2015 SEMIANNUAL REPORT – FINAL REPORT

Landfill Leak Detection Systems
Coldwater Road Landfill
Flint, Michigan
MID 005 356 860

RACER TRUST
Detroit, Michigan

August 2015

O'BRIEN & GERE

15388 | 60794

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

Prepared for RACER Trust
Detroit, Michigan

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

August 28, 2015

Mr. Richard Conforti, P.E.
Environmental Engineer
Michigan Department of Environmental Quality
Office of Waste Management and Radiological Protection
P.O. Box 30473
Lansing, Michigan 48909-7973

RE: Landfill Leak Detection System 2015 Semiannual Report
Coldwater Road Landfill, Flint, Michigan
MID 005 356 860

FILE: 15388 /60794/rep

Dear Mr. Conforti:

On behalf of Revitalizing Auto Communities Environmental Response Trust (RACER), O'Brien & Gere is pleased to present the results of the 2015 semiannual leak detection system (LDS) sampling event conducted in June 2015 for the Coldwater Road Landfill site (Figure 1). Samples from six leak detection vaults (A through F) and six leachate collection sumps (A through F) were collected on June 25, 2015 for laboratory analysis.

The samples were analyzed for total organic carbon (TOC, Method 415.1), total suspended solids (TSS, Method 160.2), specific conductivity (Method 120.1), dissolved chromium (Cr), dissolved copper (Cu), dissolved nickel (Ni), and dissolved zinc (Zn, Method 200.8). Samples collected from Sumps A through F were also analyzed for volatile organic compounds (VOCs, Method 8260). The event also included field measurements for pH, specific conductivity and temperature.

The analytical results are summarized in four attached tables: Landfill Leak Detection Vaults – Historical Analytical Results, Inorganics and Metals (Table 1), Landfill Leachate Sumps – Historical Analytical Results, Inorganics and Metals (Table 2), Landfill Leachate Sumps – Analytical Results, Volatile Organic Compounds (Table 3), and Leachate Sump Depth to Water (Table 4). A Site Location Map (Figure 1) and Landfill Site Layout (Figure 2) are also attached. The Analytical Laboratory Report and the Chain of Custody are included as (Appendix A).

The samples for the leak detection vaults and leachate sumps were collected on June 25, 2015 using a peristaltic pump and tubing for each vault and sump. Duplicate samples were collected from Vault E and Sump E. Samples were placed directly into laboratory prepared containers, logged onto a chain of custody form and placed on ice for transport to Merit Laboratories, Inc., in East Lansing, Michigan.

The laboratory analysis for TOC, TSS, dissolved metals, and the field parameters continue to show historically consistent concentrations for the vaults and sumps (Tables 1 and 2).

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:

VAULTS:

- Chromium concentrations were not detected above the method detection limit of 5 µg/L
- Copper concentrations were not detected above the method detection limit of 5 µg/L in Vaults E and F, but increased in Vault A, B and C. In Vault D, Copper concentration decreased, but remain within the range of historical concentrations
- Nickel concentrations decreased compared to previous sample results, except in Vault D, which increased, but remained within the range of historical concentrations
- Zinc concentrations increased in Vaults B, C, E and F, and decreased in Vaults A and D. Zinc concentration were comparable to previous sample results
- TOC concentrations increased, except in Vaults E and F, but were comparable to previous sample results
- TSS concentrations increased slightly, but were comparable to previous sample results
- pH concentrations increased slightly in Vaults A, B and E, and decreased in Vaults C, D and Vault F. pH concentrations were comparable to previous sample results
- Specific conductivity concentrations decreased compared to previous sample results, except in Vaults C and D, which increased; however, the results were within the range of historical concentrations.

