-48-1 | |
| 1,2-Dibromoethane | Not detected | ug/L | 1 | 8260B | 07/02/12 16:23 | WAT | 106-93-4 | |
| Chlorobenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:23 | WAT | 108-90-7 | |
| 1,1,1,2-Tetrachloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 16:23 | WAT | 630-20-6 | |
| Ethylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:23 | WAT | 100-41-4 | |
| p,m-Xylene | Not detected | ug/L | 2 | 8260B | 07/02/12 16:23 | WAT | | |
| o-Xylene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:23 | WAT | 95-47-6 | |
| Styrene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:23 | WAT | 100-42-5 | |
| Isopropylbenzene | Not detected | ug/L | 5 | 8260B | 07/02/12 16:23 | WAT | 98-82-8 | |
| Bromoform | Not detected | ug/L | 1 | 8260B | 07/02/12 16:23 | WAT | 75-25-2 | |
| 1,1,2,2-Tetrachloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 16:23 | WAT | 79-34-5 | |
| 1,2,3-Trichloropropane | Not detected | ug/L | 1 | 8260B | 07/02/12 16:23 | WAT | 96-18-4 | |
| n-Propylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:23 | WAT | 103-65-1 | |
| Bromobenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:23 | WAT | 108-86-1 | |
| 1,3,5-Trimethylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:23 | WAT | 108-67-8 | |
| tert-Butylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:23 | WAT | 98-06-6 | |
| 1,2,4-Trimethylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:23 | WAT | 95-63-6 | |
| sec-Butylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:23 | WAT | 135-98-8 | |
| p-Isopropyltoluene | Not detected | ug/L | 5 | 8260B | 07/02/12 16:23 | WAT | 99-87-6 | |
| 1,3-Dichlorobenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:23 | WAT | 541-73-1 | |
| 1,4-Dichlorobenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:23 | WAT | 106-46-7 | |
| 1,2-Dichlorobenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:23 | WAT | 95-50-1 | |
| 1,2,3-Trimethylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:23 | WAT | 526-73-8 | |
| n-Butylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:23 | WAT | 104-51-8 | |
| Hexachloroethane | Not detected | ug/L | 5 | 8260B | 07/02/12 16:23 | WAT | 67-72-1 | |
| 1,2-Dibromo-3-chloropropane | Not detected | ug/L | 5 | 8260B | 07/02/12 16:23 | WAT | 96-12-8 | |
| 1,2,4-Trichlorobenzene | Not detected | ug/L | 5 | 8260B | 07/02/12 16:23 | WAT | 120-82-1 | |
| 1,2,3-Trichlorobenzene | Not detected | ug/L | 5 | 8260B | 07/02/12 16:23 | WAT | 87-61-6 | |
| Naphthalene | Not detected | ug/L | 5 | 8260B | 07/02/12 16:23 | WAT | 91-20-3 | |

Lab Sample ID: S53009.05 (continued)
Sample Tag: EB-1

| Analysis | Results | Units | RL | Method | Run Date/Time | Analyst | CAS # | Flags |
|---|---|---|---|---|---|---|---|---|
| ***Organics - Volatiles (continued)*** | | | | | | | | |
| **Volatile Organics - DEQ List (continued)** | | | | | | | | |
| 2-Methylnaphthalene | Not detected | ug/L | 5 | 8260B | 07/02/12 16:23 | WAT | 91-57-6 | |
| ***Organics*** | | | | | | | | |
| TOX | Not detected | ug/L | 20 | 9020A | 07/03/12 11:08 | TestA | | O |

O-Analysis performed by outside laboratory. See attached report.

Lab Sample ID: S53009.06
Sample Tag: B-7
Collected Date/Time: 06/27/2012 08:45
Matrix: Groundwater
COC Reference: 65461

Sample Containers

| # | Type | Preservative(s) | Refrigerated? | Arrival Temp. (C) | Thermometer # |
|---|---|---|---|---|---|
| 1 | 250ml Plastic | None | Yes | 5.4 | IR |
| 2 | 125ml Plastic | HNO3 | Yes | 5.4 | IR |
| 2 | 40ml Glass | H2SO4 | Yes | 5.4 | IR |
| 2 | 40ml Glass | HCL | Yes | 5.4 | IR |
| 2 | 125ml Amber | H2SO4 | Yes | 5.4 | IR |
| 1 | 125ml Plastic | NaOH | Yes | 5.4 | IR |

| Analysis | Results | Units | RL | Method | Run Date/Time | Analyst | CAS # | Flags |
|---|---|---|---|---|---|---|---|---|
| ***Extraction / Prep.*** | | | | | | | | |
| Metal Digestion | Completed | | | 3015A | 07/03/12 01:00 | SLR | | |
| Metal Digestion | Completed | | | 3015A | 07/02/12 01:00 | SLR | | |
| ***Inorganics*** | | | | | | | | |
| Chloride | 40 | mg/L | 10 | 300.0 | 07/07/12 12:06 | JDP | 16887-00-6 | |
| Conductivity | 1,082 | umhos/cm | | 120.1 | 06/29/12 12:05 | JKB | | |
| Cyanide | Not detected | mg/L | 0.005 | 335.4/4500-CN-E | 07/09/12 11:24 | JDP | 57-12-5 | |
| Phenols | Not detected | mg/L | 0.02 | 420.1 | 07/09/12 13:52 | JKB | | |
| Sulfate | 134 | mg/L | 10 | 300.0 | 07/07/12 12:06 | JDP | 14808-79-8 | |
| TOC | 3.7 | mg/L | 1 | EPA 415.1 | 07/03/12 15:27 | JKB | | |
| ***Metals*** | | | | | | | | |
| Chromium, Dissolved | Not detected | mg/L | 0.005 | 200.8 | 07/05/12 15:52 | SLS | 7440-47-3 | |
| Copper, Dissolved | Not detected | mg/L | 0.004 | 200.8 | 07/05/12 15:52 | SLS | 7440-50-8 | |
| Iron, Dissolved | Not detected | mg/L | 0.02 | 200.8 | 07/05/12 15:52 | SLS | 7439-89-6 | |
| Manganese, Dissolved | 0.058 | mg/L | 0.005 | 200.8 | 07/05/12 15:52 | SLS | 7439-96-5 | |
| Nickel, Dissolved | Not detected | mg/L | 0.005 | 200.8 | 07/05/12 15:52 | SLS | 7440-02-0 | |
| Sodium | 64.9 | mg/L | 1.0 | E200.8 | 07/03/12 14:04 | SLS | 7440-23-5 | |
| Zinc, Dissolved | Not detected | mg/L | 0.005 | 200.8 | 07/05/12 15:52 | SLS | 7440-66-6 | |
| ***Organics - Volatiles*** | | | | | | | | |
| **Volatile Organics - DEQ List** | | | | | | | | |
| Diethyl ether | Not detected | ug/L | 10 | 8260B | 07/02/12 16:44 | WAT | 60-29-7 | |
| Acetone | Not detected | ug/L | 50 | 8260B | 07/02/12 16:44 | WAT | 67-64-1 | |
| Methyl iodide | Not detected | ug/L | 1 | 8260B | 07/02/12 16:44 | WAT | 74-88-4 | |
| Carbon disulfide | Not detected | ug/L | 5 | 8260B | 07/02/12 16:44 | WAT | 75-15-0 | |
| tert-Methyl butyl ether (MTBE) | Not detected | ug/L | 5 | 8260B | 07/02/12 16:44 | WAT | 1634-04-4 | |
| Acrylonitrile | Not detected | ug/L | 2 | 8260B | 07/02/12 16:44 | WAT | 107-13-1 | |
| 2-Butanone (MEK) | Not detected | ug/L | 25 | 8260B | 07/02/12 16:44 | WAT | 78-93-3 | |
| Dichlorodifluoromethane | Not detected | ug/L | 5 | 8260B | 07/02/12 16:44 | WAT | 75-71-8 | |
| Chloromethane | Not detected | ug/L | 5 | 8260B | 07/02/12 16:44 | WAT | 74-87-3 | |
| Vinyl chloride | Not detected | ug/L | 1 | 8260B | 07/02/12 16:44 | WAT | 75-01-4 | |
| Bromomethane | Not detected | ug/L | 5 | 8260B | 07/02/12 16:44 | WAT | 74-83-9 | |
| Chloroethane | Not detected | ug/L | 5 | 8260B | 07/02/12 16:44 | WAT | 75-00-3 | |
| Trichlorofluoromethane | Not detected | ug/L | 1 | 8260B | 07/02/12 16:44 | WAT | 75-69-4 | |
| 1,1-Dichloroethene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:44 | WAT | 75-35-4 | |
| Methylene chloride | Not detected | ug/L | 5 | 8260B | 07/02/12 16:44 | WAT | 75-09-2 | |
| trans-1,2-Dichloroethene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:44 | WAT | 156-60-5 | |

Lab Sample ID: S53009.06 (continued)
Sample Tag: B-7

| Analysis | Results | Units | RL | Method | Run Date/Time | Analyst | CAS # | Flags |
|---|---|---|---|---|---|---|---|---|
| ***Organics - Volatiles (continued)*** | | | | | | | | |
| **Volatile Organics - DEQ List (continued)** | | | | | | | | |
| 1,1-Dichloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 16:44 | WAT | 75-34-3 | |
| cis-1,2-Dichloroethene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:44 | WAT | 156-59-2 | |
| Tetrahydrofuran | Not detected | ug/L | 90 | 8260B | 07/02/12 16:44 | WAT | 109-99-9 | |
| Chloroform | Not detected | ug/L | 1 | 8260B | 07/02/12 16:44 | WAT | 67-66-3 | |
| Bromochloromethane | Not detected | ug/L | 1 | 8260B | 07/02/12 16:44 | WAT | 74-97-5 | |
| 1,1,1-Trichloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 16:44 | WAT | 71-55-6 | |
| 4-Methyl-2-pentanone (MIBK) | Not detected | ug/L | 50 | 8260B | 07/02/12 16:44 | WAT | 108-10-1 | |
| 2-Hexanone | Not detected | ug/L | 50 | 8260B | 07/02/12 16:44 | WAT | 591-78-6 | |
| Carbon tetrachloride | Not detected | ug/L | 1 | 8260B | 07/02/12 16:44 | WAT | 56-23-5 | |
| Benzene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:44 | WAT | 71-43-2 | |
| 1,2-Dichloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 16:44 | WAT | 107-06-2 | |
| Trichloroethene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:44 | WAT | 79-01-6 | |
| 1,2-Dichloropropane | Not detected | ug/L | 1 | 8260B | 07/02/12 16:44 | WAT | 78-87-5 | |
| Bromodichloromethane | Not detected | ug/L | 1 | 8260B | 07/02/12 16:44 | WAT | 75-27-4 | |
| Dibromomethane | Not detected | ug/L | 5 | 8260B | 07/02/12 16:44 | WAT | 74-95-3 | |
| cis-1,3-Dichloropropene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:44 | WAT | 10061-01-5 | |
| Toluene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:44 | WAT | 108-88-3 | |
| trans-1,3-Dichloropropene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:44 | WAT | 10061-02-6 | |
| 1,1,2-Trichloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 16:44 | WAT | 79-00-5 | |
| Tetrachloroethene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:44 | WAT | 127-18-4 | |
| trans-1,4-Dichloro-2-butene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:44 | WAT | 110-57-6 | |
| Dibromochloromethane | Not detected | ug/L | 5 | 8260B | 07/02/12 16:44 | WAT | 124-48-1 | |
| 1,2-Dibromoethane | Not detected | ug/L | 1 | 8260B | 07/02/12 16:44 | WAT | 106-93-4 | |
| Chlorobenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:44 | WAT | 108-90-7 | |
| 1,1,1,2-Tetrachloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 16:44 | WAT | 630-20-6 | |
| Ethylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:44 | WAT | 100-41-4 | |
| p,m-Xylene | Not detected | ug/L | 2 | 8260B | 07/02/12 16:44 | WAT | | |
| o-Xylene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:44 | WAT | 95-47-6 | |
| Styrene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:44 | WAT | 100-42-5 | |
| Isopropylbenzene | Not detected | ug/L | 5 | 8260B | 07/02/12 16:44 | WAT | 98-82-8 | |
| Bromoform | Not detected | ug/L | 1 | 8260B | 07/02/12 16:44 | WAT | 75-25-2 | |
| 1,1,2,2-Tetrachloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 16:44 | WAT | 79-34-5 | |
| 1,2,3-Trichloropropane | Not detected | ug/L | 1 | 8260B | 07/02/12 16:44 | WAT | 96-18-4 | |
| n-Propylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:44 | WAT | 103-65-1 | |
| Bromobenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:44 | WAT | 108-86-1 | |
| 1,3,5-Trimethylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:44 | WAT | 108-67-8 | |
| tert-Butylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:44 | WAT | 98-06-6 | |
| 1,2,4-Trimethylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:44 | WAT | 95-63-6 | |
| sec-Butylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:44 | WAT | 135-98-8 | |
| p-Isopropyltoluene | Not detected | ug/L | 5 | 8260B | 07/02/12 16:44 | WAT | 99-87-6 | |
| 1,3-Dichlorobenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:44 | WAT | 541-73-1 | |
| 1,4-Dichlorobenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:44 | WAT | 106-46-7 | |
| 1,2-Dichlorobenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:44 | WAT | 95-50-1 | |
| 1,2,3-Trimethylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:44 | WAT | 526-73-8 | |
| n-Butylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 16:44 | WAT | 104-51-8 | |
| Hexachloroethane | Not detected | ug/L | 5 | 8260B | 07/02/12 16:44 | WAT | 67-72-1 | |
| 1,2-Dibromo-3-chloropropane | Not detected | ug/L | 5 | 8260B | 07/02/12 16:44 | WAT | 96-12-8 | |
| 1,2,4-Trichlorobenzene | Not detected | ug/L | 5 | 8260B | 07/02/12 16:44 | WAT | 120-82-1 | |
| 1,2,3-Trichlorobenzene | Not detected | ug/L | 5 | 8260B | 07/02/12 16:44 | WAT | 87-61-6 | |

Lab Sample ID: S53009.06 (continued)
Sample Tag: B-7

| Analysis | Results | Units | RL | Method | Run Date/Time | Analyst | CAS # | Flags |
|---|---|---|---|---|---|---|---|---|
| ***Organics - Volatiles (continued)*** | | | | | | | | |
| **Volatile Organics - DEQ List (continued)** | | | | | | | | |
| Naphthalene | Not detected | ug/L | 5 | 8260B | 07/02/12 16:44 | WAT | 91-20-3 | |
| 2-Methylnaphthalene | Not detected | ug/L | 5 | 8260B | 07/02/12 16:44 | WAT | 91-57-6 | |
| ***Organics*** | | | | | | | | |
| TOX | 97 | ug/L | 40 | 9020A | 07/03/12 11:08 | TestA | | O |

O-Analysis performed by outside laboratory. See attached report.

Lab Sample ID: S53009.07
Sample Tag: B-19Ar
Collected Date/Time: 06/27/2012 09:55
Matrix: Groundwater
COC Reference: 65461

Sample Containers

| # | Type | Preservative(s) | Refrigerated? | Arrival Temp. (C) | Thermometer # |
|---|---|---|---|---|---|
| 1 | 250ml Plastic | None | Yes | 5.4 | IR |
| 2 | 125ml Plastic | HNO3 | Yes | 5.4 | IR |
| 2 | 40ml Glass | H2SO4 | Yes | 5.4 | IR |
| 2 | 40ml Glass | HCL | Yes | 5.4 | IR |
| 2 | 125ml Amber | H2SO4 | Yes | 5.4 | IR |
| 1 | 125ml Plastic | NaOH | Yes | 5.4 | IR |

| Analysis | Results | Units | RL | Method | Run Date/Time | Analyst | CAS # | Flags |
|---|---|---|---|---|---|---|---|---|
| ***Extraction / Prep.*** | | | | | | | | |
| Metal Digestion | Completed | | | 3015A | 07/03/12 01:00 | SLR | | |
| Metal Digestion | Completed | | | 3015A | 07/02/12 01:00 | SLR | | |
| ***Inorganics*** | | | | | | | | |
| Chloride | 62 | mg/L | 10 | 300.0 | 07/07/12 12:18 | JDP | 16887-00-6 | |
| Conductivity | 1,005 | umhos/cm | | 120.1 | 06/29/12 12:07 | JKB | | |
| Cyanide | Not detected | mg/L | 0.005 | 335.4/4500-CN-E | 07/09/12 11:26 | JDP | 57-12-5 | |
| Phenols | Not detected | mg/L | 0.02 | 420.1 | 07/09/12 13:54 | JKB | | |
| Sulfate | 145 | mg/L | 10 | 300.0 | 07/07/12 12:18 | JDP | 14808-79-8 | |
| TOC | 1.5 | mg/L | 1 | EPA 415.1 | 07/03/12 15:47 | JKB | | |
| ***Metals*** | | | | | | | | |
| Chromium, Dissolved | Not detected | mg/L | 0.005 | 200.8 | 07/05/12 15:54 | SLS | 7440-47-3 | |
| Copper, Dissolved | Not detected | mg/L | 0.004 | 200.8 | 07/05/12 15:54 | SLS | 7440-50-8 | |
| Iron, Dissolved | Not detected | mg/L | 0.02 | 200.8 | 07/05/12 15:54 | SLS | 7439-89-6 | |
| Manganese, Dissolved | Not detected | mg/L | 0.005 | 200.8 | 07/05/12 15:54 | SLS | 7439-96-5 | |
| Nickel, Dissolved | Not detected | mg/L | 0.005 | 200.8 | 07/05/12 15:54 | SLS | 7440-02-0 | |
| Sodium | 23.2 | mg/L | 1.0 | E200.8 | 07/03/12 14:06 | SLS | 7440-23-5 | |
| Zinc, Dissolved | Not detected | mg/L | 0.005 | 200.8 | 07/05/12 15:54 | SLS | 7440-66-6 | |
| ***Organics - Volatiles*** | | | | | | | | |
| **Volatile Organics - DEQ List** | | | | | | | | |
| Diethyl ether | Not detected | ug/L | 10 | 8260B | 07/02/12 17:04 | WAT | 60-29-7 | |
| Acetone | Not detected | ug/L | 50 | 8260B | 07/02/12 17:04 | WAT | 67-64-1 | |
| Methyl iodide | Not detected | ug/L | 1 | 8260B | 07/02/12 17:04 | WAT | 74-88-4 | |
| Carbon disulfide | Not detected | ug/L | 5 | 8260B | 07/02/12 17:04 | WAT | 75-15-0 | |
| tert-Methyl butyl ether (MTBE) | Not detected | ug/L | 5 | 8260B | 07/02/12 17:04 | WAT | 1634-04-4 | |
| Acrylonitrile | Not detected | ug/L | 2 | 8260B | 07/02/12 17:04 | WAT | 107-13-1 | |
| 2-Butanone (MEK) | Not detected | ug/L | 25 | 8260B | 07/02/12 17:04 | WAT | 78-93-3 | |
| Dichlorodifluoromethane | Not detected | ug/L | 5 | 8260B | 07/02/12 17:04 | WAT | 75-71-8 | |
| Chloromethane | Not detected | ug/L | 5 | 8260B | 07/02/12 17:04 | WAT | 74-87-3 | |
| Vinyl chloride | Not detected | ug/L | 1 | 8260B | 07/02/12 17:04 | WAT | 75-01-4 | |
| Bromomethane | Not detected | ug/L | 5 | 8260B | 07/02/12 17:04 | WAT | 74-83-9 | |
| Chloroethane | Not detected | ug/L | 5 | 8260B | 07/02/12 17:04 | WAT | 75-00-3 | |
| Trichlorofluoromethane | Not detected | ug/L | 1 | 8260B | 07/02/12 17:04 | WAT | 75-69-4 | |
| 1,1-Dichloroethene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:04 | WAT | 75-35-4 | |
| Methylene chloride | Not detected | ug/L | 5 | 8260B | 07/02/12 17:04 | WAT | 75-09-2 | |
| trans-1,2-Dichloroethene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:04 | WAT | 156-60-5 | |

Lab Sample ID: S53009.07 (continued)
Sample Tag: B-19Ar

| Analysis | Results | Units | RL | Method | Run Date/Time | Analyst | CAS # | Flags |
|---|---|---|---|---|---|---|---|---|
| ***Organics - Volatiles (continued)*** | | | | | | | | |
| **Volatile Organics - DEQ List (continued)** | | | | | | | | |
| 1,1-Dichloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 17:04 | WAT | 75-34-3 | |
| cis-1,2-Dichloroethene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:04 | WAT | 156-59-2 | |
| Tetrahydrofuran | Not detected | ug/L | 90 | 8260B | 07/02/12 17:04 | WAT | 109-99-9 | |
| Chloroform | Not detected | ug/L | 1 | 8260B | 07/02/12 17:04 | WAT | 67-66-3 | |
| Bromochloromethane | Not detected | ug/L | 1 | 8260B | 07/02/12 17:04 | WAT | 74-97-5 | |
| 1,1,1-Trichloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 17:04 | WAT | 71-55-6 | |
| 4-Methyl-2-pentanone (MIBK) | Not detected | ug/L | 50 | 8260B | 07/02/12 17:04 | WAT | 108-10-1 | |
| 2-Hexanone | Not detected | ug/L | 50 | 8260B | 07/02/12 17:04 | WAT | 591-78-6 | |
| Carbon tetrachloride | Not detected | ug/L | 1 | 8260B | 07/02/12 17:04 | WAT | 56-23-5 | |
| Benzene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:04 | WAT | 71-43-2 | |
| 1,2-Dichloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 17:04 | WAT | 107-06-2 | |
| Trichloroethene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:04 | WAT | 79-01-6 | |
| 1,2-Dichloropropane | Not detected | ug/L | 1 | 8260B | 07/02/12 17:04 | WAT | 78-87-5 | |
| Bromodichloromethane | Not detected | ug/L | 1 | 8260B | 07/02/12 17:04 | WAT | 75-27-4 | |
| Dibromomethane | Not detected | ug/L | 5 | 8260B | 07/02/12 17:04 | WAT | 74-95-3 | |
| cis-1,3-Dichloropropene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:04 | WAT | 10061-01-5 | |
| Toluene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:04 | WAT | 108-88-3 | |
| trans-1,3-Dichloropropene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:04 | WAT | 10061-02-6 | |
| 1,1,2-Trichloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 17:04 | WAT | 79-00-5 | |
| Tetrachloroethene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:04 | WAT | 127-18-4 | |
| trans-1,4-Dichloro-2-butene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:04 | WAT | 110-57-6 | |
| Dibromochloromethane | Not detected | ug/L | 5 | 8260B | 07/02/12 17:04 | WAT | 124-48-1 | |
| 1,2-Dibromoethane | Not detected | ug/L | 1 | 8260B | 07/02/12 17:04 | WAT | 106-93-4 | |
| Chlorobenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:04 | WAT | 108-90-7 | |
| 1,1,1,2-Tetrachloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 17:04 | WAT | 630-20-6 | |
| Ethylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:04 | WAT | 100-41-4 | |
| p,m-Xylene | Not detected | ug/L | 2 | 8260B | 07/02/12 17:04 | WAT | | |
| o-Xylene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:04 | WAT | 95-47-6 | |
| Styrene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:04 | WAT | 100-42-5 | |
| Isopropylbenzene | Not detected | ug/L | 5 | 8260B | 07/02/12 17:04 | WAT | 98-82-8 | |
| Bromoform | Not detected | ug/L | 1 | 8260B | 07/02/12 17:04 | WAT | 75-25-2 | |
| 1,1,2,2-Tetrachloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 17:04 | WAT | 79-34-5 | |
| 1,2,3-Trichloropropane | Not detected | ug/L | 1 | 8260B | 07/02/12 17:04 | WAT | 96-18-4 | |
| n-Propylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:04 | WAT | 103-65-1 | |
| Bromobenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:04 | WAT | 108-86-1 | |
| 1,3,5-Trimethylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:04 | WAT | 108-67-8 | |
| tert-Butylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:04 | WAT | 98-06-6 | |
| 1,2,4-Trimethylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:04 | WAT | 95-63-6 | |
| sec-Butylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:04 | WAT | 135-98-8 | |
| p-Isopropyltoluene | Not detected | ug/L | 5 | 8260B | 07/02/12 17:04 | WAT | 99-87-6 | |
| 1,3-Dichlorobenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:04 | WAT | 541-73-1 | |
| 1,4-Dichlorobenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:04 | WAT | 106-46-7 | |
| 1,2-Dichlorobenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:04 | WAT | 95-50-1 | |
| 1,2,3-Trimethylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:04 | WAT | 526-73-8 | |
| n-Butylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:04 | WAT | 104-51-8 | |
| Hexachloroethane | Not detected | ug/L | 5 | 8260B | 07/02/12 17:04 | WAT | 67-72-1 | |
| 1,2-Dibromo-3-chloropropane | Not detected | ug/L | 5 | 8260B | 07/02/12 17:04 | WAT | 96-12-8 | |
| 1,2,4-Trichlorobenzene | Not detected | ug/L | 5 | 8260B | 07/02/12 17:04 | WAT | 120-82-1 | |
| 1,2,3-Trichlorobenzene | Not detected | ug/L | 5 | 8260B | 07/02/12 17:04 | WAT | 87-61-6 | |

Lab Sample ID: S53009.07 (continued)
Sample Tag: B-19Ar

| Analysis | Results | Units | RL | Method | Run Date/Time | Analyst | CAS # | Flags |
|---|---|---|---|---|---|---|---|---|
| ***Organics - Volatiles (continued)*** | | | | | | | | |
| **Volatile Organics - DEQ List (continued)** | | | | | | | | |
| Naphthalene | Not detected | ug/L | 5 | 8260B | 07/02/12 17:04 | WAT | 91-20-3 | |
| 2-Methylnaphthalene | Not detected | ug/L | 5 | 8260B | 07/02/12 17:04 | WAT | 91-57-6 | |
| ***Organics*** | | | | | | | | |
| TOX | Not detected | ug/L | 40 | 9020A | 07/06/12 12:48 | TestA | | O |

O-Analysis performed by outside laboratory. See attached report.

Lab Sample ID: S53009.08
Sample Tag: B-18A
Collected Date/Time: 06/27/2012 10:25
Matrix: Groundwater
COC Reference: 65461

Sample Containers

| # | Type | Preservative(s) | Refrigerated? | Arrival Temp. (C) | Thermometer # |
|---|---|---|---|---|---|
| 1 | 250ml Plastic | None | Yes | 5.4 | IR |
| 2 | 125ml Plastic | HNO3 | Yes | 5.4 | IR |
| 2 | 40ml Glass | H2SO4 | Yes | 5.4 | IR |
| 2 | 40ml Glass | HCL | Yes | 5.4 | IR |
| 2 | 125ml Amber | H2SO4 | Yes | 5.4 | IR |
| 1 | 125ml Plastic | NaOH | Yes | 5.4 | IR |

| Analysis | Results | Units | RL | Method | Run Date/Time | Analyst | CAS # | Flags |
|---|---|---|---|---|---|---|---|---|
| ***Extraction / Prep.*** | | | | | | | | |
| Metal Digestion (Replicate 01) | Completed | | | 3015A | 07/24/12 01:00 | SLR | | |
| Metal Digestion | Completed | | | 3015A | 07/02/12 01:00 | SLR | | |
| ***Inorganics*** | | | | | | | | |
| Chloride | 18 | mg/L | 10 | 300.0 | 07/07/12 13:17 | JDP | 16887-00-6 | |
| Conductivity | 1,057 | umhos/cm | | 120.1 | 06/29/12 12:09 | JKB | | |
| Cyanide | Not detected | mg/L | 0.005 | 335.4/4500-CN-E | 07/09/12 11:28 | JDP | 57-12-5 | |
| Phenols | Not detected | mg/L | 0.02 | 420.1 | 07/09/12 13:56 | JKB | | |
| Sulfate | 103 | mg/L | 10 | 300.0 | 07/07/12 13:17 | JDP | 14808-79-8 | |
| TOC | 1.2 | mg/L | 1 | EPA 415.1 | 07/03/12 16:06 | JKB | | |
| ***Metals*** | | | | | | | | |
| Chromium, Dissolved (Replicate 01) | Not detected | mg/L | 0.005 | E200.8 | 07/24/12 14:36 | SLS | 7440-47-3 | |
| Copper, Dissolved (Replicate 01) | Not detected | mg/L | 0.004 | E200.8 | 07/24/12 14:36 | SLS | 7440-50-8 | |
| Iron, Dissolved (Replicate 01) | 0.03 | mg/L | 0.02 | E200.8 | 07/24/12 14:36 | SLS | 7439-89-6 | |
| Manganese, Dissolved (Replicate 01) | 0.026 | mg/L | 0.005 | E200.8 | 07/24/12 14:36 | SLS | 7439-96-5 | |
| Nickel, Dissolved (Replicate 01) | Not detected | mg/L | 0.005 | E200.8 | 07/24/12 14:36 | SLS | 7440-02-0 | |
| Sodium | 50.0 | mg/L | 1.0 | E200.8 | 07/03/12 14:08 | SLS | 7440-23-5 | |
| Zinc, Dissolved (Replicate 01) | Not detected | mg/L | 0.005 | E200.8 | 07/24/12 14:36 | SLS | 7440-66-6 | |
| ***Organics - Volatiles*** | | | | | | | | |
| **Volatile Organics - DEQ List** | | | | | | | | |
| Diethyl ether | Not detected | ug/L | 10 | 8260B | 07/02/12 17:25 | WAT | 60-29-7 | |
| Acetone | Not detected | ug/L | 50 | 8260B | 07/02/12 17:25 | WAT | 67-64-1 | |
| Methyl iodide | Not detected | ug/L | 1 | 8260B | 07/02/12 17:25 | WAT | 74-88-4 | |
| Carbon disulfide | Not detected | ug/L | 5 | 8260B | 07/02/12 17:25 | WAT | 75-15-0 | |
| tert-Methyl butyl ether (MTBE) | Not detected | ug/L | 5 | 8260B | 07/02/12 17:25 | WAT | 1634-04-4 | |
| Acrylonitrile | Not detected | ug/L | 2 | 8260B | 07/02/12 17:25 | WAT | 107-13-1 | |
| 2-Butanone (MEK) | Not detected | ug/L | 25 | 8260B | 07/02/12 17:25 | WAT | 78-93-3 | |
| Dichlorodifluoromethane | Not detected | ug/L | 5 | 8260B | 07/02/12 17:25 | WAT | 75-71-8 | |
| Chloromethane | Not detected | ug/L | 5 | 8260B | 07/02/12 17:25 | WAT | 74-87-3 | |
| Vinyl chloride | Not detected | ug/L | 1 | 8260B | 07/02/12 17:25 | WAT | 75-01-4 | |
| Bromomethane | Not detected | ug/L | 5 | 8260B | 07/02/12 17:25 | WAT | 74-83-9 | |
| Chloroethane | Not detected | ug/L | 5 | 8260B | 07/02/12 17:25 | WAT | 75-00-3 | |
| Trichlorofluoromethane | Not detected | ug/L | 1 | 8260B | 07/02/12 17:25 | WAT | 75-69-4 | |
| 1,1-Dichloroethene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:25 | WAT | 75-35-4 | |
| Methylene chloride | Not detected | ug/L | 5 | 8260B | 07/02/12 17:25 | WAT | 75-09-2 | |
| trans-1,2-Dichloroethene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:25 | WAT | 156-60-5 | |

Lab Sample ID: S53009.08 (continued)
Sample Tag: B-18A

| Analysis | Results | Units | RL | Method | Run Date/Time | Analyst | CAS # | Flags |
|---|---|---|---|---|---|---|---|---|
| ***Organics - Volatiles (continued)*** | | | | | | | | |
| **Volatile Organics - DEQ List (continued)** | | | | | | | | |
| 1,1-Dichloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 17:25 | WAT | 75-34-3 | |
| cis-1,2-Dichloroethene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:25 | WAT | 156-59-2 | |
| Tetrahydrofuran | Not detected | ug/L | 90 | 8260B | 07/02/12 17:25 | WAT | 109-99-9 | |
| Chloroform | Not detected | ug/L | 1 | 8260B | 07/02/12 17:25 | WAT | 67-66-3 | |
| Bromochloromethane | Not detected | ug/L | 1 | 8260B | 07/02/12 17:25 | WAT | 74-97-5 | |
| 1,1,1-Trichloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 17:25 | WAT | 71-55-6 | |
| 4-Methyl-2-pentanone (MIBK) | Not detected | ug/L | 50 | 8260B | 07/02/12 17:25 | WAT | 108-10-1 | |
| 2-Hexanone | Not detected | ug/L | 50 | 8260B | 07/02/12 17:25 | WAT | 591-78-6 | |
| Carbon tetrachloride | Not detected | ug/L | 1 | 8260B | 07/02/12 17:25 | WAT | 56-23-5 | |
| Benzene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:25 | WAT | 71-43-2 | |
| 1,2-Dichloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 17:25 | WAT | 107-06-2 | |
| Trichloroethene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:25 | WAT | 79-01-6 | |
| 1,2-Dichloropropane | Not detected | ug/L | 1 | 8260B | 07/02/12 17:25 | WAT | 78-87-5 | |
| Bromodichloromethane | Not detected | ug/L | 1 | 8260B | 07/02/12 17:25 | WAT | 75-27-4 | |
| Dibromomethane | Not detected | ug/L | 5 | 8260B | 07/02/12 17:25 | WAT | 74-95-3 | |
| cis-1,3-Dichloropropene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:25 | WAT | 10061-01-5 | |
| Toluene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:25 | WAT | 108-88-3 | |
| trans-1,3-Dichloropropene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:25 | WAT | 10061-02-6 | |
| 1,1,2-Trichloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 17:25 | WAT | 79-00-5 | |
| Tetrachloroethene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:25 | WAT | 127-18-4 | |
| trans-1,4-Dichloro-2-butene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:25 | WAT | 110-57-6 | |
| Dibromochloromethane | Not detected | ug/L | 5 | 8260B | 07/02/12 17:25 | WAT | 124-48-1 | |
| 1,2-Dibromoethane | Not detected | ug/L | 1 | 8260B | 07/02/12 17:25 | WAT | 106-93-4 | |
| Chlorobenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:25 | WAT | 108-90-7 | |
| 1,1,1,2-Tetrachloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 17:25 | WAT | 630-20-6 | |
| Ethylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:25 | WAT | 100-41-4 | |
| p,m-Xylene | Not detected | ug/L | 2 | 8260B | 07/02/12 17:25 | WAT | | |
| o-Xylene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:25 | WAT | 95-47-6 | |
| Styrene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:25 | WAT | 100-42-5 | |
| Isopropylbenzene | Not detected | ug/L | 5 | 8260B | 07/02/12 17:25 | WAT | 98-82-8 | |
| Bromoform | Not detected | ug/L | 1 | 8260B | 07/02/12 17:25 | WAT | 75-25-2 | |
| 1,1,2,2-Tetrachloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 17:25 | WAT | 79-34-5 | |
| 1,2,3-Trichloropropane | Not detected | ug/L | 1 | 8260B | 07/02/12 17:25 | WAT | 96-18-4 | |
| n-Propylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:25 | WAT | 103-65-1 | |
| Bromobenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:25 | WAT | 108-86-1 | |
| 1,3,5-Trimethylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:25 | WAT | 108-67-8 | |
| tert-Butylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:25 | WAT | 98-06-6 | |
| 1,2,4-Trimethylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:25 | WAT | 95-63-6 | |
| sec-Butylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:25 | WAT | 135-98-8 | |
| p-Isopropyltoluene | Not detected | ug/L | 5 | 8260B | 07/02/12 17:25 | WAT | 99-87-6 | |
| 1,3-Dichlorobenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:25 | WAT | 541-73-1 | |
| 1,4-Dichlorobenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:25 | WAT | 106-46-7 | |
| 1,2-Dichlorobenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:25 | WAT | 95-50-1 | |
| 1,2,3-Trimethylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:25 | WAT | 526-73-8 | |
| n-Butylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:25 | WAT | 104-51-8 | |
| Hexachloroethane | Not detected | ug/L | 5 | 8260B | 07/02/12 17:25 | WAT | 67-72-1 | |
| 1,2-Dibromo-3-chloropropane | Not detected | ug/L | 5 | 8260B | 07/02/12 17:25 | WAT | 96-12-8 | |
| 1,2,4-Trichlorobenzene | Not detected | ug/L | 5 | 8260B | 07/02/12 17:25 | WAT | 120-82-1 | |
| 1,2,3-Trichlorobenzene | Not detected | ug/L | 5 | 8260B | 07/02/12 17:25 | WAT | 87-61-6 | |

Lab Sample ID: S53009.08 (continued)
Sample Tag: B-18A

| Analysis | Results | Units | RL | Method | Run Date/Time | Analyst | CAS # | Flags |
|---|---|---|---|---|---|---|---|---|
| ***Organics - Volatiles (continued)*** | | | | | | | | |
| **Volatile Organics - DEQ List (continued)** | | | | | | | | |
| Naphthalene | Not detected | ug/L | 5 | 8260B | 07/02/12 17:25 | WAT | 91-20-3 | |
| 2-Methylnaphthalene | Not detected | ug/L | 5 | 8260B | 07/02/12 17:25 | WAT | 91-57-6 | |
| ***Organics*** | | | | | | | | |
| TOX | Not detected | ug/L | 40 | 9020A | 07/06/12 12:48 | TestA | | O |

O-Analysis performed by outside laboratory. See attached report.

Lab Sample ID: S53009.09
Sample Tag: DUP-3
Collected Date/Time: 06/27/2012 00:01
Matrix: Groundwater
COC Reference: 65461

Sample Containers

| # | Type | Preservative(s) | Refrigerated? | Arrival Temp. (C) | Thermometer # |
|---|---|---|---|---|---|
| 1 | 250ml Plastic | None | Yes | 5.4 | IR |
| 2 | 125ml Plastic | HNO3 | Yes | 5.4 | IR |
| 2 | 40ml Glass | H2SO4 | Yes | 5.4 | IR |
| 2 | 40ml Glass | HCL | Yes | 5.4 | IR |
| 2 | 125ml Amber | H2SO4 | Yes | 5.4 | IR |
| 1 | 125ml Plastic | NaOH | Yes | 5.4 | IR |

| Analysis | Results | Units | RL | Method | Run Date/Time | Analyst | CAS # | Flags |
|---|---|---|---|---|---|---|---|---|
| ***Extraction / Prep.*** | | | | | | | | |
| Metal Digestion | Completed | | | 3015A | 07/03/12 01:00 | SLR | | |
| Metal Digestion | Completed | | | 3015A | 07/02/12 01:00 | SLR | | |
| ***Inorganics*** | | | | | | | | |
| Chloride | 18 | mg/L | 10 | 300.0 | 07/07/12 13:28 | JDP | 16887-00-6 | |
| Conductivity | 1,054 | umhos/cm | | 120.1 | 06/29/12 12:11 | JKB | | |
| Cyanide | Not detected | mg/L | 0.005 | 335.4/4500-CN-E | 07/09/12 11:30 | JDP | 57-12-5 | |
| Phenols | Not detected | mg/L | 0.02 | 420.1 | 07/09/12 13:58 | JKB | | |
| Sulfate | 101 | mg/L | 10 | 300.0 | 07/07/12 13:28 | JDP | 14808-79-8 | |
| TOC | 1.2 | mg/L | 1 | EPA 415.1 | 07/03/12 16:26 | JKB | | |
| ***Metals*** | | | | | | | | |
| Chromium, Dissolved | Not detected | mg/L | 0.005 | 200.8 | 07/05/12 15:59 | SLS | 7440-47-3 | |
| Copper, Dissolved | Not detected | mg/L | 0.004 | 200.8 | 07/05/12 15:59 | SLS | 7440-50-8 | |
| Iron, Dissolved | 0.04 | mg/L | 0.02 | 200.8 | 07/05/12 15:59 | SLS | 7439-89-6 | |
| Manganese, Dissolved | 0.027 | mg/L | 0.005 | 200.8 | 07/05/12 15:59 | SLS | 7439-96-5 | |
| Nickel, Dissolved | Not detected | mg/L | 0.005 | 200.8 | 07/05/12 15:59 | SLS | 7440-02-0 | |
| Sodium | 46.5 | mg/L | 1.0 | E200.8 | 07/03/12 14:11 | SLS | 7440-23-5 | |
| Zinc, Dissolved | 0.005 | mg/L | 0.005 | 200.8 | 07/05/12 15:59 | SLS | 7440-66-6 | |
| ***Organics - Volatiles*** | | | | | | | | |
| **Volatile Organics - DEQ List** | | | | | | | | |
| Diethyl ether | Not detected | ug/L | 10 | 8260B | 07/02/12 17:45 | WAT | 60-29-7 | |
| Acetone | Not detected | ug/L | 50 | 8260B | 07/02/12 17:45 | WAT | 67-64-1 | |
| Methyl iodide | Not detected | ug/L | 1 | 8260B | 07/02/12 17:45 | WAT | 74-88-4 | |
| Carbon disulfide | Not detected | ug/L | 5 | 8260B | 07/02/12 17:45 | WAT | 75-15-0 | |
| tert-Methyl butyl ether (MTBE) | Not detected | ug/L | 5 | 8260B | 07/02/12 17:45 | WAT | 1634-04-4 | |
| Acrylonitrile | Not detected | ug/L | 2 | 8260B | 07/02/12 17:45 | WAT | 107-13-1 | |
| 2-Butanone (MEK) | Not detected | ug/L | 25 | 8260B | 07/02/12 17:45 | WAT | 78-93-3 | |
| Dichlorodifluoromethane | Not detected | ug/L | 5 | 8260B | 07/02/12 17:45 | WAT | 75-71-8 | |
| Chloromethane | Not detected | ug/L | 5 | 8260B | 07/02/12 17:45 | WAT | 74-87-3 | |
| Vinyl chloride | Not detected | ug/L | 1 | 8260B | 07/02/12 17:45 | WAT | 75-01-4 | |
| Bromomethane | Not detected | ug/L | 5 | 8260B | 07/02/12 17:45 | WAT | 74-83-9 | |
| Chloroethane | Not detected | ug/L | 5 | 8260B | 07/02/12 17:45 | WAT | 75-00-3 | |
| Trichlorofluoromethane | Not detected | ug/L | 1 | 8260B | 07/02/12 17:45 | WAT | 75-69-4 | |
| 1,1-Dichloroethene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:45 | WAT | 75-35-4 | |
| Methylene chloride | Not detected | ug/L | 5 | 8260B | 07/02/12 17:45 | WAT | 75-09-2 | |
| trans-1,2-Dichloroethene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:45 | WAT | 156-60-5 | |

Lab Sample ID: S53009.09 (continued)
Sample Tag: DUP-3

| Analysis | Results | Units | RL | Method | Run Date/Time | Analyst | CAS # | Flags |
|---|---|---|---|---|---|---|---|---|
| ***Organics - Volatiles (continued)*** | | | | | | | | |
| **Volatile Organics - DEQ List (continued)** | | | | | | | | |
| 1,1-Dichloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 17:45 | WAT | 75-34-3 | |
| cis-1,2-Dichloroethene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:45 | WAT | 156-59-2 | |
| Tetrahydrofuran | Not detected | ug/L | 90 | 8260B | 07/02/12 17:45 | WAT | 109-99-9 | |
| Chloroform | Not detected | ug/L | 1 | 8260B | 07/02/12 17:45 | WAT | 67-66-3 | |
| Bromochloromethane | Not detected | ug/L | 1 | 8260B | 07/02/12 17:45 | WAT | 74-97-5 | |
| 1,1,1-Trichloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 17:45 | WAT | 71-55-6 | |
| 4-Methyl-2-pentanone (MIBK) | Not detected | ug/L | 50 | 8260B | 07/02/12 17:45 | WAT | 108-10-1 | |
| 2-Hexanone | Not detected | ug/L | 50 | 8260B | 07/02/12 17:45 | WAT | 591-78-6 | |
| Carbon tetrachloride | Not detected | ug/L | 1 | 8260B | 07/02/12 17:45 | WAT | 56-23-5 | |
| Benzene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:45 | WAT | 71-43-2 | |
| 1,2-Dichloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 17:45 | WAT | 107-06-2 | |
| Trichloroethene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:45 | WAT | 79-01-6 | |
| 1,2-Dichloropropane | Not detected | ug/L | 1 | 8260B | 07/02/12 17:45 | WAT | 78-87-5 | |
| Bromodichloromethane | Not detected | ug/L | 1 | 8260B | 07/02/12 17:45 | WAT | 75-27-4 | |
| Dibromomethane | Not detected | ug/L | 5 | 8260B | 07/02/12 17:45 | WAT | 74-95-3 | |
| cis-1,3-Dichloropropene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:45 | WAT | 10061-01-5 | |
| Toluene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:45 | WAT | 108-88-3 | |
| trans-1,3-Dichloropropene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:45 | WAT | 10061-02-6 | |
| 1,1,2-Trichloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 17:45 | WAT | 79-00-5 | |
| Tetrachloroethene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:45 | WAT | 127-18-4 | |
| trans-1,4-Dichloro-2-butene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:45 | WAT | 110-57-6 | |
| Dibromochloromethane | Not detected | ug/L | 5 | 8260B | 07/02/12 17:45 | WAT | 124-48-1 | |
| 1,2-Dibromoethane | Not detected | ug/L | 1 | 8260B | 07/02/12 17:45 | WAT | 106-93-4 | |
| Chlorobenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:45 | WAT | 108-90-7 | |
| 1,1,1,2-Tetrachloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 17:45 | WAT | 630-20-6 | |
| Ethylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:45 | WAT | 100-41-4 | |
| p,m-Xylene | Not detected | ug/L | 2 | 8260B | 07/02/12 17:45 | WAT | | |
| o-Xylene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:45 | WAT | 95-47-6 | |
| Styrene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:45 | WAT | 100-42-5 | |
| Isopropylbenzene | Not detected | ug/L | 5 | 8260B | 07/02/12 17:45 | WAT | 98-82-8 | |
| Bromoform | Not detected | ug/L | 1 | 8260B | 07/02/12 17:45 | WAT | 75-25-2 | |
| 1,1,2,2-Tetrachloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 17:45 | WAT | 79-34-5 | |
| 1,2,3-Trichloropropane | Not detected | ug/L | 1 | 8260B | 07/02/12 17:45 | WAT | 96-18-4 | |
| n-Propylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:45 | WAT | 103-65-1 | |
| Bromobenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:45 | WAT | 108-86-1 | |
| 1,3,5-Trimethylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:45 | WAT | 108-67-8 | |
| tert-Butylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:45 | WAT | 98-06-6 | |
| 1,2,4-Trimethylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:45 | WAT | 95-63-6 | |
| sec-Butylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:45 | WAT | 135-98-8 | |
| p-Isopropyltoluene | Not detected | ug/L | 5 | 8260B | 07/02/12 17:45 | WAT | 99-87-6 | |
| 1,3-Dichlorobenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:45 | WAT | 541-73-1 | |
| 1,4-Dichlorobenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:45 | WAT | 106-46-7 | |
| 1,2-Dichlorobenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:45 | WAT | 95-50-1 | |
| 1,2,3-Trimethylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:45 | WAT | 526-73-8 | |
| n-Butylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 17:45 | WAT | 104-51-8 | |
| Hexachloroethane | Not detected | ug/L | 5 | 8260B | 07/02/12 17:45 | WAT | 67-72-1 | |
| 1,2-Dibromo-3-chloropropane | Not detected | ug/L | 5 | 8260B | 07/02/12 17:45 | WAT | 96-12-8 | |
| 1,2,4-Trichlorobenzene | Not detected | ug/L | 5 | 8260B | 07/02/12 17:45 | WAT | 120-82-1 | |
| 1,2,3-Trichlorobenzene | Not detected | ug/L | 5 | 8260B | 07/02/12 17:45 | WAT | 87-61-6 | |

Lab Sample ID: S53009.09 (continued)
Sample Tag: DUP-3

| Analysis | Results | Units | RL | Method | Run Date/Time | Analyst | CAS # | Flags |
|---|---|---|---|---|---|---|---|---|
| ***Organics - Volatiles (continued)*** | | | | | | | | |
| **Volatile Organics - DEQ List (continued)** | | | | | | | | |
| Naphthalene | Not detected | ug/L | 5 | 8260B | 07/02/12 17:45 | WAT | 91-20-3 | |
| 2-Methylnaphthalene | Not detected | ug/L | 5 | 8260B | 07/02/12 17:45 | WAT | 91-57-6 | |
| ***Organics*** | | | | | | | | |
| TOX | Not detected | ug/L | 40 | 9020A | 07/06/12 12:48 | TestA | | O |

O-Analysis performed by outside laboratory. See attached report.