SUMPS:

- Chromium concentrations increased in Sumps A, C, D and F, and decreased in Sumps B and E; however, the chromium concentrations were comparable to historical concentrations, except in Sump A, which was a new high concentration of 452 µg/L for this Sump.
- Copper concentrations decreased in Sumps A, C and E, but increased in the remaining sumps (B, D and F), but were within the range of historical concentrations
- Nickel concentrations decreased in Sumps A and E, but increased in the remaining sumps (B, C, D and F), but were within the range of historical concentrations
- Zinc concentrations increased in all the Sumps except in Sump E, but were within the range of historical concentrations
- TOC concentrations increased in Sumps B, C and F, and decreased in Sumps A, D and E; however, the TOC concentrations were comparable to historical concentrations
- TSS concentrations decreased compared to previous sample results; except in Sumps B and D where the TSS concentration increased, but were within the range of historical concentrations
- pH concentrations decreased slightly and remain comparable to previous sample results
- Specific conductivity decreased slightly, except for Sumps B, E and F, which increased, but were within the range of historical concentrations.

Methyl iodide and acetone were the only VOCs detected during this sampling event in the sumps. Methyl iodide was detected in Sump C and acetone was detected in Sump D at concentrations of 2 µg/L and 850 µg/L, respectively. Acetone has been detected previously in Sump D.

The duplicate samples collected during this sample event from Vault E and Sump E exhibited values consistent with the original results.

There were no exceedances of the Shewart control limits (SCL) during this sampling event. The Shewart control charts are included as Appendix B. However, there were confirmed positive (increasing) trends for nickel, zinc and specific conductivity in Vault D. The evaluation and determination of a trend is based on the most recent four results. The confirmation of two or more confirmed positive trends for constituents in Vault D requires further evaluation of Vault D and Sump D data in accordance with Section 4.42 of the Post-Closure Care Plan (OBG, 2014). The graphical analysis of the Vault D and Sump D data is contained in Appendix C.

After further evaluation, the data does not indicate a release from the landfill. The nickel and zinc trends appear to be attributed to recent low concentrations that are now increasing to previous concentrations in this vault, as is evidenced by approximately half of the historical results for these metals being equal to or greater in concentration than the current results (*i.e.*, close to the median concentrations detected in this vault), and both the nickel and zinc results are less than the baseline concentrations established for Vault D.

A detailed summary of the further evaluation indicated:

- Chromium was not detected in Vault D during this sampling event as it has been for five years, while copper, nickel and zinc concentrations increased; however, none of them were higher than the range of historical concentrations for these metals in the past half-decade.
- The metals concentrations in Sump D increased in comparison to the last sampling event, but are also within the range of historical concentrations detected within the last half-decade. Copper and nickel have the highest concentrations; therefore, a leak from the landfill would contain higher concentrations of these metals than chromium and zinc, which have consistently been detected at much lower concentrations.
- Zinc concentrations increased both in Sump D and Vault D; however, the detected concentrations do not match in rise and fall of their concentrations. In addition, zinc concentrations in Vault D are not attributable to Sump D because the zinc concentrations in Vault D are greater than in Sump D, which indicates a non-leachate source of Zinc within Vault D.
- Nickel concentrations increased both in Sump D and Vault D; yet, this increasing concentration does not follow the same trend in both Sump D and Vault D. Although the detected Nickel concentration in Vault D could be caused by a release of 6.33 gallons of leachate, calculated using the proportion of vault to sump concentrations times the amount of water in the vault, the actual detected concentration of copper in Vault D (8 µg/L) does not confirm leachate as the source because it would result in a concentration of ≥ 20 µg/L for copper from such a release.
- Specific conductivity concentrations increased in Vault D, but decreased in Sump D.
- pH concentrations do not follow a similar rise or fall in concentrations, and actually have shown opposite trends/spikes at times.

Furthermore, the positive trends in Vault D were not confirmed by the concentrations of metals, pH or specific conductivity in the closest monitoring wells, which were either not detected or stable, and the detected concentrations were within the range of historical concentrations. In fact, chromium, copper, nickel and zinc were not detected in wells B-7, B-18A and B-24r, which are the shallow wells closest to Vault D except for nickel in B-24r that was detected at a concentration of 7 µg/L, which is below the baseline concentrations established for this well.