Lab Sample ID: S53009.10
Sample Tag: B-2D
Collected Date/Time: 06/27/2012 11:30
Matrix: Groundwater
COC Reference: 65461

Sample Containers

| # | Type | Preservative(s) | Refrigerated? | Arrival Temp. (C) | Thermometer # |
|---|---|---|---|---|---|
| 1 | 250ml Plastic | None | Yes | 5.4 | IR |
| 2 | 125ml Plastic | HNO3 | Yes | 5.4 | IR |
| 2 | 40ml Glass | H2SO4 | Yes | 5.4 | IR |
| 2 | 40ml Glass | HCL | Yes | 5.4 | IR |
| 2 | 125ml Amber | H2SO4 | Yes | 5.4 | IR |
| 1 | 125ml Plastic | NaOH | Yes | 5.4 | IR |

| Analysis | Results | Units | RL | Method | Run Date/Time | Analyst | CAS # | Flags |
|---|---|---|---|---|---|---|---|---|
| ***Extraction / Prep.*** | | | | | | | | |
| Metal Digestion | Completed | | | 3015A | 07/03/12 01:00 | SLR | | |
| Metal Digestion | Completed | | | 3015A | 07/02/12 01:00 | SLR | | |
| ***Inorganics*** | | | | | | | | |
| Chloride | Not detected | mg/L | 5 | 300.0 | 07/07/12 14:00 | JDP | 16887-00-6 | |
| Conductivity | 714 | umhos/cm | | 120.1 | 06/29/12 12:13 | JKB | | |
| Cyanide | Not detected | mg/L | 0.005 | 335.4/4500-CN-E | 07/09/12 11:32 | JDP | 57-12-5 | |
| Phenols | Not detected | mg/L | 0.02 | 420.1 | 07/09/12 14:00 | JKB | | |
| Sulfate | 43 | mg/L | 5 | 300.0 | 07/07/12 14:00 | JDP | 14808-79-8 | |
| TOC | 2.2 | mg/L | 1 | EPA 415.1 | 07/03/12 16:46 | JKB | | |
| ***Metals*** | | | | | | | | |
| Chromium, Dissolved | Not detected | mg/L | 0.005 | 200.8 | 07/05/12 16:02 | SLS | 7440-47-3 | |
| Copper, Dissolved | Not detected | mg/L | 0.004 | 200.8 | 07/05/12 16:02 | SLS | 7440-50-8 | |
| Iron, Dissolved | Not detected | mg/L | 0.02 | 200.8 | 07/05/12 16:02 | SLS | 7439-89-6 | |
| Manganese, Dissolved | 0.025 | mg/L | 0.005 | 200.8 | 07/05/12 16:02 | SLS | 7439-96-5 | |
| Nickel, Dissolved | Not detected | mg/L | 0.005 | 200.8 | 07/05/12 16:02 | SLS | 7440-02-0 | |
| Sodium | 17.3 | mg/L | 1.0 | E200.8 | 07/03/12 14:13 | SLS | 7440-23-5 | |
| Zinc, Dissolved | Not detected | mg/L | 0.005 | 200.8 | 07/05/12 16:02 | SLS | 7440-66-6 | |
| ***Organics - Volatiles*** | | | | | | | | |
| **Volatile Organics - DEQ List** | | | | | | | | |
| Diethyl ether | Not detected | ug/L | 10 | 8260B | 07/02/12 18:05 | WAT | 60-29-7 | |
| Acetone | Not detected | ug/L | 50 | 8260B | 07/02/12 18:05 | WAT | 67-64-1 | |
| Methyl iodide | Not detected | ug/L | 1 | 8260B | 07/02/12 18:05 | WAT | 74-88-4 | |
| Carbon disulfide | Not detected | ug/L | 5 | 8260B | 07/02/12 18:05 | WAT | 75-15-0 | |
| tert-Methyl butyl ether (MTBE) | Not detected | ug/L | 5 | 8260B | 07/02/12 18:05 | WAT | 1634-04-4 | |
| Acrylonitrile | Not detected | ug/L | 2 | 8260B | 07/02/12 18:05 | WAT | 107-13-1 | |
| 2-Butanone (MEK) | Not detected | ug/L | 25 | 8260B | 07/02/12 18:05 | WAT | 78-93-3 | |
| Dichlorodifluoromethane | Not detected | ug/L | 5 | 8260B | 07/02/12 18:05 | WAT | 75-71-8 | |
| Chloromethane | Not detected | ug/L | 5 | 8260B | 07/02/12 18:05 | WAT | 74-87-3 | |
| Vinyl chloride | Not detected | ug/L | 1 | 8260B | 07/02/12 18:05 | WAT | 75-01-4 | |
| Bromomethane | Not detected | ug/L | 5 | 8260B | 07/02/12 18:05 | WAT | 74-83-9 | |
| Chloroethane | Not detected | ug/L | 5 | 8260B | 07/02/12 18:05 | WAT | 75-00-3 | |
| Trichlorofluoromethane | Not detected | ug/L | 1 | 8260B | 07/02/12 18:05 | WAT | 75-69-4 | |
| 1,1-Dichloroethene | Not detected | ug/L | 1 | 8260B | 07/02/12 18:05 | WAT | 75-35-4 | |
| Methylene chloride | Not detected | ug/L | 5 | 8260B | 07/02/12 18:05 | WAT | 75-09-2 | |
| trans-1,2-Dichloroethene | Not detected | ug/L | 1 | 8260B | 07/02/12 18:05 | WAT | 156-60-5 | |

Lab Sample ID: S53009.10 (continued)
Sample Tag: B-2D

| Analysis | Results | Units | RL | Method | Run Date/Time | Analyst | CAS # | Flags |
|---|---|---|---|---|---|---|---|---|
| ***Organics - Volatiles (continued)*** | | | | | | | | |
| **Volatile Organics - DEQ List (continued)** | | | | | | | | |
| 1,1-Dichloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 18:05 | WAT | 75-34-3 | |
| cis-1,2-Dichloroethene | Not detected | ug/L | 1 | 8260B | 07/02/12 18:05 | WAT | 156-59-2 | |
| Tetrahydrofuran | Not detected | ug/L | 90 | 8260B | 07/02/12 18:05 | WAT | 109-99-9 | |
| Chloroform | Not detected | ug/L | 1 | 8260B | 07/02/12 18:05 | WAT | 67-66-3 | |
| Bromochloromethane | Not detected | ug/L | 1 | 8260B | 07/02/12 18:05 | WAT | 74-97-5 | |
| 1,1,1-Trichloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 18:05 | WAT | 71-55-6 | |
| 4-Methyl-2-pentanone (MIBK) | Not detected | ug/L | 50 | 8260B | 07/02/12 18:05 | WAT | 108-10-1 | |
| 2-Hexanone | Not detected | ug/L | 50 | 8260B | 07/02/12 18:05 | WAT | 591-78-6 | |
| Carbon tetrachloride | Not detected | ug/L | 1 | 8260B | 07/02/12 18:05 | WAT | 56-23-5 | |
| Benzene | Not detected | ug/L | 1 | 8260B | 07/02/12 18:05 | WAT | 71-43-2 | |
| 1,2-Dichloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 18:05 | WAT | 107-06-2 | |
| Trichloroethene | Not detected | ug/L | 1 | 8260B | 07/02/12 18:05 | WAT | 79-01-6 | |
| 1,2-Dichloropropane | Not detected | ug/L | 1 | 8260B | 07/02/12 18:05 | WAT | 78-87-5 | |
| Bromodichloromethane | Not detected | ug/L | 1 | 8260B | 07/02/12 18:05 | WAT | 75-27-4 | |
| Dibromomethane | Not detected | ug/L | 5 | 8260B | 07/02/12 18:05 | WAT | 74-95-3 | |
| cis-1,3-Dichloropropene | Not detected | ug/L | 1 | 8260B | 07/02/12 18:05 | WAT | 10061-01-5 | |
| Toluene | Not detected | ug/L | 1 | 8260B | 07/02/12 18:05 | WAT | 108-88-3 | |
| trans-1,3-Dichloropropene | Not detected | ug/L | 1 | 8260B | 07/02/12 18:05 | WAT | 10061-02-6 | |
| 1,1,2-Trichloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 18:05 | WAT | 79-00-5 | |
| Tetrachloroethene | Not detected | ug/L | 1 | 8260B | 07/02/12 18:05 | WAT | 127-18-4 | |
| trans-1,4-Dichloro-2-butene | Not detected | ug/L | 1 | 8260B | 07/02/12 18:05 | WAT | 110-57-6 | |
| Dibromochloromethane | Not detected | ug/L | 5 | 8260B | 07/02/12 18:05 | WAT | 124-48-1 | |
| 1,2-Dibromoethane | Not detected | ug/L | 1 | 8260B | 07/02/12 18:05 | WAT | 106-93-4 | |
| Chlorobenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 18:05 | WAT | 108-90-7 | |
| 1,1,1,2-Tetrachloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 18:05 | WAT | 630-20-6 | |
| Ethylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 18:05 | WAT | 100-41-4 | |
| p,m-Xylene | Not detected | ug/L | 2 | 8260B | 07/02/12 18:05 | WAT | | |
| o-Xylene | Not detected | ug/L | 1 | 8260B | 07/02/12 18:05 | WAT | 95-47-6 | |
| Styrene | Not detected | ug/L | 1 | 8260B | 07/02/12 18:05 | WAT | 100-42-5 | |
| Isopropylbenzene | Not detected | ug/L | 5 | 8260B | 07/02/12 18:05 | WAT | 98-82-8 | |
| Bromoform | Not detected | ug/L | 1 | 8260B | 07/02/12 18:05 | WAT | 75-25-2 | |
| 1,1,2,2-Tetrachloroethane | Not detected | ug/L | 1 | 8260B | 07/02/12 18:05 | WAT | 79-34-5 | |
| 1,2,3-Trichloropropane | Not detected | ug/L | 1 | 8260B | 07/02/12 18:05 | WAT | 96-18-4 | |
| n-Propylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 18:05 | WAT | 103-65-1 | |
| Bromobenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 18:05 | WAT | 108-86-1 | |
| 1,3,5-Trimethylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 18:05 | WAT | 108-67-8 | |
| tert-Butylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 18:05 | WAT | 98-06-6 | |
| 1,2,4-Trimethylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 18:05 | WAT | 95-63-6 | |
| sec-Butylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 18:05 | WAT | 135-98-8 | |
| p-Isopropyltoluene | Not detected | ug/L | 5 | 8260B | 07/02/12 18:05 | WAT | 99-87-6 | |
| 1,3-Dichlorobenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 18:05 | WAT | 541-73-1 | |
| 1,4-Dichlorobenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 18:05 | WAT | 106-46-7 | |
| 1,2-Dichlorobenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 18:05 | WAT | 95-50-1 | |
| 1,2,3-Trimethylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 18:05 | WAT | 526-73-8 | |
| n-Butylbenzene | Not detected | ug/L | 1 | 8260B | 07/02/12 18:05 | WAT | 104-51-8 | |
| Hexachloroethane | Not detected | ug/L | 5 | 8260B | 07/02/12 18:05 | WAT | 67-72-1 | |
| 1,2-Dibromo-3-chloropropane | Not detected | ug/L | 5 | 8260B | 07/02/12 18:05 | WAT | 96-12-8 | |
| 1,2,4-Trichlorobenzene | Not detected | ug/L | 5 | 8260B | 07/02/12 18:05 | WAT | 120-82-1 | |
| 1,2,3-Trichlorobenzene | Not detected | ug/L | 5 | 8260B | 07/02/12 18:05 | WAT | 87-61-6 | |

Lab Sample ID: S53009.10 (continued)
Sample Tag: B-2D

| Analysis | Results | Units | RL | Method | Run Date/Time | Analyst | CAS # | Flags |
|---|---|---|---|---|---|---|---|---|
| ***Organics - Volatiles (continued)*** | | | | | | | | |
| **Volatile Organics - DEQ List (continued)** | | | | | | | | |
| Naphthalene | Not detected | ug/L | 5 | 8260B | 07/02/12 18:05 | WAT | 91-20-3 | |
| 2-Methylnaphthalene | Not detected | ug/L | 5 | 8260B | 07/02/12 18:05 | WAT | 91-57-6 | |
| ***Organics*** | | | | | | | | |
| TOX | 16 | ug/L | 40 | 9020A | 07/06/12 12:48 | TestA | | O1 |

O-Analysis performed by outside laboratory. See attached report. 1-Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Lab Sample ID: S53009.11
Sample Tag: TB-2 (Trip Blank)
Collected Date/Time: 06/27/2012 00:01
Matrix: Quality Control
COC Reference: 65461

Sample Containers

| # | Type | Preservative(s) | Refrigerated? | Arrival Temp. (C) | Thermometer # |
|---|---|---|---|---|---|
| 1 | 40ml Glass | HCL | Yes | 5.4 | IR |

| Analysis | Results | Units | RL | Method | Run Date/Time | Analyst | CAS # | Flags |
|---|---|---|---|---|---|---|---|---|
| ***Organics - Volatiles*** | | | | | | | | |
| **Volatile Organics - DEQ List** | | | | | | | | |
| Diethyl ether | Not detected | ug/L | 10 | SW8260B | 07/02/12 18:25 | WAT | 60-29-7 | |
| Acetone | Not detected | ug/L | 50 | SW8260B | 07/02/12 18:25 | WAT | 67-64-1 | |
| Methyl iodide | Not detected | ug/L | 1 | SW8260B | 07/02/12 18:25 | WAT | 74-88-4 | |
| Carbon disulfide | Not detected | ug/L | 5 | SW8260B | 07/02/12 18:25 | WAT | 75-15-0 | |
| tert-Methyl butyl ether (MTBE) | Not detected | ug/L | 5 | SW8260B | 07/02/12 18:25 | WAT | 1634-04-4 | |
| Acrylonitrile | Not detected | ug/L | 2 | SW8260B | 07/02/12 18:25 | WAT | 107-13-1 | |
| 2-Butanone (MEK) | Not detected | ug/L | 25 | SW8260B | 07/02/12 18:25 | WAT | 78-93-3 | |
| Dichlorodifluoromethane | Not detected | ug/L | 5 | SW8260B | 07/02/12 18:25 | WAT | 75-71-8 | |
| Chloromethane | Not detected | ug/L | 5 | SW8260B | 07/02/12 18:25 | WAT | 74-87-3 | |
| Vinyl chloride | Not detected | ug/L | 1 | SW8260B | 07/02/12 18:25 | WAT | 75-01-4 | |
| Bromomethane | Not detected | ug/L | 5 | SW8260B | 07/02/12 18:25 | WAT | 74-83-9 | |
| Chloroethane | Not detected | ug/L | 5 | SW8260B | 07/02/12 18:25 | WAT | 75-00-3 | |
| Trichlorofluoromethane | Not detected | ug/L | 1 | SW8260B | 07/02/12 18:25 | WAT | 75-69-4 | |
| 1,1-Dichloroethene | Not detected | ug/L | 1 | SW8260B | 07/02/12 18:25 | WAT | 75-35-4 | |
| Methylene chloride | Not detected | ug/L | 5 | SW8260B | 07/02/12 18:25 | WAT | 75-09-2 | |
| trans-1,2-Dichloroethene | Not detected | ug/L | 1 | SW8260B | 07/02/12 18:25 | WAT | 156-60-5 | |
| 1,1-Dichloroethane | Not detected | ug/L | 1 | SW8260B | 07/02/12 18:25 | WAT | 75-34-3 | |
| cis-1,2-Dichloroethene | Not detected | ug/L | 1 | SW8260B | 07/02/12 18:25 | WAT | 156-59-2 | |
| Tetrahydrofuran | Not detected | ug/L | 90 | SW8260B | 07/02/12 18:25 | WAT | 109-99-9 | |
| Chloroform | Not detected | ug/L | 1 | SW8260B | 07/02/12 18:25 | WAT | 67-66-3 | |
| Bromochloromethane | Not detected | ug/L | 1 | SW8260B | 07/02/12 18:25 | WAT | 74-97-5 | |
| 1,1,1-Trichloroethane | Not detected | ug/L | 1 | SW8260B | 07/02/12 18:25 | WAT | 71-55-6 | |
| 4-Methyl-2-pentanone (MIBK) | Not detected | ug/L | 50 | SW8260B | 07/02/12 18:25 | WAT | 108-10-1 | |
| 2-Hexanone | Not detected | ug/L | 50 | SW8260B | 07/02/12 18:25 | WAT | 591-78-6 | |
| Carbon tetrachloride | Not detected | ug/L | 1 | SW8260B | 07/02/12 18:25 | WAT | 56-23-5 | |
| Benzene | Not detected | ug/L | 1 | SW8260B | 07/02/12 18:25 | WAT | 71-43-2 | |
| 1,2-Dichloroethane | Not detected | ug/L | 1 | SW8260B | 07/02/12 18:25 | WAT | 107-06-2 | |
| Trichloroethene | Not detected | ug/L | 1 | SW8260B | 07/02/12 18:25 | WAT | 79-01-6 | |
| 1,2-Dichloropropane | Not detected | ug/L | 1 | SW8260B | 07/02/12 18:25 | WAT | 78-87-5 | |
| Bromodichloromethane | Not detected | ug/L | 1 | SW8260B | 07/02/12 18:25 | WAT | 75-27-4 | |
| Dibromomethane | Not detected | ug/L | 5 | SW8260B | 07/02/12 18:25 | WAT | 74-95-3 | |
| cis-1,3-Dichloropropene | Not detected | ug/L | 1 | SW8260B | 07/02/12 18:25 | WAT | 10061-01-5 | |
| Toluene | Not detected | ug/L | 1 | SW8260B | 07/02/12 18:25 | WAT | 108-88-3 | |
| trans-1,3-Dichloropropene | Not detected | ug/L | 1 | SW8260B | 07/02/12 18:25 | WAT | 10061-02-6 | |
| 1,1,2-Trichloroethane | Not detected | ug/L | 1 | SW8260B | 07/02/12 18:25 | WAT | 79-00-5 | |
| Tetrachloroethene | Not detected | ug/L | 1 | SW8260B | 07/02/12 18:25 | WAT | 127-18-4 | |
| trans-1,4-Dichloro-2-butene | Not detected | ug/L | 1 | SW8260B | 07/02/12 18:25 | WAT | 110-57-6 | |
| Dibromochloromethane | Not detected | ug/L | 5 | SW8260B | 07/02/12 18:25 | WAT | 124-48-1 | |
| 1,2-Dibromoethane | Not detected | ug/L | 1 | SW8260B | 07/02/12 18:25 | WAT | 106-93-4 | |
| Chlorobenzene | Not detected | ug/L | 1 | SW8260B | 07/02/12 18:25 | WAT | 108-90-7 | |
| 1,1,1,2-Tetrachloroethane | Not detected | ug/L | 1 | SW8260B | 07/02/12 18:25 | WAT | 630-20-6 | |
| Ethylbenzene | Not detected | ug/L | 1 | SW8260B | 07/02/12 18:25 | WAT | 100-41-4 | |

Lab Sample ID: S53009.11 (continued)
Sample Tag: TB-2 (Trip Blank)

| Analysis | Results | Units | RL | Method | Run Date/Time | Analyst | CAS # | Flags |
|---|---|---|---|---|---|---|---|---|
| ***Organics - Volatiles (continued)*** | | | | | | | | |
| **Volatile Organics - DEQ List (continued)** | | | | | | | | |
| p,m-Xylene | Not detected | ug/L | 2 | SW8260B | 07/02/12 18:25 | WAT | | |
| o-Xylene | Not detected | ug/L | 1 | SW8260B | 07/02/12 18:25 | WAT | 95-47-6 | |
| Styrene | Not detected | ug/L | 1 | SW8260B | 07/02/12 18:25 | WAT | 100-42-5 | |
| Isopropylbenzene | Not detected | ug/L | 5 | SW8260B | 07/02/12 18:25 | WAT | 98-82-8 | |
| Bromoform | Not detected | ug/L | 1 | SW8260B | 07/02/12 18:25 | WAT | 75-25-2 | |
| 1,1,2,2-Tetrachloroethane | Not detected | ug/L | 1 | SW8260B | 07/02/12 18:25 | WAT | 79-34-5 | |
| 1,2,3-Trichloropropane | Not detected | ug/L | 1 | SW8260B | 07/02/12 18:25 | WAT | 96-18-4 | |
| n-Propylbenzene | Not detected | ug/L | 1 | SW8260B | 07/02/12 18:25 | WAT | 103-65-1 | |
| Bromobenzene | Not detected | ug/L | 1 | SW8260B | 07/02/12 18:25 | WAT | 108-86-1 | |
| 1,3,5-Trimethylbenzene | Not detected | ug/L | 1 | SW8260B | 07/02/12 18:25 | WAT | 108-67-8 | |
| tert-Butylbenzene | Not detected | ug/L | 1 | SW8260B | 07/02/12 18:25 | WAT | 98-06-6 | |
| 1,2,4-Trimethylbenzene | Not detected | ug/L | 1 | SW8260B | 07/02/12 18:25 | WAT | 95-63-6 | |
| sec-Butylbenzene | Not detected | ug/L | 1 | SW8260B | 07/02/12 18:25 | WAT | 135-98-8 | |
| p-Isopropyltoluene | Not detected | ug/L | 5 | SW8260B | 07/02/12 18:25 | WAT | 99-87-6 | |
| 1,3-Dichlorobenzene | Not detected | ug/L | 1 | SW8260B | 07/02/12 18:25 | WAT | 541-73-1 | |
| 1,4-Dichlorobenzene | Not detected | ug/L | 1 | SW8260B | 07/02/12 18:25 | WAT | 106-46-7 | |
| 1,2-Dichlorobenzene | Not detected | ug/L | 1 | SW8260B | 07/02/12 18:25 | WAT | 95-50-1 | |
| 1,2,3-Trimethylbenzene | Not detected | ug/L | 1 | SW8260B | 07/02/12 18:25 | WAT | 526-73-8 | |
| n-Butylbenzene | Not detected | ug/L | 1 | SW8260B | 07/02/12 18:25 | WAT | 104-51-8 | |
| Hexachloroethane | Not detected | ug/L | 5 | SW8260B | 07/02/12 18:25 | WAT | 67-72-1 | |
| 1,2-Dibromo-3-chloropropane | Not detected | ug/L | 5 | SW8260B | 07/02/12 18:25 | WAT | 96-12-8 | |
| 1,2,4-Trichlorobenzene | Not detected | ug/L | 5 | SW8260B | 07/02/12 18:25 | WAT | 120-82-1 | |
| 1,2,3-Trichlorobenzene | Not detected | ug/L | 5 | SW8260B | 07/02/12 18:25 | WAT | 87-61-6 | |
| Naphthalene | Not detected | ug/L | 5 | SW8260B | 07/02/12 18:25 | WAT | 91-20-3 | |
| 2-Methylnaphthalene | Not detected | ug/L | 5 | SW8260B | 07/02/12 18:25 | WAT | 91-57-6 | |

Merit Laboratories, Inc.

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C.O.C. PAGE # 1 OF 1

65461

# CHAIN OF CUSTODY RECORD

## REPORT TO

CONTACT NAME: Cliff Yantz
COMPANY: O'Brien Gere
ADDRESS: 37000 Grand River Ste 260
CITY: Farmington Hills STATE: MI ZIP CODE: 48335
PHONE NO.: 248-477-5701 FAX NO.:
P.O. NO.: 124782 001,004
E-MAIL ADDRESS: Clifford.yantz@obg.com
QUOTE NO.:

## INVOICE TO

CONTACT NAME: Dave Fauero
☒ SAME
COMPANY: RACER Trust
ADDRESS: 2930 Ecorse Rd
CITY: Ypsilanti STATE: MI ZIP CODE: 48197
PHONE NO.: 217-741-6235 FAX NO.:
P.O. NO.:

PROJECT NO./NAME: RACER Coldwater Rd Landfill Semi Annual sampling # 48630
SAMPLER(S) - PLEASE PRINT/SIGN NAME: Kevin Schneider

TURNAROUND TIME REQUIRED: ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ STANDARD ☐ OTHER

DELIVERABLES REQUIRED: ☒ STANDARD ☐ LEVEL II ☐ LEVEL III ☐ OTHER

MATRIX CODE: GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID SL=SLUDGE O=OIL A=AIR W=WASTE M=MISC

ANALYSIS (ATTACH LIST IF MORE SPACE REQUIRED)

SPECIAL INSTRUCTIONS/NOTES: Metals: Cu, Cr, Ni, Zn, Fe, Mn
Equipment Blank NOT Field Filtered

| MERIT LAB NO. | YEAR DATE | YEAR TIME | SAMPLE TAG IDENTIFICATION-DESCRIPTION | MATRIX | # OF BOTTLES | # Containers & Preservatives: NONE | HCL | $HNO_3$ | $H_2SO_4$ | NaOH | MeOH | OTHER | VOCs | TDC | TOX | Phenols | Cyanide | Sulfate/Chloride | Specific Conductivity | Dissolved Metals | Sodium |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 53009.01 | 6/26/12 | 1145 | B-27D | GW | 10 | 1 | 2 | 2 | 4 | 1 | | | X | X | X | X | X | X | X | X | X |
| .02 | | 1250 | B-24R | GW | 10 | 1 | 2 | 2 | 4 | 1 | | | X | X | X | X | X | X | X | X | X |
| .03 | | 1420 | B-9 | GW | 10 | 1 | 2 | 2 | 4 | 1 | | | X | X | X | X | X | X | X | X | X |
| .04 | ↓ | 1515 | B-21D | GW | 10 | 1 | 2 | 2 | 4 | 1 | | | X | X | X | X | X | X | X | X | X |
| .05 | 6/27/12 | 515 | EB-1 (Equipment Blank) | QC | 9 | 1 | 2 | 1 | 4 | 1 | | | X | X | X | X | X | X | X | X | X |
| .06 | | 845 | B-7 | GW | 10 | 1 | 2 | 2 | 4 | 1 | | | X | X | X | X | X | X | X | X | X |
| .07 | | 955 | B-19AR | GW | 10 | 1 | 2 | 2 | 4 | 1 | | | X | X | X | X | X | X | X | X | X |
| .08 | | 1025 | B-18A | GW | 10 | 1 | 2 | 2 | 4 | 1 | | | X | X | X | X | X | X | X | X | X |
| .09 | | — | DUP-3 | GW | 10 | 1 | 2 | 2 | 4 | 1 | | | X | X | X | X | X | X | X | X | X |
| .10 | | 1130 | B-21 | GW | 10 | 1 | 2 | 2 | 4 | 1 | | | X | X | X | X | X | X | X | X | X |
| .11 | ↓ | — | TB-2 (Trip Blank) | QC | 1 | | 1 | | | | | | X | | | | | | | | |

| | | | |
|---|---|---|---|
| RELINQUISHED BY: SIGNATURE/ORGANIZATION: O'Brien & Gere | DATE: 6/27/12 | TIME: 1355 | RELINQUISHED BY: SIGNATURE/ORGANIZATION: |
| RECEIVED BY: SIGNATURE/ORGANIZATION: | DATE: 6-27-12 | TIME: 1355 | RECEIVED BY: SIGNATURE/ORGANIZATION: |
| RELINQUISHED BY: SIGNATURE/ORGANIZATION: | DATE: | TIME: | SEAL NO.: SEAL INTACT YES ☐ NO ☐ INITIALS: |
| RECEIVED BY: SIGNATURE/ORGANIZATION: | DATE: | TIME: | SEAL NO.: SEAL INTACT YES ☐ NO ☐ INITIALS: |

RELINQUISHED BY: SIGNATURE/ORGANIZATION: DATE: 6-27-12 TIME: 1510
RECEIVED BY: SIGNATURE/ORGANIZATION: DATE: 6-27-12 TIME: 1510

NOTES: TEMP. ON ARRIVAL 5.4

PLEASE NOTE: SIGNING ACKNOWLEDGES ACCEPTANCE OF TERMS & CONDITIONS ON REVERSE SIDE

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

# ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

TestAmerica Job ID: 240-12802-1
Client Project/Site: 53009

For:
Merit Laboratories
2680 E Lansing Drive
East Lansing, Michigan 48823

Attn: Paula Shaw

Denise D Heckler

*Authorized for release by:*
*7/9/2012 8:04:23 AM*

Denise Heckler
Project Manager II
denise.heckler@testamericainc.com

# Table of Contents

# Definitions/Glossary

Client: Merit Laboratories
Project/Site: 53009

TestAmerica Job ID: 240-12802-1

## Qualifiers

### General Chemistry

| Qualifier | Qualifier Description |
|---|---|
| U | Indicates the analyte was analyzed for but not detected. |
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ☼ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CNF | Contains no Free Liquid |
| DL, RA, RE, IN | Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| EDL | Estimated Detection Limit |
| EPA | United States Environmental Protection Agency |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| ND | Not detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RL | Reporting Limit |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

## Job ID: 240-12802-1

### Laboratory: TestAmerica Canton

**Narrative**

**Job Narrative**
**240-12802-1**

**Comments**
No additional comments.

**Receipt**
The samples were received on 6/29/2012 10:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.2° C.

**General Chemistry**
Method(s) 9020B: Elevated reporting limits are provided for the following sample(s) due to insufficient sample provided for preparation/analysis: S 53009.01 (240-12802-1), S 53009.02 (240-12802-2), S 53009.03 (240-12802-3), S 53009.04 (240-12802-4), S 53009.05 (240-12802-5).

No other analytical or quality issues were noted.

# Method Summary

Client: Merit Laboratories
Project/Site: 53009

TestAmerica Job ID: 240-12802-1

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 9020B | Organic Halides, Total (TOX) | SW846 | TAL SAV |

**Protocol References:**

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

# Sample Summary

Client: Merit Laboratories
Project/Site: 53009

TestAmerica Job ID: 240-12802-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| 240-12802-1 | S 53009.01 | Water | 06/26/12 11:45 | 06/29/12 10:00 |
| 240-12802-2 | S 53009.02 | Water | 06/26/12 12:50 | 06/29/12 10:00 |
| 240-12802-3 | S 53009.03 | Water | 06/26/12 14:20 | 06/29/12 10:00 |
| 240-12802-4 | S 53009.04 | Water | 06/26/12 15:15 | 06/29/12 10:00 |
| 240-12802-5 | S 53009.05 | Water | 06/27/12 08:15 | 06/29/12 10:00 |
| 240-12802-6 | S 53009.06 | Water | 06/27/12 08:45 | 06/29/12 10:00 |
| 240-12802-7 | S 53009.07 | Water | 06/27/12 09:55 | 06/29/12 10:00 |
| 240-12802-8 | S 53009.08 | Water | 06/27/12 10:25 | 06/29/12 10:00 |
| 240-12802-9 | S 53009.09 | Water | 06/27/12 00:00 | 06/29/12 10:00 |
| 240-12802-10 | S 53009.10 | Water | 06/27/12 11:30 | 06/29/12 10:00 |

# Detection Summary

Client: Merit Laboratories
Project/Site: 53009

TestAmerica Job ID: 240-12802-1

## Client Sample ID: S 53009.01 — Lab Sample ID: 240-12802-1

No Detections

## Client Sample ID: S 53009.02 — Lab Sample ID: 240-12802-2

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Halogens, Total Organic | 0.016 | J | 0.040 | 0.014 | mg/L | 4 | | 9020B | Total/NA |
| TOX Result 1 | 0.016 | J | 0.040 | 0.014 | mg/L | 4 | | 9020B | Total/NA |
| TOX Result 2 | 0.016 | J | 0.040 | 0.014 | mg/L | 4 | | 9020B | Total/NA |

## Client Sample ID: S 53009.03 — Lab Sample ID: 240-12802-3

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Halogens, Total Organic | 0.021 | J | 0.040 | 0.014 | mg/L | 4 | | 9020B | Total/NA |
| TOX Result 1 | 0.022 | J | 0.040 | 0.014 | mg/L | 4 | | 9020B | Total/NA |
| TOX Result 2 | 0.020 | J | 0.040 | 0.014 | mg/L | 4 | | 9020B | Total/NA |

## Client Sample ID: S 53009.04 — Lab Sample ID: 240-12802-4

No Detections

## Client Sample ID: S 53009.05 — Lab Sample ID: 240-12802-5

No Detections

## Client Sample ID: S 53009.06 — Lab Sample ID: 240-12802-6

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Halogens, Total Organic | 0.097 | | 0.040 | 0.014 | mg/L | 4 | | 9020B | Total/NA |
| TOX Result 1 | 0.10 | | 0.040 | 0.014 | mg/L | 4 | | 9020B | Total/NA |
| TOX Result 2 | 0.095 | | 0.040 | 0.014 | mg/L | 4 | | 9020B | Total/NA |

## Client Sample ID: S 53009.07 — Lab Sample ID: 240-12802-7

No Detections

## Client Sample ID: S 53009.08 — Lab Sample ID: 240-12802-8

No Detections

## Client Sample ID: S 53009.09 — Lab Sample ID: 240-12802-9

No Detections

## Client Sample ID: S 53009.10 — Lab Sample ID: 240-12802-10

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Halogens, Total Organic | 0.016 | J | 0.040 | 0.014 | mg/L | 4 | | 9020B | Total/NA |
| TOX Result 1 | 0.017 | J | 0.040 | 0.014 | mg/L | 4 | | 9020B | Total/NA |
| TOX Result 2 | 0.015 | J | 0.040 | 0.014 | mg/L | 4 | | 9020B | Total/NA |

Client: Merit Laboratories
Project/Site: 53009

TestAmerica Job ID: 240-12802-1

**Client Sample ID: S 53009.01**
**Date Collected: 06/26/12 11:45**
**Date Received: 06/29/12 10:00**

**Lab Sample ID: 240-12802-1**
**Matrix: Water**

## General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Halogens, Total Organic | 0.040 | U | 0.040 | 0.014 | mg/L | | 07/02/12 07:00 | 07/03/12 11:08 | 4 |
| TOX Result 1 | 0.040 | U | 0.040 | 0.014 | mg/L | | 07/02/12 07:00 | 07/03/12 11:08 | 4 |
| TOX Result 2 | 0.040 | U | 0.040 | 0.014 | mg/L | | 07/02/12 07:00 | 07/03/12 11:08 | 4 |

Client: Merit Laboratories
Project/Site: 53009

TestAmerica Job ID: 240-12802-1

**Client Sample ID: S 53009.02**
**Date Collected: 06/26/12 12:50**
**Date Received: 06/29/12 10:00**

**Lab Sample ID: 240-12802-2**
**Matrix: Water**

## General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Halogens, Total Organic | 0.016 | J | 0.040 | 0.014 | mg/L | | 07/02/12 07:00 | 07/03/12 11:08 | 4 |
| TOX Result 1 | 0.016 | J | 0.040 | 0.014 | mg/L | | 07/02/12 07:00 | 07/03/12 11:08 | 4 |
| TOX Result 2 | 0.016 | J | 0.040 | 0.014 | mg/L | | 07/02/12 07:00 | 07/03/12 11:08 | 4 |

Client: Merit Laboratories
Project/Site: 53009

TestAmerica Job ID: 240-12802-1

**Client Sample ID: S 53009.03**
**Date Collected: 06/26/12 14:20**
**Date Received: 06/29/12 10:00**

**Lab Sample ID: 240-12802-3**
**Matrix: Water**

## General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Halogens, Total Organic | 0.021 | J | 0.040 | 0.014 | mg/L | | 07/02/12 07:00 | 07/03/12 11:08 | 4 |
| TOX Result 1 | 0.022 | J | 0.040 | 0.014 | mg/L | | 07/02/12 07:00 | 07/03/12 11:08 | 4 |
| TOX Result 2 | 0.020 | J | 0.040 | 0.014 | mg/L | | 07/02/12 07:00 | 07/03/12 11:08 | 4 |

Client: Merit Laboratories
Project/Site: 53009

TestAmerica Job ID: 240-12802-1

**Client Sample ID: S 53009.04**
**Date Collected: 06/26/12 15:15**
**Date Received: 06/29/12 10:00**

**Lab Sample ID: 240-12802-4**
**Matrix: Water**

## General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Halogens, Total Organic | 0.040 | U | 0.040 | 0.014 | mg/L | | 07/02/12 07:00 | 07/03/12 11:08 | 4 |
| TOX Result 1 | 0.040 | U | 0.040 | 0.014 | mg/L | | 07/02/12 07:00 | 07/03/12 11:08 | 4 |
| TOX Result 2 | 0.040 | U | 0.040 | 0.014 | mg/L | | 07/02/12 07:00 | 07/03/12 11:08 | 4 |

Client: Merit Laboratories
Project/Site: 53009

TestAmerica Job ID: 240-12802-1

**Client Sample ID: S 53009.05**
**Date Collected: 06/27/12 08:15**
**Date Received: 06/29/12 10:00**

**Lab Sample ID: 240-12802-5**
**Matrix: Water**

## General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Halogens, Total Organic | 0.020 | U | 0.020 | 0.0070 | mg/L | | 07/02/12 07:00 | 07/03/12 11:08 | 2 |
| TOX Result 1 | 0.020 | U | 0.020 | 0.0070 | mg/L | | 07/02/12 07:00 | 07/03/12 11:08 | 2 |
| TOX Result 2 | 0.020 | U | 0.020 | 0.0070 | mg/L | | 07/02/12 07:00 | 07/03/12 11:08 | 2 |

Client: Merit Laboratories
Project/Site: 53009

TestAmerica Job ID: 240-12802-1

**Client Sample ID: S 53009.06**
**Date Collected: 06/27/12 08:45**
**Date Received: 06/29/12 10:00**

**Lab Sample ID: 240-12802-6**
**Matrix: Water**

## General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Halogens, Total Organic | 0.097 | | 0.040 | 0.014 | mg/L | | 07/02/12 07:00 | 07/03/12 11:08 | 4 |
| TOX Result 1 | 0.10 | | 0.040 | 0.014 | mg/L | | 07/02/12 07:00 | 07/03/12 11:08 | 4 |
| TOX Result 2 | 0.095 | | 0.040 | 0.014 | mg/L | | 07/02/12 07:00 | 07/03/12 11:08 | 4 |

Client: Merit Laboratories
Project/Site: 53009

TestAmerica Job ID: 240-12802-1

**Client Sample ID: S 53009.07**
**Date Collected: 06/27/12 09:55**
**Date Received: 06/29/12 10:00**

**Lab Sample ID: 240-12802-7**
**Matrix: Water**

## General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Halogens, Total Organic | 0.040 | U | 0.040 | 0.014 | mg/L | | 07/05/12 07:00 | 07/06/12 12:48 | 4 |
| TOX Result 1 | 0.040 | U | 0.040 | 0.014 | mg/L | | 07/05/12 07:00 | 07/06/12 12:48 | 4 |
| TOX Result 2 | 0.040 | U | 0.040 | 0.014 | mg/L | | 07/05/12 07:00 | 07/06/12 12:48 | 4 |

Client: Merit Laboratories
Project/Site: 53009

TestAmerica Job ID: 240-12802-1

**Client Sample ID: S 53009.08**
**Date Collected: 06/27/12 10:25**
**Date Received: 06/29/12 10:00**

**Lab Sample ID: 240-12802-8**
**Matrix: Water**

## General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Halogens, Total Organic | 0.040 | U | 0.040 | 0.014 | mg/L | | 07/05/12 07:00 | 07/06/12 12:48 | 4 |
| TOX Result 1 | 0.040 | U | 0.040 | 0.014 | mg/L | | 07/05/12 07:00 | 07/06/12 12:48 | 4 |
| TOX Result 2 | 0.040 | U | 0.040 | 0.014 | mg/L | | 07/05/12 07:00 | 07/06/12 12:48 | 4 |

Client: Merit Laboratories
Project/Site: 53009

TestAmerica Job ID: 240-12802-1

**Client Sample ID: S 53009.09**
**Date Collected: 06/27/12 00:00**
**Date Received: 06/29/12 10:00**

**Lab Sample ID: 240-12802-9**
**Matrix: Water**

## General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Halogens, Total Organic | 0.040 | U | 0.040 | 0.014 | mg/L | | 07/05/12 07:00 | 07/06/12 12:48 | 4 |
| TOX Result 1 | 0.040 | U | 0.040 | 0.014 | mg/L | | 07/05/12 07:00 | 07/06/12 12:48 | 4 |
| TOX Result 2 | 0.040 | U | 0.040 | 0.014 | mg/L | | 07/05/12 07:00 | 07/06/12 12:48 | 4 |

Client: Merit Laboratories
Project/Site: 53009

TestAmerica Job ID: 240-12802-1

**Client Sample ID: S 53009.10**
**Date Collected: 06/27/12 11:30**
**Date Received: 06/29/12 10:00**

**Lab Sample ID: 240-12802-10**
**Matrix: Water**

## General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Halogens, Total Organic | 0.016 | J | 0.040 | 0.014 | mg/L | | 07/05/12 07:00 | 07/06/12 12:48 | 4 |
| TOX Result 1 | 0.017 | J | 0.040 | 0.014 | mg/L | | 07/05/12 07:00 | 07/06/12 12:48 | 4 |
| TOX Result 2 | 0.015 | J | 0.040 | 0.014 | mg/L | | 07/05/12 07:00 | 07/06/12 12:48 | 4 |

## Method: 9020B - Organic Halides, Total (TOX)

**Lab Sample ID: MB 680-242223/1-A**
**Matrix: Water**
**Analysis Batch: 242225**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 242223**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Halogens, Total Organic | 0.010 | U | 0.010 | 0.0035 | mg/L | | 07/02/12 07:00 | 07/03/12 11:08 | 1 |
| TOX Result 1 | 0.010 | U | 0.010 | 0.0035 | mg/L | | 07/02/12 07:00 | 07/03/12 11:08 | 1 |
| TOX Result 2 | 0.010 | U | 0.010 | 0.0035 | mg/L | | 07/02/12 07:00 | 07/03/12 11:08 | 1 |

**Lab Sample ID: LCS 680-242223/2-A**
**Matrix: Water**
**Analysis Batch: 242225**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 242223**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| TOX Result 1 | 0.0984 | 0.0774 | | mg/L | | 79 | 60 - 140 |
| TOX Result 2 | 0.0984 | 0.0774 | | mg/L | | 79 | 60 - 140 |

**Lab Sample ID: MB 680-242542/1-A**
**Matrix: Water**
**Analysis Batch: 242546**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 242542**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Halogens, Total Organic | 0.010 | U | 0.010 | 0.0035 | mg/L | | 07/05/12 07:00 | 07/06/12 12:48 | 1 |
| TOX Result 1 | 0.010 | U | 0.010 | 0.0035 | mg/L | | 07/05/12 07:00 | 07/06/12 12:48 | 1 |
| TOX Result 2 | 0.010 | U | 0.010 | 0.0035 | mg/L | | 07/05/12 07:00 | 07/06/12 12:48 | 1 |

**Lab Sample ID: LCS 680-242542/2-A**
**Matrix: Water**
**Analysis Batch: 242546**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 242542**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| TOX Result 1 | 0.0984 | 0.0940 | | mg/L | | 96 | 60 - 140 |
| TOX Result 2 | 0.0984 | 0.0940 | | mg/L | | 96 | 60 - 140 |

**Lab Sample ID: 240-12802-7 MS**
**Matrix: Water**
**Analysis Batch: 242546**

**Client Sample ID: S 53009.07**
**Prep Type: Total/NA**
**Prep Batch: 242542**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| TOX Result 1 | 0.040 | U | 0.393 | 0.373 | | mg/L | | 95 | 60 - 140 |
| TOX Result 2 | 0.040 | U | 0.393 | 0.373 | | mg/L | | 95 | 60 - 140 |

**Lab Sample ID: 240-12802-7 MSD**
**Matrix: Water**
**Analysis Batch: 242546**

**Client Sample ID: S 53009.07**
**Prep Type: Total/NA**
**Prep Batch: 242542**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TOX Result 1 | 0.040 | U | 0.393 | 0.352 | | mg/L | | 90 | 60 - 140 | 6 | 40 |
| TOX Result 2 | 0.040 | U | 0.393 | 0.352 | | mg/L | | 90 | 60 - 140 | 6 | 40 |

# QC Association Summary

Client: Merit Laboratories
Project/Site: 53009

TestAmerica Job ID: 240-12802-1

## General Chemistry

### Prep Batch: 242223

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-12802-1 | S 53009.01 | Total/NA | Water | Carbon Trap | |
| 240-12802-2 | S 53009.02 | Total/NA | Water | Carbon Trap | |
| 240-12802-3 | S 53009.03 | Total/NA | Water | Carbon Trap | |
| 240-12802-4 | S 53009.04 | Total/NA | Water | Carbon Trap | |
| 240-12802-5 | S 53009.05 | Total/NA | Water | Carbon Trap | |
| 240-12802-6 | S 53009.06 | Total/NA | Water | Carbon Trap | |
| LCS 680-242223/2-A | Lab Control Sample | Total/NA | Water | Carbon Trap | |
| MB 680-242223/1-A | Method Blank | Total/NA | Water | Carbon Trap | |

### Analysis Batch: 242225

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-12802-1 | S 53009.01 | Total/NA | Water | 9020B | 242223 |
| 240-12802-2 | S 53009.02 | Total/NA | Water | 9020B | 242223 |
| 240-12802-3 | S 53009.03 | Total/NA | Water | 9020B | 242223 |
| 240-12802-4 | S 53009.04 | Total/NA | Water | 9020B | 242223 |
| 240-12802-5 | S 53009.05 | Total/NA | Water | 9020B | 242223 |
| 240-12802-6 | S 53009.06 | Total/NA | Water | 9020B | 242223 |
| LCS 680-242223/2-A | Lab Control Sample | Total/NA | Water | 9020B | 242223 |
| MB 680-242223/1-A | Method Blank | Total/NA | Water | 9020B | 242223 |

### Prep Batch: 242542

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-12802-7 | S 53009.07 | Total/NA | Water | Carbon Trap | |
| 240-12802-7 MS | S 53009.07 | Total/NA | Water | Carbon Trap | |
| 240-12802-7 MSD | S 53009.07 | Total/NA | Water | Carbon Trap | |
| 240-12802-8 | S 53009.08 | Total/NA | Water | Carbon Trap | |
| 240-12802-9 | S 53009.09 | Total/NA | Water | Carbon Trap | |
| 240-12802-10 | S 53009.10 | Total/NA | Water | Carbon Trap | |
| LCS 680-242542/2-A | Lab Control Sample | Total/NA | Water | Carbon Trap | |
| MB 680-242542/1-A | Method Blank | Total/NA | Water | Carbon Trap | |

### Analysis Batch: 242546

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-12802-7 | S 53009.07 | Total/NA | Water | 9020B | 242542 |
| 240-12802-7 MS | S 53009.07 | Total/NA | Water | 9020B | 242542 |
| 240-12802-7 MSD | S 53009.07 | Total/NA | Water | 9020B | 242542 |
| 240-12802-8 | S 53009.08 | Total/NA | Water | 9020B | 242542 |
| 240-12802-9 | S 53009.09 | Total/NA | Water | 9020B | 242542 |
| 240-12802-10 | S 53009.10 | Total/NA | Water | 9020B | 242542 |
| LCS 680-242542/2-A | Lab Control Sample | Total/NA | Water | 9020B | 242542 |
| MB 680-242542/1-A | Method Blank | Total/NA | Water | 9020B | 242542 |

# Lab Chronicle

Client: Merit Laboratories
Project/Site: 53009

TestAmerica Job ID: 240-12802-1

## Client Sample ID: S 53009.01

**Lab Sample ID: 240-12802-1**

**Date Collected: 06/26/12 11:45**

**Matrix: Water**

**Date Received: 06/29/12 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | Carbon Trap | | | 242223 | 07/02/12 07:00 | CN | TAL SAV |
| Total/NA | Analysis | 9020B | | 4 | 242225 | 07/03/12 11:08 | CN | TAL SAV |

## Client Sample ID: S 53009.02

**Lab Sample ID: 240-12802-2**

**Date Collected: 06/26/12 12:50**

**Matrix: Water**

**Date Received: 06/29/12 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | Carbon Trap | | | 242223 | 07/02/12 07:00 | CN | TAL SAV |
| Total/NA | Analysis | 9020B | | 4 | 242225 | 07/03/12 11:08 | CN | TAL SAV |

## Client Sample ID: S 53009.03

**Lab Sample ID: 240-12802-3**

**Date Collected: 06/26/12 14:20**

**Matrix: Water**

**Date Received: 06/29/12 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | Carbon Trap | | | 242223 | 07/02/12 07:00 | CN | TAL SAV |
| Total/NA | Analysis | 9020B | | 4 | 242225 | 07/03/12 11:08 | CN | TAL SAV |

## Client Sample ID: S 53009.04

**Lab Sample ID: 240-12802-4**

**Date Collected: 06/26/12 15:15**

**Matrix: Water**

**Date Received: 06/29/12 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | Carbon Trap | | | 242223 | 07/02/12 07:00 | CN | TAL SAV |
| Total/NA | Analysis | 9020B | | 4 | 242225 | 07/03/12 11:08 | CN | TAL SAV |

## Client Sample ID: S 53009.05

**Lab Sample ID: 240-12802-5**

**Date Collected: 06/27/12 08:15**

**Matrix: Water**

**Date Received: 06/29/12 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | Carbon Trap | | | 242223 | 07/02/12 07:00 | CN | TAL SAV |
| Total/NA | Analysis | 9020B | | 2 | 242225 | 07/03/12 11:08 | CN | TAL SAV |

## Client Sample ID: S 53009.06

**Lab Sample ID: 240-12802-6**

**Date Collected: 06/27/12 08:45**

**Matrix: Water**

**Date Received: 06/29/12 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | Carbon Trap | | | 242223 | 07/02/12 07:00 | CN | TAL SAV |
| Total/NA | Analysis | 9020B | | 4 | 242225 | 07/03/12 11:08 | CN | TAL SAV |

# Lab Chronicle

Client: Merit Laboratories
Project/Site: 53009

TestAmerica Job ID: 240-12802-1

## Client Sample ID: S 53009.07

**Lab Sample ID: 240-12802-7**

**Date Collected: 06/27/12 09:55**
**Matrix: Water**
**Date Received: 06/29/12 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | Carbon Trap | | | 242542 | 07/05/12 07:00 | CN | TAL SAV |
| Total/NA | Analysis | 9020B | | 4 | 242546 | 07/06/12 12:48 | CN | TAL SAV |

## Client Sample ID: S 53009.08

**Lab Sample ID: 240-12802-8**

**Date Collected: 06/27/12 10:25**
**Matrix: Water**
**Date Received: 06/29/12 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | Carbon Trap | | | 242542 | 07/05/12 07:00 | CN | TAL SAV |
| Total/NA | Analysis | 9020B | | 4 | 242546 | 07/06/12 12:48 | CN | TAL SAV |

## Client Sample ID: S 53009.09

**Lab Sample ID: 240-12802-9**

**Date Collected: 06/27/12 00:00**
**Matrix: Water**
**Date Received: 06/29/12 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | Carbon Trap | | | 242542 | 07/05/12 07:00 | CN | TAL SAV |
| Total/NA | Analysis | 9020B | | 4 | 242546 | 07/06/12 12:48 | CN | TAL SAV |

## Client Sample ID: S 53009.10

**Lab Sample ID: 240-12802-10**

**Date Collected: 06/27/12 11:30**
**Matrix: Water**
**Date Received: 06/29/12 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | Carbon Trap | | | 242542 | 07/05/12 07:00 | CN | TAL SAV |
| Total/NA | Analysis | 9020B | | 4 | 242546 | 07/06/12 12:48 | CN | TAL SAV |

**Laboratory References:**

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

# Certification Summary

Client: Merit Laboratories
Project/Site: 53009

TestAmerica Job ID: 240-12802-1

| Laboratory | Authority | Program | EPA Region | Certification ID |
|---|---|---|---|---|
| TestAmerica Canton | California | NELAC | 9 | 01144CA |
| TestAmerica Canton | Connecticut | State Program | 1 | PH-0590 |
| TestAmerica Canton | Florida | NELAC | 4 | E87225 |
| TestAmerica Canton | Georgia | State Program | 4 | N/A |
| TestAmerica Canton | Illinois | NELAC | 5 | 200004 |
| TestAmerica Canton | Kansas | NELAC | 7 | E-10336 |
| TestAmerica Canton | Kentucky | State Program | 4 | 58 |
| TestAmerica Canton | L-A-B | DoD ELAP | | L2315 |
| TestAmerica Canton | Minnesota | NELAC | 5 | 039-999-348 |
| TestAmerica Canton | Nevada | State Program | 9 | OH-000482008A |
| TestAmerica Canton | New Jersey | NELAC | 2 | OH001 |
| TestAmerica Canton | New York | NELAC | 2 | 10975 |
| TestAmerica Canton | Ohio VAP | State Program | 5 | CL0024 |
| TestAmerica Canton | Pennsylvania | NELAC | 3 | 68-00340 |
| TestAmerica Canton | USDA | Federal | | P330-11-00328 |
| TestAmerica Canton | Virginia | NELAC | 3 | 460175 |
| TestAmerica Canton | Washington | State Program | 10 | C971 |
| TestAmerica Canton | West Virginia DEP | State Program | 3 | 210 |
| TestAmerica Canton | Wisconsin | State Program | 5 | 999518190 |
| | | | | |
| TestAmerica Savannah | A2LA | DoD ELAP | | 0399-01 |
| TestAmerica Savannah | A2LA | ISO/IEC 17025 | | 399.01 |
| TestAmerica Savannah | Alabama | State Program | 4 | 41450 |
| TestAmerica Savannah | Alaska (UST) | State Program | 10 | UST-104 |
| TestAmerica Savannah | Arkansas DEQ | State Program | 6 | 88-0692 |
| TestAmerica Savannah | California | NELAC | 9 | 3217CA |
| TestAmerica Savannah | Colorado | State Program | 8 | N/A |
| TestAmerica Savannah | Connecticut | State Program | 1 | PH-0161 |
| TestAmerica Savannah | Florida | NELAC | 4 | E87052 |
| TestAmerica Savannah | GA Dept. of Agriculture | State Program | 4 | N/A |
| TestAmerica Savannah | Georgia | State Program | 4 | 803 |
| TestAmerica Savannah | Georgia | State Program | 4 | N/A |
| TestAmerica Savannah | Guam | State Program | 9 | 09-005r |
| TestAmerica Savannah | Hawaii | State Program | 9 | N/A |
| TestAmerica Savannah | Illinois | NELAC | 5 | 200022 |
| TestAmerica Savannah | Indiana | State Program | 5 | N/A |
| TestAmerica Savannah | Iowa | State Program | 7 | 353 |
| TestAmerica Savannah | Kentucky | State Program | 4 | 90084 |
| TestAmerica Savannah | Kentucky (UST) | State Program | 4 | 18 |
| TestAmerica Savannah | Louisiana | NELAC | 6 | 30690 |
| TestAmerica Savannah | Louisiana | NELAC | 6 | LA100015 |
| TestAmerica Savannah | Maine | State Program | 1 | GA00006 |
| TestAmerica Savannah | Maryland | State Program | 3 | 250 |
| TestAmerica Savannah | Massachusetts | State Program | 1 | M-GA006 |
| TestAmerica Savannah | Michigan | State Program | 5 | 9925 |
| TestAmerica Savannah | Mississippi | State Program | 4 | N/A |
| TestAmerica Savannah | Montana | State Program | 8 | CERT0081 |
| TestAmerica Savannah | Nebraska | State Program | 7 | TestAmerica-Savannah |
| TestAmerica Savannah | New Jersey | NELAC | 2 | GA769 |
| TestAmerica Savannah | New Mexico | State Program | 6 | N/A |
| TestAmerica Savannah | New York | NELAC | 2 | 10842 |
| TestAmerica Savannah | North Carolina DENR | State Program | 4 | 269 |
| TestAmerica Savannah | North Carolina DHHS | State Program | 4 | 13701 |
| TestAmerica Savannah | Oklahoma | State Program | 6 | 9984 |

# Certification Summary

Client: Merit Laboratories
Project/Site: 53009

TestAmerica Job ID: 240-12802-1

| Laboratory | Authority | Program | EPA Region | Certification ID |
|---|---|---|---|---|
| TestAmerica Savannah | Pennsylvania | NELAC | 3 | 68-00474 |
| TestAmerica Savannah | Puerto Rico | State Program | 2 | GA00006 |
| TestAmerica Savannah | Rhode Island | State Program | 1 | LAO00244 |
| TestAmerica Savannah | South Carolina | State Program | 4 | 98001 |
| TestAmerica Savannah | Tennessee | State Program | 4 | TN02961 |
| TestAmerica Savannah | Texas | NELAC | 6 | T104704185-08-TX |
| TestAmerica Savannah | USDA | Federal | | SAV 3-04 |
| TestAmerica Savannah | Vermont | State Program | 1 | 87052 |
| TestAmerica Savannah | Virginia | NELAC | 3 | 460161 |
| TestAmerica Savannah | Washington | State Program | 10 | C1794 |
| TestAmerica Savannah | West Virginia | State Program | 3 | 9950C |
| TestAmerica Savannah | West Virginia DEP | State Program | 3 | 94 |
| TestAmerica Savannah | Wisconsin | State Program | 5 | 999819810 |
| TestAmerica Savannah | Wyoming | State Program | 8 | 8TMS-Q |

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

Merit Laboratories, Inc.

2680 East Lansing Dr., East Lansing, MI 48823
Phone (517) 332-0167 Fax (517) 332-6333
www.meritlabs.com

C.O.C. PAGE # _____ OF _____

64646

# CHAIN OF CUSTODY RECORD

## REPORT TO

CONTACT NAME: Paula Shaw / Andy Ball
COMPANY: Merit
ADDRESS:
CITY: STATE: ZIP CODE:
PHONE NO.: FAX NO.: P.O. NO.:
E-MAIL ADDRESS: QUOTE NO.:

## INVOICE TO

CONTACT NAME: Julie Teague ☒ SAME
COMPANY:
ADDRESS:
CITY: STATE: ZIP CODE:
PHONE NO.: FAX NO.: P.O. NO.:

PROJECT NO./NAME: S53009
SAMPLER(S) - PLEASE PRINT/SIGN NAME:

TURNAROUND TIME REQUIRED ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ STANDARD ☐ OTHER

DELIVERABLES REQUIRED ☒ STANDARD ☐ LEVEL II ☐ LEVEL III ☐ OTHER

MATRIX CODE: GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID SL=SLUDGE O=OIL A=AIR W=WASTE M=MISC

ANALYSIS (ATTACH LIST IF MORE SPACE REQUIRED)

SPECIAL INSTRUCTIONS/NOTES: *Sub'd to TestAmerica

| MERIT LAB NO. | YEAR DATE | TIME | SAMPLE TAG IDENTIFICATION-DESCRIPTION | MATRIX | # OF BOTTLES | # Containers & Preservatives: NONE | HCL | $HNO_3$ | $H_2SO_4$ | NaOH | MeOH | OTHER | TOX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 06/26 | 11:45 | S53009.01 | | | | | | | | | | X |
| | | 12:50 | .02 | | | | | | | | | | X |
| | | 14:20 | .03 | | | | | | | | | | X |
| | | 15:15 | .04 | | | | | | | | | | X |
| | 06/27 | 08:15 | .05 | | | | | | | | | | X |
| | | 08:45 | .06 | | | | | | | | | | X |
| | | 09:55 | .07 | | | | | | | | | | X |
| | | 10:25 | .08 | | | | | | | | | | X |
| | | — | .09 | | | | | | | | | | X |
| | | 11:30 | .10 | | | | | | | | | | X |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

| | | DATE | TIME |
|---|---|---|---|
| RELINQUISHED BY: SIGNATURE/ORGANIZATION | Andrew Ball | 28 JUN 12 | 1600 |
| RECEIVED BY: SIGNATURE/ORGANIZATION | Terry Burns | 6/29/12 | 0800 |
| RELINQUISHED BY: SIGNATURE/ORGANIZATION | | DATE | TIME |
| RECEIVED BY: SIGNATURE/ORGANIZATION | | DATE | TIME |

| | | DATE | TIME |
|---|---|---|---|
| RELINQUISHED BY: SIGNATURE/ORGANIZATION | | DATE | TIME |
| RECEIVED BY: SIGNATURE/ORGANIZATION | | DATE | TIME |

| SEAL NO. | SEAL INTACT YES ☐ NO ☐ | INITIALS | NOTES: | TEMP. ON ARRIVAL _____ |
|---|---|---|---|---|
| SEAL NO. | SEAL INTACT YES ☐ NO ☐ | INITIALS | | |

PLEASE NOTE: SIGNING ACKNOWLEDGES ACCEPTANCE OF TERMS & CONDITIONS ON REVERSE SIDE



7/9/2012

**TestAmerica North Canton Sample Receipt Form/Narrative** Login # : 12802

Client MERIT Site Name _____ By: (Signature)

Cooler Received on 6-29-12 Opened on 6-29-12

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

TestAmerica Cooler # 241-637 Foam Box Client Cooler Box Other _____

Packing material used: ~~Bubble Wrap~~ Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

| | | | | |
|---|---|---|---|---|
| IR GUN# 1 | (CF 0°C) | Observed Sample Temp. ____ °C | Corrected Sample Temp. ____ °C | ☐ Multiple on Back |
| IR GUN# 4G | (CF –1°C) | Observed Sample Temp. 2.2 °C | Corrected Sample Temp. 1.2 °C | |
| IR GUN# 5G | (CF –1°C) | Observed Sample Temp. ____ °C | Corrected Sample Temp. ____ °C | |
| IR GUN# 8 | (CF 0°C) | Observed Sample Temp. ____ °C | Corrected Sample Temp. ____ °C | |

| | | |
|---|---|---|
| 2. Were custody seals on the outside of the cooler(s)? If Yes Quantity ____ | Yes | (No) |
| -Were custody seals on the outside of the cooler(s) signed & dated? | Yes No | (NA) |
| -Were custody seals on the bottle(s)? | Yes | (No) |
| 3. Shippers' packing slip attached to the cooler(s)? | ~~Yes~~ | No |
| 4. Did custody papers accompany the sample(s)? | ~~Yes~~ | No |
| 5. Were the custody papers relinquished & signed in the appropriate place? | (Yes) | No |
| 6. Did all bottles arrive in good condition (Unbroken)? | (Yes) | No |
| 7. Could all bottle labels be reconciled with the COC? | ~~Yes~~ | No |
| 8. Were correct bottle(s) used for the test(s) indicated? | ~~Yes~~ | No |
| 9. Sufficient quantity received to perform indicated analyses? | (Yes) | No |
| 10. Were sample(s) at the correct pH upon receipt? | (Yes) | No NA |
| 11. Were VOAs on the COC? | Yes | (No) |
| 12. Were air bubbles >6 mm in any VOA vials? | Yes No | (NA) |
| 13. Was a trip blank present in the cooler(s)? | Yes | (No) |

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

**14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES**

**15. SAMPLE CONDITION**

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

## 16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in Sample Receiving to meet recommended pH level(s). Nitric Acid Lot# 110410-HNO3; Sulfuric Acid Lot# 041911-H2SO4; Sodium Hydroxide Lot# 121809 - NaOH; Hydrochloric Acid Lot# 041911-HCl; Sodium Hydroxide and Zinc Acetate Lot# 100108-(CH3COO)2ZN/NaOH. What time was preservative added to sample(s)? _____

| Client ID | pH | Date | Initials |
|---|---|---|---|
| 1 | <2 | 6/22/12 | CSL |
| 2 | <2 | | |
| 3 | <2 | | |
| 4 | <2 | | |
| 5 | <2 | | |
| 6 | <2 | | |
| 7 | <2 | | |
| 8 | <2 | | |
| 9 | <2 | | |
| 10 | <2 | | |

| Cooler # | Observed Sample Temp. °C | Corrected Sample Temp. °C | IR # | Coolant |
|---|---|---|---|---|

# Login Sample Receipt Checklist

Client: Merit Laboratories

Job Number: 240-12802-1

**Login Number: 12802**

**List Source: TestAmerica Canton**

**List Number: 1**

**Creator: Livengood, Chris**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity either was not measured or, if measured, is at or below background | N/A | |
| The cooler's custody seal, if present, is intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the sample IDs on the containers and the COC. | True | |
| Samples are received within Holding Time. | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter. | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |

# Login Sample Receipt Checklist

Client: Merit Laboratories

Job Number: 240-12802-1

**Login Number: 12802**
**List Number: 1**
**Creator: Howard, Brandon L**

**List Source: TestAmerica Savannah**
**List Creation: 06/30/12 11:48 AM**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity either was not measured or, if measured, is at or below background | N/A | |
| The cooler's custody seal, if present, is intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | N/A | |
| There are no discrepancies between the sample IDs on the containers and the COC. | True | |
| Samples are received within Holding Time. | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | N/A | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter. | N/A | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |

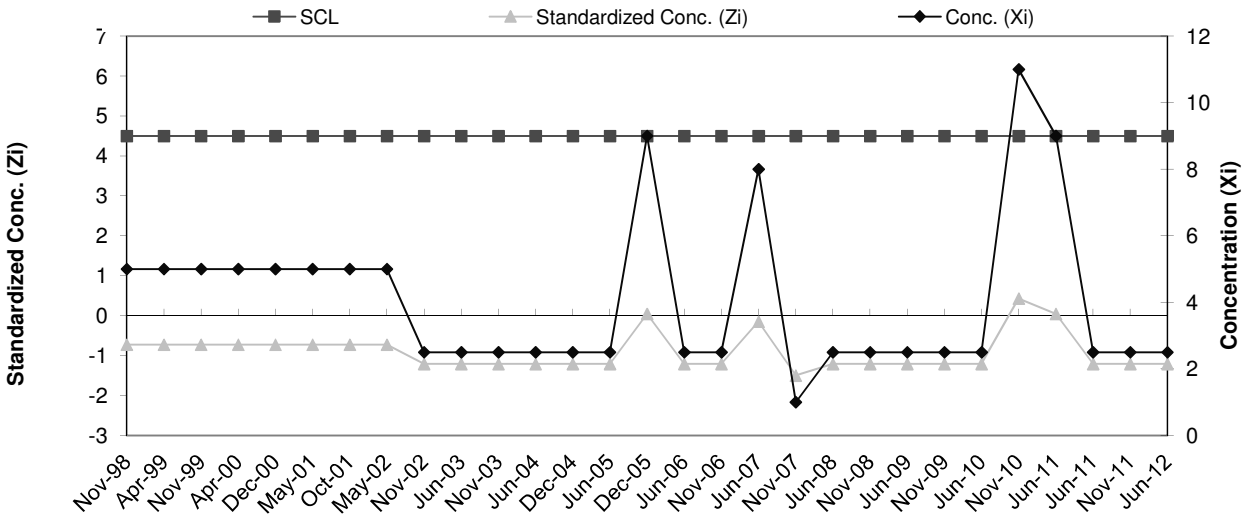
# *APPENDIX D*

# *Monitoring Well Control Charts*

**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-2d Cr**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-95 | 10 | **8.78** | **5.19** |
| 2 | Aug-95 | 10 | | |
| 3 | Jun-96 | 10 | | |
| 4 | Aug-96 | 10 | | |
| 5 | Nov-96 | 10 | | |
| 6 | May-97 | 10 | | |
| 7 | Nov-97 | 5 | | |
| 8 | May-98 | 5 | | |

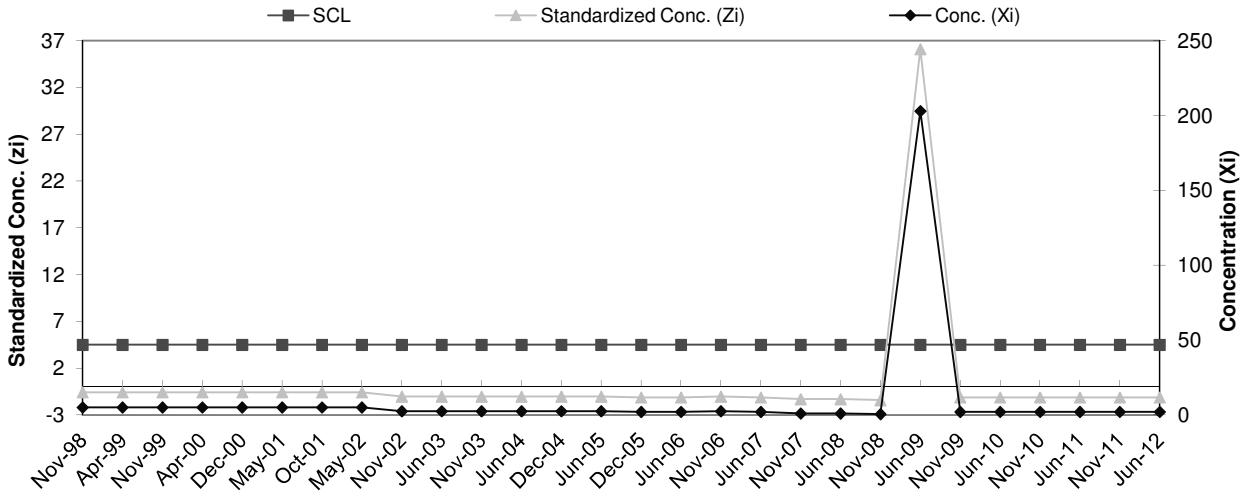
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | Nov-98 | 4.5 | 5 | -0.73 |
| 10 | Apr-99 | 4.5 | 5 | -0.73 |
| 11 | Nov-99 | 4.5 | 5 | -0.73 |
| 12 | Apr-00 | 4.5 | 5 | -0.73 |
| 13 | Dec-00 | 4.5 | 5 | -0.73 |
| 14 | May-01 | 4.5 | 5 | -0.73 |
| 15 | Oct-01 | 4.5 | 5 | -0.73 |
| 16 | May-02 | 4.5 | 5 | -0.73 |
| 17 | Nov-02 | 4.5 | 2.5 | -1.21 |
| 18 | Jun-03 | 4.5 | 2.5 | -1.21 |
| 19 | Nov-03 | 4.5 | 2.5 | -1.21 |
| 20 | Jun-04 | 4.5 | 2.5 | -1.21 |
| 21 | Dec-04 | 4.5 | 2.5 | -1.21 |
| 22 | Jun-05 | 4.5 | 2.5 | -1.21 |
| 23 | Dec-05 | 4.5 | 9 | 0.04 |
| 24 | Jun-06 | 4.5 | 2.5 | -1.21 |
| 25 | Nov-06 | 4.5 | 2.5 | -1.21 |
| 26 | Jun-07 | 4.5 | 8 | -0.15 |
| 27 | Nov-07 | 4.5 | 1 | -1.50 |
| 28 | Jun-08 | 4.5 | 2.5 | -1.21 |
| 29 | Nov-08 | 4.5 | 2.5 | -1.21 |
| 30 | Jun-09 | 4.5 | 2.5 | -1.21 |
| 31 | Nov-09 | 4.5 | 2.5 | -1.21 |
| 32 | Jun-10 | 4.5 | 2.5 | -1.21 |
| 33 | Nov-10 | 4.5 | 11 | 0.43 |
| 34 | Jun-11 | 4.5 | 9 | 0.04 |
| 35 | Jun-11 | 4.5 | 2.5 | -1.21 |
| 36 | Nov-11 | 4.5 | 2.5 | -1.21 |
| 37 | Jun-12 | 4.5 | 2.5 | -1.21 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-2d Cu**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-95 | 10 | **8.13** | **5.40** |
| 2 | Aug-95 | 10 | | |
| 3 | Jun-96 | 10 | | |
| 4 | Aug-96 | 10 | | |
| 5 | Nov-96 | 10 | | |
| 6 | May-97 | 5 | | |
| 7 | Nov-97 | 5 | | |
| 8 | May-98 | 5 | | |

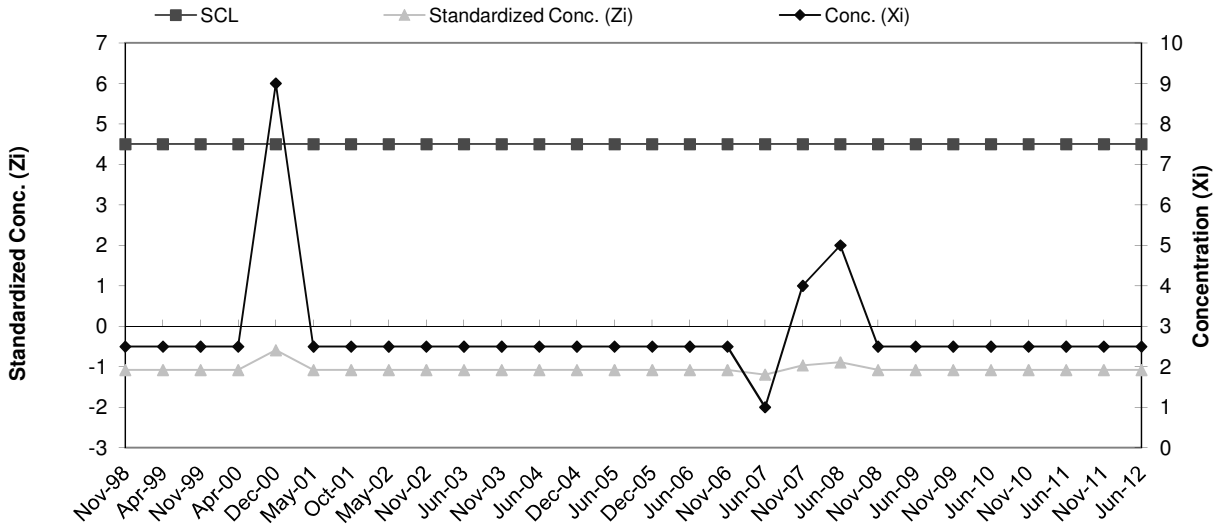
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | Nov-98 | 4.5 | 5 | -0.58 |
| 10 | Apr-99 | 4.5 | 5 | -0.58 |
| 11 | Nov-99 | 4.5 | 5 | -0.58 |
| 12 | Apr-00 | 4.5 | 5 | -0.58 |
| 13 | Dec-00 | 4.5 | 5 | -0.58 |
| 14 | May-01 | 4.5 | 5 | -0.58 |
| 15 | Oct-01 | 4.5 | 5 | -0.58 |
| 16 | May-02 | 4.5 | 5 | -0.58 |
| 17 | Nov-02 | 4.5 | 2.5 | -1.04 |
| 18 | Jun-03 | 4.5 | 2.5 | -1.04 |
| 19 | Nov-03 | 4.5 | 2.5 | -1.04 |
| 20 | Jun-04 | 4.5 | 2.5 | -1.04 |
| 21 | Dec-04 | 4.5 | 2.5 | -1.04 |
| 22 | Jun-05 | 4.5 | 2.5 | -1.04 |
| 23 | Dec-05 | 4.5 | 2 | -1.14 |
| 24 | Jun-06 | 4.5 | 2 | -1.14 |
| 25 | Nov-06 | 4.5 | 2.5 | -1.04 |
| 26 | Jun-07 | 4.5 | 2 | -1.14 |
| 27 | Nov-07 | 4.5 | 1 | -1.32 |
| 28 | Jun-08 | 4.5 | 1 | -1.32 |
| 29 | Nov-08 | 4.5 | 0.5 | -1.41 |
| 30 | Jun-09 | 4.5 | 203 | 36.09 |
| 31 | Nov-09 | 4.5 | 2 | -1.14 |
| 32 | Jun-10 | 4.5 | 2 | -1.14 |
| 33 | Nov-10 | 4.5 | 2 | -1.14 |
| 34 | Jun-11 | 4.5 | 2 | -1.14 |
| 35 | Nov-11 | 4.5 | 2 | -1.14 |
| 36 | Jun-12 | 4.5 | 2 | -1.14 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-2d Ni**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-95 | 15 | | |
| 2 | Aug-95 | 20 | | |
| 3 | Jun-96 | 10 | | |
| 4 | Aug-96 | 10 | **16.83** | **13.28** |
| 5 | Nov-96 | 10 | | |
| 6 | May-97 | 28 | | |
| 7 | Nov-97 | 39 | | |
| 8 | May-98 | 2.5 | | |

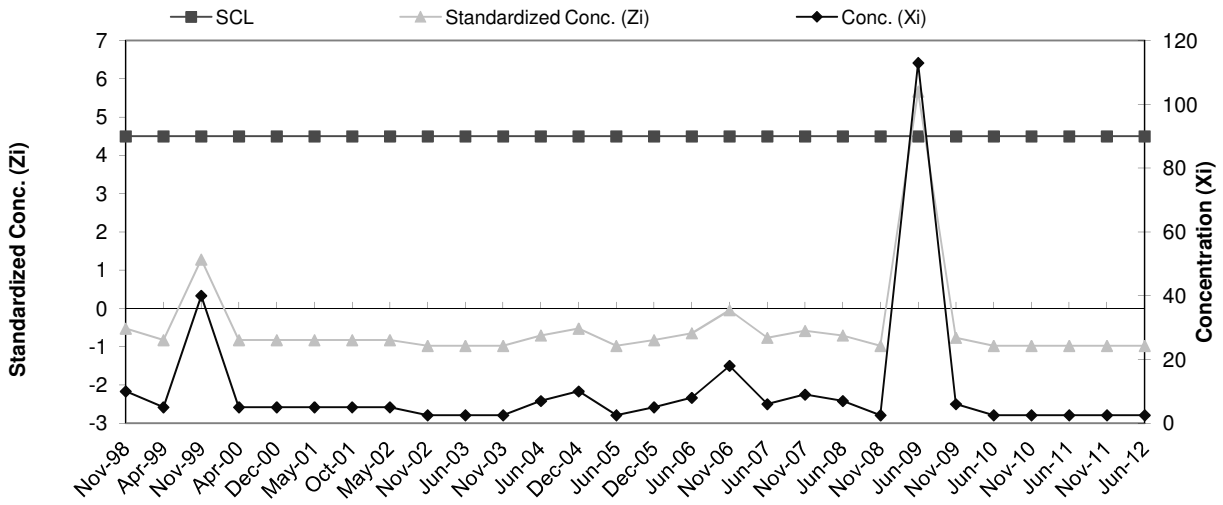
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | Nov-98 | 4.5 | 2.5 | -1.08 |
| 10 | Apr-99 | 4.5 | 2.5 | -1.08 |
| 11 | Nov-99 | 4.5 | 2.5 | -1.08 |
| 12 | Apr-00 | 4.5 | 2.5 | -1.08 |
| 13 | Dec-00 | 4.5 | 9 | -0.59 |
| 14 | May-01 | 4.5 | 2.5 | -1.08 |
| 15 | Oct-01 | 4.5 | 2.5 | -1.08 |
| 16 | May-02 | 4.5 | 2.5 | -1.08 |
| 17 | Nov-02 | 4.5 | 2.5 | -1.08 |
| 18 | Jun-03 | 4.5 | 2.5 | -1.08 |
| 19 | Nov-03 | 4.5 | 2.5 | -1.08 |
| 20 | Jun-04 | 4.5 | 2.5 | -1.08 |
| 21 | Dec-04 | 4.5 | 2.5 | -1.08 |
| 22 | Jun-05 | 4.5 | 2.5 | -1.08 |
| 23 | Dec-05 | 4.5 | 2.5 | -1.08 |
| 24 | Jun-06 | 4.5 | 2.5 | -1.08 |
| 25 | Nov-06 | 4.5 | 2.5 | -1.08 |
| 26 | Jun-07 | 4.5 | 1 | -1.19 |
| 27 | Nov-07 | 4.5 | 4 | -0.97 |
| 28 | Jun-08 | 4.5 | 5 | -0.89 |
| 29 | Nov-08 | 4.5 | 2.5 | -1.08 |
| 30 | Jun-09 | 4.5 | 2.5 | -1.08 |
| 31 | Nov-09 | 4.5 | 2.5 | -1.08 |
| 32 | Jun-10 | 4.5 | 2.5 | -1.08 |
| 33 | Nov-10 | 4.5 | 2.5 | -1.08 |
| 34 | Jun-11 | 4.5 | 2.5 | -1.08 |
| 35 | Nov-11 | 4.5 | 2.5 | -1.08 |
| 36 | Jun-12 | 4.5 | 2.5 | -1.08 |
| | | | | |
| | | | | |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-2d Zn**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-95 | 10 | **18.75** | **16.62** |
| 2 | Aug-95 | 10 | | |
| 3 | Jun-96 | 10 | | |
| 4 | Aug-96 | 50 | | |
| 5 | Nov-96 | 30 | | |
| 6 | May-97 | 30 | | |
| 7 | Nov-97 | 5 | | |
| 8 | May-98 | 5 | | |

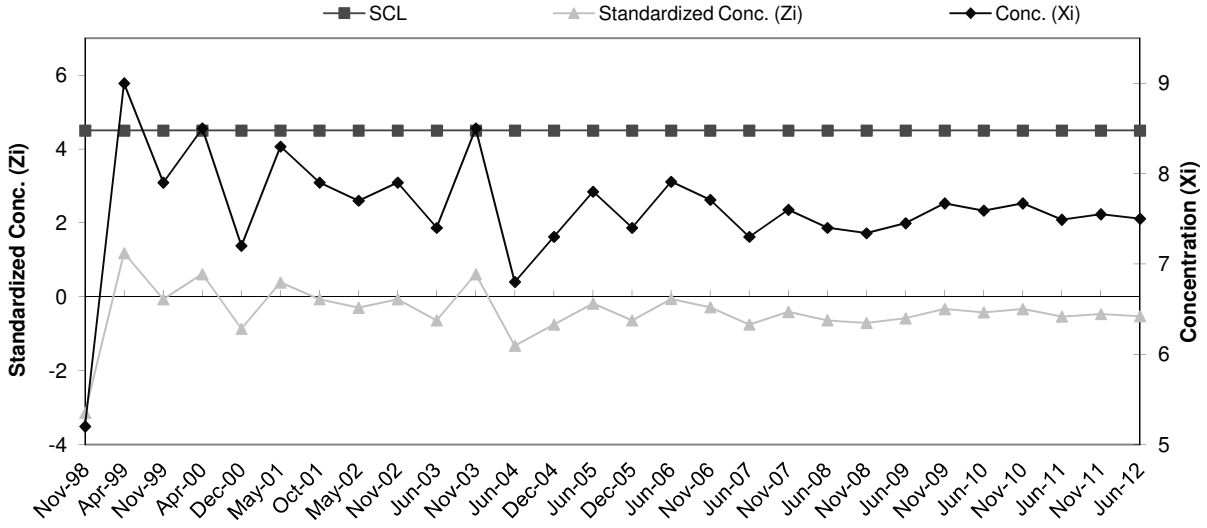
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | Nov-98 | 4.5 | 10 | -0.53 |
| 10 | Apr-99 | 4.5 | 5 | -0.83 |
| 11 | Nov-99 | 4.5 | 40 | 1.28 |
| 12 | Apr-00 | 4.5 | 5 | -0.83 |
| 13 | Dec-00 | 4.5 | 5 | -0.83 |
| 14 | May-01 | 4.5 | 5 | -0.83 |
| 15 | Oct-01 | 4.5 | 5 | -0.83 |
| 16 | May-02 | 4.5 | 5 | -0.83 |
| 17 | Nov-02 | 4.5 | 2.5 | -0.98 |
| 18 | Jun-03 | 4.5 | 2.5 | -0.98 |
| 19 | Nov-03 | 4.5 | 2.5 | -0.98 |
| 20 | Jun-04 | 4.5 | 7 | -0.71 |
| 21 | Dec-04 | 4.5 | 10 | -0.53 |
| 22 | Jun-05 | 4.5 | 2.5 | -0.98 |
| 23 | Dec-05 | 4.5 | 5 | -0.83 |
| 24 | Jun-06 | 4.5 | 8 | -0.65 |
| 25 | Nov-06 | 4.5 | 18 | -0.05 |
| 26 | Jun-07 | 4.5 | 6 | -0.77 |
| 27 | Nov-07 | 4.5 | 9 | -0.59 |
| 28 | Jun-08 | 4.5 | 7 | -0.71 |
| 29 | Nov-08 | 4.5 | 2.5 | -0.98 |
| 30 | Jun-09 | 4.5 | 113 | 5.67 |
| 31 | Nov-09 | 4.5 | 6 | -0.77 |
| 32 | Jun-10 | 4.5 | 2.5 | -0.98 |
| 33 | Nov-10 | 4.5 | 2.5 | -0.98 |
| 34 | Jun-11 | 4.5 | 2.5 | -0.98 |
| 35 | Nov-11 | 4.5 | 2.5 | -0.98 |
| 36 | Jun-12 | 4.5 | 2.5 | -0.98 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-2d pH**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-95 | 9.0 | **7.46** | **0.88** |
| 2 | Aug-95 | 8.3 | | |
| 3 | Jun-96 | 7.5 | | |
| 4 | Aug-96 | 7.7 | | |
| 5 | Nov-96 | 7.3 | | |
| 6 | May-97 | 6.3 | | |
| 7 | Nov-97 | 6.9 | | |
| 8 | May-98 | 6.7 | | |

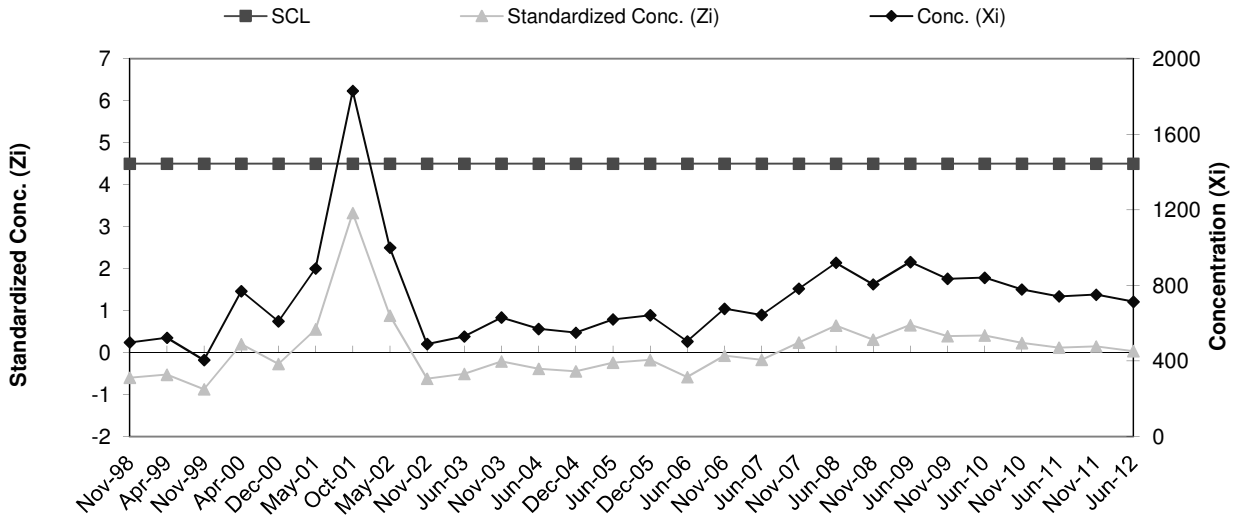
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | Nov-98 | 4.5 | 4.7 | -3.15 |
| 10 | Apr-99 | 4.5 | 8.5 | 1.18 |
| 11 | Nov-99 | 4.5 | 7.4 | -0.07 |
| 12 | Apr-00 | 4.5 | 8.0 | 0.61 |
| 13 | Dec-00 | 4.5 | 6.7 | -0.87 |
| 14 | May-01 | 4.5 | 7.8 | 0.38 |
| 15 | Oct-01 | 4.5 | 7.4 | -0.07 |
| 16 | May-02 | 4.5 | 7.2 | -0.30 |
| 17 | Nov-02 | 4.5 | 7.4 | -0.07 |
| 18 | Jun-03 | 4.5 | 6.9 | -0.64 |
| 19 | Nov-03 | 4.5 | 8.0 | 0.61 |
| 20 | Jun-04 | 4.5 | 6.3 | -1.32 |
| 21 | Dec-04 | 4.5 | 6.8 | -0.75 |
| 22 | Jun-05 | 4.5 | 7.3 | -0.19 |
| 23 | Dec-05 | 4.5 | 6.9 | -0.64 |
| 24 | Jun-06 | 4.5 | 7.4 | -0.06 |
| 25 | Nov-06 | 4.5 | 7.2 | -0.29 |
| 26 | Jun-07 | 4.5 | 6.8 | -0.75 |
| 27 | Nov-07 | 4.5 | 7.1 | -0.41 |
| 28 | Jun-08 | 4.5 | 6.9 | -0.64 |
| 29 | Nov-08 | 4.5 | 6.8 | -0.71 |
| 30 | Jun-09 | 4.5 | 7.0 | -0.58 |
| 31 | Nov-09 | 4.5 | 7.2 | -0.33 |
| 32 | Jun-10 | 4.5 | 7.1 | -0.42 |
| 33 | Nov-10 | 4.5 | 7.2 | -0.33 |
| 34 | Jun-11 | 4.5 | 7.0 | -0.54 |
| 35 | Nov-11 | 4.5 | 7.1 | -0.47 |
| 36 | Jun-12 | 4.5 | 7.0 | -0.53 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-2d SpC**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-95 | 434.0 | 701.50 | 339.46 |
| 2 | Aug-95 | 479.0 | | |
| 3 | Jun-96 | 580.0 | | |
| 4 | Aug-96 | 641.0 | | |
| 5 | Nov-96 | 769.0 | | |
| 6 | May-97 | 1500.0 | | |
| 7 | Nov-97 | 660.0 | | |
| 8 | May-98 | 549.0 | | |

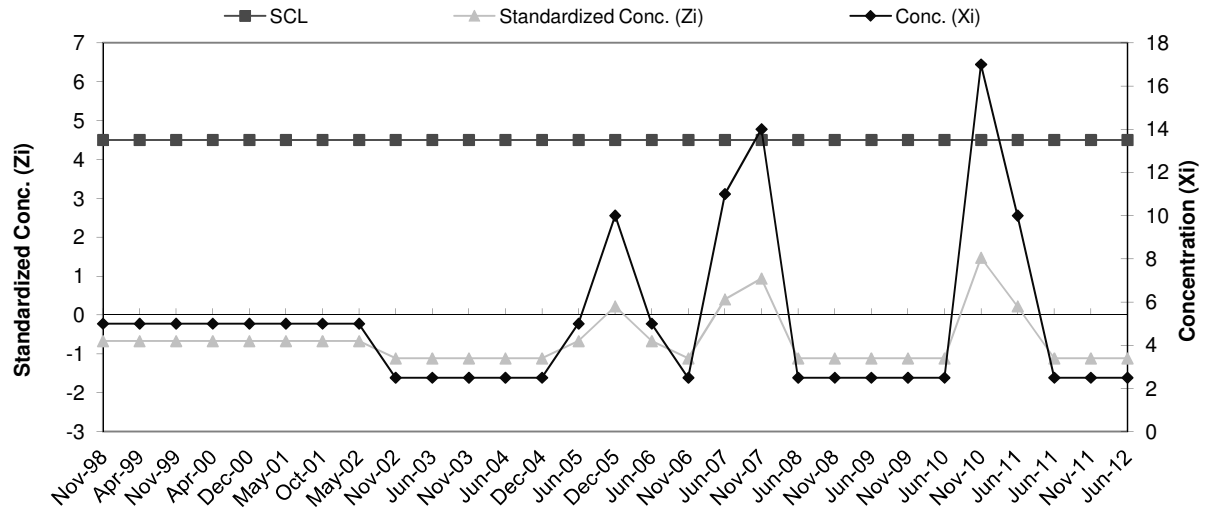
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | Nov-98 | 4.5 | 498.0 | -0.60 |
| 10 | Apr-99 | 4.5 | 523.0 | -0.53 |
| 11 | Nov-99 | 4.5 | 405.0 | -0.87 |
| 12 | Apr-00 | 4.5 | 770.0 | 0.20 |
| 13 | Dec-00 | 4.5 | 610.0 | -0.27 |
| 14 | May-01 | 4.5 | 890.0 | 0.56 |
| 15 | Oct-01 | 4.5 | 1830.0 | 3.32 |
| 16 | May-02 | 4.5 | 1000.0 | 0.88 |
| 17 | Nov-02 | 4.5 | 490.0 | -0.62 |
| 18 | Jun-03 | 4.5 | 530.0 | -0.51 |
| 19 | Nov-03 | 4.5 | 630.0 | -0.21 |
| 20 | Jun-04 | 4.5 | 570.0 | -0.39 |
| 21 | Dec-04 | 4.5 | 550.0 | -0.45 |
| 22 | Jun-05 | 4.5 | 620.0 | -0.24 |
| 23 | Dec-05 | 4.5 | 642.0 | -0.18 |
| 24 | Jun-06 | 4.5 | 504.1 | -0.58 |
| 25 | Nov-06 | 4.5 | 677.0 | -0.07 |
| 26 | Jun-07 | 4.5 | 644.0 | -0.17 |
| 27 | Nov-07 | 4.5 | 783.0 | 0.24 |
| 28 | Jun-08 | 4.5 | 920.0 | 0.64 |
| 29 | Nov-08 | 4.5 | 806.0 | 0.31 |
| 30 | Jun-09 | 4.5 | 924.0 | 0.66 |
| 31 | Nov-09 | 4.5 | 835.0 | 0.39 |
| 32 | Jun-10 | 4.5 | 841.0 | 0.41 |
| 33 | Nov-10 | 4.5 | 779.0 | 0.23 |
| 34 | Jun-11 | 4.5 | 742.0 | 0.12 |
| 35 | Nov-11 | 4.5 | 751.0 | 0.15 |
| 36 | Jun-12 | 4.5 | 714.0 | 0.04 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-7 Cr**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-95 | 10 | | |
| 2 | Aug-95 | 10 | | |
| 3 | Feb-96 | 10 | | |
| 4 | Jun-96 | 10 | **8.75** | **5.60** |
| 5 | Aug-96 | 10 | | |
| 6 | Nov-96 | 10 | | |
| 7 | May-97 | 5 | | |
| 8 | May-98 | 5 | | |

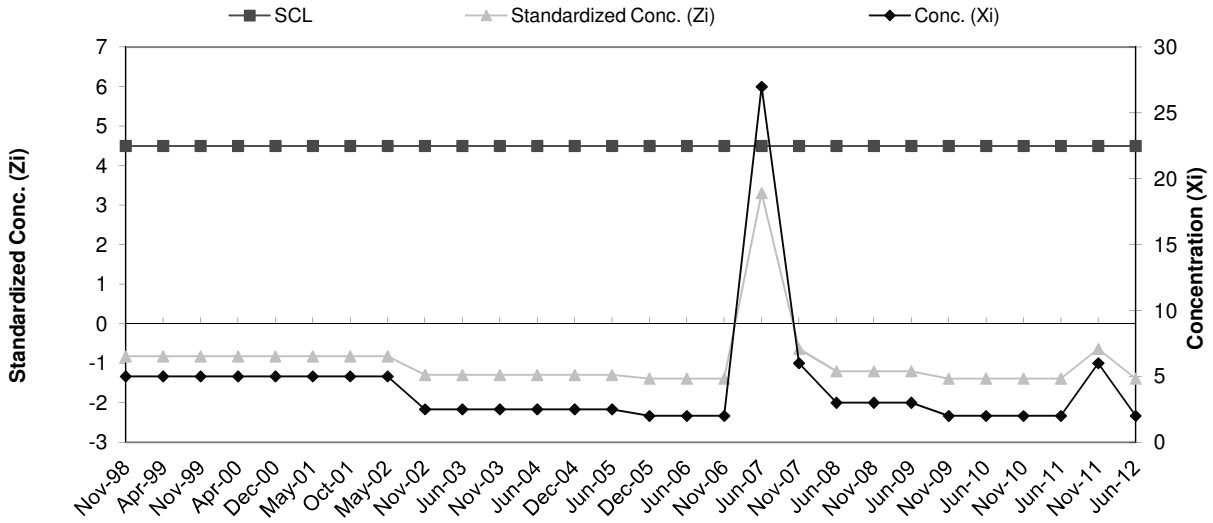
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | Nov-98 | 4.5 | 5 | -0.67 |
| 10 | Apr-99 | 4.5 | 5 | -0.67 |
| 11 | Nov-99 | 4.5 | 5 | -0.67 |
| 12 | Apr-00 | 4.5 | 5 | -0.67 |
| 13 | Dec-00 | 4.5 | 5 | -0.67 |
| 14 | May-01 | 4.5 | 5 | -0.67 |
| 15 | Oct-01 | 4.5 | 5 | -0.67 |
| 16 | May-02 | 4.5 | 5 | -0.67 |
| 17 | Nov-02 | 4.5 | 2.5 | -1.12 |
| 18 | Jun-03 | 4.5 | 2.5 | -1.12 |
| 19 | Nov-03 | 4.5 | 2.5 | -1.12 |
| 20 | Jun-04 | 4.5 | 2.5 | -1.12 |
| 21 | Dec-04 | 4.5 | 2.5 | -1.12 |
| 22 | Jun-05 | 4.5 | 5 | -0.67 |
| 23 | Dec-05 | 4.5 | 10 | 0.22 |
| 24 | Jun-06 | 4.5 | 5 | -0.67 |
| 25 | Nov-06 | 4.5 | 2.5 | -1.12 |
| 26 | Jun-07 | 4.5 | 11 | 0.40 |
| 27 | Nov-07 | 4.5 | 14 | 0.94 |
| 28 | Jun-08 | 4.5 | 2.5 | -1.12 |
| 29 | Nov-08 | 4.5 | 2.5 | -1.12 |
| 30 | Jun-09 | 4.5 | 2.5 | -1.12 |
| 31 | Nov-09 | 4.5 | 2.5 | -1.12 |
| 32 | Jun-10 | 4.5 | 2.5 | -1.12 |
| 33 | Nov-10 | 4.5 | 17 | 1.47 |
| 34 | Jun-11 | 4.5 | 10 | 0.22 |
| 35 | Jun-11 | 4.5 | 2.5 | -1.12 |
| 36 | Nov-11 | 4.5 | 2.5 | -1.12 |
| 37 | Jun-12 | 4.5 | 2.5 | -1.12 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-7 Cu**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-95 | 10 | | |
| 2 | Aug-95 | 10 | | |
| 3 | Feb-96 | 10 | | |
| 4 | Jun-96 | 10 | **9.40** | **5.32** |
| 5 | Aug-96 | 10 | | |
| 6 | Nov-96 | 10 | | |
| 7 | May-97 | 10 | | |
| 8 | May-98 | 5 | | |