Therefore, the positive trends do not suggest there was a release from the landfill, but will continue to be monitored during future sampling events.

There was also a negative (decreasing) trend for specific conductivity in Vault A, and positive (increasing) trends for pH in Vaults B and E, which were not confirmed by trends or spikes in the other metals or specific conductivity in these vaults.

The next semiannual sampling event will be completed in November 2015. 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
Scientist III

ENCLOSURES:
Table 1 – Vaults Historical Analytical Results
Table 2 – Sumps Historical Analytical Results
Table 3 – Sumps Volatile Organics Analytical Results
Table 4 – Sumps Depth to Water
Figure 1 – Site Location Map
Figure 2 – Site Layout
Appendix A – Analytical Laboratory Reports
Appendix B – Leak Detection Vault Control Charts
Appendix C – Further Evaluation of Vault D Trends

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 28, 2015

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Date

cc: file

TABLES

Table 1
RACER Trust - Coldwater Road Landfill Facility
Landfill Leak Detection Vaults - Historical Analytical Results
Inorganics and Metals

Vault	Sample Date	Indicator Parameters					Dissolved Metals (µg/L)			
		TOC (mg/L)	TSS (mg/L)	pH	SpC	T	Cr	Cu	Ni	Zn
	MDEQ Residential Drinking Water Criteria & RBSLs						100 (A)	1,000 (E)	100 (A)	2,400
Vault A	23-Mar-95	4.6	<1	7.50	690	--	<20	<20	<40	180
	20-Jun-95	8.9	2.0	6.80	1900	--	24	21	<30	<20
	30-Aug-95	8.2	2.0	6.90	2000	--	<20	<20	<40	<20
	28-Nov-95	9.1	<1	7.00	1900	--	23	31	43	24
	27-Mar-96	140.0	<10	7.20	2000	--	<20	<20	46	<20
	18-Jun-96	12.0	<10	6.90	2000	--	<20	<20	<20	<20
	20-Aug-96	32.0	<5	7.10	1900	--	<20	<20	<20	30
	11-Nov-96	18.0	5.0	7.10	2000	--	<20	<20	30	60
	19-Feb-97	NS	NS	NS	NS	NS	NS	NS	NS	NS
	9-May-97	13.0	17.0	6.67	1940	9.7	<10	<10	71	90
	12-Aug-97	6.0	4.0	5.98	1810	12.8	<10	<10	88	60
	15-Nov-97	8.0	12.0	6.50	2000	12.0	<10	10	125	100
	9-Feb-98	6.0	8.0	6.40	1960	11.5	<10	<10	73	60
	14-May-98	12.0	15.0	6.90	1760	17.4	<10	20	13	200
	14-Aug-98	5.0	6.0	6.70	--	--	<10	<10	15	160
	13-Nov-98	5.0	12.0	6.50	1990	16.5	<10	<10	20	220
	19-Mar-99	5.7	8.0	6.80	1334	13.6	<10	10	14	60
	6-May-99	5.6	16.0	6.85	3250	26.2	<10	<10	15	20