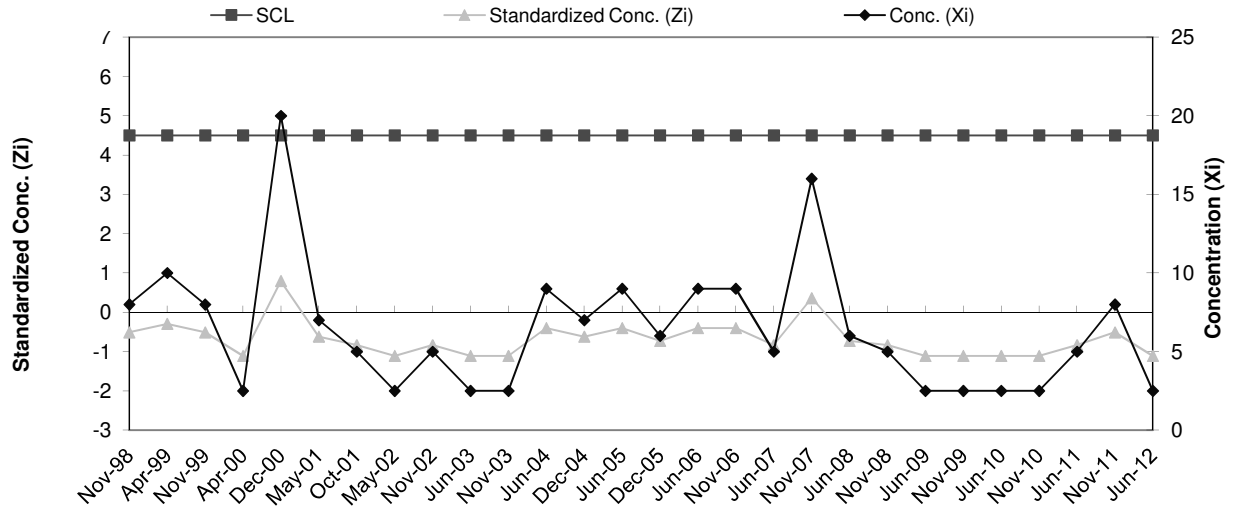
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | Nov-98 | 4.5 | 5 | -0.83 |
| 10 | Apr-99 | 4.5 | 5 | -0.83 |
| 11 | Nov-99 | 4.5 | 5 | -0.83 |
| 12 | Apr-00 | 4.5 | 5 | -0.83 |
| 13 | Dec-00 | 4.5 | 5 | -0.83 |
| 14 | May-01 | 4.5 | 5 | -0.83 |
| 15 | Oct-01 | 4.5 | 5 | -0.83 |
| 16 | May-02 | 4.5 | 5 | -0.83 |
| 17 | Nov-02 | 4.5 | 2.5 | -1.30 |
| 18 | Jun-03 | 4.5 | 2.5 | -1.30 |
| 19 | Nov-03 | 4.5 | 2.5 | -1.30 |
| 20 | Jun-04 | 4.5 | 2.5 | -1.30 |
| 21 | Dec-04 | 4.5 | 2.5 | -1.30 |
| 22 | Jun-05 | 4.5 | 2.5 | -1.30 |
| 23 | Dec-05 | 4.5 | 2 | -1.39 |
| 24 | Jun-06 | 4.5 | 2 | -1.39 |
| 25 | Nov-06 | 4.5 | 2 | -1.39 |
| 26 | Jun-07 | 4.5 | 27 | 3.31 |
| 27 | Nov-07 | 4.5 | 6 | -0.64 |
| 28 | Jun-08 | 4.5 | 3 | -1.20 |
| 29 | Nov-08 | 4.5 | 3 | -1.20 |
| 30 | Jun-09 | 4.5 | 3 | -1.20 |
| 31 | Nov-09 | 4.5 | 2 | -1.39 |
| 32 | Jun-10 | 4.5 | 2 | -1.39 |
| 33 | Nov-10 | 4.5 | 2 | -1.39 |
| 34 | Jun-11 | 4.5 | 2 | -1.39 |
| 35 | Nov-11 | 4.5 | 6 | -0.64 |
| 36 | Jun-12 | 4.5 | 2 | -1.39 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-7 Ni**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-95 | 15 | | |
| 2 | Aug-95 | 20 | | |
| 3 | Feb-96 | 20 | | |
| 4 | Jun-96 | 10 | **12.70** | **9.19** |
| 5 | Aug-96 | 10 | | |
| 6 | Nov-96 | 20 | | |
| 7 | May-97 | 14 | | |
| 8 | May-98 | 2.5 | | |

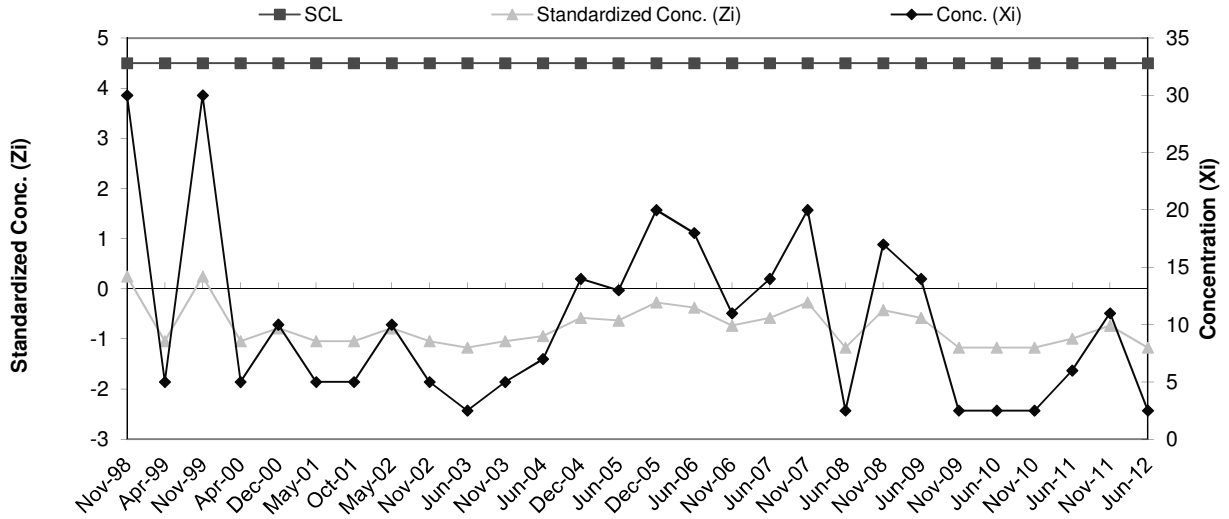
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | Nov-98 | 4.5 | 8 | -0.51 |
| 10 | Apr-99 | 4.5 | 10 | -0.29 |
| 11 | Nov-99 | 4.5 | 8 | -0.51 |
| 12 | Apr-00 | 4.5 | 2.5 | -1.11 |
| 13 | Dec-00 | 4.5 | 20 | 0.79 |
| 14 | May-01 | 4.5 | 7 | -0.62 |
| 15 | Oct-01 | 4.5 | 5 | -0.84 |
| 16 | May-02 | 4.5 | 2.5 | -1.11 |
| 17 | Nov-02 | 4.5 | 5 | -0.84 |
| 18 | Jun-03 | 4.5 | 2.5 | -1.11 |
| 19 | Nov-03 | 4.5 | 2.5 | -1.11 |
| 20 | Jun-04 | 4.5 | 9 | -0.40 |
| 21 | Dec-04 | 4.5 | 7 | -0.62 |
| 22 | Jun-05 | 4.5 | 9 | -0.40 |
| 23 | Dec-05 | 4.5 | 6 | -0.73 |
| 24 | Jun-06 | 4.5 | 9 | -0.40 |
| 25 | Nov-06 | 4.5 | 9 | -0.40 |
| 26 | Jun-07 | 4.5 | 5 | -0.84 |
| 27 | Nov-07 | 4.5 | 16 | 0.36 |
| 28 | Jun-08 | 4.5 | 6 | -0.73 |
| 29 | Nov-08 | 4.5 | 5 | -0.84 |
| 30 | Jun-09 | 4.5 | 2.5 | -1.11 |
| 31 | Nov-09 | 4.5 | 2.5 | -1.11 |
| 32 | Jun-10 | 4.5 | 2.5 | -1.11 |
| 33 | Nov-10 | 4.5 | 2.5 | -1.11 |
| 34 | Jun-11 | 4.5 | 5 | -0.84 |
| 35 | Nov-11 | 4.5 | 8 | -0.51 |
| 36 | Jun-12 | 4.5 | 2.5 | -1.11 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-7 Zn**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-95 | 10 | | |
| 2 | Aug-95 | 10 | | |
| 3 | Feb-96 | 22 | | |
| 4 | Jun-96 | 20 | **25.25** | **19.40** |
| 5 | Aug-96 | 60 | | |
| 6 | Nov-96 | 50 | | |
| 7 | May-97 | 10 | | |
| 8 | May-98 | 20 | | |

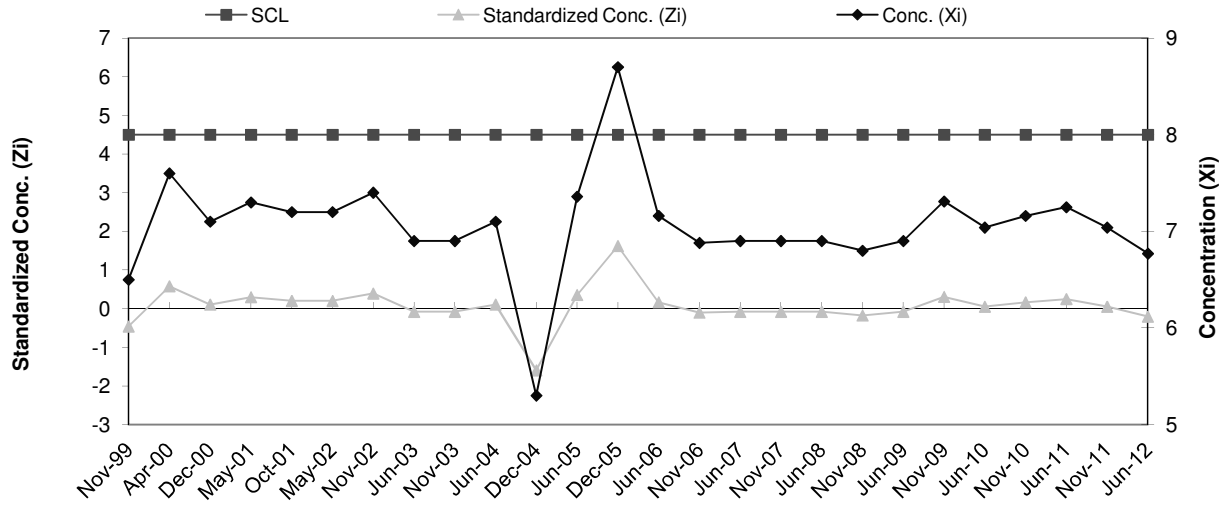
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | Nov-98 | 4.5 | 30 | 0.24 |
| 10 | Apr-99 | 4.5 | 5 | -1.04 |
| 11 | Nov-99 | 4.5 | 30 | 0.24 |
| 12 | Apr-00 | 4.5 | 5 | -1.04 |
| 13 | Dec-00 | 4.5 | 10 | -0.79 |
| 14 | May-01 | 4.5 | 5 | -1.04 |
| 15 | Oct-01 | 4.5 | 5 | -1.04 |
| 16 | May-02 | 4.5 | 10 | -0.79 |
| 17 | Nov-02 | 4.5 | 5 | -1.04 |
| 18 | Jun-03 | 4.5 | 2.5 | -1.17 |
| 19 | Nov-03 | 4.5 | 5 | -1.04 |
| 20 | Jun-04 | 4.5 | 7 | -0.94 |
| 21 | Dec-04 | 4.5 | 14 | -0.58 |
| 22 | Jun-05 | 4.5 | 13 | -0.63 |
| 23 | Dec-05 | 4.5 | 20 | -0.27 |
| 24 | Jun-06 | 4.5 | 18 | -0.37 |
| 25 | Nov-06 | 4.5 | 11 | -0.73 |
| 26 | Jun-07 | 4.5 | 14 | -0.58 |
| 27 | Nov-07 | 4.5 | 20 | -0.27 |
| 28 | Jun-08 | 4.5 | 2.5 | -1.17 |
| 29 | Nov-08 | 4.5 | 17 | -0.43 |
| 30 | Jun-09 | 4.5 | 14 | -0.58 |
| 31 | Nov-09 | 4.5 | 2.5 | -1.17 |
| 32 | Jun-10 | 4.5 | 2.5 | -1.17 |
| 33 | Nov-10 | 4.5 | 2.5 | -1.17 |
| 34 | Jun-11 | 4.5 | 6 | -0.99 |
| 35 | Nov-11 | 4.5 | 11 | -0.73 |
| 36 | Jun-12 | 4.5 | 2.5 | -1.17 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-7 pH**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-95 | 7.5 | 6.99 | 1.06 |
| 2 | Jun-96 | 6.9 | | |
| 3 | Aug-96 | 7.6 | | |
| 4 | Nov-96 | 8.0 | | |
| 5 | May-97 | 7.2 | | |
| 6 | May-98 | 6.6 | | |
| 7 | Nov-98 | 4.6 | | |
| 8 | Apr-99 | 7.5 | | |

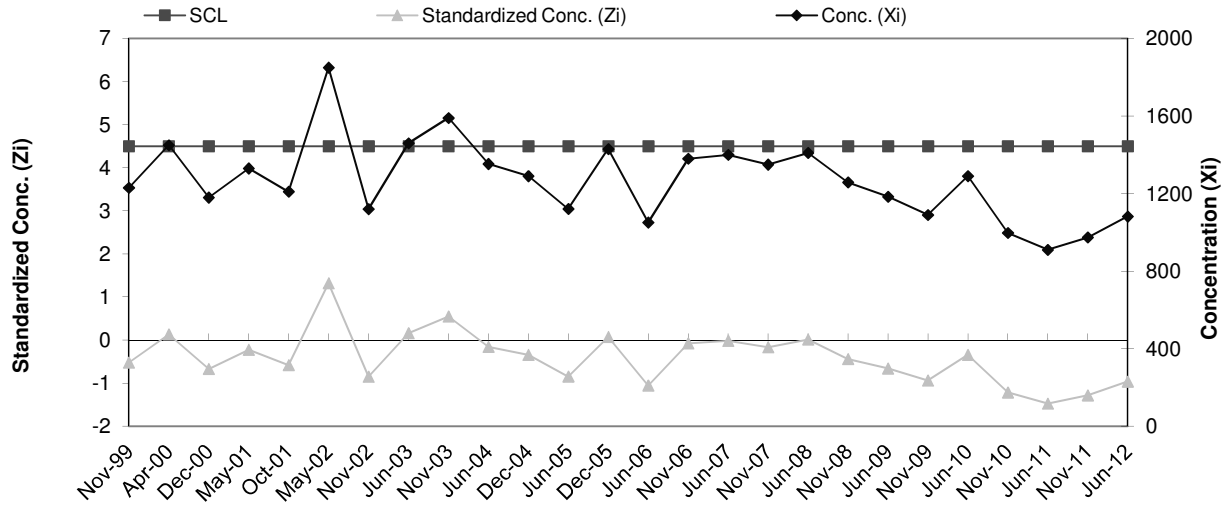
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | Nov-99 | 4.5 | 6.5 | -0.46 |
| 10 | Apr-00 | 4.5 | 7.6 | 0.58 |
| 11 | Dec-00 | 4.5 | 7.1 | 0.11 |
| 12 | May-01 | 4.5 | 7.3 | 0.30 |
| 13 | Oct-01 | 4.5 | 7.2 | 0.20 |
| 14 | May-02 | 4.5 | 7.2 | 0.20 |
| 15 | Nov-02 | 4.5 | 7.4 | 0.39 |
| 16 | Jun-03 | 4.5 | 6.9 | -0.08 |
| 17 | Nov-03 | 4.5 | 6.9 | -0.08 |
| 18 | Jun-04 | 4.5 | 7.1 | 0.11 |
| 19 | Dec-04 | 4.5 | 5.3 | -1.60 |
| 20 | Jun-05 | 4.5 | 7.4 | 0.35 |
| 21 | Dec-05 | 4.5 | 8.7 | 1.62 |
| 22 | Jun-06 | 4.5 | 7.2 | 0.16 |
| 23 | Nov-06 | 4.5 | 6.9 | -0.10 |
| 24 | Jun-07 | 4.5 | 6.9 | -0.08 |
| 25 | Nov-07 | 4.5 | 6.9 | -0.08 |
| 26 | Jun-08 | 4.5 | 6.9 | -0.08 |
| 27 | Nov-08 | 4.5 | 6.8 | -0.18 |
| 28 | Jun-09 | 4.5 | 6.9 | -0.08 |
| 29 | Nov-09 | 4.5 | 7.3 | 0.30 |
| 30 | Jun-10 | 4.5 | 7.0 | 0.05 |
| 31 | Nov-10 | 4.5 | 7.2 | 0.16 |
| 32 | Jun-11 | 4.5 | 7.3 | 0.25 |
| 33 | Nov-11 | 4.5 | 7.0 | 0.05 |
| 34 | Jun-12 | 4.5 | 6.8 | -0.21 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-7 SpC**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-95 | 1509.0 | | |
| 2 | Jun-96 | 1508.0 | | |
| 3 | Aug-96 | 1567.0 | | |
| 4 | Nov-96 | 1960.0 | **1,405.88** | **336.33** |
| 5 | May-97 | 780.0 | | |
| 6 | May-98 | 1270.0 | | |
| 7 | Nov-98 | 1240.0 | | |
| 8 | Apr-99 | 1413.0 | | |

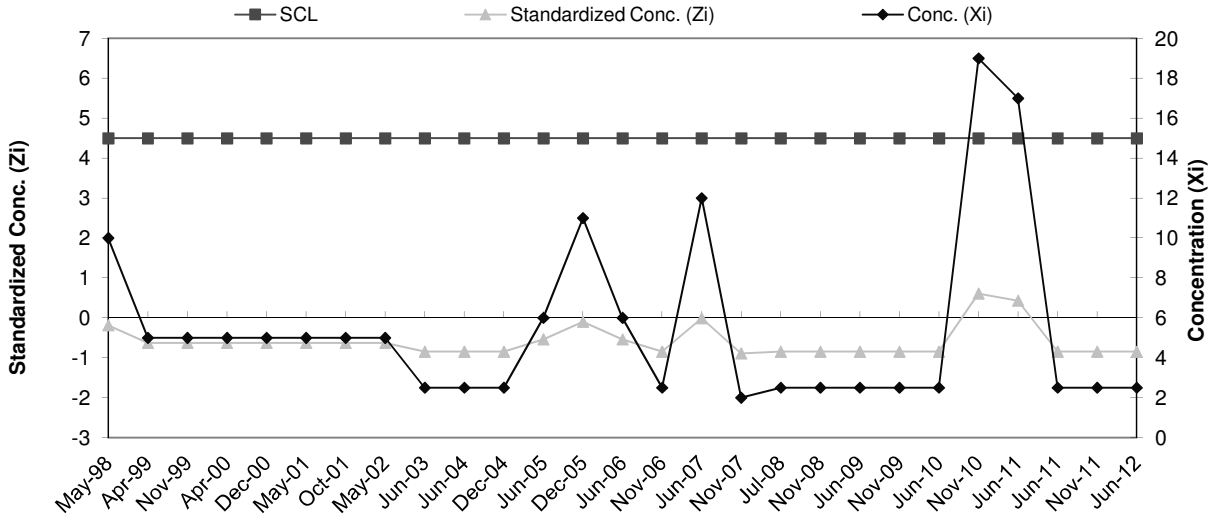
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | Nov-99 | 4.5 | 1230.0 | -0.52 |
| 10 | Apr-00 | 4.5 | 1450.0 | 0.13 |
| 11 | Dec-00 | 4.5 | 1180.0 | -0.67 |
| 12 | May-01 | 4.5 | 1330.0 | -0.23 |
| 13 | Oct-01 | 4.5 | 1210.0 | -0.58 |
| 14 | May-02 | 4.5 | 1850.0 | 1.32 |
| 15 | Nov-02 | 4.5 | 1120.0 | -0.85 |
| 16 | Jun-03 | 4.5 | 1460.0 | 0.16 |
| 17 | Nov-03 | 4.5 | 1590.0 | 0.55 |
| 18 | Jun-04 | 4.5 | 1353.0 | -0.16 |
| 19 | Dec-04 | 4.5 | 1290.0 | -0.34 |
| 20 | Jun-05 | 4.5 | 1121.0 | -0.85 |
| 21 | Dec-05 | 4.5 | 1430.0 | 0.07 |
| 22 | Jun-06 | 4.5 | 1051.0 | -1.06 |
| 23 | Nov-06 | 4.5 | 1380.0 | -0.08 |
| 24 | Jun-07 | 4.5 | 1400.0 | -0.02 |
| 25 | Nov-07 | 4.5 | 1350.0 | -0.17 |
| 26 | Jun-08 | 4.5 | 1410.0 | 0.01 |
| 27 | Nov-08 | 4.5 | 1258.0 | -0.44 |
| 28 | Jun-09 | 4.5 | 1184.0 | -0.66 |
| 29 | Nov-09 | 4.5 | 1090.0 | -0.94 |
| 30 | Jun-10 | 4.5 | 1290.0 | -0.34 |
| 31 | Nov-10 | 4.5 | 997.0 | -1.22 |
| 32 | Jun-11 | 4.5 | 910.0 | -1.47 |
| 33 | Nov-11 | 4.5 | 974.0 | -1.28 |
| 34 | Jun-12 | 4.5 | 1082.0 | -0.96 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-9 Cr**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-95 | 10 | | |
| 2 | Aug-95 | 37 | | |
| 3 | Feb-96 | 10 | | |
| 4 | Jun-96 | 10 | **12.12** | **11.34** |
| 5 | Aug-96 | 10 | | |
| 6 | Nov-96 | 10 | | |
| 7 | May-97 | 5 | | |
| 8 | Nov-97 | 5 | | |

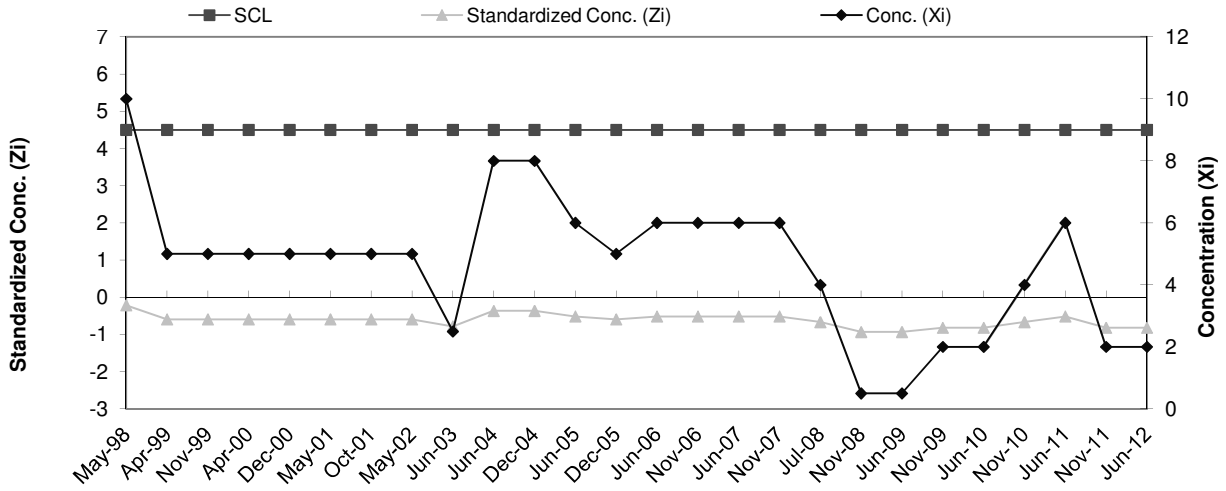
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | May-98 | 4.5 | 10 | -0.19 |
| 10 | Apr-99 | 4.5 | 5 | -0.63 |
| 11 | Nov-99 | 4.5 | 5 | -0.63 |
| 12 | Apr-00 | 4.5 | 5 | -0.63 |
| 13 | Dec-00 | 4.5 | 5 | -0.63 |
| 14 | May-01 | 4.5 | 5 | -0.63 |
| 15 | Oct-01 | 4.5 | 5 | -0.63 |
| 16 | May-02 | 4.5 | 5 | -0.63 |
| 17 | Jun-03 | 4.5 | 2.5 | -0.85 |
| 18 | Jun-04 | 4.5 | 2.5 | -0.85 |
| 19 | Dec-04 | 4.5 | 2.5 | -0.85 |
| 20 | Jun-05 | 4.5 | 6 | -0.54 |
| 21 | Dec-05 | 4.5 | 11 | -0.10 |
| 22 | Jun-06 | 4.5 | 6 | -0.54 |
| 23 | Nov-06 | 4.5 | 2.5 | -0.85 |
| 24 | Jun-07 | 4.5 | 12 | -0.01 |
| 25 | Nov-07 | 4.5 | 2 | -0.89 |
| 26 | Jul-08 | 4.5 | 2.5 | -0.85 |
| 27 | Nov-08 | 4.5 | 2.5 | -0.85 |
| 28 | Jun-09 | 4.5 | 2.5 | -0.85 |
| 29 | Nov-09 | 4.5 | 2.5 | -0.85 |
| 30 | Jun-10 | 4.5 | 2.5 | -0.85 |
| 31 | Nov-10 | 4.5 | 19 | 0.61 |
| 32 | Jun-11 | 4.5 | 17 | 0.43 |
| 33 | Jun-11 | 4.5 | 2.5 | -0.85 |
| 34 | Nov-11 | 4.5 | 2.5 | -0.85 |
| 35 | Jun-12 | 4.5 | 2.5 | -0.85 |
| | | | | |
| | | | | |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-9 Cu**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-95 | 10 | **12.87** | **13.26** |
| 2 | Aug-95 | 43 | | |
| 3 | Feb-96 | 10 | | |
| 4 | Jun-96 | 10 | | |
| 5 | Aug-96 | 10 | | |
| 6 | Nov-96 | 10 | | |
| 7 | May-97 | 5 | | |
| 8 | Nov-97 | 5 | | |

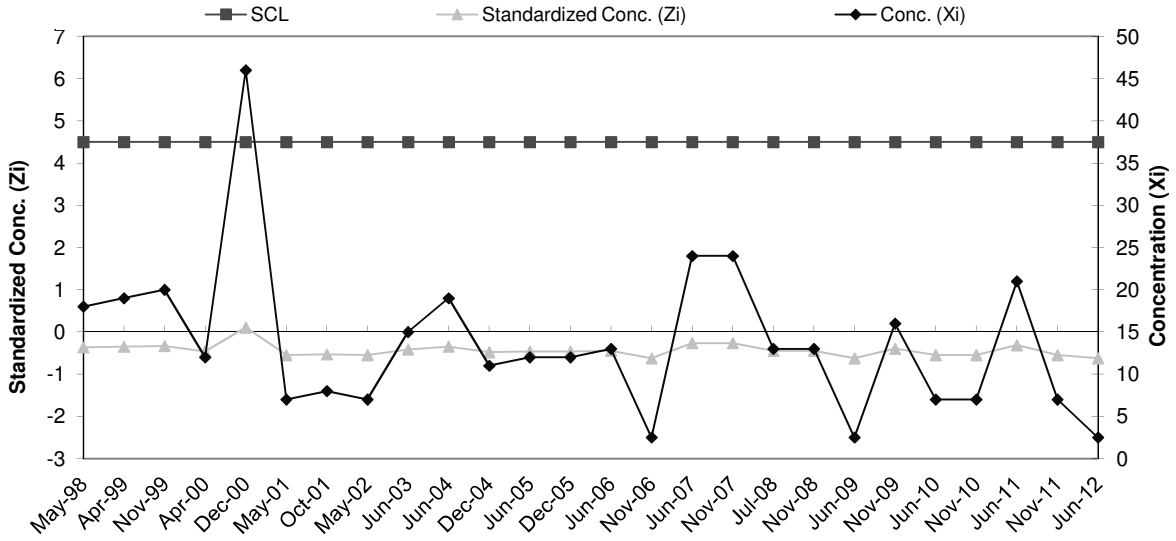
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | May-98 | 4.5 | 10 | -0.22 |
| 10 | Apr-99 | 4.5 | 5 | -0.59 |
| 11 | Nov-99 | 4.5 | 5 | -0.59 |
| 12 | Apr-00 | 4.5 | 5 | -0.59 |
| 13 | Dec-00 | 4.5 | 5 | -0.59 |
| 14 | May-01 | 4.5 | 5 | -0.59 |
| 15 | Oct-01 | 4.5 | 5 | -0.59 |
| 16 | May-02 | 4.5 | 5 | -0.59 |
| 17 | Jun-03 | 4.5 | 2.5 | -0.78 |
| 18 | Jun-04 | 4.5 | 8 | -0.37 |
| 19 | Dec-04 | 4.5 | 8 | -0.37 |
| 20 | Jun-05 | 4.5 | 6 | -0.52 |
| 21 | Dec-05 | 4.5 | 5 | -0.59 |
| 22 | Jun-06 | 4.5 | 6 | -0.52 |
| 23 | Nov-06 | 4.5 | 6 | -0.52 |
| 24 | Jun-07 | 4.5 | 6 | -0.52 |
| 25 | Nov-07 | 4.5 | 6 | -0.52 |
| 26 | Jul-08 | 4.5 | 4 | -0.67 |
| 27 | Nov-08 | 4.5 | 0.5 | -0.93 |
| 28 | Jun-09 | 4.5 | 0.5 | -0.93 |
| 29 | Nov-09 | 4.5 | 2 | -0.82 |
| 30 | Jun-10 | 4.5 | 2 | -0.82 |
| 31 | Nov-10 | 4.5 | 4 | -0.67 |
| 32 | Jun-11 | 4.5 | 6 | -0.52 |
| 33 | Nov-11 | 4.5 | 2 | -0.82 |
| 34 | Jun-12 | 4.5 | 2 | -0.82 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-9 Ni**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-95 | 15 | | |
| 2 | Aug-95 | 20 | | |
| 3 | Feb-96 | 20 | | |
| 4 | Jun-96 | 10 | **39.83** | **59.86** |
| 5 | Aug-96 | 10 | | |
| 6 | Nov-96 | 10 | | |
| 7 | May-97 | 51 | | |
| 8 | Nov-97 | 183 | | |

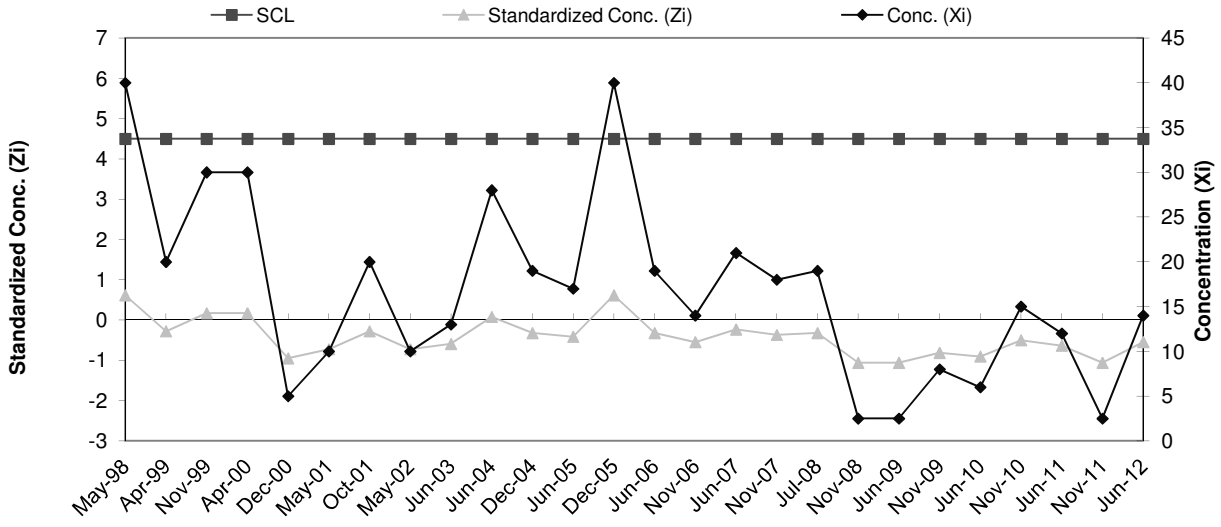
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | May-98 | 4.5 | 18 | -0.36 |
| 10 | Apr-99 | 4.5 | 19 | -0.35 |
| 11 | Nov-99 | 4.5 | 20 | -0.33 |
| 12 | Apr-00 | 4.5 | 12 | -0.46 |
| 13 | Dec-00 | 4.5 | 46 | 0.10 |
| 14 | May-01 | 4.5 | 7 | -0.55 |
| 15 | Oct-01 | 4.5 | 8 | -0.53 |
| 16 | May-02 | 4.5 | 7 | -0.55 |
| 17 | Jun-03 | 4.5 | 15 | -0.41 |
| 18 | Jun-04 | 4.5 | 19 | -0.35 |
| 19 | Dec-04 | 4.5 | 11 | -0.48 |
| 20 | Jun-05 | 4.5 | 12 | -0.46 |
| 21 | Dec-05 | 4.5 | 12 | -0.46 |
| 22 | Jun-06 | 4.5 | 13 | -0.45 |
| 23 | Nov-06 | 4.5 | 2.5 | -0.62 |
| 24 | Jun-07 | 4.5 | 24 | -0.26 |
| 25 | Nov-07 | 4.5 | 24 | -0.26 |
| 26 | Jul-08 | 4.5 | 13 | -0.45 |
| 27 | Nov-08 | 4.5 | 13 | -0.45 |
| 28 | Jun-09 | 4.5 | 2.5 | -0.62 |
| 29 | Nov-09 | 4.5 | 16 | -0.40 |
| 30 | Jun-10 | 4.5 | 7 | -0.55 |
| 31 | Nov-10 | 4.5 | 7 | -0.55 |
| 32 | Jun-11 | 4.5 | 21 | -0.31 |
| 33 | Nov-11 | 4.5 | 7 | -0.55 |
| 34 | Jun-12 | 4.5 | 2.5 | -0.62 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-9 Zn**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-95 | 10 | | |
| 2 | Aug-95 | 10 | | |
| 3 | Feb-96 | 10 | | |
| 4 | Jun-96 | 10 | **26.23** | **22.36** |
| 5 | Aug-96 | 70 | | |
| 6 | Nov-96 | 40 | | |
| 7 | May-97 | 20 | | |
| 8 | Nov-97 | 40 | | |

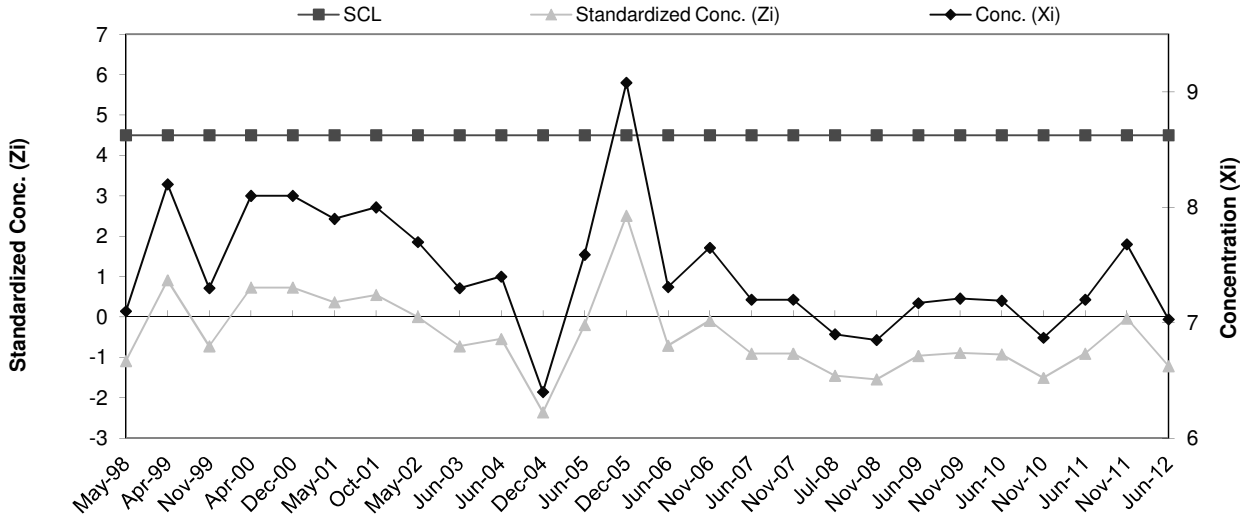
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | May-98 | 4.5 | 40 | 0.62 |
| 10 | Apr-99 | 4.5 | 20 | -0.28 |
| 11 | Nov-99 | 4.5 | 30 | 0.17 |
| 12 | Apr-00 | 4.5 | 30 | 0.17 |
| 13 | Dec-00 | 4.5 | 5 | -0.95 |
| 14 | May-01 | 4.5 | 10 | -0.73 |
| 15 | Oct-01 | 4.5 | 20 | -0.28 |
| 16 | May-02 | 4.5 | 10 | -0.73 |
| 17 | Jun-03 | 4.5 | 13 | -0.59 |
| 18 | Jun-04 | 4.5 | 28 | 0.08 |
| 19 | Dec-04 | 4.5 | 19 | -0.32 |
| 20 | Jun-05 | 4.5 | 17 | -0.41 |
| 21 | Dec-05 | 4.5 | 40 | 0.62 |
| 22 | Jun-06 | 4.5 | 19 | -0.32 |
| 23 | Nov-06 | 4.5 | 14 | -0.55 |
| 24 | Jun-07 | 4.5 | 21 | -0.23 |
| 25 | Nov-07 | 4.5 | 18 | -0.37 |
| 26 | Jul-08 | 4.5 | 19 | -0.32 |
| 27 | Nov-08 | 4.5 | 2.5 | -1.06 |
| 28 | Jun-09 | 4.5 | 2.5 | -1.06 |
| 29 | Nov-09 | 4.5 | 8 | -0.82 |
| 30 | Jun-10 | 4.5 | 6 | -0.90 |
| 31 | Nov-10 | 4.5 | 15 | -0.50 |
| 32 | Jun-11 | 4.5 | 12 | -0.64 |
| 33 | Nov-11 | 4.5 | 2.5 | -1.06 |
| 34 | Jun-12 | 4.5 | 14 | -0.55 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-9 pH**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-95 | 7.7 | **7.20** | **0.55** |
| 2 | Aug-95 | 7.7 | | |
| 3 | Feb-96 | 7.3 | | |
| 4 | Jun-96 | 6.8 | | |
| 5 | Aug-96 | 8.0 | | |
| 6 | Nov-96 | 6.8 | | |
| 7 | May-97 | 6.8 | | |
| 8 | Nov-97 | 6.5 | | |

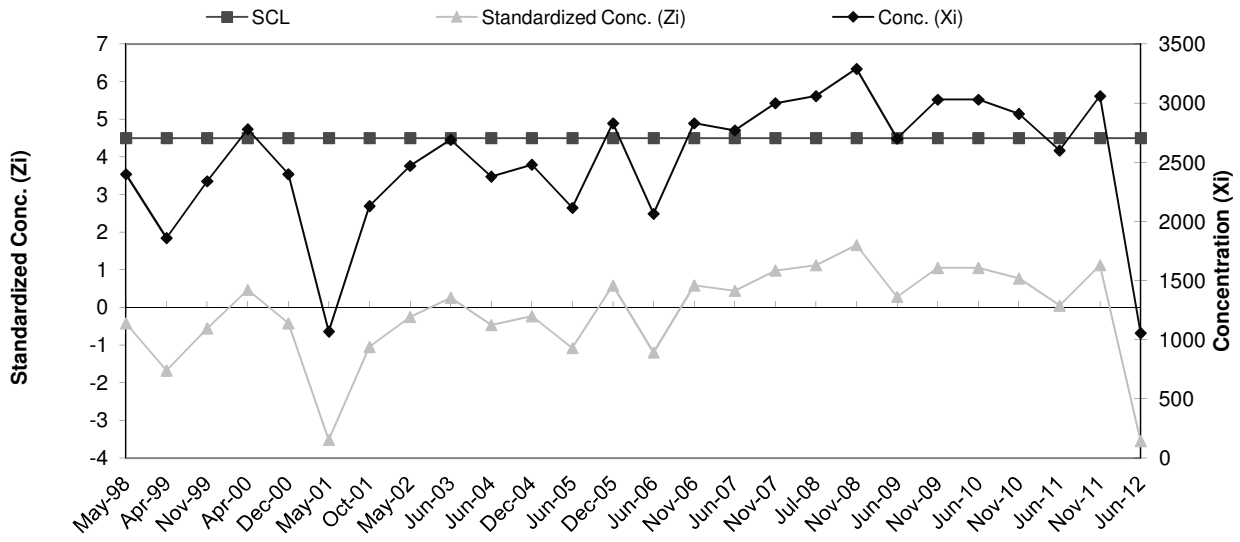
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | May-98 | 4.5 | 6.6 | -1.09 |
| 10 | Apr-99 | 4.5 | 7.7 | 0.91 |
| 11 | Nov-99 | 4.5 | 6.8 | -0.73 |
| 12 | Apr-00 | 4.5 | 7.6 | 0.73 |
| 13 | Dec-00 | 4.5 | 7.6 | 0.73 |
| 14 | May-01 | 4.5 | 7.4 | 0.36 |
| 15 | Oct-01 | 4.5 | 7.5 | 0.55 |
| 16 | May-02 | 4.5 | 7.2 | 0.00 |
| 17 | Jun-03 | 4.5 | 6.8 | -0.73 |
| 18 | Jun-04 | 4.5 | 6.9 | -0.55 |
| 19 | Dec-04 | 4.5 | 5.9 | -2.36 |
| 20 | Jun-05 | 4.5 | 7.1 | -0.20 |
| 21 | Dec-05 | 4.5 | 8.6 | 2.51 |
| 22 | Jun-06 | 4.5 | 6.8 | -0.71 |
| 23 | Nov-06 | 4.5 | 7.2 | -0.09 |
| 24 | Jun-07 | 4.5 | 6.7 | -0.91 |
| 25 | Nov-07 | 4.5 | 6.7 | -0.91 |
| 26 | Jul-08 | 4.5 | 6.4 | -1.45 |
| 27 | Nov-08 | 4.5 | 6.4 | -1.54 |
| 28 | Jun-09 | 4.5 | 6.7 | -0.96 |
| 29 | Nov-09 | 4.5 | 6.7 | -0.89 |
| 30 | Jun-10 | 4.5 | 6.7 | -0.93 |
| 31 | Nov-10 | 4.5 | 6.4 | -1.51 |
| 32 | Jun-11 | 4.5 | 6.7 | -0.91 |
| 33 | Nov-11 | 4.5 | 7.2 | -0.04 |
| 34 | Jun-12 | 4.5 | 6.5 | -1.22 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-9 SpC**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-95 | 2400 | | |
| 2 | Aug-95 | 1829 | | |
| 3 | Feb-96 | 2860 | | |
| 4 | Jun-96 | 2550 | **2,578.63** | **428.85** |
| 5 | Aug-96 | 2310 | | |
| 6 | Nov-96 | 3280 | | |
| 7 | May-97 | 2600 | | |
| 8 | Nov-97 | 2800 | | |

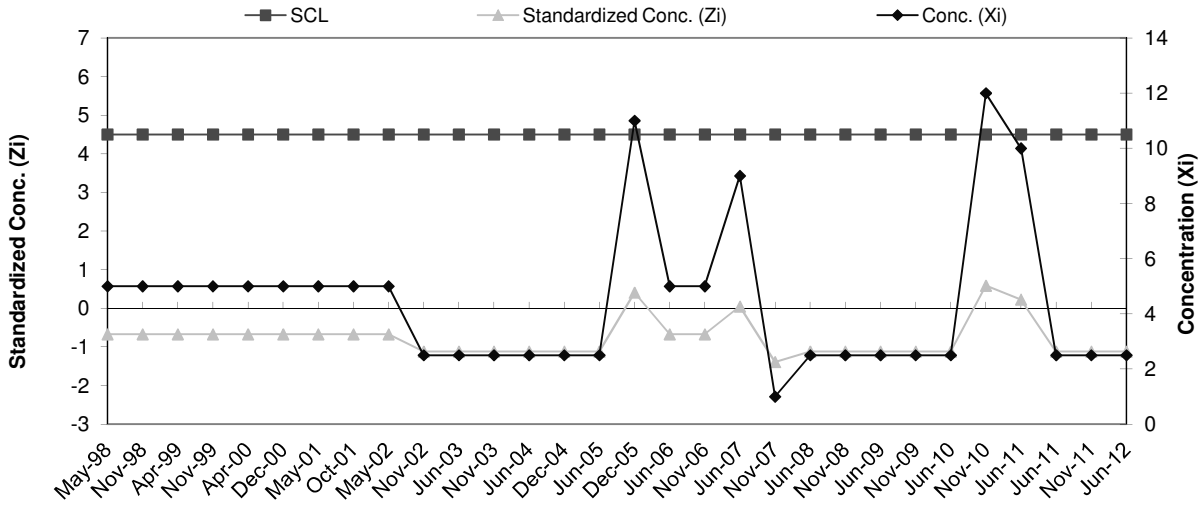
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | May-98 | 4.5 | 2400 | -0.42 |
| 10 | Apr-99 | 4.5 | 1860 | -1.68 |
| 11 | Nov-99 | 4.5 | 2340 | -0.56 |
| 12 | Apr-00 | 4.5 | 2780 | 0.47 |
| 13 | Dec-00 | 4.5 | 2400 | -0.42 |
| 14 | May-01 | 4.5 | 1070 | -3.52 |
| 15 | Oct-01 | 4.5 | 2130 | -1.05 |
| 16 | May-02 | 4.5 | 2470 | -0.25 |
| 17 | Jun-03 | 4.5 | 2690 | 0.26 |
| 18 | Jun-04 | 4.5 | 2379 | -0.47 |
| 19 | Dec-04 | 4.5 | 2480 | -0.23 |
| 20 | Jun-05 | 4.5 | 2116 | -1.08 |
| 21 | Dec-05 | 4.5 | 2830 | 0.59 |
| 22 | Jun-06 | 4.5 | 2065 | -1.20 |
| 23 | Nov-06 | 4.5 | 2830 | 0.59 |
| 24 | Jun-07 | 4.5 | 2770 | 0.45 |
| 25 | Nov-07 | 4.5 | 3000 | 0.98 |
| 26 | Jul-08 | 4.5 | 3060 | 1.12 |
| 27 | Nov-08 | 4.5 | 3290 | 1.66 |
| 28 | Jun-09 | 4.5 | 2700 | 0.28 |
| 29 | Nov-09 | 4.5 | 3030 | 1.05 |
| 30 | Jun-10 | 4.5 | 3030 | 1.05 |
| 31 | Nov-10 | 4.5 | 2910 | 0.77 |
| 32 | Jun-11 | 4.5 | 2600 | 0.05 |
| 33 | Nov-11 | 4.5 | 3060 | 1.12 |
| 34 | Jun-12 | 4.5 | 1057 | -3.55 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-18a Cr**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-95 | 10 | **8.74** | **5.57** |
| 2 | Aug-95 | 10 | | |
| 3 | Feb-96 | 10 | | |
| 4 | Jun-96 | 10 | | |
| 5 | Aug-96 | 10 | | |
| 6 | Nov-96 | 10 | | |
| 7 | May-97 | 5 | | |
| 8 | Nov-97 | 5 | | |

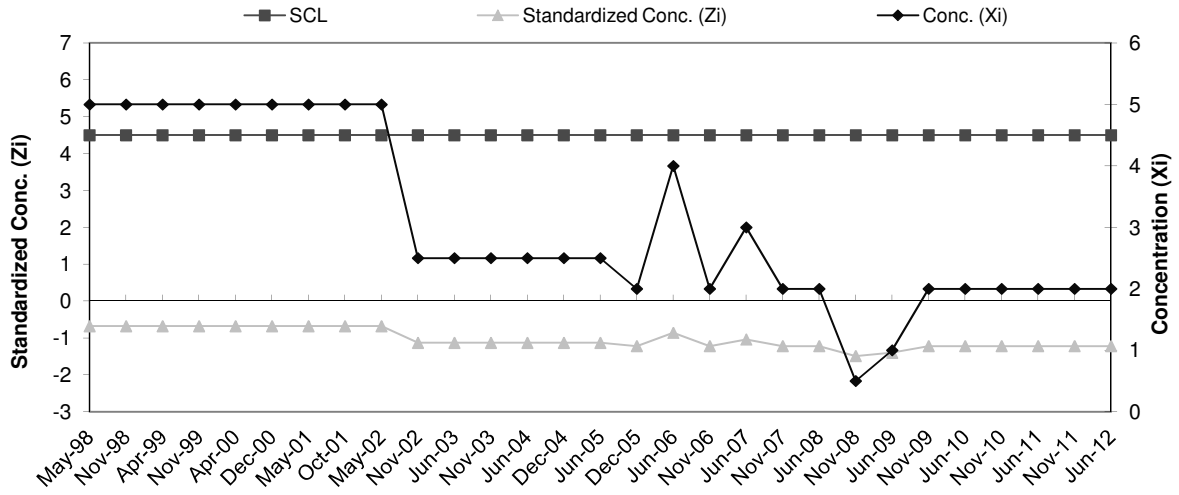
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | May-98 | 4.5 | 5 | -0.67 |
| 10 | Nov-98 | 4.5 | 5 | -0.67 |
| 11 | Apr-99 | 4.5 | 5 | -0.67 |
| 12 | Nov-99 | 4.5 | 5 | -0.67 |
| 13 | Apr-00 | 4.5 | 5 | -0.67 |
| 14 | Dec-00 | 4.5 | 5 | -0.67 |
| 15 | May-01 | 4.5 | 5 | -0.67 |
| 16 | Oct-01 | 4.5 | 5 | -0.67 |
| 17 | May-02 | 4.5 | 5 | -0.67 |
| 18 | Nov-02 | 4.5 | 2.5 | -1.12 |
| 19 | Jun-03 | 4.5 | 2.5 | -1.12 |
| 20 | Nov-03 | 4.5 | 2.5 | -1.12 |
| 21 | Jun-04 | 4.5 | 2.5 | -1.12 |
| 22 | Dec-04 | 4.5 | 2.5 | -1.12 |
| 23 | Jun-05 | 4.5 | 2.5 | -1.12 |
| 24 | Dec-05 | 4.5 | 11 | 0.41 |
| 25 | Jun-06 | 4.5 | 5 | -0.67 |
| 26 | Nov-06 | 4.5 | 5 | -0.67 |
| 27 | Jun-07 | 4.5 | 9 | 0.05 |
| 28 | Nov-07 | 4.5 | 1 | -1.39 |
| 29 | Jun-08 | 4.5 | 2.5 | -1.12 |
| 30 | Nov-08 | 4.5 | 2.5 | -1.12 |
| 31 | Jun-09 | 4.5 | 2.5 | -1.12 |
| 32 | Nov-09 | 4.5 | 2.5 | -1.12 |
| 33 | Jun-10 | 4.5 | 2.5 | -1.12 |
| 34 | Nov-10 | 4.5 | 12 | 0.59 |
| 35 | Jun-11 | 4.5 | 10 | 0.23 |
| 36 | Jun-11 | 4.5 | 2.5 | -1.12 |
| 37 | Nov-11 | 4.5 | 2.5 | -1.12 |
| 38 | Jun-12 | 4.5 | 2.5 | -1.12 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-18a Cu**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-95 | 10 | | |
| 2 | Aug-95 | 10 | | |
| 3 | Feb-96 | 10 | | |
| 4 | Jun-96 | 10 | **8.78** | **5.56** |
| 5 | Aug-96 | 10 | | |
| 6 | Nov-96 | 10 | | |
| 7 | May-97 | 5 | | |
| 8 | Nov-97 | 5 | | |