	23-Jul-99	5.7	3.0	6.30	1470	18.9	<5	9	13	19
	22-Oct-99	5.0	3.0	5.86	1750	12.1	<10	<10	16	30
	14-Mar-00	5.6	<1	7.60	1410	10.7	<10	<10	15	20
	20-Jun-00	7.0	3.0	6.90	1410	18.3	<10	<10	12	20
	13-Sep-00	5.9	5.0	7.50	1650	15.1	<5	<10	14	20
	10-Nov-00	6.4	2.0	7.20	1470	11.8	<10	100	10	150
	12-Mar-01	6.0	1.0	7.43	1530	12.8	<10	<10	7	10
	24-May-01	9.4	10.0	7.56	1380	11.9	<10	<10	10	20
	31-Aug-01	5.3	10.6	7.49	1450	12.5	<5	<10	14	9
	16-Nov-01	5.1	3.0	6.77	1300	12.4	<10	<10	15	50
	8-Mar-02	NS	NS	NS	NS	NS	NS	NS	NS	NS
	31-May-02	2.4	54.0	7.23	1470	13.8	<10	<10	<5	40
	5-Sep-02	4.7	6.0	6.60	--	--	<5	<5	14	140
	12-Dec-02	NS	NS	NS	NS	NS	NS	NS	NS	NS
	18-Mar-03	6.7	8.0	6.81	1290	12	<5	<5	9	99
	4-Jun-03	2.0	11.0	6.78	1370	11.3	<5	<5	10	<5
	5-Oct-03	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8-Dec-03	NS	NS	NS	NS	NS	NS	NS	NS	NS
	27-Feb-04	NS	NS	NS	NS	NS	NS	NS	NS	NS
	30-Jun-04	4.5	55.0	6.99	1318	12.5	<5	<5	8	<5
	19-Nov-04	3.4	2.0	6.85	1120	11.4	6	<5	15	14
Duplicate	19-Nov-04	4.4	4.0	--	--	--	6	<5	18	16
	15-Jun-05	6.0	8.0	6.00	1640	13.4	<5	<5	13	21
	17-Jan-06	5.9	12785	10.01	1630	8.4	<5	<5	13	8
Re-sample	14-Feb-06	--	--	7.88	1800	8.5	--	--	14	--
	29-Jun-06	NS	NS	NS	NS	NS	NS	NS	NS	NS
	28-Nov-06	4.7	438	7.73	1940	13.2	<5	<4	13	6
	6-Jun-07	4.9	11	6.76	1990	11.7	13	4	20	8
	12-Nov-07	5.9	70	6.76	2030	12.4	4	5	21	11
	24-Jun-08	5.0	371	6.89	2060	13.3	<5	<1	25	5
	17-Nov-08	5.8	23	6.06	2060	9.2	<5	<1	22	<5
	23-Jun-09	5.5	88	7.01	2050	13.6	<5	11	27	36
	17-Nov-09	6	8	7.07	2090	10.3	<5	<4	22	7
	14-Jun-10	6	10	7.05	2070	13.1	8	<4	16	6
	20-Jun-11	6.7	9	7.33	2010	12.2	30	<4	27	39
Re-sample	14-Jul-11	--	--	--	--	--	<5	--	--	--
	14-Nov-11	7.0	316	6.93	2080	11.5	<5	<4	20	<5
	25-Jun-12	6.0	6	5.75	1870	11.9	<5	4	25	<5
Duplicate	25-Jun-12	6.0	6	5.75	1872	11.9	<5	6	25	10
	5-Dec-12	5.8	2	6.76	1820	10.6	<5	<4	24	10
Duplicate	5-Dec-12	5.8	3	6.76	1814	10.6	<5	<4	24	8
	6-Jun-13	6.1	4	6.71	1882	11.0	<5	<4	22	<5
	4-Nov-13	5.0	<1	6.71	1630	11.2	<5	<4	18	<5
	23-Jun-14	5.0	3	6.82	1579	13.2	<5	<4	18	<5
	18-Nov-14	4.1	2	6.27	1525	6.6	<5	<4	25	20
	25-Jun-15	**4.5**	**2**	**6.64**	**1507**	**11.2**	**<5**	**6**	**21**	**10**

See notes on page 6.

Table 1
RACER Trust - Coldwater Road Landfill Facility
Landfill Leak Detection Vaults - Historical Analytical Results
Inorganics and Metals

Vault	Sample Date	Indicator Parameters					Dissolved Metals (µg/L)			
		TOC (mg/L)	TSS (mg/L)	pH	SpC	T	Cr	Cu	Ni	Zn
	MDEQ Residential Drinking Water Criteria & RBSLs						100 (A)	1,000 (E)	100 (A)	2,400
Vault B	23-Mar-95	NS	NS	NS	NS	NS	NS	NS	NS	NS
	20-Jun-95	NS	NS	NS	NS	NS	NS	NS	NS	NS
	30-Aug-95	NS	NS	NS	NS	NS	NS	NS	NS	NS
	28-Nov-95	NS	NS	NS	NS	NS	NS	NS	NS	NS
	27-Mar-96	NS	NS	NS	NS	NS	NS	NS	NS	NS
	18-Jun-96	11.0	<10	6.90	1900	--	<20	<20	<20	<20
	20-Aug-96	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11-Nov-96	17.0	66.0	7.00	1600	--	<20	<20	20	40
	19-Feb-97	7.0	4	7.10	1590	8.9	<10	<10	43	20
	7-May-97	7.0	4	6.50	1930	13.8	<10	<10	45	20
	12-Aug-97	5.0	3.0	6.45	663	26.0	<10	<10	26	60
	15-Nov-97	6.0	4.0	6.80	1400	11.0	<10	<10	96	50
	9-Feb-98	7.0	8.0	6.60	1560	12.6	<10	<10	57	20
	14-May-98	6.0	3.0	6.90	1490	11.2	<10	<10	14	30
	14-Aug-98	4.0	7.0	6.60	--	--	<10	<10	10	14
	13-Nov-98	6.0	18.0	6.30	1940	20.6	<10	10	17	80
	19-Mar-99	4.2	6.0	6.50	817	14.2	<10	<10	5	<10
	6-May-99	5.6	4.0	7.00	1330	26.2	<10	10	6	20
	23-Jul-99	5.8	3.0	6.50	1070	16.2	<5	13	10	18
	22-Oct-99	5.0	5.0	6.23	1440	11.0	<10	<10	16	20
	14-Mar-00	6.6	<1	8.00	900	11.0	<10	<10	8	20
	20-Jun-00	7.1	7.0	6.80	1120	17.3	<10	30	9	30
	13-Sep-00	5.4	<1	7.40	1560	15.6	<5	10	8	20
	10-Nov-00	6.8	1.0	7.10	1280	11.6	<5	40	14	90
	12-Mar-01	5.2	5.0	7.36	1460	12.3	<10	<10	7	20
	24-May-01	8.5	10.0	7.58	1280	13.0	<10	20	12	40
	31-Aug-01	3.9	<1.3	7.78	1370	12.9	<5	<10	11	20
	16-Nov-01	5.7	2.0	7.12	1230	13.1	<10	10	8	60
	8-Mar-02	5.4	2.0	6.99	2400	8.5	<10	10	<5	70
	31-May-02	5.1	3.0	7.23	1070	14.2	<10	<10	<5	20
	5-Sep-02	4.8	4.0	6.70	--	--	<5	<5	8	84
	12-Dec-02	NS	NS	NS	NS	NS	NS	NS	NS	NS
	18-Mar-03	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4-Jun-03	5.5	3.0	6.98	1530	10.1	<5	<5	7	<5
	5-Oct-03	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8-Dec-03	4.7	2.0	7.12	1490	11.5	<5	6	5	35
	8-Dec-03	4.7	7.0	--	--	--	<5	6	5	35
	27-Feb-04	4.0	12.0	7.42	1380	12.3	<5	5	<5	16
	30-Jun-04	4.1	396.0	6.98	1210	11.8	<5	12	7	<5
	19-Nov-04	NS	NS	NS	NS	NS	NS	NS	NS	NS
	15-Jun-05	6.0	6.0	6.07	1560	12.8	<5	<5	14	20
	1-Dec-05	4.7	<1	6.87	1310	9.1	<5	<5	8	50
Re-sample	14-Feb-06	--	--	7.70	1520	6.1	--	<4	--	--
Duplicate	29-Jun-06	2.6	1.0	7.04	1050	13.9	<5	<4	5	8
	28-Nov-06	5.5	4.0	7.46	1380	13.0	<5	<4	8	11
Duplicate	28-Nov-06	4.7	--	7.17	1340	13.0	5	4	7	11
	6-Jun-07	4.7	2.0	6.34	1670	12.1	9	6	13	16
	12-Nov-07	3.8	1.0	6.93	1690	12.6	2	5	16	14
	24-Jun-08	3.2	6.0	6.95	1880	14.0	<5	2	8	9
	17-Nov-08	2.4	<1	6.89	1818	9.6	<5	2	8	15
Duplicate	17-Nov-08	1.7	2.0	6.89	1820	9.6	<5	1	8	15
	23-Jun-09	3.6	4.0	7.13	1780	13.3	<5	1	6	17
	17-Nov-09	3	0	6.99	1970	10.9	<5	<4	9	17
	14-Jun-10	3	2	6.90	1810	12.1	8	<4	5	20
	8-Nov-10	4	3	6.93	1911	12.2	21	<4	11	17
Re-sample	1-Dec-10	--	--	6.93	--	12.2	6	--	--	--
	20-Jun-11	3.4	1	7.03	1496	12.2	28	<4	11	16
Re-sample	14-Jul-11	--	--	--	--	--	<5	--	--	--
	14-Nov-11	3.0	1	6.93	1948	12.0	<5	<4	7	9
	25-Jun-12	3.0	4	6.16	1781	12.5	<5	<4	<5	8
	5-Dec-12	3.2	5	6.85	1936	10.2	<5	6	9	15
	6-Jun-13	3.2	<1	6.66	1455	10.8	<5	<4	6	7
	4-Nov-13	3.0	1	6.74	1750	11.8	<5	<4	5	14
	23-Jun-14	3.2	1	6.87	1369	12.3	<5	<4	<5	7
	18-Nov-14	2.7	3	7.05	1656	7.1	<5	<4	13	10
	25-Jun-15	**3.0**	**<1**	**7.07**	**1513**	**13.4**	**<5**	**5**	**11**	**12**