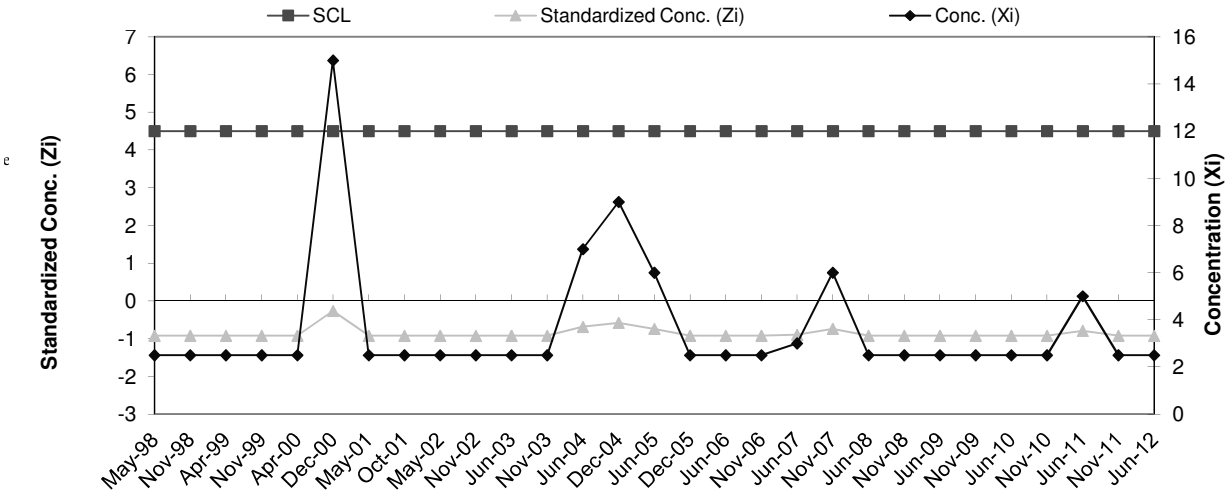
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | May-98 | 4.5 | 5 | -0.68 |
| 10 | Nov-98 | 4.5 | 5 | -0.68 |
| 11 | Apr-99 | 4.5 | 5 | -0.68 |
| 12 | Nov-99 | 4.5 | 5 | -0.68 |
| 13 | Apr-00 | 4.5 | 5 | -0.68 |
| 14 | Dec-00 | 4.5 | 5 | -0.68 |
| 15 | May-01 | 4.5 | 5 | -0.68 |
| 16 | Oct-01 | 4.5 | 5 | -0.68 |
| 17 | May-02 | 4.5 | 5 | -0.68 |
| 18 | Nov-02 | 4.5 | 2.5 | -1.13 |
| 19 | Jun-03 | 4.5 | 2.5 | -1.13 |
| 20 | Nov-03 | 4.5 | 2.5 | -1.13 |
| 21 | Jun-04 | 4.5 | 2.5 | -1.13 |
| 22 | Dec-04 | 4.5 | 2.5 | -1.13 |
| 23 | Jun-05 | 4.5 | 2.5 | -1.13 |
| 24 | Dec-05 | 4.5 | 2 | -1.22 |
| 25 | Jun-06 | 4.5 | 4 | -0.86 |
| 26 | Nov-06 | 4.5 | 2 | -1.22 |
| 27 | Jun-07 | 4.5 | 3 | -1.04 |
| 28 | Nov-07 | 4.5 | 2 | -1.22 |
| 29 | Jun-08 | 4.5 | 2 | -1.22 |
| 30 | Nov-08 | 4.5 | 0.5 | -1.49 |
| 31 | Jun-09 | 4.5 | 1 | -1.40 |
| 32 | Nov-09 | 4.5 | 2 | -1.22 |
| 33 | Jun-10 | 4.5 | 2 | -1.22 |
| 34 | Nov-10 | 4.5 | 2 | -1.22 |
| 35 | Jun-11 | 4.5 | 2 | -1.22 |
| 36 | Nov-11 | 4.5 | 2 | -1.22 |
| 37 | Jun-12 | 4.5 | 2 | -1.22 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-18a Ni**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-95 | 15 | | |
| 2 | Aug-95 | 20 | | |
| 3 | Feb-96 | 20 | | |
| 4 | Jun-96 | 10 | **20.01** | **18.96** |
| 5 | Aug-96 | 10 | | |
| 6 | Nov-96 | 10 | | |
| 7 | May-97 | 13 | | |
| 8 | Nov-97 | 62 | | |

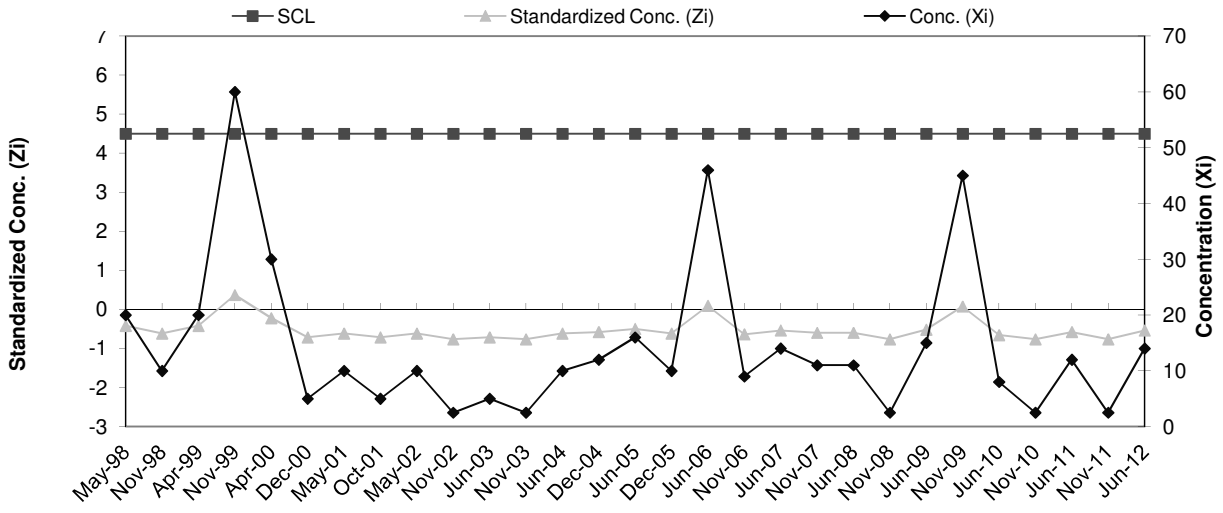
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | May-98 | 4.5 | 2.5 | -0.92 |
| 10 | Nov-98 | 4.5 | 2.5 | -0.92 |
| 11 | Apr-99 | 4.5 | 2.5 | -0.92 |
| 12 | Nov-99 | 4.5 | 2.5 | -0.92 |
| 13 | Apr-00 | 4.5 | 2.5 | -0.92 |
| 14 | Dec-00 | 4.5 | 15 | -0.26 |
| 15 | May-01 | 4.5 | 2.5 | -0.92 |
| 16 | Oct-01 | 4.5 | 2.5 | -0.92 |
| 17 | May-02 | 4.5 | 2.5 | -0.92 |
| 18 | Nov-02 | 4.5 | 2.5 | -0.92 |
| 19 | Jun-03 | 4.5 | 2.5 | -0.92 |
| 20 | Nov-03 | 4.5 | 2.5 | -0.92 |
| 21 | Jun-04 | 4.5 | 7 | -0.69 |
| 22 | Dec-04 | 4.5 | 9 | -0.58 |
| 23 | Jun-05 | 4.5 | 6 | -0.74 |
| 24 | Dec-05 | 4.5 | 2.5 | -0.92 |
| 25 | Jun-06 | 4.5 | 2.5 | -0.92 |
| 26 | Nov-06 | 4.5 | 2.5 | -0.92 |
| 27 | Jun-07 | 4.5 | 3 | -0.90 |
| 28 | Nov-07 | 4.5 | 6 | -0.74 |
| 29 | Jun-08 | 4.5 | 2.5 | -0.92 |
| 30 | Nov-08 | 4.5 | 2.5 | -0.92 |
| 31 | Jun-09 | 4.5 | 2.5 | -0.92 |
| 32 | Nov-09 | 4.5 | 2.5 | -0.92 |
| 33 | Jun-10 | 4.5 | 2.5 | -0.92 |
| 34 | Nov-10 | 4.5 | 2.5 | -0.92 |
| 35 | Jun-11 | 4.5 | 5 | -0.79 |
| 36 | Nov-11 | 4.5 | 2.5 | -0.92 |
| 37 | Jun-12 | 4.5 | 2.5 | -0.92 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-18a Zn**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-95 | 150 | | |
| 2 | Aug-95 | 10 | | |
| 3 | Feb-96 | 10 | | |
| 4 | Jun-96 | 10 | **41.25** | **50.67** |
| 5 | Aug-96 | 60 | | |
| 6 | Nov-96 | 70 | | |
| 7 | May-97 | 10 | | |
| 8 | Nov-97 | 10 | | |

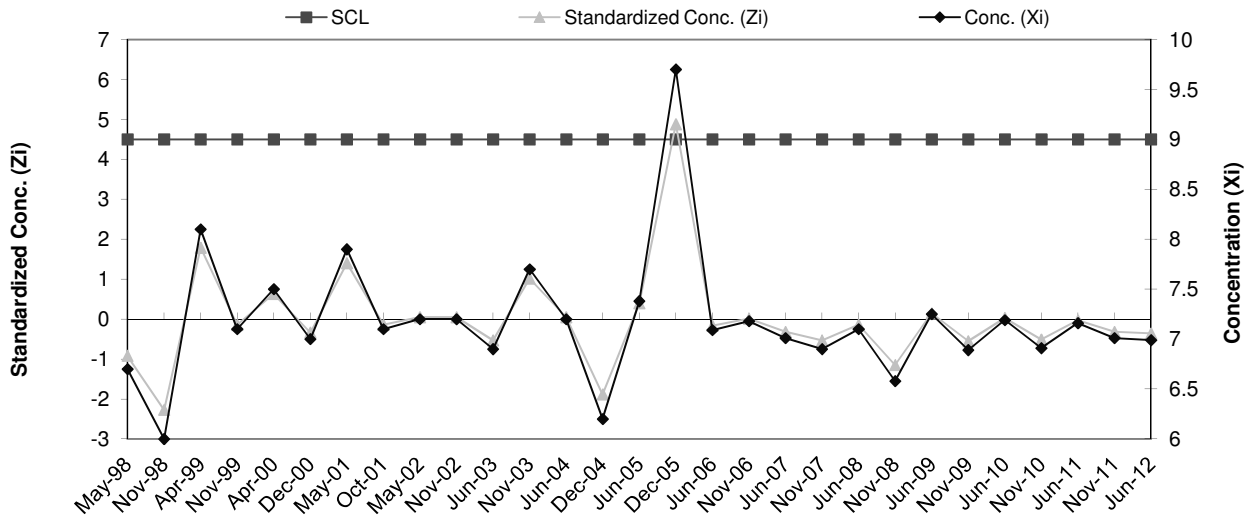
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | May-98 | 4.5 | 20 | -0.42 |
| 10 | Nov-98 | 4.5 | 10 | -0.62 |
| 11 | Apr-99 | 4.5 | 20 | -0.42 |
| 12 | Nov-99 | 4.5 | 60 | 0.37 |
| 13 | Apr-00 | 4.5 | 30 | -0.22 |
| 14 | Dec-00 | 4.5 | 5 | -0.72 |
| 15 | May-01 | 4.5 | 10 | -0.62 |
| 16 | Oct-01 | 4.5 | 5 | -0.72 |
| 17 | May-02 | 4.5 | 10 | -0.62 |
| 18 | Nov-02 | 4.5 | 2.5 | -0.76 |
| 19 | Jun-03 | 4.5 | 5 | -0.72 |
| 20 | Nov-03 | 4.5 | 2.5 | -0.76 |
| 21 | Jun-04 | 4.5 | 10 | -0.62 |
| 22 | Dec-04 | 4.5 | 12 | -0.58 |
| 23 | Jun-05 | 4.5 | 16 | -0.50 |
| 24 | Dec-05 | 4.5 | 10 | -0.62 |
| 25 | Jun-06 | 4.5 | 46 | 0.09 |
| 26 | Nov-06 | 4.5 | 9 | -0.64 |
| 27 | Jun-07 | 4.5 | 14 | -0.54 |
| 28 | Nov-07 | 4.5 | 11 | -0.60 |
| 29 | Jun-08 | 4.5 | 11 | -0.60 |
| 30 | Nov-08 | 4.5 | 2.5 | -0.76 |
| 31 | Jun-09 | 4.5 | 15 | -0.52 |
| 32 | Nov-09 | 4.5 | 45 | 0.07 |
| 33 | Jun-10 | 4.5 | 8 | -0.66 |
| 34 | Nov-10 | 4.5 | 2.5 | -0.76 |
| 35 | Jun-11 | 4.5 | 12 | -0.58 |
| 36 | Nov-11 | 4.5 | 2.5 | -0.76 |
| 37 | Jun-12 | 4.5 | 14 | -0.54 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-18a pH**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-95 | 7.5 | **7.18** | **0.52** |
| 2 | Aug-95 | 7.9 | | |
| 3 | Feb-96 | 7.4 | | |
| 4 | Jun-96 | 7.0 | | |
| 5 | Aug-96 | 7.5 | | |
| 6 | Nov-96 | 7.2 | | |
| 7 | May-97 | 6.5 | | |
| 8 | Nov-97 | 6.4 | | |

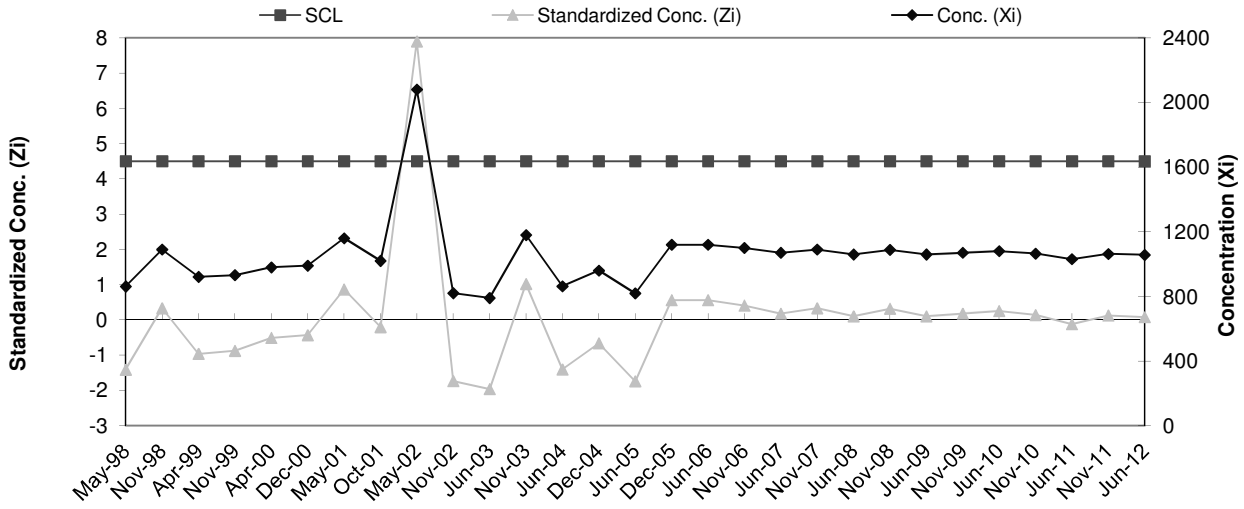
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | May-98 | 4.5 | 6.7 | -0.92 |
| 10 | Nov-98 | 4.5 | 6.0 | -2.27 |
| 11 | Apr-99 | 4.5 | 8.1 | 1.79 |
| 12 | Nov-99 | 4.5 | 7.1 | -0.14 |
| 13 | Apr-00 | 4.5 | 7.5 | 0.63 |
| 14 | Dec-00 | 4.5 | 7.0 | -0.34 |
| 15 | May-01 | 4.5 | 7.9 | 1.40 |
| 16 | Oct-01 | 4.5 | 7.1 | -0.14 |
| 17 | May-02 | 4.5 | 7.2 | 0.05 |
| 18 | Nov-02 | 4.5 | 7.2 | 0.05 |
| 19 | Jun-03 | 4.5 | 6.9 | -0.53 |
| 20 | Nov-03 | 4.5 | 7.7 | 1.01 |
| 21 | Jun-04 | 4.5 | 7.2 | 0.05 |
| 22 | Dec-04 | 4.5 | 6.2 | -1.88 |
| 23 | Jun-05 | 4.5 | 7.4 | 0.40 |
| 24 | Dec-05 | 4.5 | 9.7 | 4.88 |
| 25 | Jun-06 | 4.5 | 7.1 | -0.16 |
| 26 | Nov-06 | 4.5 | 7.2 | 0.01 |
| 27 | Jun-07 | 4.5 | 7.0 | -0.32 |
| 28 | Nov-07 | 4.5 | 6.9 | -0.53 |
| 29 | Jun-08 | 4.5 | 7.1 | -0.14 |
| 30 | Nov-08 | 4.5 | 6.6 | -1.15 |
| 31 | Jun-09 | 4.5 | 7.3 | 0.14 |
| 32 | Nov-09 | 4.5 | 6.9 | -0.55 |
| 33 | Jun-10 | 4.5 | 7.2 | 0.03 |
| 34 | Nov-10 | 4.5 | 6.9 | -0.51 |
| 35 | Jun-11 | 4.5 | 7.2 | -0.03 |
| 36 | Nov-11 | 4.5 | 7.0 | -0.32 |
| 37 | Jun-12 | 4.5 | 7.0 | -0.36 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-18a SpC**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-95 | 1048 | | |
| 2 | Aug-95 | 989 | | |
| 3 | Feb-96 | 1021 | | |
| 4 | Jun-96 | 944.0 | **1,046.75** | **130.80** |
| 5 | Aug-96 | 1041 | | |
| 6 | Nov-96 | 1331 | | |
| 7 | May-97 | 900 | | |
| 8 | Nov-97 | 1100 | | |

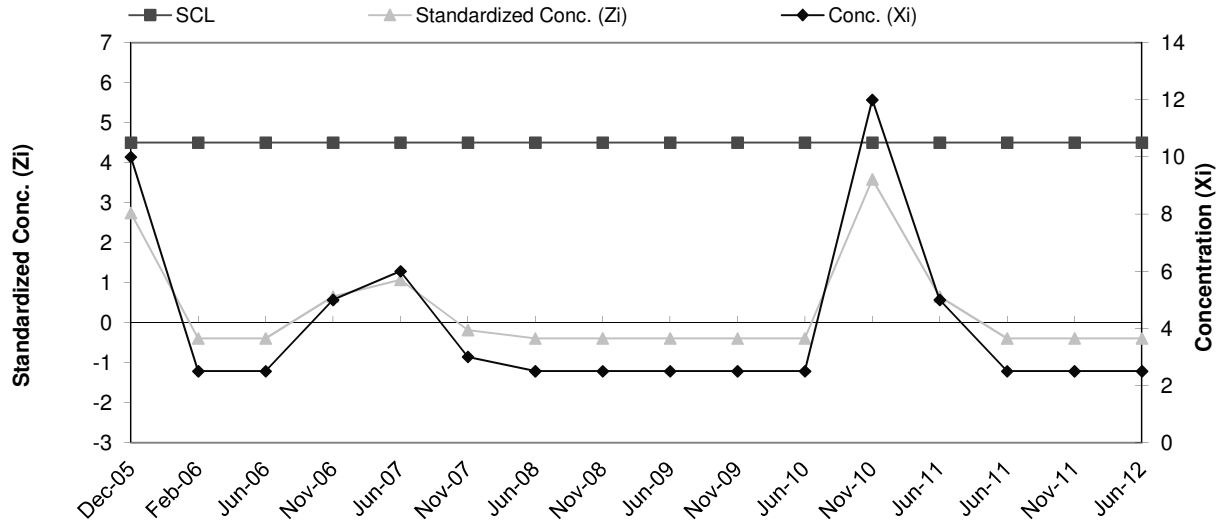
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | May-98 | 4.5 | 862 | -1.41 |
| 10 | Nov-98 | 4.5 | 1090.0 | 0.33 |
| 11 | Apr-99 | 4.5 | 921 | -0.96 |
| 12 | Nov-99 | 4.5 | 932 | -0.88 |
| 13 | Apr-00 | 4.5 | 980 | -0.51 |
| 14 | Dec-00 | 4.5 | 990.0 | -0.43 |
| 15 | May-01 | 4.5 | 1160 | 0.87 |
| 16 | Oct-01 | 4.5 | 1020 | -0.20 |
| 17 | May-02 | 4.5 | 2080 | 7.90 |
| 18 | Nov-02 | 4.5 | 820 | -1.73 |
| 19 | Jun-03 | 4.5 | 790 | -1.96 |
| 20 | Nov-03 | 4.5 | 1180 | 1.02 |
| 21 | Jun-04 | 4.5 | 863 | -1.40 |
| 22 | Dec-04 | 4.5 | 960 | -0.66 |
| 23 | Jun-05 | 4.5 | 819 | -1.74 |
| 24 | Dec-05 | 4.5 | 1120 | 0.56 |
| 25 | Jun-06 | 4.5 | 1120 | 0.56 |
| 26 | Nov-06 | 4.5 | 1100 | 0.41 |
| 27 | Jun-07 | 4.5 | 1070 | 0.18 |
| 28 | Nov-07 | 4.5 | 1090 | 0.33 |
| 29 | Jun-08 | 4.5 | 1060 | 0.10 |
| 30 | Nov-08 | 4.5 | 1088 | 0.32 |
| 31 | Jun-09 | 4.5 | 1060 | 0.10 |
| 32 | Nov-09 | 4.5 | 1070 | 0.18 |
| 33 | Jun-10 | 4.5 | 1080 | 0.25 |
| 34 | Nov-10 | 4.5 | 1065 | 0.14 |
| 35 | Jun-11 | 4.5 | 1031 | -0.12 |
| 36 | Nov-11 | 4.5 | 1063 | 0.12 |
| 37 | Jun-12 | 4.5 | 1057 | 0.08 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-19a Cr**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | May-98 | 5 | | |
| 2 | May-01 | 5 | | |
| 3 | May-02 | 5 | | |
| 4 | Jun-03 | 2.5 | **3.44** | **2.39** |
| 5 | Nov-03 | 2.5 | | |
| 6 | Jun-04 | 2.5 | | |
| 7 | Dec-04 | 2.5 | | |
| 8 | Jun-05 | 2.5 | | |

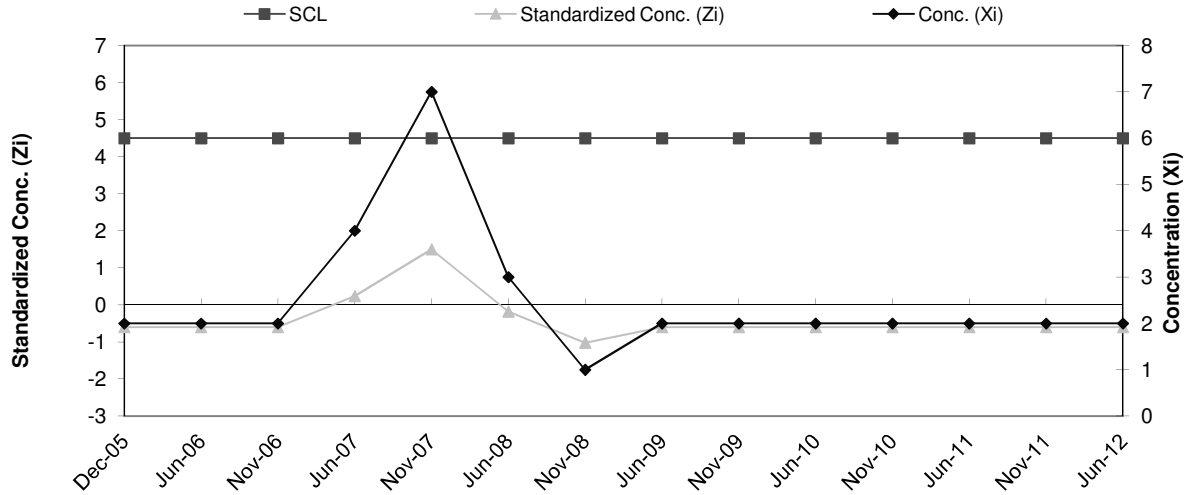
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | Dec-05 | 4.5 | 10 | 2.74 |
| 10 | Feb-06 | 4.5 | 2.5 | -0.39 |
| 11 | Jun-06 | 4.5 | 2.5 | -0.39 |
| 12 | Nov-06 | 4.5 | 5 | 0.65 |
| 13 | Jun-07 | 4.5 | 6 | 1.07 |
| 14 | Nov-07 | 4.5 | 3 | -0.18 |
| 15 | Jun-08 | 4.5 | 2.5 | -0.39 |
| 16 | Nov-08 | 4.5 | 2.5 | -0.39 |
| 17 | Jun-09 | 4.5 | 2.5 | -0.39 |
| 18 | Nov-09 | 4.5 | 2.5 | -0.39 |
| 19 | Jun-10 | 4.5 | 2.5 | -0.39 |
| 20 | Nov-10 | 4.5 | 12 | 3.58 |
| 21 | Jun-11 | 4.5 | 5 | 0.65 |
| 22 | Jun-11 | 4.5 | 2.5 | -0.39 |
| 23 | Nov-11 | 4.5 | 2.5 | -0.39 |
| 24 | Jun-12 | 4.5 | 2.5 | -0.39 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-19a Cu**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | May-98 | 5 | | |
| 2 | May-01 | 5 | | |
| 3 | May-02 | 5 | | |
| 4 | Jun-03 | 2.5 | **3.43** | **2.38** |
| 5 | Nov-03 | 2.5 | | |
| 6 | Jun-04 | 2.5 | | |
| 7 | Dec-04 | 2.5 | | |
| 8 | Jun-05 | 2.5 | | |

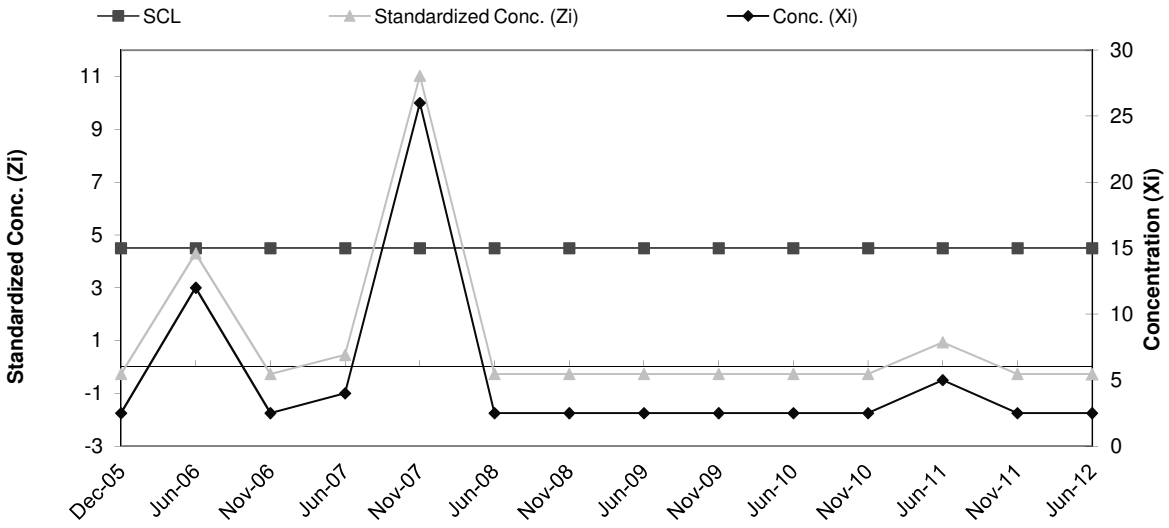
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | Dec-05 | 4.5 | 2 | -0.60 |
| 10 | Jun-06 | 4.5 | 2 | -0.60 |
| 11 | Nov-06 | 4.5 | 2 | -0.60 |
| 12 | Jun-07 | 4.5 | 4 | 0.24 |
| 13 | Nov-07 | 4.5 | 7 | 1.50 |
| 14 | Jun-08 | 4.5 | 3 | -0.18 |
| 15 | Nov-08 | 4.5 | 1 | -1.02 |
| 16 | Jun-09 | 4.5 | 2 | -0.60 |
| 17 | Nov-09 | 4.5 | 2 | -0.60 |
| 18 | Jun-10 | 4.5 | 2 | -0.60 |
| 19 | Nov-10 | 4.5 | 2 | -0.60 |
| 20 | Jun-11 | 4.5 | 2 | -0.60 |
| 21 | Nov-11 | 4.5 | 2 | -0.60 |
| 22 | Jun-12 | 4.5 | 2 | -0.60 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-19a Ni**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | May-98 | 2.5 | **3.06** | **2.08** |
| 2 | May-01 | 2.5 | | |
| 3 | May-02 | 2.5 | | |
| 4 | Jun-03 | 2.5 | | |
| 5 | Nov-03 | 2.5 | | |
| 6 | Jun-04 | 2.5 | | |
| 7 | Dec-04 | 2.5 | | |
| 8 | Jun-05 | 7 | | |

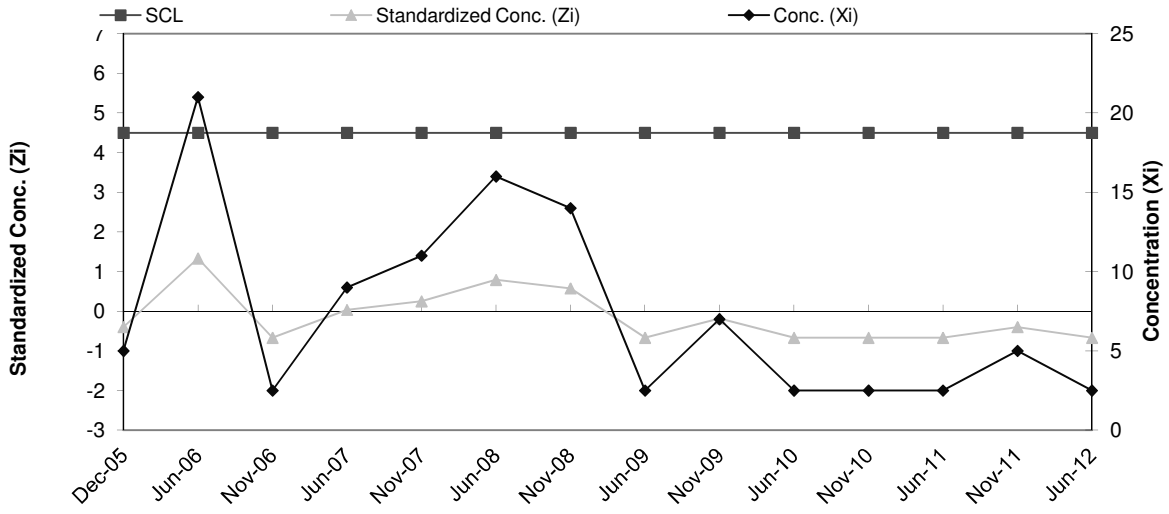
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | Dec-05 | 4.5 | 2.5 | -0.27 |
| 10 | Jun-06 | 4.5 | 12 | 4.30 |
| 11 | Nov-06 | 4.5 | 2.5 | -0.27 |
| 12 | Jun-07 | 4.5 | 4 | 0.45 |
| 13 | Nov-07 | 4.5 | 26 | 11.03 |
| 14 | Jun-08 | 4.5 | 2.5 | -0.27 |
| 15 | Nov-08 | 4.5 | 2.5 | -0.27 |
| 16 | Jun-09 | 4.5 | 2.5 | -0.27 |
| 17 | Nov-09 | 4.5 | 2.5 | -0.27 |
| 19 | Jun-10 | 4.5 | 2.5 | -0.27 |
| 20 | Nov-10 | 4.5 | 2.5 | -0.27 |
| 21 | Jun-11 | 4.5 | 5 | 0.93 |
| 22 | Nov-11 | 4.5 | 2.5 | -0.27 |
| 23 | Jun-12 | 4.5 | 2.5 | -0.27 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-19a Zn**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | May-98 | 30 | **8.69** | **9.24** |
| 2 | May-01 | 5 | | |
| 3 | May-02 | 10 | | |
| 4 | Jun-03 | 2.5 | | |
| 5 | Nov-03 | 2.5 | | |
| 6 | Jun-04 | 8 | | |
| 7 | Dec-04 | 9 | | |
| 8 | Jun-05 | 2.5 | | |

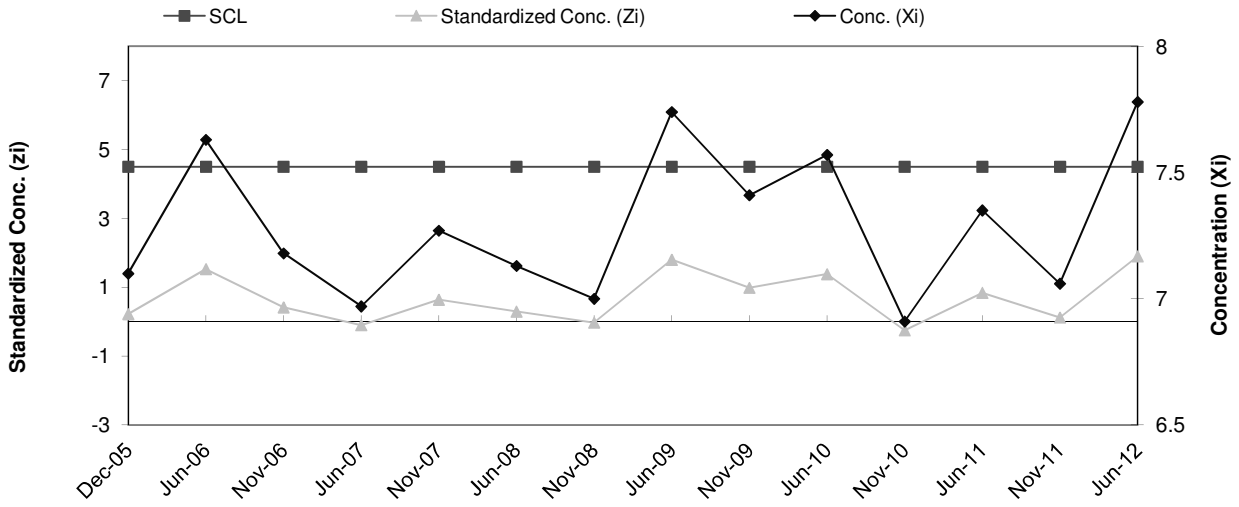
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | Dec-05 | 4.5 | 5 | -0.40 |
| 10 | Jun-06 | 4.5 | 21 | 1.33 |
| 11 | Nov-06 | 4.5 | 2.5 | -0.67 |
| 12 | Jun-07 | 4.5 | 9 | 0.03 |
| 13 | Nov-07 | 4.5 | 11 | 0.25 |
| 14 | Jun-08 | 4.5 | 16 | 0.79 |
| 15 | Nov-08 | 4.5 | 14 | 0.57 |
| 16 | Jun-09 | 4.5 | 2.5 | -0.67 |
| 17 | Nov-09 | 4.5 | 7 | -0.18 |
| 18 | Jun-10 | 4.5 | 2.5 | -0.67 |
| 19 | Nov-10 | 4.5 | 2.5 | -0.67 |
| 20 | Jun-11 | 4.5 | 2.5 | -0.67 |
| 21 | Nov-11 | 4.5 | 5 | -0.40 |
| 22 | Jun-12 | 4.5 | 2.5 | -0.67 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-19a pH**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | May-98 | 6.8 | | |
| 2 | May-01 | 7.1 | | |
| 3 | May-02 | 7.2 | | |
| 4 | Jun-03 | 6.9 | **7.01** | **0.40** |
| 5 | Nov-03 | 7.6 | | |
| 6 | Jun-04 | 7.2 | | |
| 7 | Dec-04 | 6.2 | | |
| 8 | Jun-05 | 7.1 | | |

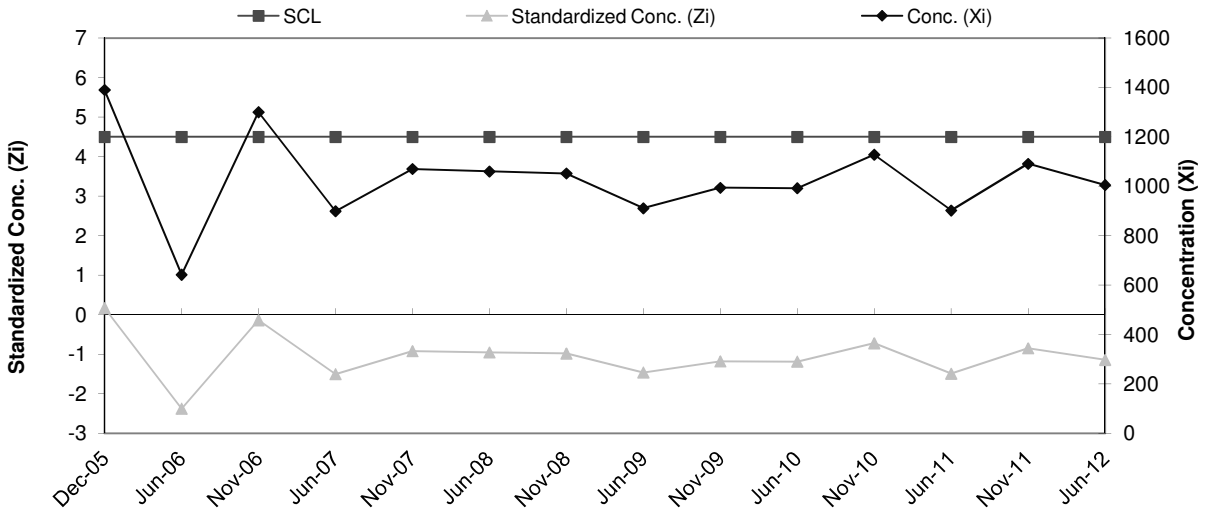
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | Dec-05 | 4.5 | 7.1 | 0.22 |
| 10 | Jun-06 | 4.5 | 7.6 | 1.53 |
| 11 | Nov-06 | 4.5 | 7.2 | 0.42 |
| 12 | Jun-07 | 4.5 | 7.0 | -0.10 |
| 13 | Nov-07 | 4.5 | 7.3 | 0.64 |
| 14 | Jun-08 | 4.5 | 7.1 | 0.29 |
| 15 | Nov-08 | 4.5 | 7.0 | -0.03 |
| 16 | Jun-09 | 4.5 | 7.7 | 1.80 |
| 17 | Nov-09 | 4.5 | 7.4 | 0.99 |
| 18 | Jun-10 | 4.5 | 7.6 | 1.38 |
| 19 | Nov-10 | 4.5 | 6.9 | -0.25 |
| 20 | Jun-11 | 4.5 | 7.4 | 0.84 |
| 21 | Nov-11 | 4.5 | 7.1 | 0.12 |
| 22 | Jun-12 | 4.5 | 7.8 | 1.90 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-19a SpC**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | May-98 | 1480 | | |
| 2 | May-01 | 1050 | | |
| 3 | May-02 | 1740 | | |
| 4 | Jun-03 | 1350 | **1,340.63** | **293.72** |
| 5 | Nov-03 | 1620 | | |
| 6 | Jun-04 | 1316 | | |
| 7 | Dec-04 | 1340 | | |
| 8 | Jun-05 | 829 | | |

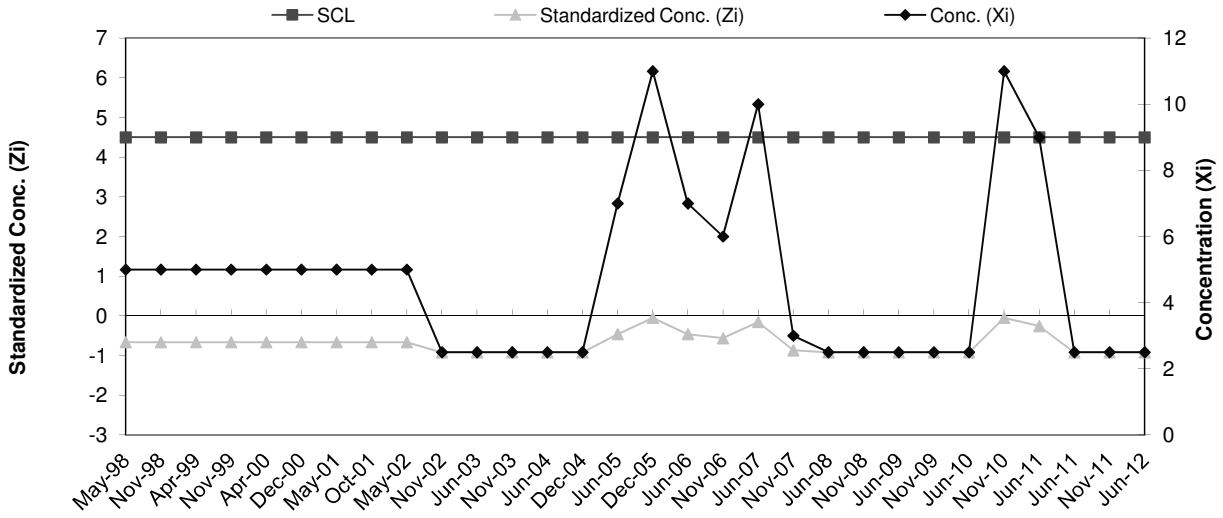
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | Dec-05 | 4.5 | 1390 | 0.17 |
| 10 | Jun-06 | 4.5 | 642 | -2.38 |
| 11 | Nov-06 | 4.5 | 1300 | -0.14 |
| 12 | Jun-07 | 4.5 | 899 | -1.50 |
| 13 | Nov-07 | 4.5 | 1070 | -0.92 |
| 14 | Jun-08 | 4.5 | 1060 | -0.96 |
| 15 | Nov-08 | 4.5 | 1052 | -0.98 |
| 16 | Jun-09 | 4.5 | 911 | -1.46 |
| 17 | Nov-09 | 4.5 | 994 | -1.18 |
| 18 | Jun-10 | 4.5 | 992 | -1.19 |
| 19 | Nov-10 | 4.5 | 1128 | -0.72 |
| 20 | Jun-11 | 4.5 | 902 | -1.49 |
| 21 | Nov-11 | 4.5 | 1091 | -0.85 |
| 22 | Jun-12 | 4.5 | 1005 | -1.14 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-20d Cr**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-95 | 10 | | |
| 2 | Aug-95 | 10 | | |
| 3 | Feb-96 | 32 | | |
| 4 | Jun-96 | 10 | **11.51** | **9.80** |
| 5 | Aug-96 | 10 | | |
| 6 | Nov-96 | 10 | | |
| 7 | May-97 | 5 | | |
| 8 | Nov-97 | 5 | | |

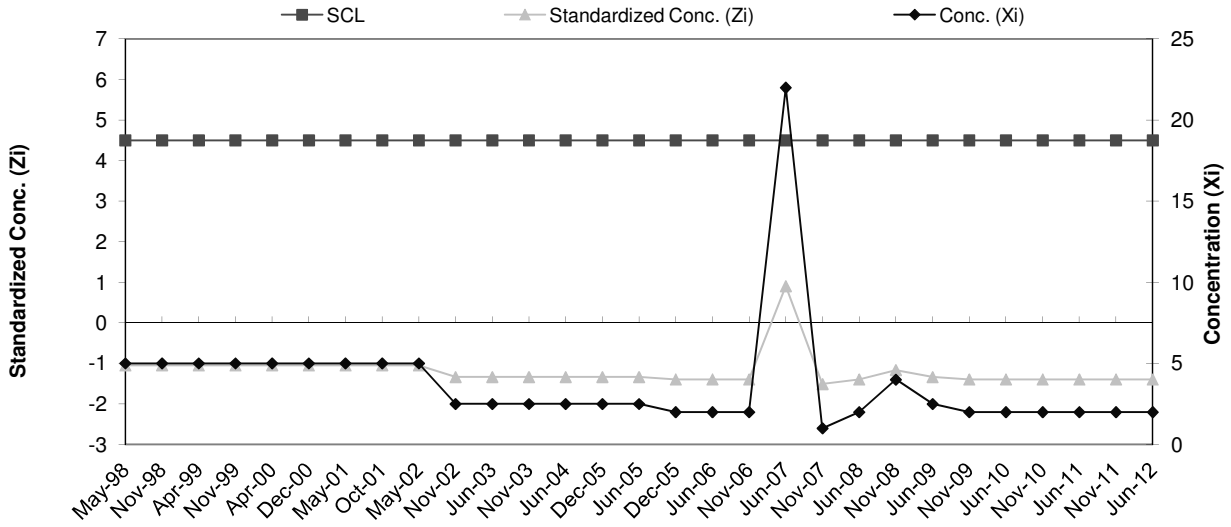
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | May-98 | 4.5 | 5 | -0.66 |
| 10 | Nov-98 | 4.5 | 5 | -0.66 |
| 11 | Apr-99 | 4.5 | 5 | -0.66 |
| 12 | Nov-99 | 4.5 | 5 | -0.66 |
| 13 | Apr-00 | 4.5 | 5 | -0.66 |
| 14 | Dec-00 | 4.5 | 5 | -0.66 |
| 15 | May-01 | 4.5 | 5 | -0.66 |
| 16 | Oct-01 | 4.5 | 5 | -0.66 |
| 17 | May-02 | 4.5 | 5 | -0.66 |
| 18 | Nov-02 | 4.5 | 2.5 | -0.92 |
| 19 | Jun-03 | 4.5 | 2.5 | -0.92 |
| 20 | Nov-03 | 4.5 | 2.5 | -0.92 |
| 21 | Jun-04 | 4.5 | 2.5 | -0.92 |
| 22 | Dec-04 | 4.5 | 2.5 | -0.92 |
| 23 | Jun-05 | 4.5 | 7 | -0.46 |
| 24 | Dec-05 | 4.5 | 11 | -0.05 |
| 25 | Jun-06 | 4.5 | 7 | -0.46 |
| 26 | Nov-06 | 4.5 | 6 | -0.56 |
| 27 | Jun-07 | 4.5 | 10 | -0.15 |
| 28 | Nov-07 | 4.5 | 3 | -0.87 |
| 29 | Jun-08 | 4.5 | 2.5 | -0.92 |
| 30 | Nov-08 | 4.5 | 2.5 | -0.92 |
| 31 | Jun-09 | 4.5 | 2.5 | -0.92 |
| 32 | Nov-09 | 4.5 | 2.5 | -0.92 |
| 33 | Jun-10 | 4.5 | 2.5 | -0.92 |
| 34 | Nov-10 | 4.5 | 11 | -0.05 |
| 35 | Jun-11 | 4.5 | 9 | -0.26 |
| 36 | Jun-11 | 4.5 | 2.5 | -0.92 |
| 37 | Nov-11 | 4.5 | 2.5 | -0.92 |
| 38 | Jun-12 | 4.5 | 2.5 | -0.92 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-20d Cu**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-95 | 10 | | |
| 2 | Aug-95 | 20 | | |
| 3 | Feb-96 | 28 | | |
| 4 | Jun-96 | 10 | **14.13** | **8.70** |
| 5 | Aug-96 | 10 | | |
| 6 | Nov-96 | 10 | | |
| 7 | May-97 | 5 | | |
| 8 | Nov-97 | 20 | | |

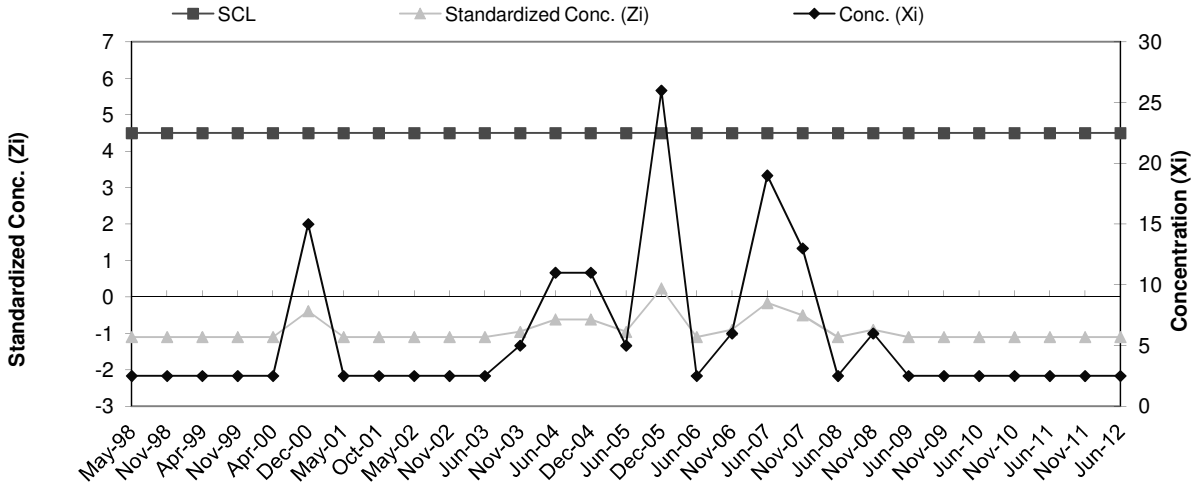
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | May-98 | 4.5 | 5 | -1.05 |
| 10 | Nov-98 | 4.5 | 5 | -1.05 |
| 11 | Apr-99 | 4.5 | 5 | -1.05 |
| 12 | Nov-99 | 4.5 | 5 | -1.05 |
| 13 | Apr-00 | 4.5 | 5 | -1.05 |
| 14 | Dec-00 | 4.5 | 5 | -1.05 |
| 15 | May-01 | 4.5 | 5 | -1.05 |
| 16 | Oct-01 | 4.5 | 5 | -1.05 |
| 17 | May-02 | 4.5 | 5 | -1.05 |
| 18 | Nov-02 | 4.5 | 2.5 | -1.34 |
| 19 | Jun-03 | 4.5 | 2.5 | -1.34 |
| 20 | Nov-03 | 4.5 | 2.5 | -1.34 |
| 21 | Jun-04 | 4.5 | 2.5 | -1.34 |
| 22 | Dec-05 | 4.5 | 2.5 | -1.34 |
| 23 | Jun-05 | 4.5 | 2.5 | -1.34 |
| 24 | Dec-05 | 4.5 | 2 | -1.39 |
| 25 | Jun-06 | 4.5 | 2 | -1.39 |
| 26 | Nov-06 | 4.5 | 2 | -1.39 |
| 27 | Jun-07 | 4.5 | 22 | 0.90 |
| 28 | Nov-07 | 4.5 | 1 | -1.51 |
| 29 | Jun-08 | 4.5 | 2 | -1.39 |
| 30 | Nov-08 | 4.5 | 4 | -1.16 |
| 31 | Jun-09 | 4.5 | 2.5 | -1.34 |
| 32 | Nov-09 | 4.5 | 2 | -1.39 |
| 33 | Jun-10 | 4.5 | 2 | -1.39 |
| 34 | Nov-10 | 4.5 | 2 | -1.39 |
| 35 | Jun-11 | 4.5 | 2 | -1.39 |
| 36 | Nov-11 | 4.5 | 2 | -1.39 |
| 37 | Jun-12 | 4.5 | 2 | -1.39 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-20d Ni**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-95 | 15 | | |
| 2 | Aug-95 | 20 | | |
| 3 | Feb-96 | 54 | | |
| 4 | Jun-96 | 10 | **21.88** | **17.64** |
| 5 | Aug-96 | 10 | | |
| 6 | Nov-96 | 10 | | |
| 7 | May-97 | 15 | | |
| 8 | Nov-97 | 41 | | |