See notes on page 6.

Table 1
RACER Trust - Coldwater Road Landfill Facility
Landfill Leak Detection Vaults - Historical Analytical Results
Inorganics and Metals

Vault	Sample Date	Indicator Parameters					Dissolved Metals (µg/L)			
		TOC (mg/L)	TSS (mg/L)	pH	SpC	T	Cr	Cu	Ni	Zn
	MDEQ Residential Drinking Water Criteria & RBSLs						100 (A)	1,000 (E)	100 (A)	2,400
Vault C	23-Mar-95	NS	NS	NS	NS	NS	NS	NS	NS	NS
	20-Jun-95	4.4	<1	7.40	530	--	25	25	<30	60
	30-Aug-95	3.7	<1	7.40	340	--	<20	<20	<40	74
	28-Nov-95	7.6	<1	7.00	2200	--	29	37	67	36
	27-Mar-96	NS	NS	NS	NS	NS	NS	NS	NS	NS
	18-Jun-96	7.7	<10	6.90	2000	--	<20	<20	<20	<20
	20-Aug-96	8.3	<5	6.90	1900	--	<20	<20	<20	40
	11-Nov-96	16.0	9.0	7.00	2100	--	<20	<20	<20	80
	19-Feb-97	7.0	1.0	7.60	1610	9.0	<10	<10	45	30
	7-May-97	6.0	10.0	6.57	1730	12.5	<10	100	66	20
	8-Aug-97	4.0	13.0	6.34	1610	24.1	<10	<10	79	20
	15-Nov-97	6.0	4.0	6.70	2000	12.0	<10	<10	122	50
	9-Feb-98	8.0	4.0	6.50	1720	12.2	<10	<10	64	50
	14-May-98	6.0	3.0	6.90	1600	12.1	<10	<10	23	40
	14-Aug-98	6.0	5.0	6.80	--	--	<10	<10	23	40
	13-Nov-98	6.0	12.0	6.30	1760	21.4	<10	<10	21	30
	13-Nov-98	6.0	10.0	--	--	--	<10	<10	21	30
	19-Mar-99	6.3	2.0	7.00	1300	15.6	<10	<10	19	20
	6-May-99	6.1	8.0	6.90	1600	26.6	<10	10	20	20
	23-Jul-99	6.5	0.0	6.70	1370	17.3	<5	12	20	20
	22-Oct-99	6.4	5.0	6.57	1160	11.0	<10	<10	18	10
	14-Mar-00	6.5	1.0	7.80	1350	12.6	<10	<10	17	10
	20-Jun-00	6.0	4.0	6.90	1280	18.3	<10	140	19	170
	13-Sep-00	6.1	<1	7.60	1430	14.9	<5	<10	16	20
	10-Nov-00	10.6	4.0	6.80	1210	12.1	<10	<10	17	40
	12-Mar-01	6.3	4.0	7.69	1380	12.1	<10	<10	8	<10
	24-May-01	9.2	8.0	7.54	1410	13.3	<10	<10	17	30
	31-Aug-01	5.4	4.0	7.44	1530	13.1	<5	<10	16	20
	16-Nov-01	6.0	2.0	6.79	1170	13.2	<10	<10	15	60
	8-Mar-02	4.0	1.0	7.09	1680	11.3	<10	10	<5	20
	31-May-02	5.1	7.0	7.17	1280	14.2	<10	<10	14	40
	5-Sep-02	5.0	7.0	6.69	--	--	<5	<5	14	39
	12-Dec-02	4.2	7.0	6.90	1330	12.1	<5	<5	12	53
	18-Mar-03	5.7	4.0	6.80	1260	10.7	<5	<5	10	37
	4-Jun-03	4.4	6.0	6.92	1150	11.0	<5	<5	8	<5
	5-Oct-03	4.4	4.0	6.99	1230	13.6	<5	<5	14	28
	8-Dec-03	3.8	6.0	7.14	1520	11.6	<5	11	14	63
	27-Feb-04	4.6	1.0	7.39	1410	12.1	<5	<5	12	36
	30-Jun-04	3.7	14.0	6.96	1008	12.2	<5	<5	12	8
	19-Nov-04	4.3	4.0	6.90	1090	11.7	<5	<5	20	6
	15-Jun-05	5.0	6.0	6.26	1460	12.5	<5	<5	15	39
	1-Dec-05	5.9	2.0	6.92	1620	11.1	<5	<5	18	15
	29-Jun-06	2.6	5.0	6.90	2260	15.2	5	<4	10	11
	28-Nov-06	11.6	44.0	7.04	1430	13.4	<5	5	15	<5
	6-Jun-07	4.9	6.0	6.54	1510	12.2	9	5	11	6
	12-Nov-07	4.3	1.0	6.90	1490	13.2	2	5	16	12
	24-Jun-08	4.2	49.0	6.91	1620	13.4	<5	<1	9	<5
	17-Nov-08	4.4	6.0	6.79	1600	9.4	<5	<1	10	11
	23-Jun-09	4.6	9.0	7.16	1660	13.7	<5	<1	8	6
	17-Nov-09	5	15	7.11	1650	11.5	<5	<4	9	6
Duplicate	17-Nov-09	5	20	7.11	1650	11.5	<5	<4	9	6
	14-Jun-10	5	4	7.01	1710	12.4	7	<4	7	7
	8-Nov-10	6	7	7.16	1670	12.7	16	<4	11	<5
	20-Jun-11	5.4	5	7.28	1686	12.9	25	<4	15	22
Duplicate	20-Jun-11	5.9	5	7.28	1688	12.9	24	<4	14	21
Re-sample	14-Jul-11	--	--	--	--	--	<5	--	--	--
	14-Nov-11	5.0	5	6.97	1699	12.4	<5	<4	10	<5
	25-Jun-12	5.0	7	6.83	1748	13.0	<5	<4	6	<5
	5-Dec-12	5.4	1	6.91	1713	11.1	<5	11	16	9
	6-Jun-13	5.4	22	6.66	1744	12.2	<5	<4	10	6
	4-Nov-13	5.3	1	6.84	1703	11.8	<5	<4	8	<5
	23-Jun-14	5.7	4	7.01	1759	12.3	<5	5	10	<5
	18-Nov-14	4.6	4	7.09	1724	7.4	<5	<4	18	5
	25-Jun-15	**5.1**	**6**	**6.87**	**1788**	**12.4**	**<5**	**6**	**14**	**8**

See notes on page 6.