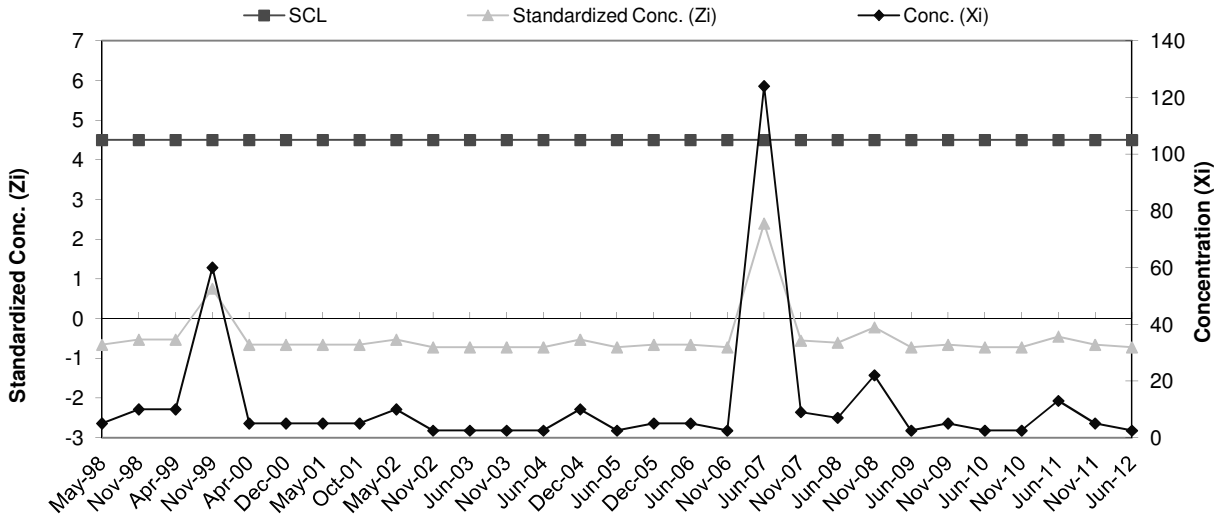
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | May-98 | 4.5 | 2.5 | -1.10 |
| 10 | Nov-98 | 4.5 | 2.5 | -1.10 |
| 11 | Apr-99 | 4.5 | 2.5 | -1.10 |
| 12 | Nov-99 | 4.5 | 2.5 | -1.10 |
| 13 | Apr-00 | 4.5 | 2.5 | -1.10 |
| 14 | Dec-00 | 4.5 | 15 | -0.39 |
| 15 | May-01 | 4.5 | 2.5 | -1.10 |
| 16 | Oct-01 | 4.5 | 2.5 | -1.10 |
| 17 | May-02 | 4.5 | 2.5 | -1.10 |
| 18 | Nov-02 | 4.5 | 2.5 | -1.10 |
| 19 | Jun-03 | 4.5 | 2.5 | -1.10 |
| 20 | Nov-03 | 4.5 | 5 | -0.96 |
| 21 | Jun-04 | 4.5 | 11 | -0.62 |
| 22 | Dec-04 | 4.5 | 11 | -0.62 |
| 23 | Jun-05 | 4.5 | 5 | -0.96 |
| 24 | Dec-05 | 4.5 | 26 | 0.23 |
| 25 | Jun-06 | 4.5 | 2.5 | -1.10 |
| 26 | Nov-06 | 4.5 | 6 | -0.90 |
| 27 | Jun-07 | 4.5 | 19 | -0.16 |
| 28 | Nov-07 | 4.5 | 13 | -0.50 |
| 29 | Jun-08 | 4.5 | 2.5 | -1.10 |
| 30 | Nov-08 | 4.5 | 6 | -0.90 |
| 31 | Jun-09 | 4.5 | 2.5 | -1.10 |
| 32 | Nov-09 | 4.5 | 2.5 | -1.10 |
| 33 | Jun-10 | 4.5 | 2.5 | -1.10 |
| 34 | Nov-10 | 4.5 | 2.5 | -1.10 |
| 35 | Jun-11 | 4.5 | 2.5 | -1.10 |
| 36 | Nov-11 | 4.5 | 2.5 | -1.10 |
| 37 | Jun-12 | 4.5 | 2.5 | -1.10 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-20d Zn**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-95 | 10 | | |
| 2 | Aug-95 | 10 | | |
| 3 | Feb-96 | 120 | | |
| 4 | Jun-96 | 10 | **30.66** | **38.93** |
| 5 | Aug-96 | 40 | | |
| 6 | Nov-96 | 40 | | |
| 7 | May-97 | 10 | | |
| 8 | Nov-97 | 5 | | |

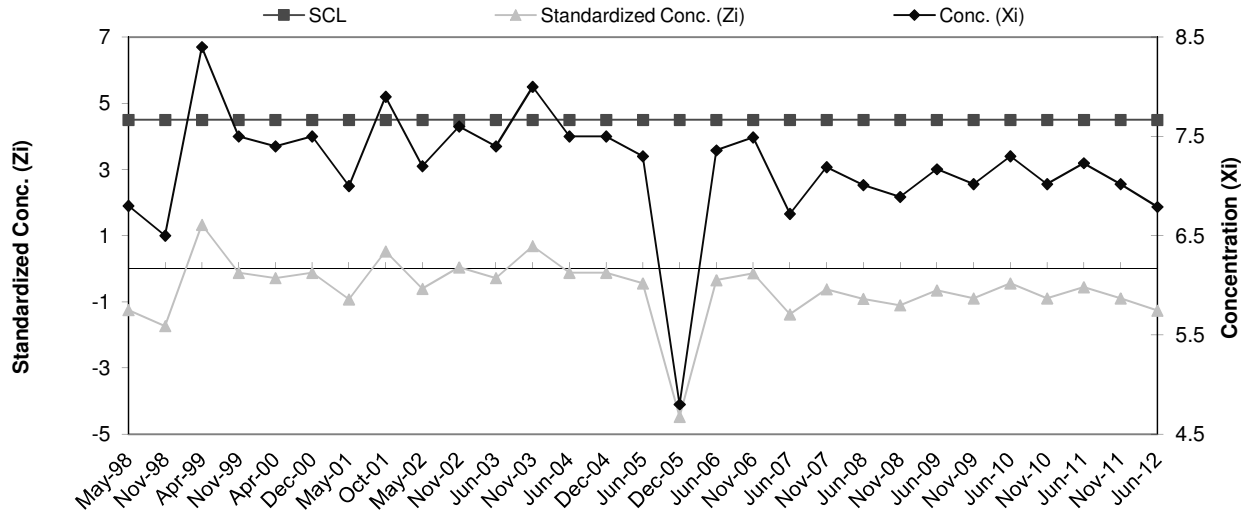
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | May-98 | 4.5 | 5 | -0.66 |
| 10 | Nov-98 | 4.5 | 10 | -0.53 |
| 11 | Apr-99 | 4.5 | 10 | -0.53 |
| 12 | Nov-99 | 4.5 | 60 | 0.75 |
| 13 | Apr-00 | 4.5 | 5 | -0.66 |
| 14 | Dec-00 | 4.5 | 5 | -0.66 |
| 15 | May-01 | 4.5 | 5 | -0.66 |
| 16 | Oct-01 | 4.5 | 5 | -0.66 |
| 17 | May-02 | 4.5 | 10 | -0.53 |
| 18 | Nov-02 | 4.5 | 2.5 | -0.72 |
| 19 | Jun-03 | 4.5 | 2.5 | -0.72 |
| 20 | Nov-03 | 4.5 | 2.5 | -0.72 |
| 21 | Jun-04 | 4.5 | 2.5 | -0.72 |
| 22 | Dec-04 | 4.5 | 10 | -0.53 |
| 23 | Jun-05 | 4.5 | 2.5 | -0.72 |
| 24 | Dec-05 | 4.5 | 5 | -0.66 |
| 25 | Jun-06 | 4.5 | 5 | -0.66 |
| 26 | Nov-06 | 4.5 | 2.5 | -0.72 |
| 27 | Jun-07 | 4.5 | 124 | 2.40 |
| 28 | Nov-07 | 4.5 | 9 | -0.56 |
| 29 | Jun-08 | 4.5 | 7 | -0.61 |
| 30 | Nov-08 | 4.5 | 22 | -0.22 |
| 31 | Jun-09 | 4.5 | 2.5 | -0.72 |
| 32 | Nov-09 | 4.5 | 5 | -0.66 |
| 33 | Jun-10 | 4.5 | 2.5 | -0.72 |
| 34 | Nov-10 | 4.5 | 2.5 | -0.72 |
| 35 | Jun-11 | 4.5 | 13 | -0.45 |
| 36 | Nov-11 | 4.5 | 5 | -0.66 |
| 37 | Jun-12 | 4.5 | 2.5 | -0.72 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-20d pH**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-95 | 8.3 | | |
| 2 | Aug-95 | 8.1 | | |
| 3 | Feb-96 | 7.1 | | |
| 4 | Jun-96 | 7.9 | **7.58** | **0.62** |
| 5 | Aug-96 | 8.0 | | |
| 6 | Nov-96 | 7.7 | | |
| 7 | May-97 | 6.8 | | |
| 8 | Nov-97 | 6.7 | | |

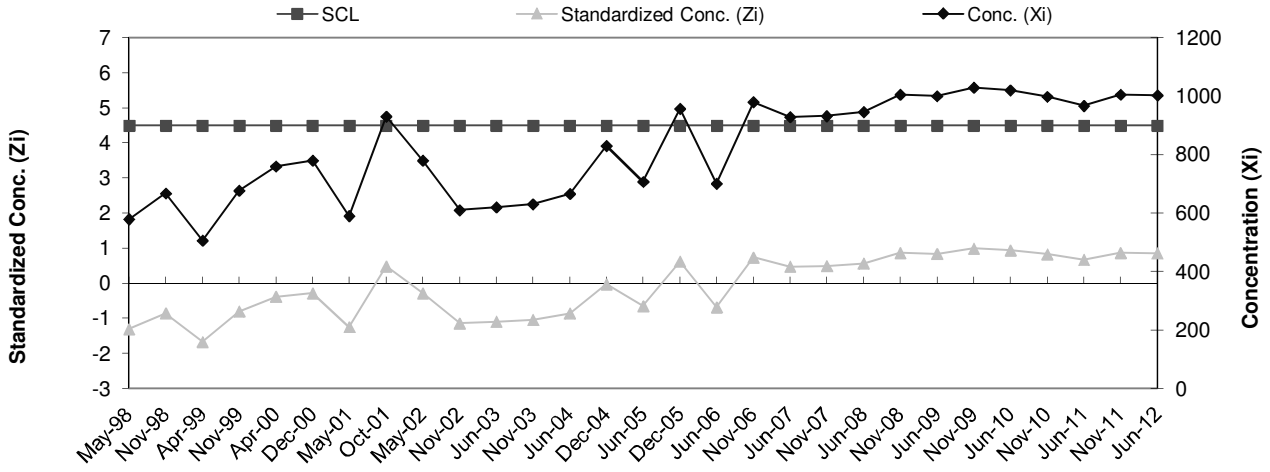
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | May-98 | 4.5 | 6.8 | -1.25 |
| 10 | Nov-98 | 4.5 | 6.5 | -1.73 |
| 11 | Apr-99 | 4.5 | 8.4 | 1.33 |
| 12 | Nov-99 | 4.5 | 7.5 | -0.12 |
| 13 | Apr-00 | 4.5 | 7.4 | -0.28 |
| 14 | Dec-00 | 4.5 | 7.5 | -0.12 |
| 15 | May-01 | 4.5 | 7.0 | -0.93 |
| 16 | Oct-01 | 4.5 | 7.9 | 0.52 |
| 17 | May-02 | 4.5 | 7.2 | -0.60 |
| 18 | Nov-02 | 4.5 | 7.6 | 0.04 |
| 19 | Jun-03 | 4.5 | 7.4 | -0.28 |
| 20 | Nov-03 | 4.5 | 8.0 | 0.68 |
| 21 | Jun-04 | 4.5 | 7.5 | -0.12 |
| 22 | Dec-04 | 4.5 | 7.5 | -0.12 |
| 23 | Jun-05 | 4.5 | 7.3 | -0.44 |
| 24 | Dec-05 | 4.5 | 4.8 | -4.47 |
| 25 | Jun-06 | 4.5 | 7.4 | -0.35 |
| 26 | Nov-06 | 4.5 | 7.5 | -0.14 |
| 27 | Jun-07 | 4.5 | 6.7 | -1.38 |
| 28 | Nov-07 | 4.5 | 7.2 | -0.62 |
| 29 | Jun-08 | 4.5 | 7.0 | -0.91 |
| 30 | Nov-08 | 4.5 | 6.9 | -1.10 |
| 31 | Jun-09 | 4.5 | 7.2 | -0.65 |
| 32 | Nov-09 | 4.5 | 7.0 | -0.89 |
| 33 | Jun-10 | 4.5 | 7.3 | -0.44 |
| 34 | Nov-10 | 4.5 | 7.0 | -0.89 |
| 35 | Jun-11 | 4.5 | 7.2 | -0.56 |
| 36 | Nov-11 | 4.5 | 7.0 | -0.89 |
| 37 | Jun-12 | 4.5 | 6.8 | -1.27 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-20d SpC**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-95 | 771 | | |
| 2 | Aug-95 | 1204 | | |
| 3 | Feb-96 | 801 | | |
| 4 | Jun-96 | 745 | **835.75** | **196.61** |
| 5 | Aug-96 | 750 | | |
| 6 | Nov-96 | 1075 | | |
| 7 | May-97 | 640 | | |
| 8 | Nov-97 | 700 | | |

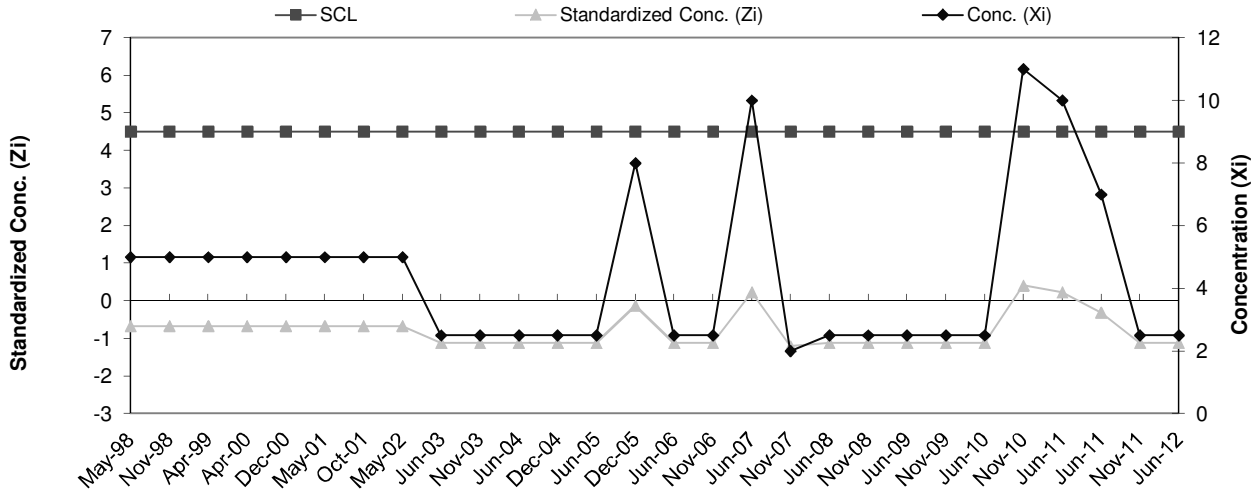
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | May-98 | 4.5 | 579 | -1.31 |
| 10 | Nov-98 | 4.5 | 667 | -0.86 |
| 11 | Apr-99 | 4.5 | 506 | -1.68 |
| 12 | Nov-99 | 4.5 | 677 | -0.81 |
| 13 | Apr-00 | 4.5 | 760 | -0.39 |
| 14 | Dec-00 | 4.5 | 780 | -0.28 |
| 15 | May-01 | 4.5 | 590 | -1.25 |
| 16 | Oct-01 | 4.5 | 930 | 0.48 |
| 17 | May-02 | 4.5 | 780 | -0.28 |
| 18 | Nov-02 | 4.5 | 610 | -1.15 |
| 19 | Jun-03 | 4.5 | 620 | -1.10 |
| 20 | Nov-03 | 4.5 | 630 | -1.05 |
| 21 | Jun-04 | 4.5 | 666 | -0.86 |
| 22 | Dec-04 | 4.5 | 830 | -0.03 |
| 23 | Jun-05 | 4.5 | 707 | -0.65 |
| 24 | Dec-05 | 4.5 | 957 | 0.62 |
| 25 | Jun-06 | 4.5 | 701 | -0.69 |
| 26 | Nov-06 | 4.5 | 980 | 0.73 |
| 27 | Jun-07 | 4.5 | 929 | 0.47 |
| 28 | Nov-07 | 4.5 | 932 | 0.49 |
| 29 | Jun-08 | 4.5 | 946 | 0.56 |
| 30 | Nov-08 | 4.5 | 1006 | 0.87 |
| 31 | Jun-09 | 4.5 | 1000 | 0.84 |
| 32 | Nov-09 | 4.5 | 1030 | 0.99 |
| 33 | Jun-10 | 4.5 | 1020 | 0.94 |
| 34 | Nov-10 | 4.5 | 998 | 0.83 |
| 35 | Jun-11 | 4.5 | 967 | 0.67 |
| 36 | Nov-11 | 4.5 | 1006 | 0.87 |
| 37 | Jun-12 | 4.5 | 1003 | 0.85 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-21d Cr**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-95 | 10 | | |
| 2 | Aug-95 | 10 | | |
| 3 | Feb-96 | 10 | | |
| 4 | Jun-96 | 10 | **8.74** | **5.57** |
| 5 | Aug-96 | 10 | | |
| 6 | Nov-96 | 10 | | |
| 7 | May-97 | 5 | | |
| 8 | Nov-97 | 5 | | |

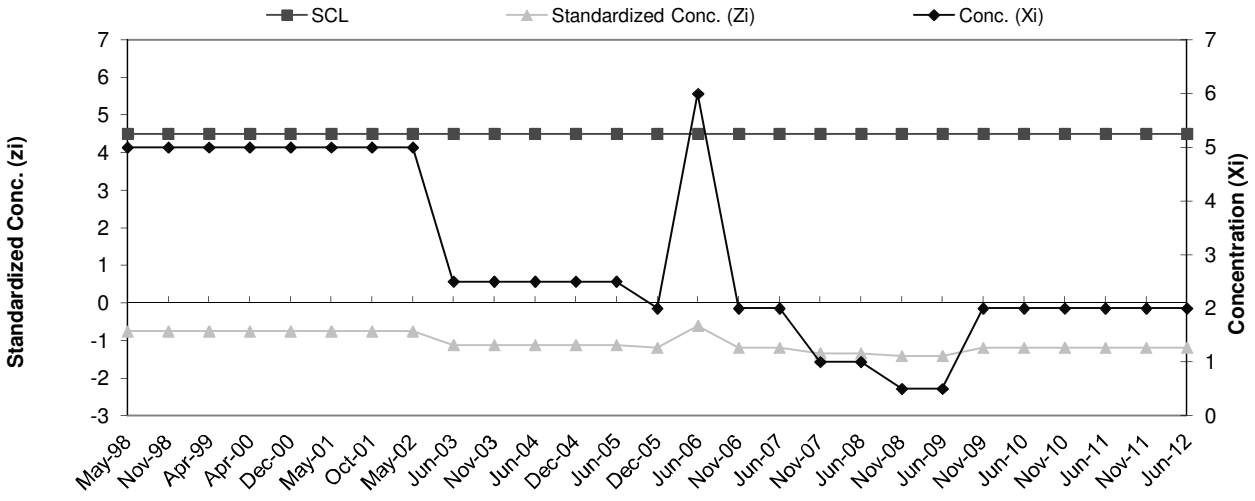
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | May-98 | 4.5 | 5 | -0.67 |
| 10 | Nov-98 | 4.5 | 5 | -0.67 |
| 11 | Apr-99 | 4.5 | 5 | -0.67 |
| 12 | Apr-00 | 4.5 | 5 | -0.67 |
| 13 | Dec-00 | 4.5 | 5 | -0.67 |
| 14 | May-01 | 4.5 | 5 | -0.67 |
| 15 | Oct-01 | 4.5 | 5 | -0.67 |
| 16 | May-02 | 4.5 | 5 | -0.67 |
| 18 | Jun-03 | 4.5 | 2.5 | -1.12 |
| 19 | Nov-03 | 4.5 | 2.5 | -1.12 |
| 20 | Jun-04 | 4.5 | 2.5 | -1.12 |
| 21 | Dec-04 | 4.5 | 2.5 | -1.12 |
| 22 | Jun-05 | 4.5 | 2.5 | -1.12 |
| 23 | Dec-05 | 4.5 | 8 | -0.13 |
| 24 | Jun-06 | 4.5 | 2.5 | -1.12 |
| 25 | Nov-06 | 4.5 | 2.5 | -1.12 |
| 26 | Jun-07 | 4.5 | 10 | 0.23 |
| 27 | Nov-07 | 4.5 | 2 | -1.21 |
| 28 | Jun-08 | 4.5 | 2.5 | -1.12 |
| 29 | Nov-08 | 4.5 | 2.5 | -1.12 |
| 30 | Jun-09 | 4.5 | 2.5 | -1.12 |
| 31 | Nov-09 | 4.5 | 2.5 | -1.12 |
| 32 | Jun-10 | 4.5 | 2.5 | -1.12 |
| 33 | Nov-10 | 4.5 | 11 | 0.41 |
| 34 | Jun-11 | 4.5 | 10 | 0.23 |
| 35 | Jun-11 | 4.5 | 7 | -0.31 |
| 36 | Nov-11 | 4.5 | 2.5 | -1.12 |
| 37 | Jun-12 | 4.5 | 2.5 | -1.12 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-21d Cu**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-95 | 10 | | |
| 2 | Aug-95 | 21 | | |
| 3 | Feb-96 | 10 | | |
| 4 | Jun-96 | 10 | **10.13** | **6.83** |
| 5 | Aug-96 | 10 | | |
| 6 | Nov-96 | 10 | | |
| 7 | May-97 | 5 | | |
| 8 | Nov-97 | 5 | | |

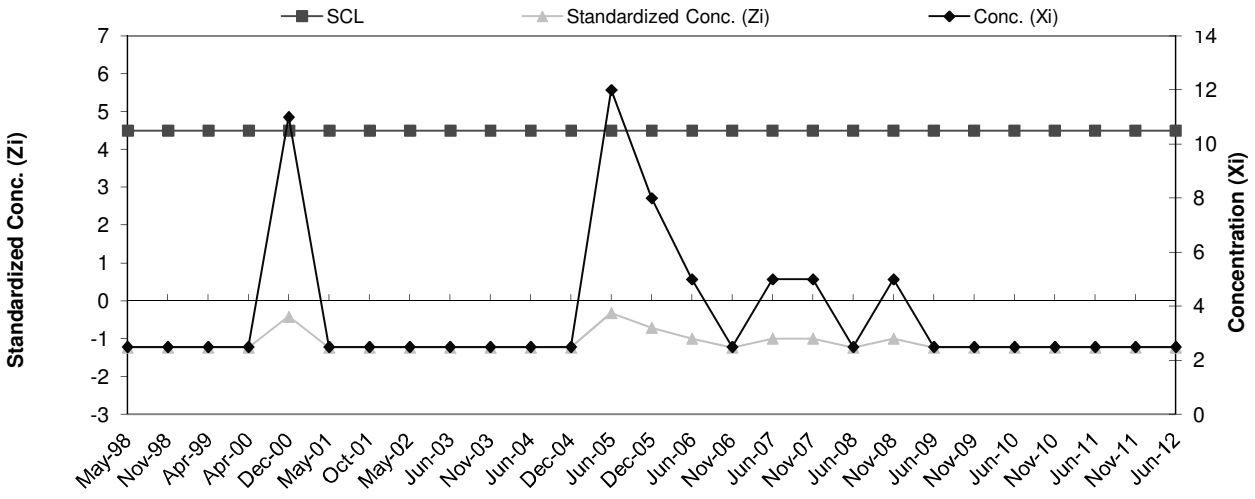
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | May-98 | 4.5 | 5 | -0.75 |
| 10 | Nov-98 | 4.5 | 5 | -0.75 |
| 11 | Apr-99 | 4.5 | 5 | -0.75 |
| 12 | Apr-00 | 4.5 | 5 | -0.75 |
| 13 | Dec-00 | 4.5 | 5 | -0.75 |
| 14 | May-01 | 4.5 | 5 | -0.75 |
| 15 | Oct-01 | 4.5 | 5 | -0.75 |
| 16 | May-02 | 4.5 | 5 | -0.75 |
| 18 | Jun-03 | 4.5 | 2.5 | -1.12 |
| 19 | Nov-03 | 4.5 | 2.5 | -1.12 |
| 20 | Jun-04 | 4.5 | 2.5 | -1.12 |
| 21 | Dec-04 | 4.5 | 2.5 | -1.12 |
| 22 | Jun-05 | 4.5 | 2.5 | -1.12 |
| 23 | Dec-05 | 4.5 | 2 | -1.19 |
| 24 | Jun-06 | 4.5 | 6 | -0.60 |
| 25 | Nov-06 | 4.5 | 2 | -1.19 |
| 26 | Jun-07 | 4.5 | 2 | -1.19 |
| 27 | Nov-07 | 4.5 | 1 | -1.34 |
| 28 | Jun-08 | 4.5 | 1 | -1.34 |
| 29 | Nov-08 | 4.5 | 0.5 | -1.41 |
| 30 | Jun-09 | 4.5 | 0.5 | -1.41 |
| 31 | Nov-09 | 4.5 | 2 | -1.19 |
| 32 | Jun-10 | 4.5 | 2 | -1.19 |
| 33 | Nov-10 | 4.5 | 2 | -1.19 |
| 34 | Jun-11 | 4.5 | 2 | -1.19 |
| 35 | Nov-11 | 4.5 | 2 | -1.19 |
| 36 | Jun-12 | 4.5 | 2 | -1.19 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-21d Ni**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-95 | 15 | 15.37 | 10.43 |
| 2 | Aug-95 | 20 | | |
| 3 | Feb-96 | 20 | | |
| 4 | Jun-96 | 10 | | |
| 5 | Aug-96 | 10 | | |
| 6 | Nov-96 | 10 | | |
| 7 | May-97 | 8 | | |
| 8 | Nov-97 | 30 | | |

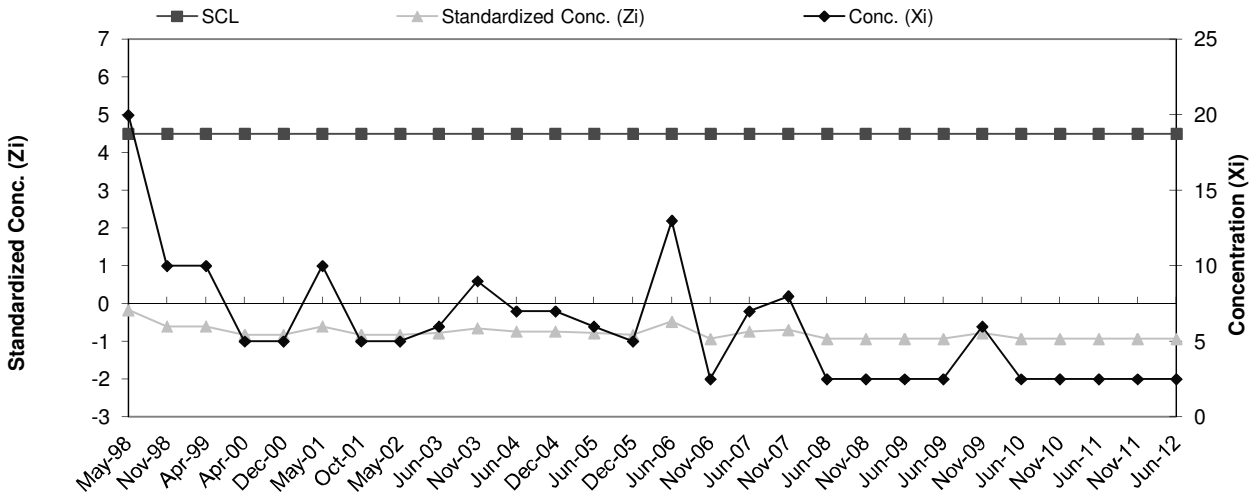
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | May-98 | 4.5 | 2.5 | -1.23 |
| 10 | Nov-98 | 4.5 | 2.5 | -1.23 |
| 11 | Apr-99 | 4.5 | 2.5 | -1.23 |
| 12 | Apr-00 | 4.5 | 2.5 | -1.23 |
| 13 | Dec-00 | 4.5 | 11 | -0.42 |
| 14 | May-01 | 4.5 | 2.5 | -1.23 |
| 15 | Oct-01 | 4.5 | 2.5 | -1.23 |
| 16 | May-02 | 4.5 | 2.5 | -1.23 |
| 18 | Jun-03 | 4.5 | 2.5 | -1.23 |
| 19 | Nov-03 | 4.5 | 2.5 | -1.23 |
| 20 | Jun-04 | 4.5 | 2.5 | -1.23 |
| 20 | Dec-04 | 4.5 | 2.5 | -1.23 |
| 21 | Jun-05 | 4.5 | 12 | -0.32 |
| 22 | Dec-05 | 4.5 | 8 | -0.71 |
| 23 | Jun-06 | 4.5 | 5 | -0.99 |
| 24 | Nov-06 | 4.5 | 2.5 | -1.23 |
| 25 | Jun-07 | 4.5 | 5 | -0.99 |
| 26 | Nov-07 | 4.5 | 5 | -0.99 |
| 27 | Jun-08 | 4.5 | 2.5 | -1.23 |
| 28 | Nov-08 | 4.5 | 5 | -0.99 |
| 30 | Jun-09 | 4.5 | 2.5 | -1.23 |
| 31 | Nov-09 | 4.5 | 2.5 | -1.23 |
| 32 | Jun-10 | 4.5 | 2.5 | -1.23 |
| 33 | Nov-10 | 4.5 | 2.5 | -1.23 |
| 34 | Jun-11 | 4.5 | 2.5 | -1.23 |
| 35 | Nov-11 | 4.5 | 2.5 | -1.23 |
| 36 | Jun-12 | 4.5 | 2.5 | -1.23 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-21d Zn**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-95 | 61 | | |
| 2 | Aug-95 | 10 | | |
| 3 | Feb-96 | 10 | | |
| 4 | Jun-96 | 10 | **23.89** | **23.00** |
| 5 | Aug-96 | 50 | | |
| 6 | Nov-96 | 40 | | |
| 7 | May-97 | 5 | | |
| 8 | Nov-97 | 5 | | |

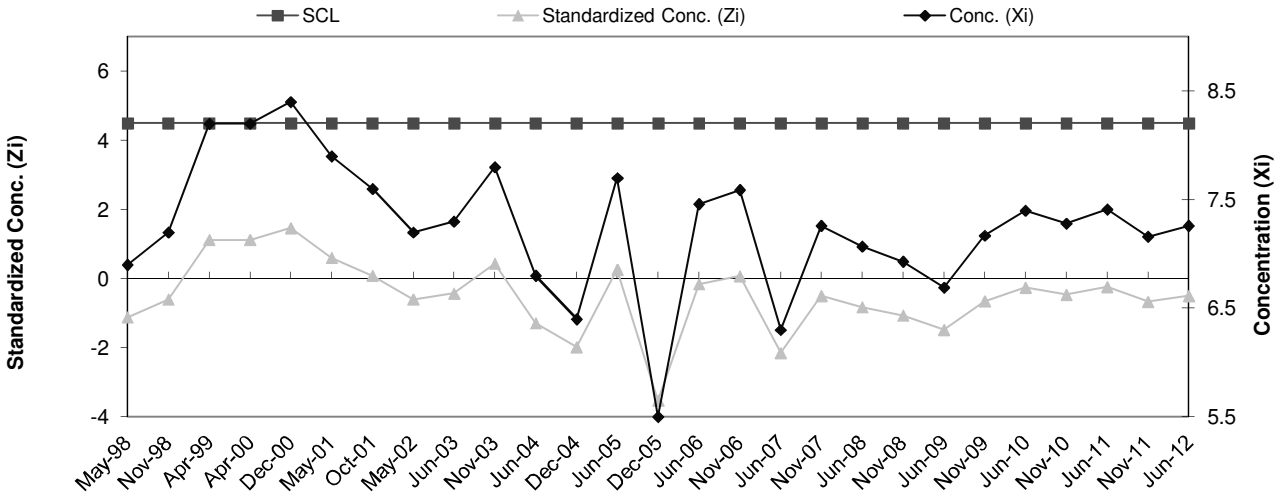
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | May-98 | 4.5 | 20 | -0.17 |
| 10 | Nov-98 | 4.5 | 10 | -0.60 |
| 11 | Apr-99 | 4.5 | 10 | -0.60 |
| 12 | Apr-00 | 4.5 | 5 | -0.82 |
| 13 | Dec-00 | 4.5 | 5 | -0.82 |
| 14 | May-01 | 4.5 | 10 | -0.60 |
| 15 | Oct-01 | 4.5 | 5 | -0.82 |
| 16 | May-02 | 4.5 | 5 | -0.82 |
| 18 | Jun-03 | 4.5 | 6 | -0.78 |
| 19 | Nov-03 | 4.5 | 9 | -0.65 |
| 20 | Jun-04 | 4.5 | 7 | -0.73 |
| 21 | Dec-04 | 4.5 | 7 | -0.73 |
| 22 | Jun-05 | 4.5 | 6 | -0.78 |
| 23 | Dec-05 | 4.5 | 5 | -0.82 |
| 24 | Jun-06 | 4.5 | 13 | -0.47 |
| 25 | Nov-06 | 4.5 | 2.5 | -0.93 |
| 26 | Jun-07 | 4.5 | 7 | -0.73 |
| 27 | Nov-07 | 4.5 | 8 | -0.69 |
| 28 | Jun-08 | 4.5 | 2.5 | -0.93 |
| 29 | Nov-08 | 4.5 | 2.5 | -0.93 |
| 30 | Jun-09 | 4.5 | 2.5 | -0.93 |
| 31 | Jun-09 | 4.5 | 2.5 | -0.93 |
| 32 | Nov-09 | 4.5 | 6 | -0.78 |
| 33 | Jun-10 | 4.5 | 2.5 | -0.93 |
| 34 | Nov-10 | 4.5 | 2.5 | -0.93 |
| 35 | Jun-11 | 4.5 | 2.5 | -0.93 |
| 36 | Nov-11 | 4.5 | 2.5 | -0.93 |
| 37 | Jun-12 | 4.5 | 2.5 | -0.93 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-21d pH**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-95 | 8.3 | **7.55** | **0.58** |
| 2 | Aug-95 | 8.1 | | |
| 3 | Feb-96 | 7.7 | | |
| 4 | Jun-96 | 7.6 | | |
| 5 | Aug-96 | 7.9 | | |
| 6 | Nov-96 | 7.3 | | |
| 7 | May-97 | 6.8 | | |
| 8 | Nov-97 | 6.7 | | |

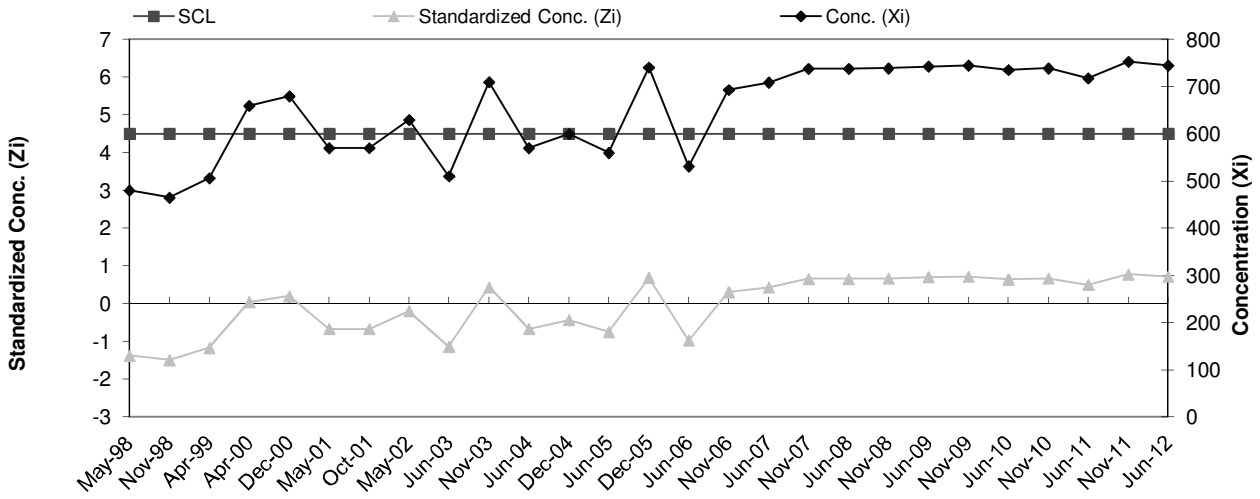
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | May-98 | 4.5 | 6.9 | -1.12 |
| 10 | Nov-98 | 4.5 | 7.2 | -0.60 |
| 11 | Apr-99 | 4.5 | 8.2 | 1.12 |
| 12 | Apr-00 | 4.5 | 8.2 | 1.12 |
| 13 | Dec-00 | 4.5 | 8.4 | 1.46 |
| 14 | May-01 | 4.5 | 7.9 | 0.60 |
| 15 | Oct-01 | 4.5 | 7.6 | 0.09 |
| 16 | May-02 | 4.5 | 7.2 | -0.60 |
| 18 | Jun-03 | 4.5 | 7.3 | -0.43 |
| 19 | Nov-03 | 4.5 | 7.8 | 0.43 |
| 20 | Jun-04 | 4.5 | 6.8 | -1.29 |
| 21 | Dec-04 | 4.5 | 6.4 | -1.98 |
| 22 | Jun-05 | 4.5 | 7.7 | 0.26 |
| 23 | Dec-05 | 4.5 | 5.5 | -3.53 |
| 24 | Jun-06 | 4.5 | 7.5 | -0.16 |
| 25 | Nov-06 | 4.5 | 7.6 | 0.07 |
| 26 | Jun-07 | 4.5 | 6.3 | -2.15 |
| 27 | Nov-07 | 4.5 | 7.3 | -0.50 |
| 28 | Jun-08 | 4.5 | 7.1 | -0.83 |
| 29 | Nov-08 | 4.5 | 6.9 | -1.07 |
| 30 | Jun-09 | 4.5 | 6.7 | -1.48 |
| 31 | Nov-09 | 4.5 | 7.2 | -0.65 |
| 32 | Jun-10 | 4.5 | 7.4 | -0.26 |
| 33 | Nov-10 | 4.5 | 7.3 | -0.47 |
| 34 | Jun-11 | 4.5 | 7.4 | -0.24 |
| 35 | Nov-11 | 4.5 | 7.2 | -0.67 |
| 36 | Jun-12 | 4.5 | 7.3 | -0.50 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-21d SpC**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-95 | 870 | | |
| 2 | Aug-95 | 684 | | |
| 3 | Feb-96 | 646 | | |
| 4 | Jun-96 | 577 | **654.13** | **126.68** |
| 5 | Aug-96 | 576 | | |
| 6 | Nov-96 | 810 | | |
| 7 | May-97 | 530 | | |
| 8 | Nov-97 | 540 | | |

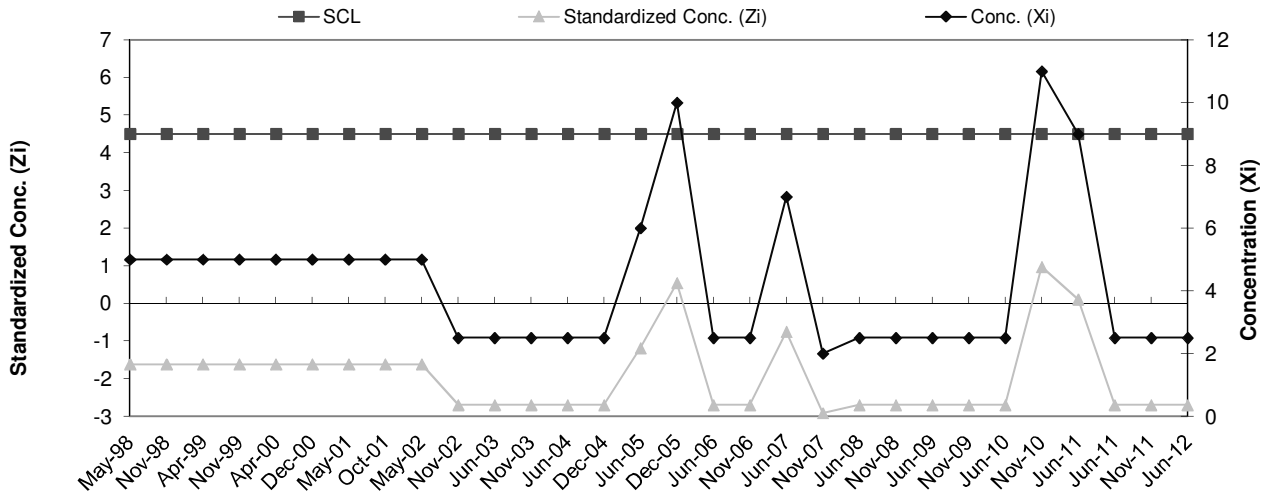
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | May-98 | 4.5 | 480 | -1.37 |
| 10 | Nov-98 | 4.5 | 465 | -1.49 |
| 11 | Apr-99 | 4.5 | 506 | -1.17 |
| 12 | Apr-00 | 4.5 | 660 | 0.05 |
| 13 | Dec-00 | 4.5 | 680 | 0.20 |
| 14 | May-01 | 4.5 | 570 | -0.66 |
| 15 | Oct-01 | 4.5 | 570 | -0.66 |
| 16 | May-02 | 4.5 | 630 | -0.19 |
| 18 | Jun-03 | 4.5 | 510 | -1.14 |
| 19 | Nov-03 | 4.5 | 710 | 0.44 |
| 20 | Jun-04 | 4.5 | 570 | -0.66 |
| 21 | Dec-04 | 4.5 | 600 | -0.43 |
| 22 | Jun-05 | 4.5 | 560 | -0.74 |
| 23 | Dec-05 | 4.5 | 741 | 0.69 |
| 24 | Jun-06 | 4.5 | 531.3 | -0.97 |
| 25 | Nov-06 | 4.5 | 693 | 0.31 |
| 26 | Jun-07 | 4.5 | 709 | 0.43 |
| 27 | Nov-07 | 4.5 | 738 | 0.66 |
| 28 | Jun-08 | 4.5 | 738 | 0.66 |
| 29 | Nov-08 | 4.5 | 739 | 0.67 |
| 30 | Jun-09 | 4.5 | 743 | 0.70 |
| 31 | Nov-09 | 4.5 | 745 | 0.72 |
| 32 | Jun-10 | 4.5 | 736 | 0.65 |
| 33 | Nov-10 | 4.5 | 739 | 0.67 |
| 34 | Jun-11 | 4.5 | 718 | 0.50 |
| 35 | Nov-11 | 4.5 | 753 | 0.78 |
| 36 | Jun-12 | 4.5 | 745 | 0.72 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-22D Cr**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-95 | 10 | **8.75** | **2.31** |
| 2 | Aug-95 | 10 | | |
| 3 | Feb-96 | 10 | | |
| 4 | Jun-96 | 10 | | |
| 5 | Aug-96 | 10 | | |
| 6 | Nov-96 | 10 | | |
| 7 | May-97 | 5 | | |
| 8 | Nov-97 | 5 | | |

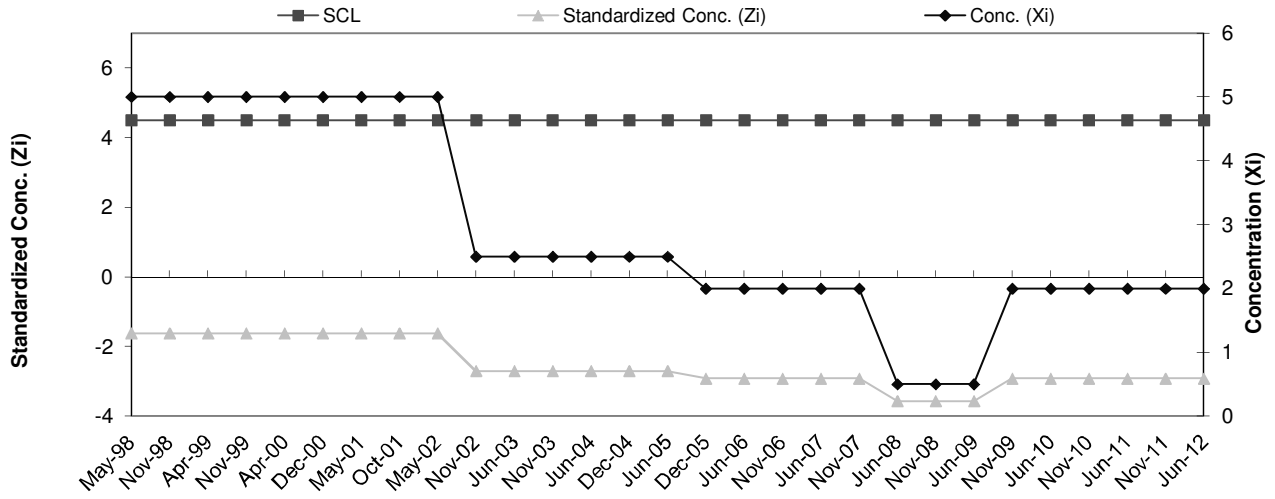
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | May-98 | 4.5 | 5 | -1.62 |
| 10 | Nov-98 | 4.5 | 5 | -1.62 |
| 11 | Apr-99 | 4.5 | 5 | -1.62 |
| 12 | Nov-99 | 4.5 | 5 | -1.62 |
| 13 | Apr-00 | 4.5 | 5 | -1.62 |
| 14 | Dec-00 | 4.5 | 5 | -1.62 |
| 15 | May-01 | 4.5 | 5 | -1.62 |
| 16 | Oct-01 | 4.5 | 5 | -1.62 |
| 17 | May-02 | 4.5 | 5 | -1.62 |
| 18 | Nov-02 | 4.5 | 2.5 | -2.70 |
| 19 | Jun-03 | 4.5 | 2.5 | -2.70 |
| 20 | Nov-03 | 4.5 | 2.5 | -2.70 |
| 21 | Jun-04 | 4.5 | 2.5 | -2.70 |
| 22 | Dec-04 | 4.5 | 2.5 | -2.70 |
| 23 | Jun-05 | 4.5 | 6 | -1.19 |
| 24 | Dec-05 | 4.5 | 10 | 0.54 |
| 25 | Jun-06 | 4.5 | 2.5 | -2.70 |
| 26 | Nov-06 | 4.5 | 2.5 | -2.70 |
| 27 | Jun-07 | 4.5 | 7 | -0.76 |
| 28 | Nov-07 | 4.5 | 2 | -2.92 |
| 29 | Jun-08 | 4.5 | 2.5 | -2.70 |
| 30 | Nov-08 | 4.5 | 2.5 | -2.70 |
| 31 | Jun-09 | 4.5 | 2.5 | -2.70 |
| 32 | Nov-09 | 4.5 | 2.5 | -2.70 |
| 33 | Jun-10 | 4.5 | 2.5 | -2.70 |
| 34 | Nov-10 | 4.5 | 11 | 0.97 |
| 35 | Jun-11 | 4.5 | 9 | 0.11 |
| 36 | Jun-11 | 4.5 | 2.5 | -2.70 |
| 37 | Nov-11 | 4.5 | 2.5 | -2.70 |
| 38 | Jun-12 | 4.5 | 2.5 | -2.70 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-22D Cu**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-95 | 10 | | |
| 2 | Aug-95 | 10 | | |
| 3 | Feb-96 | 10 | | |
| 4 | Jun-96 | 10 | **8.75** | **2.31** |
| 5 | Aug-96 | 10 | | |
| 6 | Nov-96 | 10 | | |
| 7 | May-97 | 5 | | |
| 8 | Nov-97 | 5 | | |

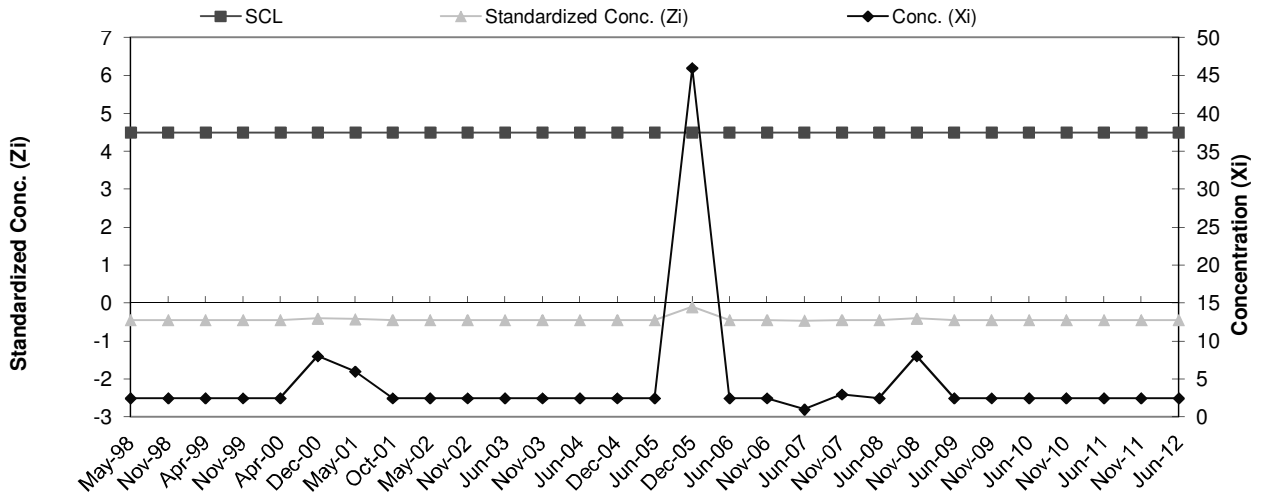
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | May-98 | 4.5 | 5 | -1.62 |
| 10 | Nov-98 | 4.5 | 5 | -1.62 |
| 11 | Apr-99 | 4.5 | 5 | -1.62 |
| 12 | Nov-99 | 4.5 | 5 | -1.62 |
| 13 | Apr-00 | 4.5 | 5 | -1.62 |
| 14 | Dec-00 | 4.5 | 5 | -1.62 |
| 15 | May-01 | 4.5 | 5 | -1.62 |
| 16 | Oct-01 | 4.5 | 5 | -1.62 |
| 17 | May-02 | 4.5 | 5 | -1.62 |
| 18 | Nov-02 | 4.5 | 2.5 | -2.70 |
| 19 | Jun-03 | 4.5 | 2.5 | -2.70 |
| 20 | Nov-03 | 4.5 | 2.5 | -2.70 |
| 21 | Jun-04 | 4.5 | 2.5 | -2.70 |
| 22 | Dec-04 | 4.5 | 2.5 | -2.70 |
| 23 | Jun-05 | 4.5 | 2.5 | -2.70 |
| 24 | Dec-05 | 4.5 | 2 | -2.92 |
| 25 | Jun-06 | 4.5 | 2 | -2.92 |
| 26 | Nov-06 | 4.5 | 2 | -2.92 |
| 27 | Jun-07 | 4.5 | 2 | -2.92 |
| 28 | Nov-07 | 4.5 | 2 | -2.92 |
| 29 | Jun-08 | 4.5 | 0.5 | -3.56 |
| 30 | Nov-08 | 4.5 | 0.5 | -3.56 |
| 31 | Jun-09 | 4.5 | 0.5 | -3.56 |
| 32 | Nov-09 | 4.5 | 2 | -2.92 |
| 33 | Jun-10 | 4.5 | 2 | -2.92 |
| 34 | Nov-10 | 4.5 | 2 | -2.92 |
| 35 | Jun-11 | 4.5 | 2 | -2.92 |
| 36 | Nov-11 | 4.5 | 2 | -2.92 |
| 37 | Jun-12 | 4.5 | 2 | -2.92 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-22D Ni**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-95 | 370 | | |
| 2 | Aug-95 | 20 | | |
| 3 | Feb-96 | 20 | | |
| 4 | Jun-96 | 10 | **58.94** | **125.96** |
| 5 | Aug-96 | 10 | | |
| 6 | Nov-96 | 10 | | |
| 7 | May-97 | 2.5 | | |
| 8 | Nov-97 | 29 | | |

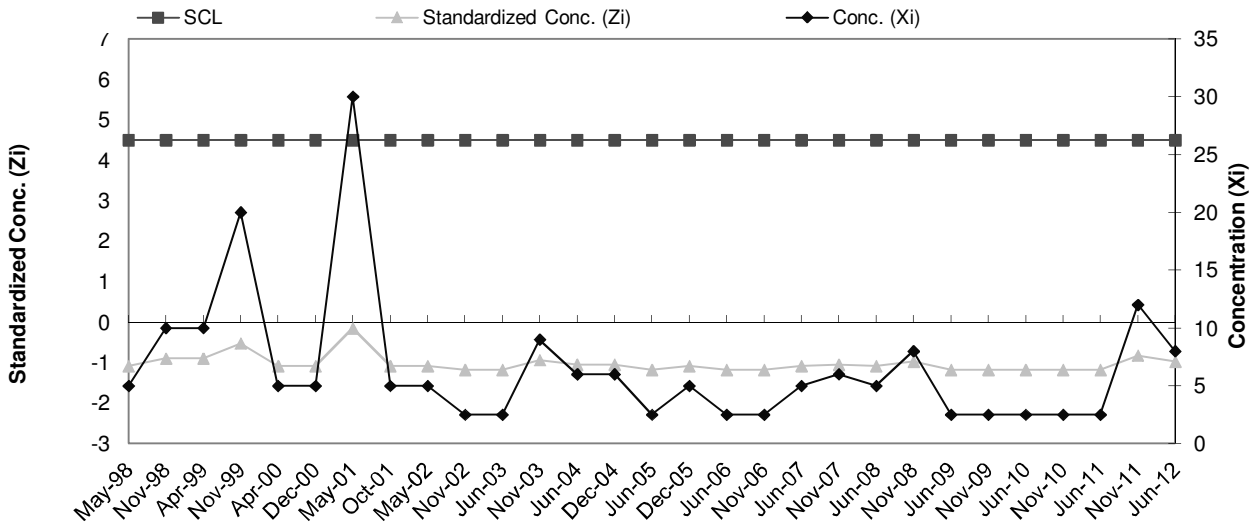
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | May-98 | 4.5 | 2.5 | -0.45 |
| 10 | Nov-98 | 4.5 | 2.5 | -0.45 |
| 11 | Apr-99 | 4.5 | 2.5 | -0.45 |
| 12 | Nov-99 | 4.5 | 2.5 | -0.45 |
| 13 | Apr-00 | 4.5 | 2.5 | -0.45 |
| 14 | Dec-00 | 4.5 | 8 | -0.40 |
| 15 | May-01 | 4.5 | 6 | -0.42 |
| 16 | Oct-01 | 4.5 | 2.5 | -0.45 |
| 17 | May-02 | 4.5 | 2.5 | -0.45 |
| 18 | Nov-02 | 4.5 | 2.5 | -0.45 |
| 19 | Jun-03 | 4.5 | 2.5 | -0.45 |
| 20 | Nov-03 | 4.5 | 2.5 | -0.45 |
| 21 | Jun-04 | 4.5 | 2.5 | -0.45 |
| 22 | Dec-04 | 4.5 | 2.5 | -0.45 |
| 23 | Jun-05 | 4.5 | 2.5 | -0.45 |
| 24 | Dec-05 | 4.5 | 46 | -0.10 |
| 25 | Jun-06 | 4.5 | 2.5 | -0.45 |
| 26 | Nov-06 | 4.5 | 2.5 | -0.45 |
| 27 | Jun-07 | 4.5 | 1 | -0.46 |
| 28 | Nov-07 | 4.5 | 3 | -0.44 |
| 29 | Jun-08 | 4.5 | 2.5 | -0.45 |
| 30 | Nov-08 | 4.5 | 8 | -0.40 |
| 31 | Jun-09 | 4.5 | 2.5 | -0.45 |
| 32 | Nov-09 | 4.5 | 2.5 | -0.45 |
| 33 | Jun-10 | 4.5 | 2.5 | -0.45 |
| 34 | Nov-10 | 4.5 | 2.5 | -0.45 |
| 35 | Jun-11 | 4.5 | 2.5 | -0.45 |
| 36 | Nov-11 | 4.5 | 2.5 | -0.45 |
| 37 | Jun-12 | 4.5 | 2.5 | -0.45 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-22D Zn**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-95 | 10 | | |
| 2 | Aug-95 | 47 | | |
| 3 | Feb-96 | 80 | | |
| 4 | Jun-96 | 20 | **34.00** | **26.69** |
| 5 | Aug-96 | 50 | | |
| 6 | Nov-96 | 50 | | |
| 7 | May-97 | 5 | | |
| 8 | Nov-97 | 10 | | |

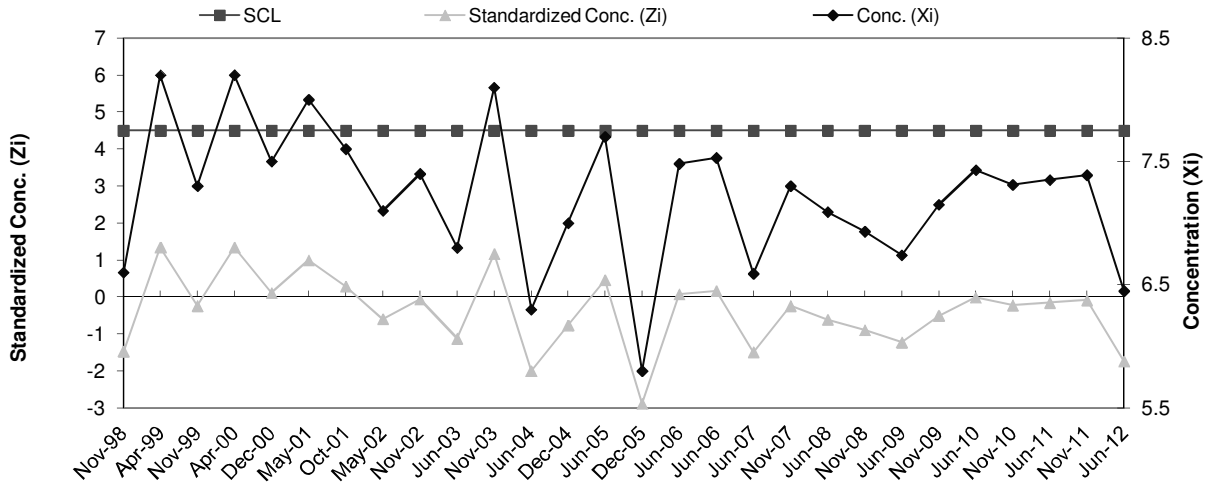
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | May-98 | 4.5 | 5 | -1.09 |
| 10 | Nov-98 | 4.5 | 10 | -0.90 |
| 11 | Apr-99 | 4.5 | 10 | -0.90 |
| 12 | Nov-99 | 4.5 | 20 | -0.52 |
| 13 | Apr-00 | 4.5 | 5 | -1.09 |
| 14 | Dec-00 | 4.5 | 5 | -1.09 |
| 15 | May-01 | 4.5 | 30 | -0.15 |
| 16 | Oct-01 | 4.5 | 5 | -1.09 |
| 17 | May-02 | 4.5 | 5 | -1.09 |
| 18 | Nov-02 | 4.5 | 2.5 | -1.18 |
| 19 | Jun-03 | 4.5 | 2.5 | -1.18 |
| 20 | Nov-03 | 4.5 | 9 | -0.94 |
| 21 | Jun-04 | 4.5 | 6 | -1.05 |
| 22 | Dec-04 | 4.5 | 6 | -1.05 |
| 23 | Jun-05 | 4.5 | 2.5 | -1.18 |
| 24 | Dec-05 | 4.5 | 5 | -1.09 |
| 25 | Jun-06 | 4.5 | 2.5 | -1.18 |
| 26 | Nov-06 | 4.5 | 2.5 | -1.18 |
| 27 | Jun-07 | 4.5 | 5 | -1.09 |
| 28 | Nov-07 | 4.5 | 6 | -1.05 |
| 29 | Jun-08 | 4.5 | 5 | -1.09 |
| 30 | Nov-08 | 4.5 | 8 | -0.97 |
| 31 | Jun-09 | 4.5 | 2.5 | -1.18 |
| 32 | Nov-09 | 4.5 | 2.5 | -1.18 |
| 33 | Jun-10 | 4.5 | 2.5 | -1.18 |
| 34 | Nov-10 | 4.5 | 2.5 | -1.18 |
| 35 | Jun-11 | 4.5 | 2.5 | -1.18 |
| 36 | Nov-11 | 4.5 | 12 | -0.82 |
| 37 | Jun-12 | 4.5 | 8 | -0.97 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-22D pH**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-95 | 7.7 | **7.44** | **0.57** |
| 2 | Aug-95 | 8.3 | | |
| 3 | Jun-96 | 7.5 | | |
| 4 | Aug-96 | 8.1 | | |
| 5 | Nov-96 | 7.2 | | |
| 6 | May-97 | 6.7 | | |
| 7 | Nov-97 | 6.9 | | |
| 8 | May-98 | 7.1 | | |

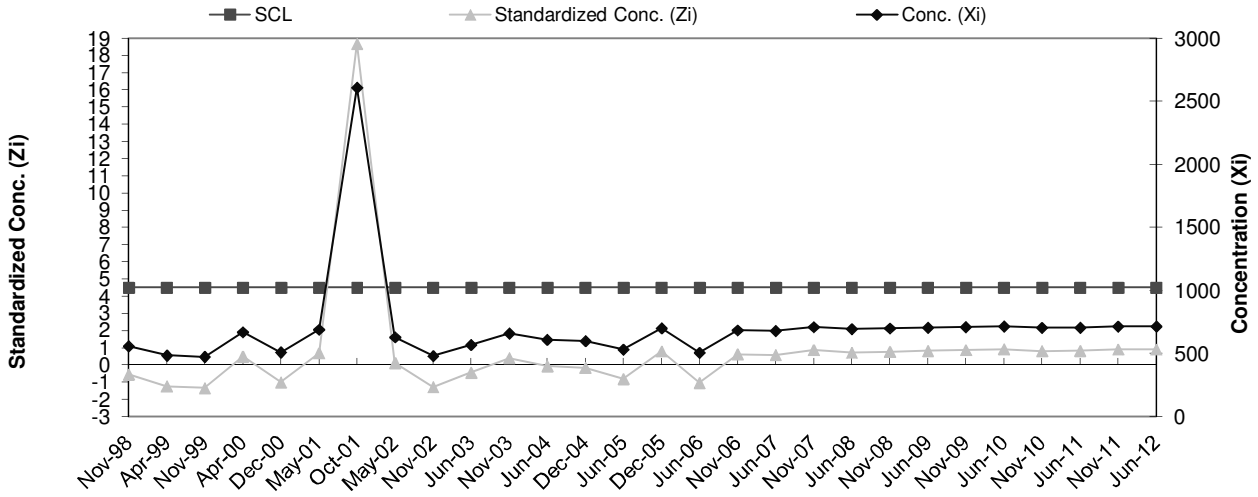
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | Nov-98 | 4.5 | 6.6 | -1.47 |
| 10 | Apr-99 | 4.5 | 8.2 | 1.34 |
| 11 | Nov-99 | 4.5 | 7.3 | -0.24 |
| 12 | Apr-00 | 4.5 | 8.2 | 1.34 |
| 13 | Dec-00 | 4.5 | 7.5 | 0.11 |
| 14 | May-01 | 4.5 | 8 | 0.99 |
| 15 | Oct-01 | 4.5 | 7.6 | 0.29 |
| 16 | May-02 | 4.5 | 7.1 | -0.59 |
| 17 | Nov-02 | 4.5 | 7.4 | -0.07 |
| 18 | Jun-03 | 4.5 | 6.8 | -1.12 |
| 19 | Nov-03 | 4.5 | 8.1 | 1.17 |
| 20 | Jun-04 | 4.5 | 6.3 | -2.00 |
| 21 | Dec-04 | 4.5 | 7 | -0.77 |
| 22 | Jun-05 | 4.5 | 7.7 | 0.46 |
| 23 | Dec-05 | 4.5 | 5.8 | -2.88 |
| 24 | Jun-06 | 4.5 | 7.5 | 0.07 |
| 25 | Jun-06 | 4.5 | 7.5 | 0.16 |
| 26 | Jun-07 | 4.5 | 6.6 | -1.49 |
| 27 | Nov-07 | 4.5 | 7.3 | -0.24 |
| 28 | Jun-08 | 4.5 | 7.1 | -0.61 |
| 29 | Nov-08 | 4.5 | 6.9 | -0.89 |
| 30 | Jun-09 | 4.5 | 6.7 | -1.23 |
| 31 | Nov-09 | 4.5 | 7.2 | -0.51 |
| 32 | Jun-10 | 4.5 | 7.4 | -0.01 |
| 33 | Nov-10 | 4.5 | 7.3 | -0.22 |
| 34 | Jun-11 | 4.5 | 7.4 | -0.15 |
| 35 | Nov-11 | 4.5 | 7.4 | -0.08 |
| 36 | Jun-12 | 4.5 | 6.5 | -1.74 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-22D SpC**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-95 | 573 | | |
| 2 | Aug-95 | 739 | | |
| 3 | Jun-96 | 600 | | |
| 4 | Aug-96 | 608 | **617.25** | **106.65** |
| 5 | Nov-96 | 817 | | |
| 6 | May-97 | 550 | | |
| 7 | Nov-97 | 550 | | |
| 8 | May-98 | 501 | | |

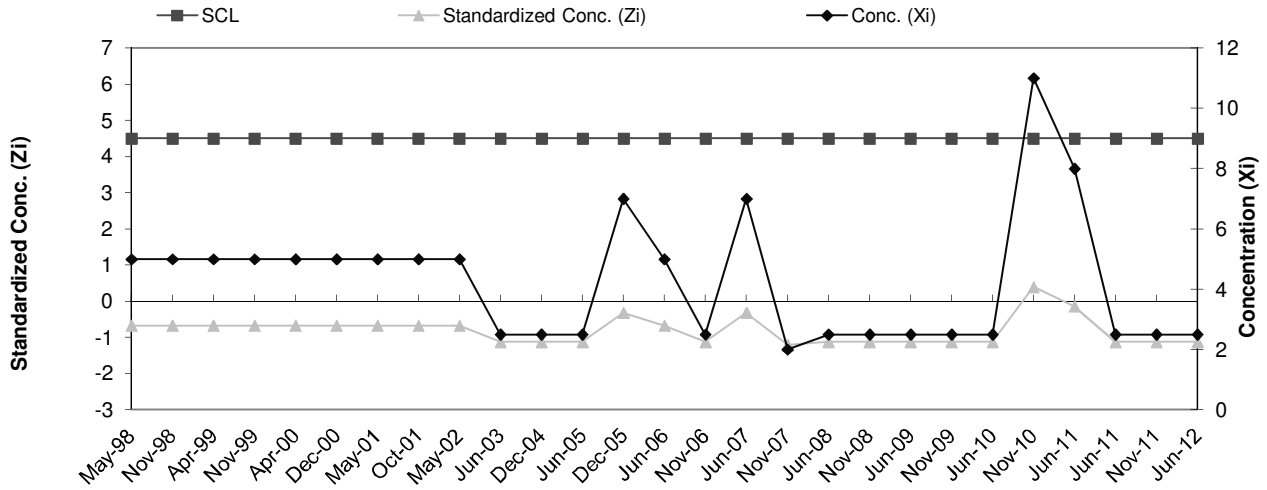
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | Nov-98 | 4.5 | 559 | -0.55 |
| 10 | Apr-99 | 4.5 | 485 | -1.24 |
| 11 | Nov-99 | 4.5 | 474 | -1.34 |
| 12 | Apr-00 | 4.5 | 670 | 0.49 |
| 13 | Dec-00 | 4.5 | 510 | -1.01 |
| 14 | May-01 | 4.5 | 690 | 0.68 |
| 15 | Oct-01 | 4.5 | 2610 | 18.68 |
| 16 | May-02 | 4.5 | 630 | 0.12 |
| 17 | Nov-02 | 4.5 | 480 | -1.29 |
| 18 | Jun-03 | 4.5 | 570 | -0.44 |
| 19 | Nov-03 | 4.5 | 660 | 0.40 |
| 20 | Jun-04 | 4.5 | 610 | -0.07 |
| 21 | Dec-04 | 4.5 | 600 | -0.16 |
| 22 | Jun-05 | 4.5 | 531 | -0.81 |
| 23 | Dec-05 | 4.5 | 702 | 0.79 |
| 24 | Jun-06 | 4.5 | 507 | -1.04 |
| 25 | Nov-06 | 4.5 | 684 | 0.63 |
| 26 | Jun-07 | 4.5 | 680 | 0.59 |
| 27 | Nov-07 | 4.5 | 710 | 0.87 |
| 28 | Jun-08 | 4.5 | 694 | 0.72 |
| 29 | Nov-08 | 4.5 | 699 | 0.77 |
| 30 | Jun-09 | 4.5 | 705 | 0.82 |
| 31 | Nov-09 | 4.5 | 710 | 0.87 |
| 32 | Jun-10 | 4.5 | 715 | 0.92 |
| 33 | Nov-10 | 4.5 | 704 | 0.81 |
| 34 | Jun-11 | 4.5 | 705 | 0.82 |
| 35 | Nov-11 | 4.5 | 714 | 0.91 |
| 36 | Jun-12 | 4.5 | 714 | 0.91 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-23d Cr**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-95 | 10 | **8.79** | **5.60** |
| 2 | Aug-95 | 10 | | |
| 3 | Feb-96 | 10 | | |
| 4 | Jun-96 | 10 | | |
| 5 | Aug-96 | 10 | | |
| 6 | Nov-96 | 10 | | |
| 7 | May-97 | 5 | | |
| 8 | Nov-97 | 5 | | |

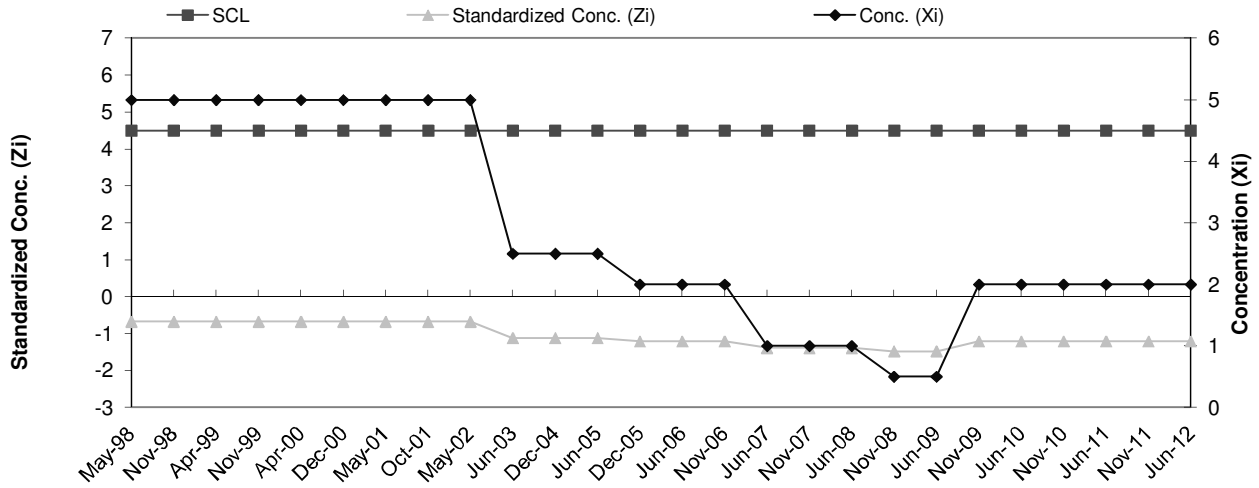
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | May-98 | 4.5 | 5 | -0.68 |
| 10 | Nov-98 | 4.5 | 5 | -0.68 |
| 11 | Apr-99 | 4.5 | 5 | -0.68 |
| 12 | Nov-99 | 4.5 | 5 | -0.68 |
| 13 | Apr-00 | 4.5 | 5 | -0.68 |
| 14 | Dec-00 | 4.5 | 5 | -0.68 |
| 15 | May-01 | 4.5 | 5 | -0.68 |
| 16 | Oct-01 | 4.5 | 5 | -0.68 |
| 17 | May-02 | 4.5 | 5 | -0.68 |
| 18 | Jun-03 | 4.5 | 2.5 | -1.12 |
| 19 | Dec-04 | 4.5 | 2.5 | -1.12 |
| 20 | Jun-05 | 4.5 | 2.5 | -1.12 |
| 21 | Dec-05 | 4.5 | 7.0 | -0.32 |
| 22 | Jun-06 | 4.5 | 5.0 | -0.68 |
| 23 | Nov-06 | 4.5 | 2.5 | -1.12 |
| 24 | Jun-07 | 4.5 | 7 | -0.32 |
| 25 | Nov-07 | 4.5 | 2 | -1.21 |
| 26 | Jun-08 | 4.5 | 2.5 | -1.12 |
| 27 | Nov-08 | 4.5 | 2.5 | -1.12 |
| 28 | Jun-09 | 4.5 | 2.5 | -1.12 |
| 29 | Nov-09 | 4.5 | 2.5 | -1.12 |
| 30 | Jun-10 | 4.5 | 2.5 | -1.12 |
| 31 | Nov-10 | 4.5 | 11 | 0.39 |
| 32 | Jun-11 | 4.5 | 8 | -0.14 |
| 33 | Jun-11 | 4.5 | 2.5 | -1.12 |
| 34 | Nov-11 | 4.5 | 2.5 | -1.12 |
| 35 | Jun-12 | 4.5 | 2.5 | -1.12 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-23d Cu**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-95 | 10 | | |
| 2 | Aug-95 | 10 | | |
| 3 | Feb-96 | 10 | | |
| 4 | Jun-96 | 10 | **8.75** | **5.59** |
| 5 | Aug-96 | 10 | | |
| 6 | Nov-96 | 10 | | |
| 7 | May-97 | 5 | | |
| 8 | Nov-97 | 5 | | |

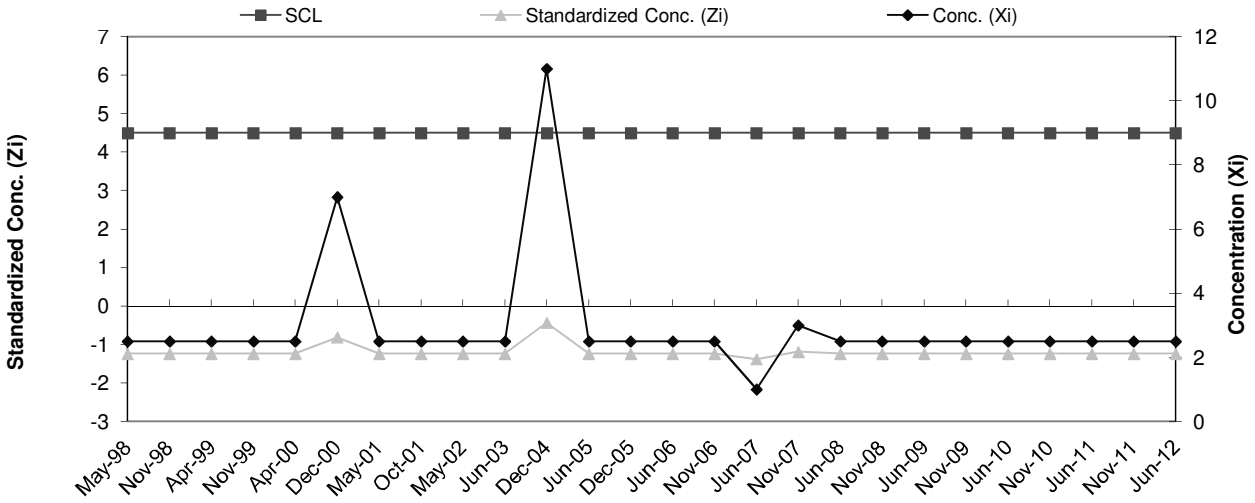
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | May-98 | 4.5 | 5 | -0.67 |
| 10 | Nov-98 | 4.5 | 5 | -0.67 |
| 11 | Apr-99 | 4.5 | 5 | -0.67 |
| 12 | Nov-99 | 4.5 | 5 | -0.67 |
| 13 | Apr-00 | 4.5 | 5 | -0.67 |
| 14 | Dec-00 | 4.5 | 5 | -0.67 |
| 15 | May-01 | 4.5 | 5 | -0.67 |
| 16 | Oct-01 | 4.5 | 5 | -0.67 |
| 17 | May-02 | 4.5 | 5 | -0.67 |
| 18 | Jun-03 | 4.5 | 2.5 | -1.12 |
| 19 | Dec-04 | 4.5 | 2.5 | -1.12 |
| 20 | Jun-05 | 4.5 | 2.5 | -1.12 |
| 21 | Dec-05 | 4.5 | 2.0 | -1.21 |
| 22 | Jun-06 | 4.5 | 2.0 | -1.21 |
| 23 | Nov-06 | 4.5 | 2.0 | -1.21 |
| 24 | Jun-07 | 4.5 | 1 | -1.39 |
| 25 | Nov-07 | 4.5 | 1 | -1.39 |
| 26 | Jun-08 | 4.5 | 1 | -1.39 |
| 27 | Nov-08 | 4.5 | 0.5 | -1.48 |
| 28 | Jun-09 | 4.5 | 0.5 | -1.48 |
| 29 | Nov-09 | 4.5 | 2 | -1.21 |
| 30 | Jun-10 | 4.5 | 2 | -1.21 |
| 31 | Nov-10 | 4.5 | 2 | -1.21 |
| 32 | Jun-11 | 4.5 | 2 | -1.21 |
| 33 | Nov-11 | 4.5 | 2 | -1.21 |
| 34 | Jun-12 | 4.5 | 2 | -1.21 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-23d Ni**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-95 | 15 | **15.61** | **10.57** |
| 2 | Aug-95 | 20 | | |
| 3 | Feb-96 | 20 | | |
| 4 | Jun-96 | 10 | | |
| 5 | Aug-96 | 10 | | |
| 6 | Nov-96 | 10 | | |
| 7 | May-97 | 9 | | |
| 8 | Nov-97 | 31 | | |

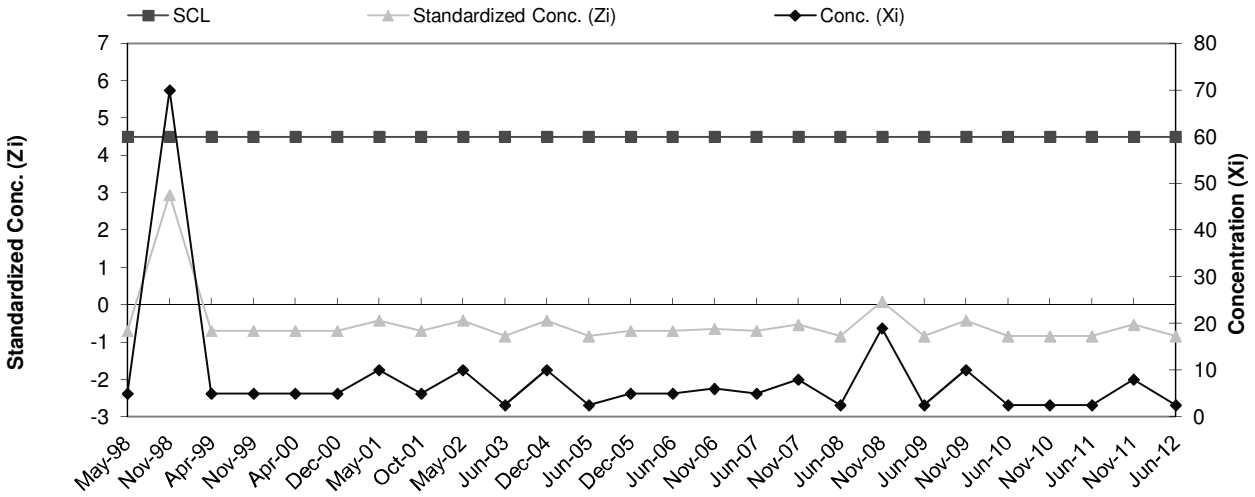
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | May-98 | 4.5 | 2.5 | -1.24 |
| 10 | Nov-98 | 4.5 | 2.5 | -1.24 |
| 11 | Apr-99 | 4.5 | 2.5 | -1.24 |
| 12 | Nov-99 | 4.5 | 2.5 | -1.24 |
| 13 | Apr-00 | 4.5 | 2.5 | -1.24 |
| 14 | Dec-00 | 4.5 | 7.0 | -0.81 |
| 15 | May-01 | 4.5 | 2.5 | -1.24 |
| 16 | Oct-01 | 4.5 | 2.5 | -1.24 |
| 17 | May-02 | 4.5 | 2.5 | -1.24 |
| 18 | Jun-03 | 4.5 | 2.5 | -1.24 |
| 19 | Dec-04 | 4.5 | 11.0 | -0.44 |
| 20 | Jun-05 | 4.5 | 2.5 | -1.24 |
| 21 | Dec-05 | 4.5 | 2.5 | -1.24 |
| 22 | Jun-06 | 4.5 | 2.5 | -1.24 |
| 23 | Nov-06 | 4.5 | 2.5 | -1.24 |
| 24 | Jun-07 | 4.5 | 1 | -1.38 |
| 25 | Nov-07 | 4.5 | 3 | -1.19 |
| 26 | Jun-08 | 4.5 | 2.5 | -1.24 |
| 27 | Nov-08 | 4.5 | 2.5 | -1.24 |
| 28 | Jun-09 | 4.5 | 2.5 | -1.24 |
| 29 | Nov-09 | 4.5 | 2.5 | -1.24 |
| 30 | Jun-10 | 4.5 | 2.5 | -1.24 |
| 31 | Nov-10 | 4.5 | 2.5 | -1.24 |
| 32 | Jun-11 | 4.5 | 2.5 | -1.24 |
| 33 | Nov-11 | 4.5 | 2.5 | -1.24 |
| 34 | Jun-12 | 4.5 | 2.5 | -1.24 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-23d Zn**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-95 | 10 | | |
| 2 | Aug-95 | 10 | | |
| 3 | Feb-96 | 10 | | |
| 4 | Jun-96 | 10 | **17.49** | **17.84** |
| 5 | Aug-96 | 50 | | |
| 6 | Nov-96 | 40 | | |
| 7 | May-97 | 5 | | |
| 8 | Nov-97 | 5 | | |

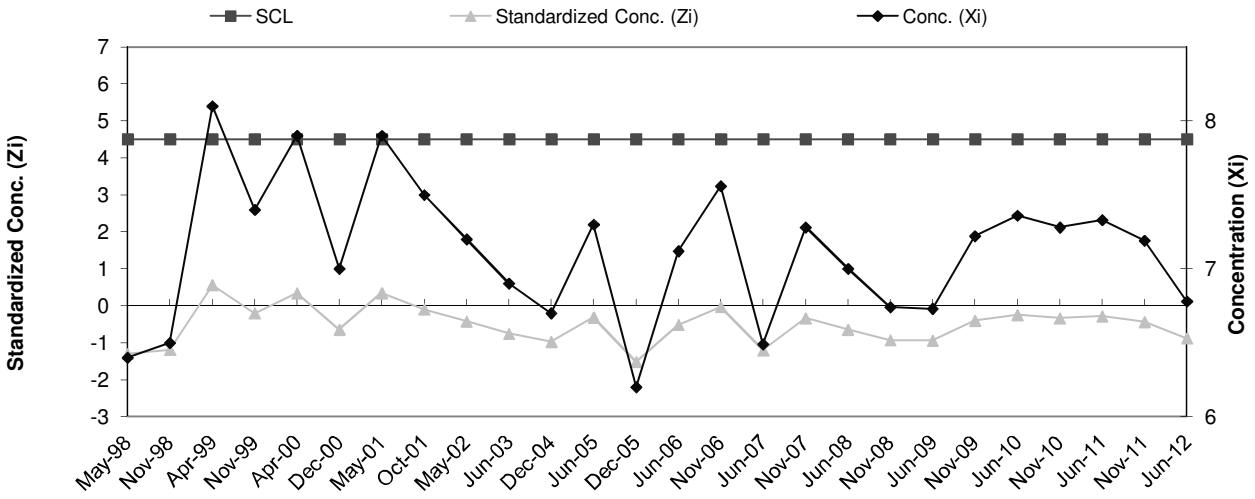
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | May-98 | 4.5 | 5.0 | -0.70 |
| 10 | Nov-98 | 4.5 | 70.0 | 2.94 |
| 11 | Apr-99 | 4.5 | 5.0 | -0.70 |
| 12 | Nov-99 | 4.5 | 5.0 | -0.70 |
| 13 | Apr-00 | 4.5 | 5.0 | -0.70 |
| 14 | Dec-00 | 4.5 | 5.0 | -0.70 |
| 15 | May-01 | 4.5 | 10.0 | -0.42 |
| 16 | Oct-01 | 4.5 | 5.0 | -0.70 |
| 17 | May-02 | 4.5 | 10.0 | -0.42 |
| 18 | Jun-03 | 4.5 | 2.5 | -0.84 |
| 19 | Dec-04 | 4.5 | 10.0 | -0.42 |
| 20 | Jun-05 | 4.5 | 2.5 | -0.84 |
| 21 | Dec-05 | 4.5 | 5.0 | -0.70 |
| 22 | Jun-06 | 4.5 | 5.0 | -0.70 |
| 23 | Nov-06 | 4.5 | 6.0 | -0.64 |
| 24 | Jun-07 | 4.5 | 5 | -0.70 |
| 25 | Nov-07 | 4.5 | 8 | -0.53 |
| 26 | Jun-08 | 4.5 | 2.5 | -0.84 |
| 27 | Nov-08 | 4.5 | 19 | 0.08 |
| 28 | Jun-09 | 4.5 | 2.5 | -0.84 |
| 29 | Nov-09 | 4.5 | 10 | -0.42 |
| 30 | Jun-10 | 4.5 | 2.5 | -0.84 |
| 31 | Nov-10 | 4.5 | 2.5 | -0.84 |
| 32 | Jun-11 | 4.5 | 2.5 | -0.84 |
| 33 | Nov-11 | 4.5 | 8 | -0.53 |
| 34 | Jun-12 | 4.5 | 2.5 | -0.84 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-23d pH**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-95 | 7.3 | **7.59** | **0.91** |
| 2 | Aug-95 | 8.2 | | |
| 3 | Feb-96 | 7.5 | | |
| 4 | Jun-96 | 8.3 | | |
| 5 | Aug-96 | 8.9 | | |
| 6 | Nov-96 | 7.7 | | |
| 7 | May-97 | 6.8 | | |
| 8 | Nov-97 | 6.0 | | |

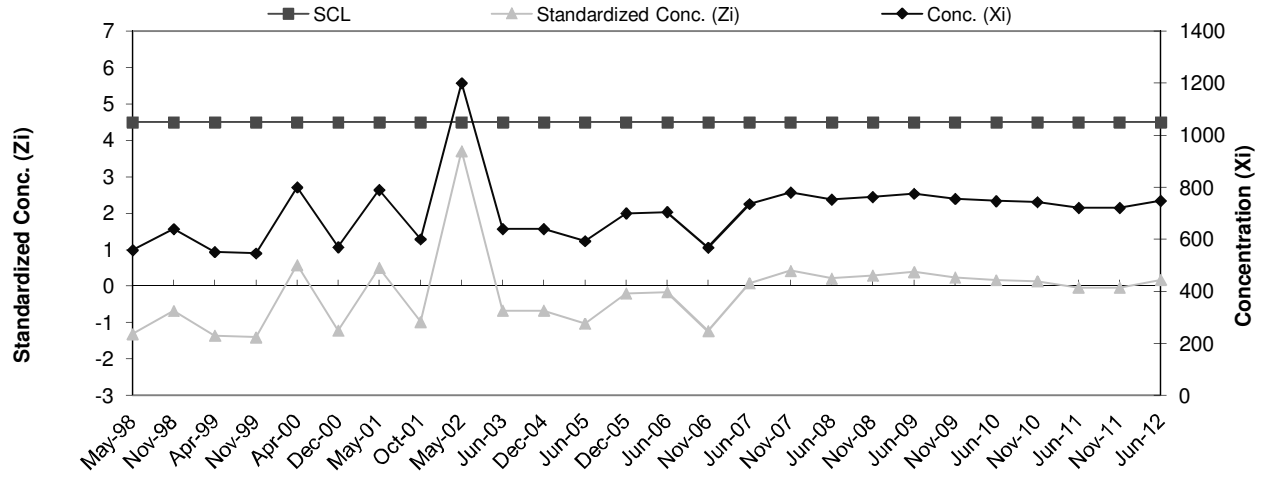
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | May-98 | 4.5 | 6.4 | -1.30 |
| 10 | Nov-98 | 4.5 | 6.5 | -1.19 |
| 11 | Apr-99 | 4.5 | 8.1 | 0.56 |
| 12 | Nov-99 | 4.5 | 7.4 | -0.21 |
| 13 | Apr-00 | 4.5 | 7.9 | 0.34 |
| 14 | Dec-00 | 4.5 | 7.0 | -0.64 |
| 15 | May-01 | 4.5 | 7.9 | 0.34 |
| 16 | Oct-01 | 4.5 | 7.5 | -0.10 |
| 17 | May-02 | 4.5 | 7.2 | -0.42 |
| 18 | Jun-03 | 4.5 | 6.9 | -0.75 |
| 19 | Dec-04 | 4.5 | 6.7 | -0.97 |
| 20 | Jun-05 | 4.5 | 7.3 | -0.31 |
| 21 | Dec-05 | 4.5 | 6.2 | -1.52 |
| 22 | Jun-06 | 4.5 | 7.1 | -0.51 |
| 23 | Nov-06 | 4.5 | 7.6 | -0.03 |
| 24 | Jun-07 | 4.5 | 6.5 | -1.20 |
| 25 | Nov-07 | 4.5 | 7.3 | -0.34 |
| 26 | Jun-08 | 4.5 | 7.0 | -0.64 |
| 27 | Nov-08 | 4.5 | 6.7 | -0.93 |
| 28 | Jun-09 | 4.5 | 6.7 | -0.94 |
| 29 | Nov-09 | 4.5 | 7.2 | -0.40 |
| 30 | Jun-10 | 4.5 | 7.4 | -0.25 |
| 31 | Nov-10 | 4.5 | 7.3 | -0.34 |
| 32 | Jun-11 | 4.5 | 7.3 | -0.28 |
| 33 | Nov-11 | 4.5 | 7.2 | -0.43 |
| 34 | Jun-12 | 4.5 | 6.8 | -0.88 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-23d SpC**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-95 | 680 | | |
| 2 | Aug-95 | 845 | | |
| 3 | Feb-96 | 751 | | |
| 4 | Jun-96 | 632 | **725.75** | **127.98** |
| 5 | Aug-96 | 691 | | |
| 6 | Nov-96 | 977 | | |
| 7 | May-97 | 610 | | |
| 8 | Nov-97 | 620 | | |

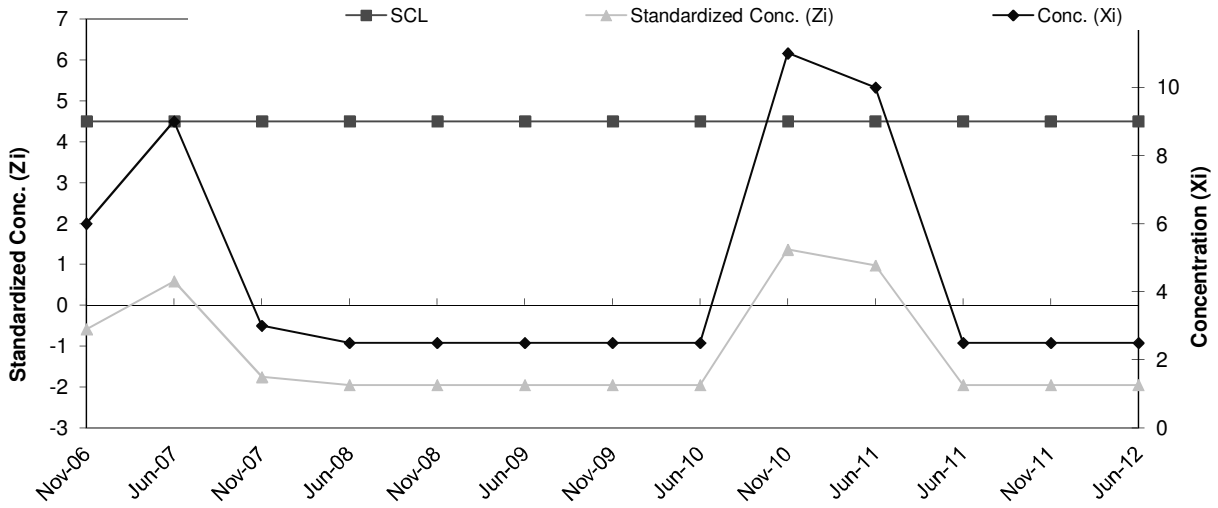
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | May-98 | 4.5 | 558 | -1.31 |
| 10 | Nov-98 | 4.5 | 639 | -0.68 |
| 11 | Apr-99 | 4.5 | 552 | -1.36 |
| 12 | Nov-99 | 4.5 | 546 | -1.40 |
| 13 | Apr-00 | 4.5 | 800 | 0.58 |
| 14 | Dec-00 | 4.5 | 570 | -1.22 |
| 15 | May-01 | 4.5 | 790 | 0.50 |
| 16 | Oct-01 | 4.5 | 600 | -0.98 |
| 17 | May-02 | 4.5 | 1200 | 3.71 |
| 18 | Jun-03 | 4.5 | 640 | -0.67 |
| 19 | Dec-04 | 4.5 | 640 | -0.67 |
| 20 | Jun-05 | 4.5 | 594 | -1.03 |
| 21 | Dec-05 | 4.5 | 700 | -0.20 |
| 22 | Jun-06 | 4.5 | 705 | -0.16 |
| 23 | Nov-06 | 4.5 | 568 | -1.23 |
| 24 | Jun-07 | 4.5 | 736 | 0.08 |
| 25 | Nov-07 | 4.5 | 780 | 0.42 |
| 26 | Jun-08 | 4.5 | 753 | 0.21 |
| 27 | Nov-08 | 4.5 | 763 | 0.29 |
| 28 | Jun-09 | 4.5 | 776 | 0.39 |
| 29 | Nov-09 | 4.5 | 756 | 0.24 |
| 30 | Jun-10 | 4.5 | 747 | 0.17 |
| 31 | Nov-10 | 4.5 | 743 | 0.13 |
| 32 | Jun-11 | 4.5 | 721 | -0.04 |
| 33 | Nov-11 | 4.5 | 721 | -0.04 |
| 34 | Jun-12 | 4.5 | 748 | 0.17 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-24 Cr**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Aug-96 | 10 | **7.50** | **2.56** |
| 2 | Nov-96 | 10 | | |
| 3 | May-97 | 5 | | |
| 4 | May-98 | 5 | | |
| 5 | Nov-03 | 5 | | |
| 6 | Jun-05 | 8 | | |
| 7 | Dec-05 | 11 | | |
| 8 | Jun-06 | 6 | | |

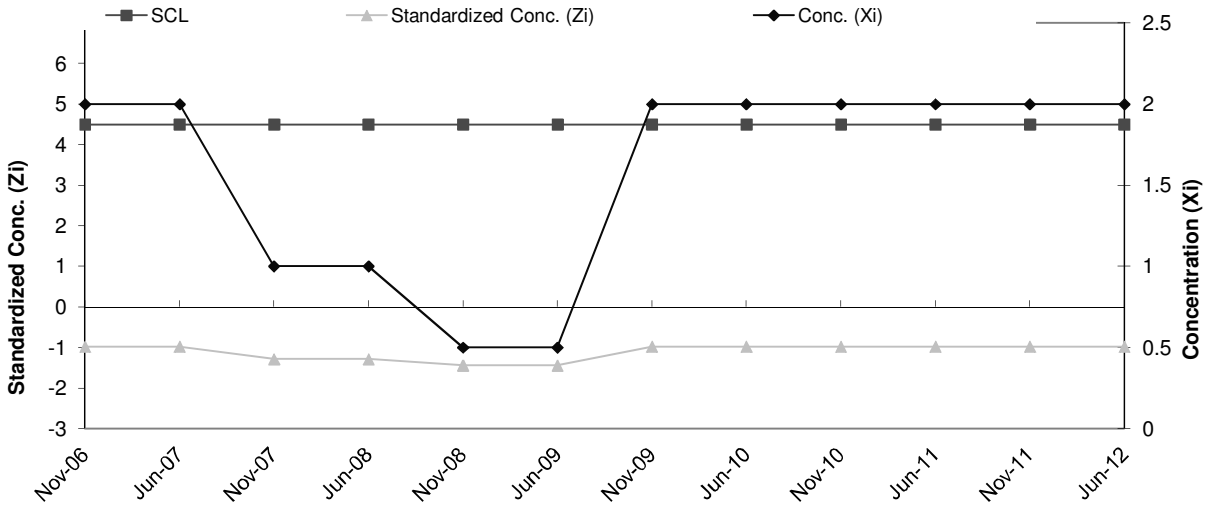
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | Nov-06 | 4.5 | 6 | -0.59 |
| 10 | Jun-07 | 4.5 | 9 | 0.59 |
| 11 | Nov-07 | 4.5 | 3 | -1.76 |
| 12 | Jun-08 | 4.5 | 2.5 | -1.95 |
| 13 | Nov-08 | 4.5 | 2.5 | -1.95 |
| 14 | Jun-09 | 4.5 | 2.5 | -1.95 |
| 15 | Nov-09 | 4.5 | 2.5 | -1.95 |
| 16 | Jun-10 | 4.5 | 2.5 | -1.95 |
| 17 | Nov-10 | 4.5 | 11 | 1.37 |
| 18 | Jun-11 | 4.5 | 10 | 0.98 |
| 19 | Jun-11 | 4.5 | 2.5 | -1.95 |
| 20 | Nov-11 | 4.5 | 2.5 | -1.95 |
| 21 | Jun-12 | 4.5 | 2.5 | -1.95 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-24 Cu**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Aug-96 | 10 | | |
| 2 | Nov-96 | 10 | | |
| 3 | May-97 | 5 | | |
| 4 | May-98 | 5 | **5.19** | **3.25** |
| 5 | Nov-03 | 5 | | |
| 6 | Jun-05 | 2.5 | | |
| 7 | Dec-05 | 2 | | |
| 8 | Jun-06 | 2 | | |

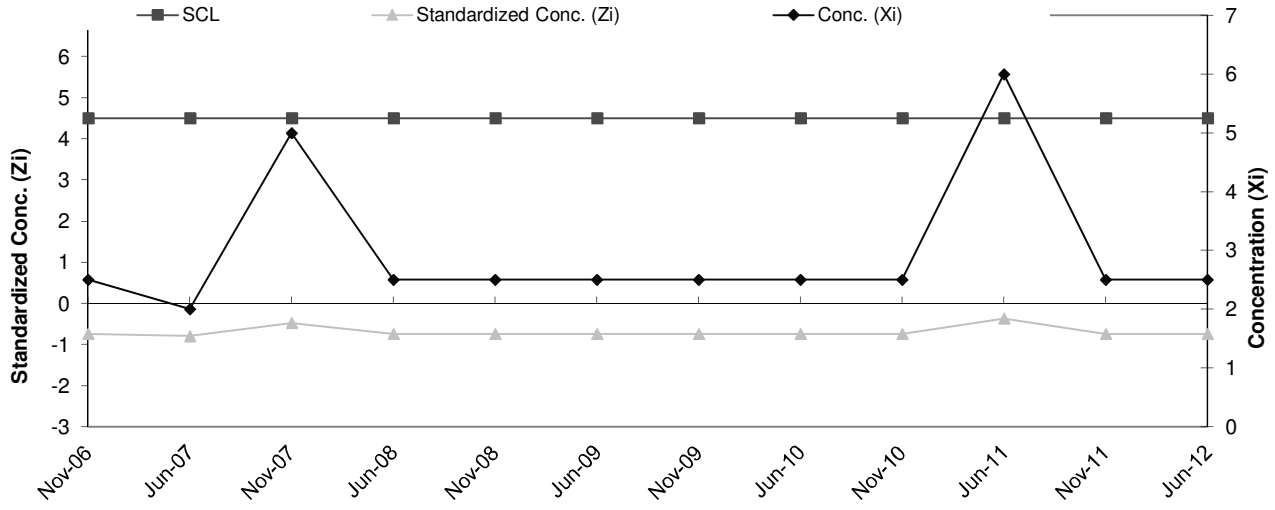
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | Nov-06 | 4.5 | 2 | -0.98 |
| 10 | Jun-07 | 4.5 | 2 | -0.98 |
| 11 | Nov-07 | 4.5 | 1 | -1.29 |
| 12 | Jun-08 | 4.5 | 1 | -1.29 |
| 13 | Nov-08 | 4.5 | 0.5 | -1.44 |
| 14 | Jun-09 | 4.5 | 0.5 | -1.44 |
| 15 | Nov-09 | 4.5 | 2 | -0.98 |
| 16 | Jun-10 | 4.5 | 2 | -0.98 |
| 17 | Nov-10 | 4.5 | 2 | -0.98 |
| 18 | Jun-11 | 4.5 | 2 | -0.98 |
| 19 | Nov-11 | 4.5 | 2 | -0.98 |
| 20 | Jun-12 | 4.5 | 2 | -0.98 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-24 Ni**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Aug-96 | 10 | | |
| 2 | Nov-96 | 10 | | |
| 3 | May-97 | 31 | | |
| 4 | May-98 | 8 | **9.44** | **9.35** |
| 5 | Nov-03 | 9 | | |
| 6 | Jun-05 | 2.5 | | |
| 7 | Dec-05 | 2.5 | | |
| 8 | Jun-06 | 2.5 | | |

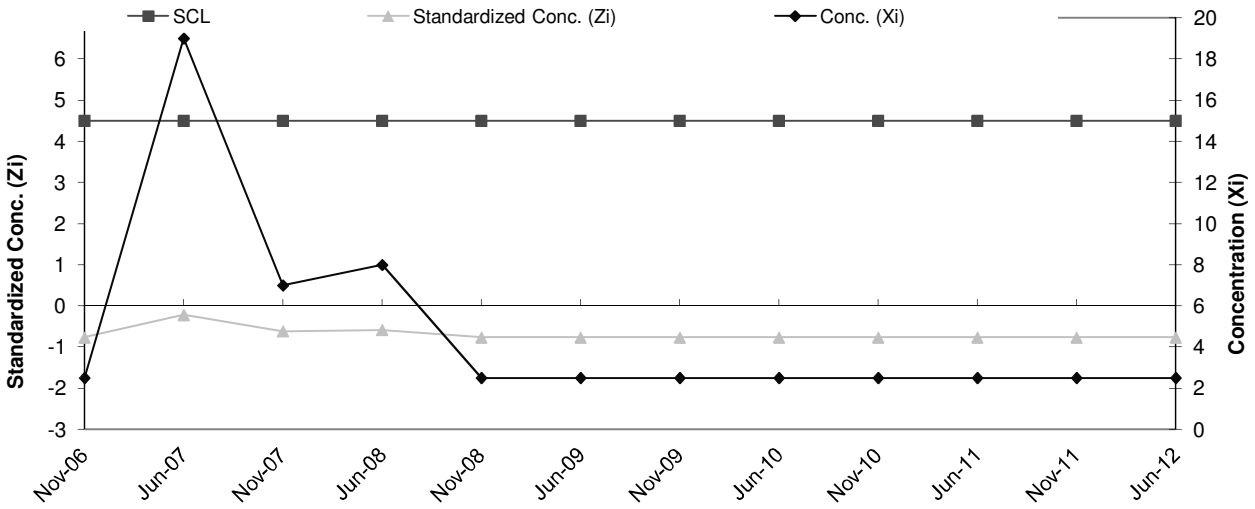
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | Nov-06 | 4.5 | 2.5 | -0.74 |
| 10 | Jun-07 | 4.5 | 2 | -0.80 |
| 11 | Nov-07 | 4.5 | 5 | -0.47 |
| 12 | Jun-08 | 4.5 | 2.5 | -0.74 |
| 13 | Nov-08 | 4.5 | 2.5 | -0.74 |
| 14 | Jun-09 | 4.5 | 2.5 | -0.74 |
| 15 | Nov-09 | 4.5 | 2.5 | -0.74 |
| 16 | Jun-10 | 4.5 | 2.5 | -0.74 |
| 17 | Nov-10 | 4.5 | 2.5 | -0.74 |
| 18 | Jun-11 | 4.5 | 6 | -0.37 |
| 19 | Nov-11 | 4.5 | 2.5 | -0.74 |
| 20 | Jun-12 | 4.5 | 2.5 | -0.74 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-24 Zn**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Aug-96 | 90 | **25.63** | **30.14** |
| 2 | Nov-96 | 50 | | |
| 3 | May-97 | 10 | | |
| 4 | May-98 | 20 | | |
| 5 | Nov-03 | 20 | | |
| 6 | Jun-05 | 2.5 | | |
| 7 | Dec-05 | 10 | | |
| 8 | Jun-06 | 2.5 | | |

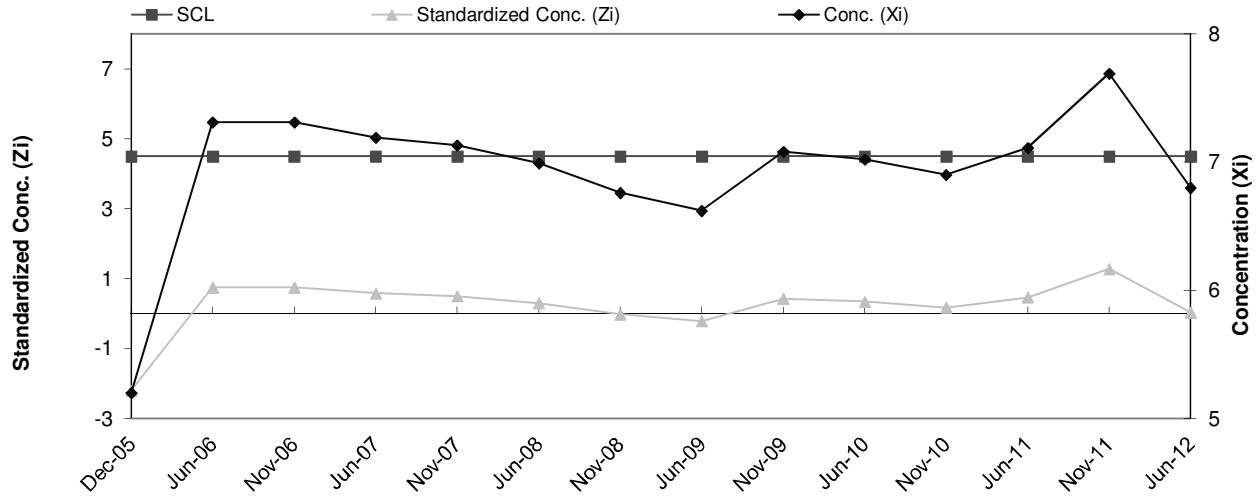
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | Nov-06 | 4.5 | 2.5 | -0.77 |
| 10 | Jun-07 | 4.5 | 19 | -0.22 |
| 11 | Nov-07 | 4.5 | 7 | -0.62 |
| 12 | Jun-08 | 4.5 | 8 | -0.58 |
| 13 | Nov-08 | 4.5 | 2.5 | -0.77 |
| 14 | Jun-09 | 4.5 | 2.5 | -0.77 |
| 15 | Nov-09 | 4.5 | 2.5 | -0.77 |
| 16 | Jun-10 | 4.5 | 2.5 | -0.77 |
| 17 | Nov-10 | 4.5 | 2.5 | -0.77 |
| 18 | Jun-11 | 4.5 | 2.5 | -0.77 |
| 19 | Nov-11 | 4.5 | 2.5 | -0.77 |
| 20 | Jun-12 | 4.5 | 2.5 | -0.77 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-24 pH**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Aug-96 | 7.8 | **6.78** | **0.72** |
| 2 | Nov-96 | 7.1 | | |
| 3 | May-97 | 6.4 | | |
| 4 | May-98 | 7 | | |
| 5 | Nov-98 | 6 | | |
| 6 | Nov-99 | 7 | | |
| 7 | May-01 | 6.4 | | |
| 8 | Jun-05 | 7.3 | | |

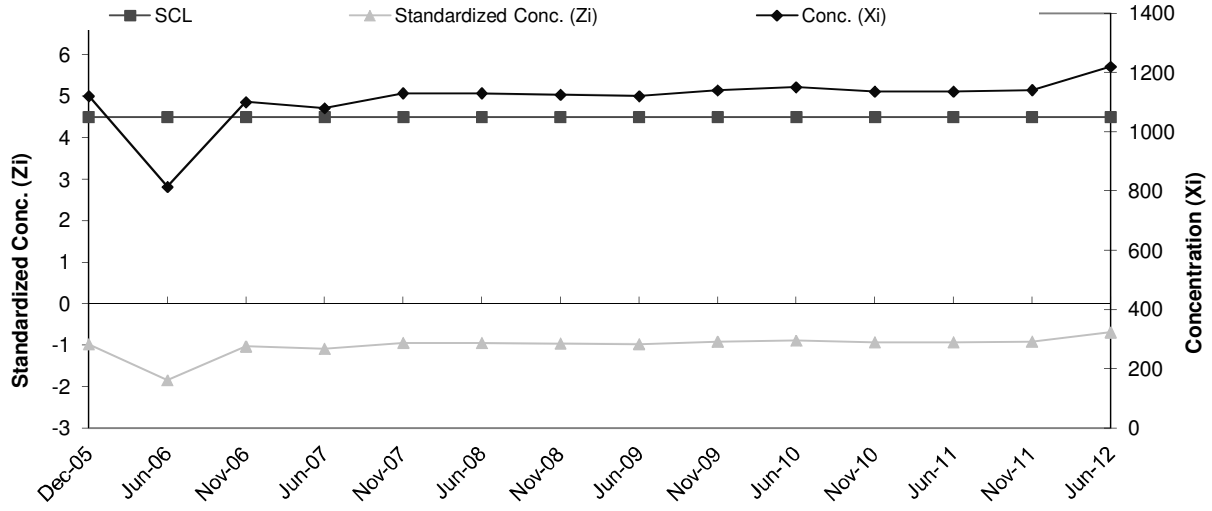
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | Dec-05 | 4.5 | 5.2 | -2.20 |
| 10 | Jun-06 | 4.5 | 7.3 | 0.75 |
| 11 | Nov-06 | 4.5 | 7.3 | 0.75 |
| 12 | Jun-07 | 4.5 | 7.2 | 0.58 |
| 13 | Nov-07 | 4.5 | 7.1 | 0.50 |
| 14 | Jun-08 | 4.5 | 7.0 | 0.30 |
| 15 | Nov-08 | 4.5 | 6.8 | -0.02 |
| 14 | Jun-09 | 4.5 | 6.6 | -0.22 |
| 15 | Nov-09 | 4.5 | 7.1 | 0.43 |
| 16 | Jun-10 | 4.5 | 7.0 | 0.34 |
| 17 | Nov-10 | 4.5 | 6.9 | 0.17 |
| 18 | Jun-11 | 4.5 | 7.1 | 0.47 |
| 19 | Nov-11 | 4.5 | 7.7 | 1.28 |
| 20 | Jun-12 | 4.5 | 6.8 | 0.03 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-24 SpC**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Aug-96 | 1502 | | |
| 2 | Nov-96 | 2030 | | |
| 3 | May-97 | 1700 | | |
| 4 | May-98 | 1410 | **1,462.00** | **351.23** |
| 5 | Nov-98 | 1595 | | |
| 6 | Nov-99 | 1152 | | |
| 7 | May-01 | 1450 | | |
| 8 | Jun-05 | 857 | | |

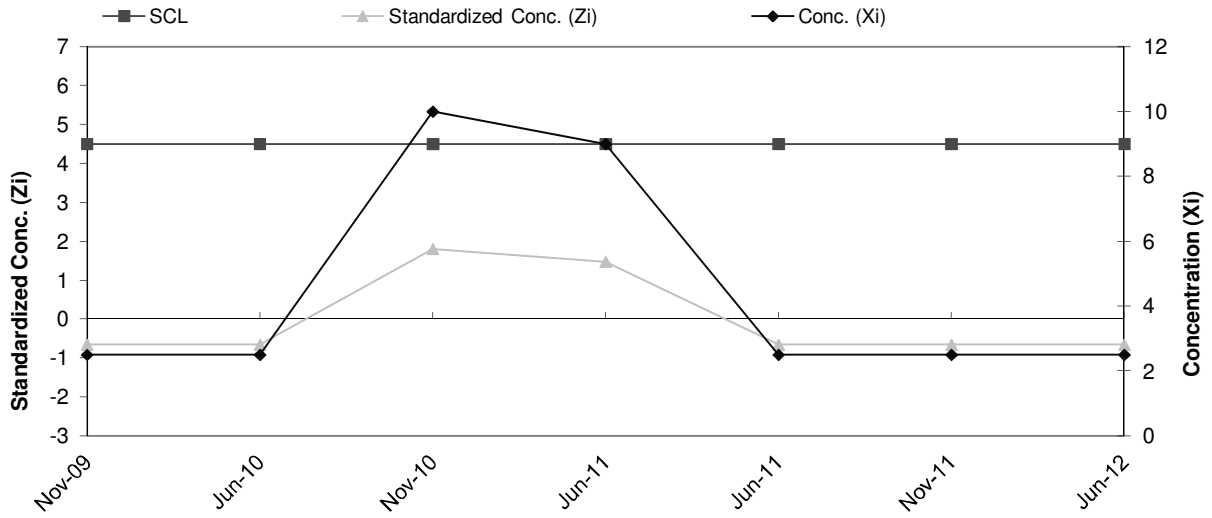
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | Dec-05 | 4.5 | 1120 | -0.97 |
| 10 | Jun-06 | 4.5 | 814 | -1.84 |
| 11 | Nov-06 | 4.5 | 1100 | -1.03 |
| 12 | Jun-07 | 4.5 | 1080 | -1.09 |
| 13 | Nov-07 | 4.5 | 1130 | -0.95 |
| 14 | Jun-08 | 4.5 | 1130 | -0.95 |
| 15 | Nov-08 | 4.5 | 1125 | -0.96 |
| 16 | Jun-09 | 4.5 | 1120 | -0.97 |
| 17 | Nov-09 | 4.5 | 1140 | -0.92 |
| 18 | Jun-10 | 4.5 | 1150 | -0.89 |
| 19 | Nov-10 | 4.5 | 1136 | -0.93 |
| 20 | Jun-11 | 4.5 | 1136 | -0.93 |
| 21 | Nov-11 | 4.5 | 1141 | -0.91 |
| 22 | Jun-12 | 4.5 | 1219 | -0.69 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-27 Cr**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Dec-05 | 9 | | |
| 2 | Jun-06 | 6 | | |
| 3 | Nov-06 | 2.5 | | |
| 4 | Jun-07 | 9 | **4.50** | **3.05** |
| 5 | Nov-07 | 2 | | |
| 6 | Jun-08 | 2.5 | | |
| 7 | Nov-08 | 2.5 | | |
| 8 | Jun-09 | 2.5 | | |

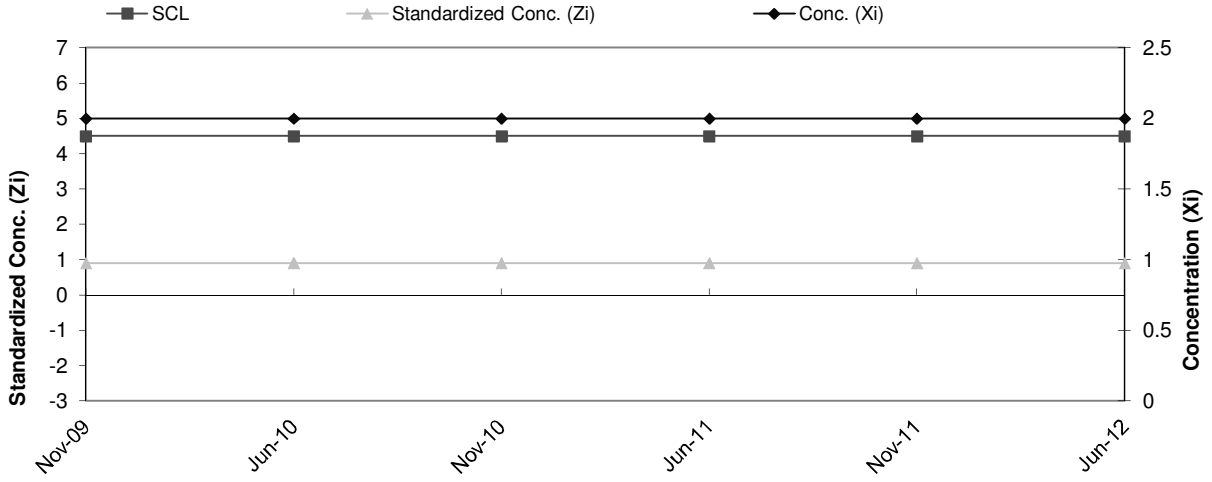
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | Nov-09 | 4.5 | 2.5 | -0.66 |
| 10 | Jun-10 | 4.5 | 2.5 | -0.66 |
| 11 | Nov-10 | 4.5 | 10 | 1.80 |
| 12 | Jun-11 | 4.5 | 9 | 1.48 |
| 13 | Jun-11 | 4.5 | 2.5 | -0.66 |
| 14 | Nov-11 | 4.5 | 2.5 | -0.66 |
| 15 | Jun-12 | 4.5 | 2.5 | -0.66 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-27 Cu**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Dec-05 | 2 | **1.38** | **0.69** |
| 2 | Jun-06 | 2 | | |
| 3 | Nov-06 | 2 | | |
| 4 | Jun-07 | 2 | | |
| 5 | Nov-07 | 1 | | |
| 6 | Jun-08 | 0.5 | | |
| 7 | Nov-08 | 0.5 | | |
| 8 | Jun-09 | 1 | | |

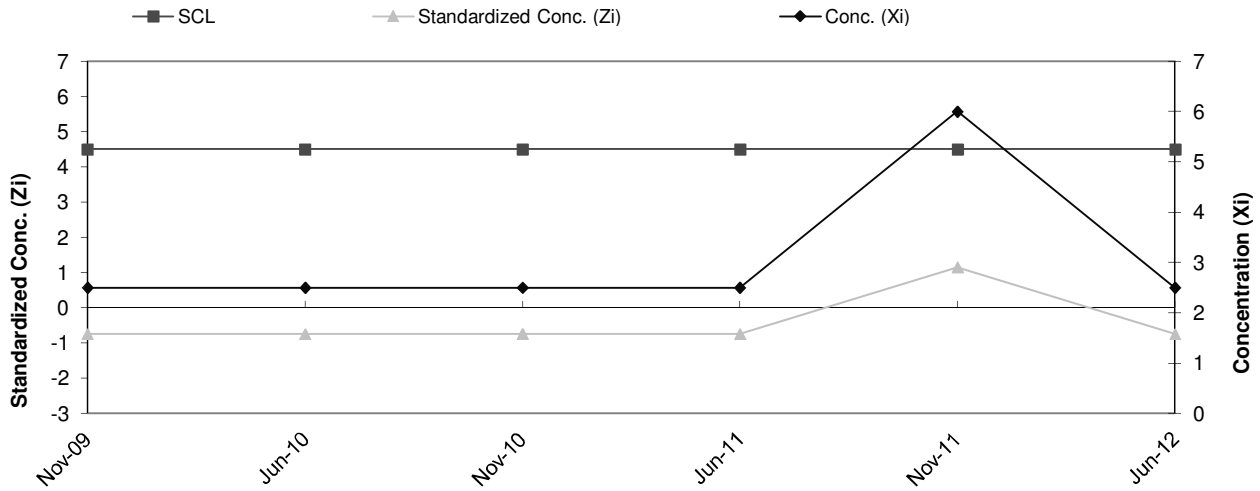
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | Nov-09 | 4.5 | 2 | 0.90 |
| 10 | Jun-10 | 4.5 | 2 | 0.90 |
| 11 | Nov-10 | 4.5 | 2 | 0.90 |
| 12 | Jun-11 | 4.5 | 2 | 0.90 |
| 13 | Nov-11 | 4.5 | 2 | 0.90 |
| 14 | Jun-12 | 4.5 | 2 | 0.90 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-27 Ni**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Dec-05 | 6 | **3.88** | **1.85** |
| 2 | Jun-06 | 7 | | |
| 3 | Nov-06 | 2.5 | | |
| 4 | Jun-07 | 3 | | |
| 5 | Nov-07 | 5 | | |
| 6 | Jun-08 | 2.5 | | |
| 7 | Nov-08 | 2.5 | | |
| 8 | Jun-09 | 2.5 | | |

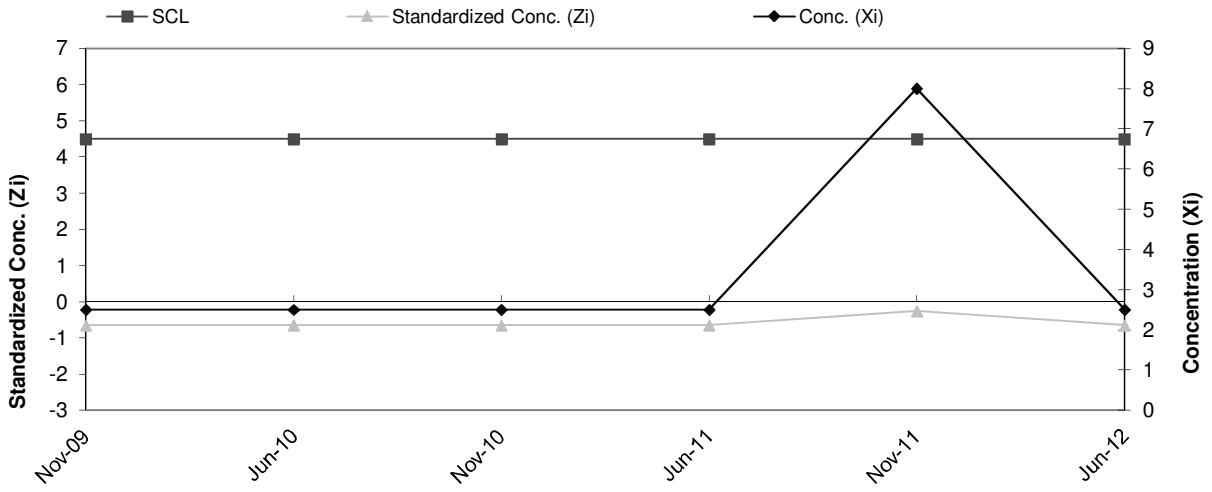
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | Nov-09 | 4.5 | 2.5 | -0.74 |
| 10 | Jun-10 | 4.5 | 2.5 | -0.74 |
| 11 | Nov-10 | 4.5 | 2.5 | -0.74 |
| 12 | Jun-11 | 4.5 | 2.5 | -0.74 |
| 13 | Nov-11 | 4.5 | 6 | 1.15 |
| 14 | Jun-12 | 4.5 | 2.5 | -0.74 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-27 Zn**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Dec-05 | 5 | **11.56** | **13.97** |
| 2 | Jun-06 | 6 | | |
| 3 | Nov-06 | 6 | | |
| 4 | Jun-07 | 36 | | |
| 5 | Nov-07 | 32 | | |
| 6 | Jun-08 | 2.5 | | |
| 7 | Nov-08 | 2.5 | | |
| 8 | Jun-09 | 2.5 | | |

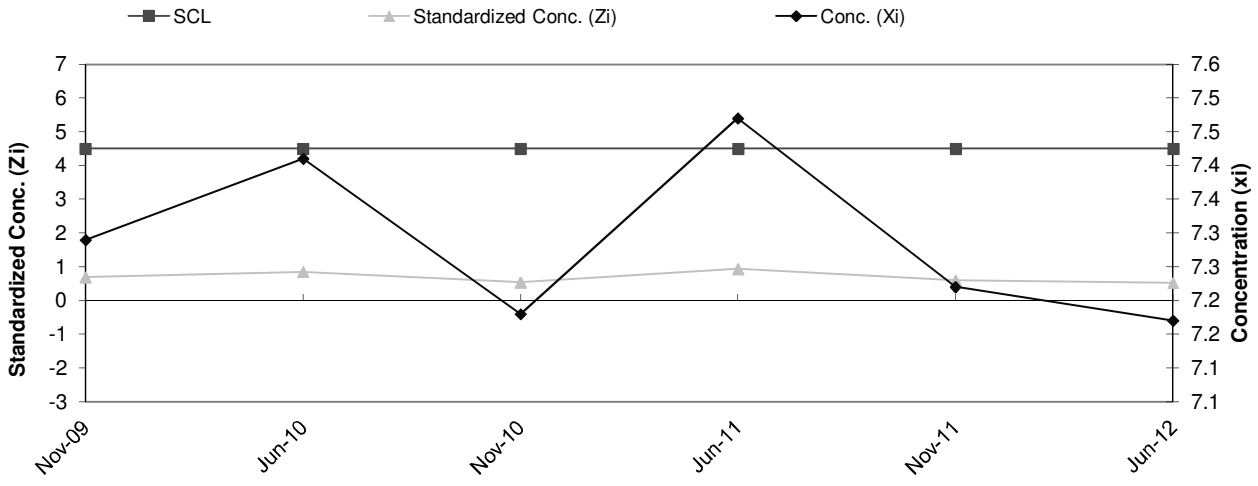
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | Nov-09 | 4.5 | 2.5 | -0.65 |
| 10 | Jun-10 | 4.5 | 2.5 | -0.65 |
| 11 | Nov-10 | 4.5 | 2.5 | -0.65 |
| 12 | Jun-11 | 4.5 | 2.5 | -0.65 |
| 13 | Nov-11 | 4.5 | 8 | -0.26 |
| 14 | Jun-12 | 4.5 | 2.5 | -0.65 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-27 pH**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Dec-05 | 5.1 | **6.79** | **0.73** |
| 2 | Jun-06 | 7.1 | | |
| 3 | Nov-06 | 7.5 | | |
| 4 | Jun-07 | 6.6 | | |
| 5 | Nov-07 | 7.3 | | |
| 6 | Jun-08 | 7.1 | | |
| 7 | Nov-08 | 6.8 | | |
| 8 | Jun-09 | 6.8 | | |

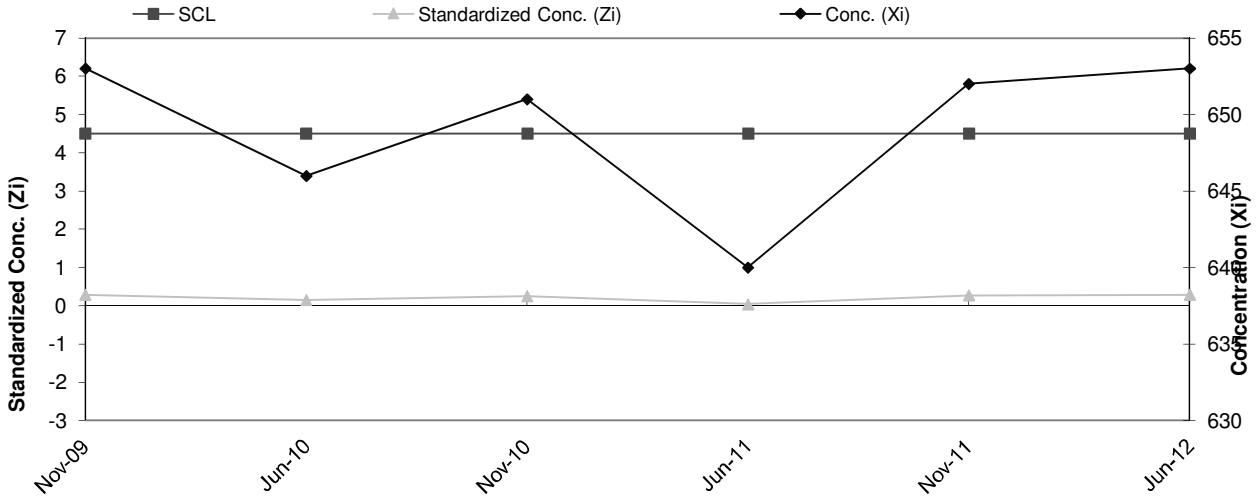
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | Nov-09 | 4.5 | 7.3 | 0.69 |
| 10 | Jun-10 | 4.5 | 7.4 | 0.85 |
| 11 | Nov-10 | 4.5 | 7.2 | 0.54 |
| 12 | Jun-11 | 4.5 | 7.5 | 0.94 |
| 13 | Nov-11 | 4.5 | 7.2 | 0.59 |
| 14 | Jun-12 | 4.5 | 7.2 | 0.52 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-27 SpC**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Dec-05 | 714 | | |
| 2 | Jun-06 | 594 | | |
| 3 | Nov-06 | 540 | | |
| 4 | Jun-07 | 628 | **637.75** | **52.08** |
| 5 | Nov-07 | 649 | | |
| 6 | Jun-08 | 659 | | |
| 7 | Nov-08 | 667 | | |
| 8 | Jun-09 | 651 | | |

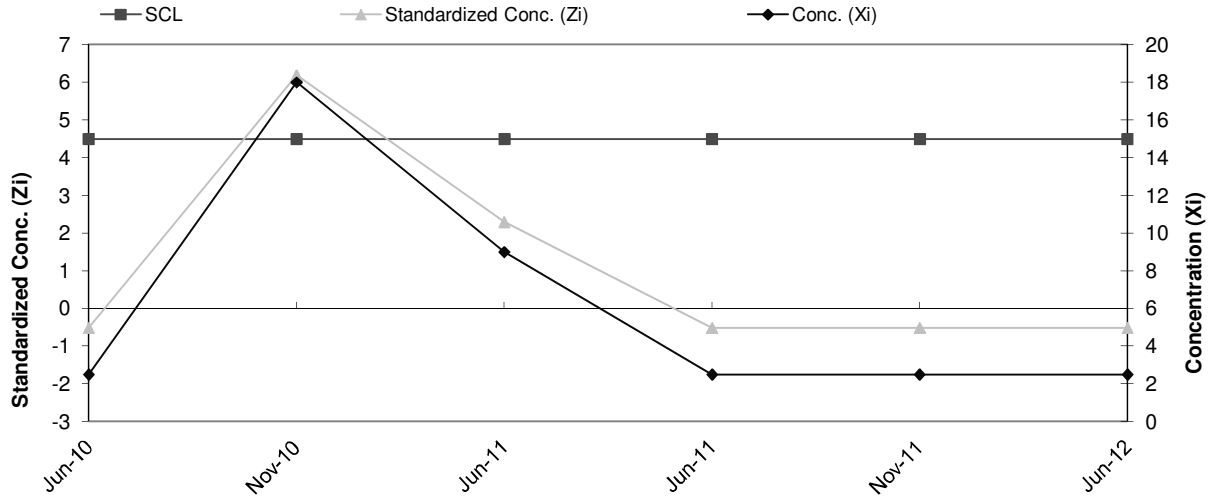
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | Nov-09 | 4.5 | 653 | 0.29 |
| 10 | Jun-10 | 4.5 | 646 | 0.16 |
| 11 | Nov-10 | 4.5 | 651 | 0.25 |
| 12 | Jun-11 | 4.5 | 640 | 0.04 |
| 13 | Nov-11 | 4.5 | 652 | 0.27 |
| 14 | Jun-12 | 4.5 | 653 | 0.29 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-28 Cr**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-06 | 5 | **3.69** | **2.31** |
| 2 | Dec-06 | 2.5 | | |
| 3 | Jun-07 | 9 | | |
| 4 | Nov-07 | 3 | | |
| 5 | Jun-08 | 2.5 | | |
| 6 | Nov-08 | 2.5 | | |
| 7 | Jun-09 | 2.5 | | |
| 8 | Nov-09 | 2.5 | | |

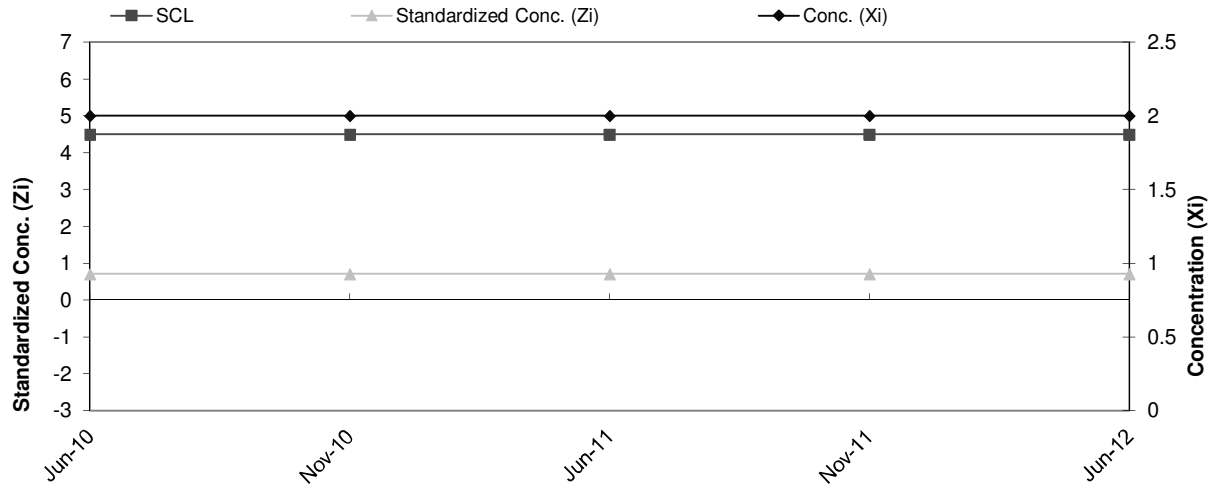
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | Jun-10 | 4.5 | 2.5 | -0.51 |
| 10 | Nov-10 | 4.5 | 18 | 6.19 |
| 11 | Jun-11 | 4.5 | 9 | 2.30 |
| 12 | Jun-11 | 4.5 | 2.5 | -0.51 |
| 13 | Nov-11 | 4.5 | 2.5 | -0.51 |
| 14 | Jun-12 | 4.5 | 2.5 | -0.51 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-28 Cu**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-06 | 2 | **1.50** | **0.71** |
| 2 | Dec-06 | 2 | | |
| 3 | Jun-07 | 2 | | |
| 4 | Nov-07 | 2 | | |
| 5 | Jun-08 | 1 | | |
| 6 | Nov-08 | 0.5 | | |
| 7 | Jun-09 | 0.5 | | |
| 8 | Nov-09 | 2 | | |

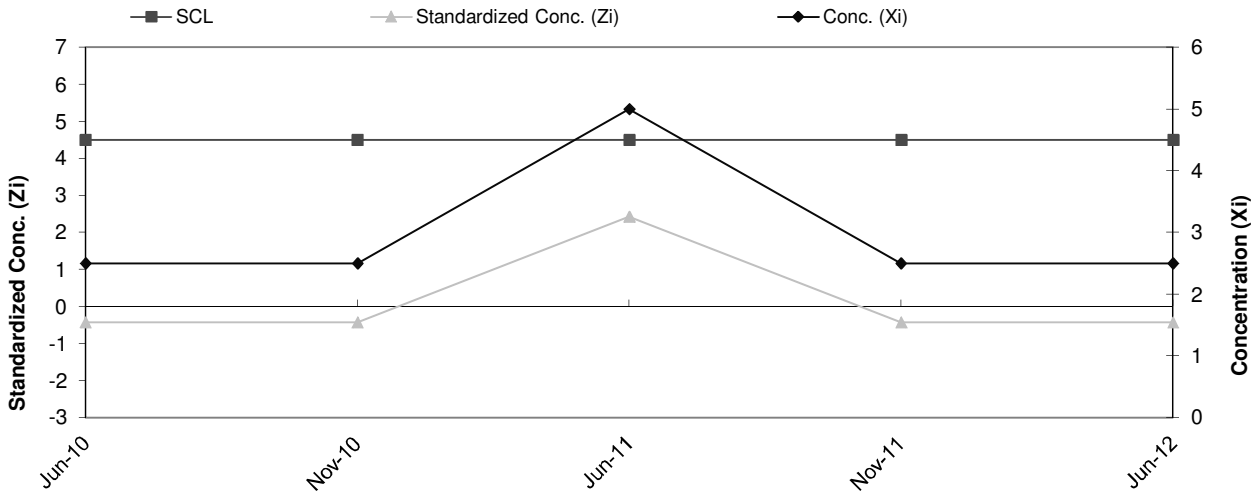
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | Jun-10 | 4.5 | 2 | 0.71 |
| 10 | Nov-10 | 4.5 | 2 | 0.71 |
| 11 | Jun-11 | 4.5 | 2 | 0.71 |
| 12 | Nov-11 | 4.5 | 2 | 0.71 |
| 13 | Jun-12 | 4.5 | 2 | 0.71 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-28 Ni**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-06 | 2.5 | **2.88** | **0.88** |
| 2 | Dec-06 | 2.5 | | |
| 3 | Jun-07 | 3 | | |
| 4 | Nov-07 | 5 | | |
| 5 | Jun-08 | 2.5 | | |
| 6 | Nov-08 | 2.5 | | |
| 7 | Jun-09 | 2.5 | | |
| 8 | Nov-09 | 2.5 | | |

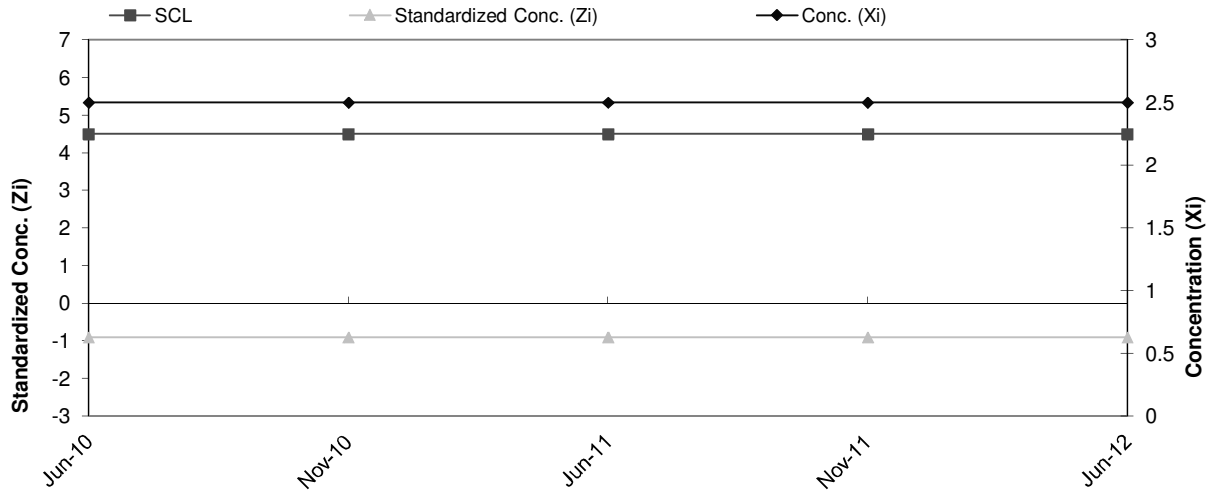
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | Jun-10 | 4.5 | 2.5 | -0.43 |
| 10 | Nov-10 | 4.5 | 2.5 | -0.43 |
| 9 | Jun-11 | 4.5 | 5 | 2.43 |
| 10 | Nov-11 | 4.5 | 2.5 | -0.43 |
| 11 | Jun-12 | 4.5 | 2.5 | -0.43 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-28 Zn**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-06 | 18 | **8.75** | **6.88** |
| 2 | Dec-06 | 5 | | |
| 3 | Jun-07 | 6 | | |
| 4 | Nov-07 | 11 | | |
| 5 | Jun-08 | 5 | | |
| 6 | Nov-08 | 2.5 | | |
| 7 | Jun-09 | 2.5 | | |
| 8 | Nov-09 | 20 | | |

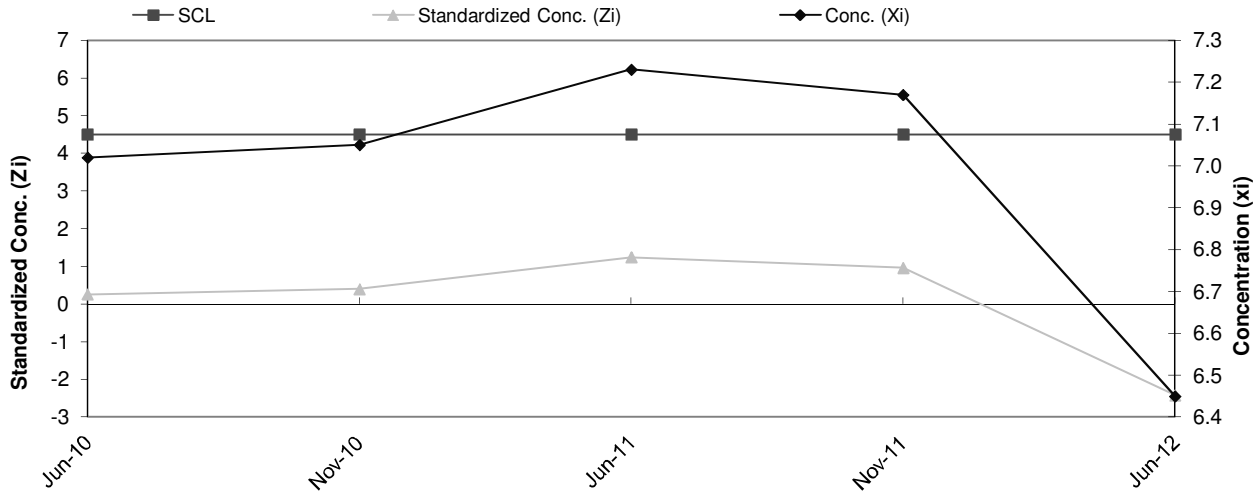
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | Jun-10 | 4.5 | 2.5 | -0.91 |
| 10 | Nov-10 | 4.5 | 2.5 | -0.91 |
| 11 | Jun-11 | 4.5 | 2.5 | -0.91 |
| 12 | Nov-11 | 4.5 | 2.5 | -0.91 |
| 13 | Jun-12 | 4.5 | 2.5 | -0.91 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-28 pH**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-06 | 7.1 | **6.97** | **0.21** |
| 2 | Dec-06 | 7.4 | | |
| 3 | Jun-07 | 6.8 | | |
| 4 | Nov-07 | 6.8 | | |
| 5 | Jun-08 | 6.9 | | |
| 6 | Nov-08 | 6.8 | | |
| 7 | Jun-09 | 7.0 | | |
| 8 | Nov-09 | 6.9 | | |

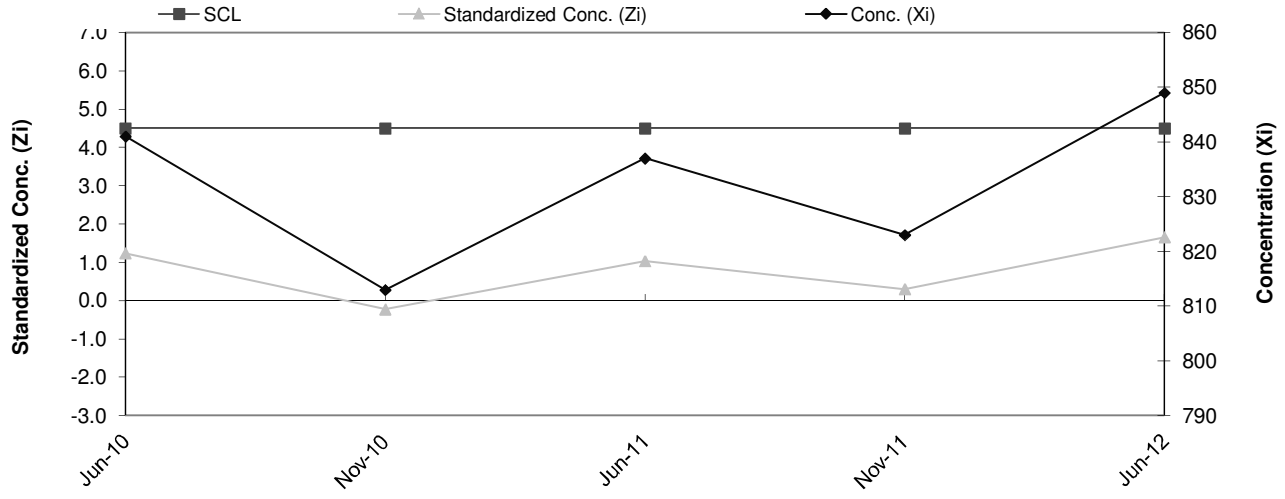
| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | Jun-10 | 4.5 | 7.0 | 0.26 |
| 10 | Nov-10 | 4.5 | 7.1 | 0.40 |
| 11 | Jun-11 | 4.5 | 7.2 | 1.24 |
| 12 | Nov-11 | 4.5 | 7.2 | 0.96 |
| 13 | Jun-12 | 4.5 | 6.5 | -2.42 |



**COLDWATER ROAD LANDFILL FACILITY**
**RCRA GROUND WATER DETECTION MONITORING SYSTEM**
**SHEWART CONTROL CHART**
**B-28 SpC**

| Baseline Data | | | | |
|---|---|---|---|---|
| Ti | Date | Conc. | Mean | Std. Dev |
| 1 | Jun-06 | 785 | **817.25** | **19.14** |
| 2 | Dec-06 | 812 | | |
| 3 | Jun-07 | 845 | | |
| 4 | Nov-07 | 816 | | |
| 5 | Jun-08 | 840 | | |
| 6 | Nov-08 | 804 | | |
| 7 | Jun-09 | 822 | | |
| 8 | Nov-09 | 814 | | |

| Ti | Date | SCL | Conc. (Xi) | Standardized Conc. (Zi) |
|---|---|---|---|---|
| 9 | Jun-10 | 4.5 | 841 | 1.24 |
| 10 | Nov-10 | 4.5 | 813 | -0.22 |
| 11 | Jun-11 | 4.5 | 837 | 1.03 |
| 12 | Nov-11 | 4.5 | 823 | 0.30 |
| 13 | Jun-12 | 4.5 | 849 | 1.66 |



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