Table 1
RACER Trust - Coldwater Road Landfill Facility
Landfill Leak Detection Vaults - Historical Analytical Results
Inorganics and Metals

Vault	Sample Date	Indicator Parameters					Dissolved Metals (µg/L)			
		TOC (mg/L)	TSS (mg/L)	pH	SpC	T	Cr	Cu	Ni	Zn
	MDEQ Residential Drinking Water Criteria & RBSLs						100 (A)	1,000 (E)	100 (A)	2,400
	23-Mar-95	8.9	83.0	7.30	2200	--	13	<20	44	<20
	20-Jun-95	NS	NS	NS	NS	NS	NS	NS	NS	NS
	30-Aug-95	NS	NS	NS	NS	NS	NS	NS	NS	NS
	28-Nov-95	NS	NS	NS	NS	NS	NS	NS	NS	NS
	27-Mar-96	NS	NS	NS	NS	NS	NS	NS	NS	NS
Vault D	18-Jun-96	11.0	150.0	6.90	1800	--	<20	<20	<20	20
	20-Aug-96	40.0	<5	7.20	1600	--	<20	<20	<20	40
	11-Nov-96	23.0	9.0	7.00	1700	--	<20	<20	40	70
	19-Feb-97	NS	NS	NS	NS	NS	NS	NS	NS	NS
	9-May-97	23.0	76.0	6.69	1580	8.8	<10	<10	58	70
	8-Aug-97	11.0	44.0	6.48	1540	28.5	<10	<10	79	20
	15-Nov-97	12.0	6.0	6.60	1800	11.0	<10	<10	114	30
	9-Feb-98	12.0	52.0	6.50	1655	12.5	<10	<10	66	40
	14-May-98	10.0	40.0	7.00	1700	16.3	<10	30	23	50
	14-Aug-98	11.0	57.0	6.60	--	--	<10	<10	23	40
	13-Nov-98	11.0	22.0	6.70	1790	15.2	<10	<10	20	30
	19-Mar-99	6.3	2.0	7.00	1302	14.8	<10	30	20	40
	6-May-99	12.4	28.0	6.90	1510	25.2	<10	30	15	30
	23-Jul-99	11.0	40.0	7.00	1231	21.0	<5	9	21	19
	22-Oct-99	10.6	13.0	6.76	1384	10.3	<10	<10	23	20
	14-Mar-00	10.7	57.0	7.80	1460	13.0	<10	<10	15	20
	20-Jun-00	10.1	23.0	6.80	1410	18.7	<10	60	21	70
	13-Sep-00	10.7	7.0	7.60	1370	16.1	<5	<10	21	20
	10-Nov-00	7.0	10.0	7.20	1630	12.2	<10	<10	23	20
	12-Mar-01	5.6	33.0	7.84	1710	12.9	<10	<10	11	10
	24-May-01	12.0	16.0	7.48	1760	13.1	<10	10	18	30
	31-Aug-01	9.8	8.0	7.66	1420	12.8	5	<10	24	20
	16-Nov-01	7.4	20.0	7.58	1270	12.9	<10	10	17	50
	8-Mar-02	8.4	3.0	7.18	1430	10.9	<10	10	<5	10
	31-May-02	NS	NS	NS	NS	NS	NS	NS	NS	NS
	5-Sep-02	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12-Dec-02	NS	NS	NS	NS	NS	NS	NS	NS	NS
	18-Mar-03	8.9	15.0	6.77	1380	11.6	<5	5.0	10.0	19
	4-Jun-03	9.6	5.0	6.91	1430	11.0	<5	<5	8	<5
	5-Oct-03	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8-Dec-03	6.1	4.0	6.92	1330	11.0	8	17	14	63
	27-Feb-04	NS	NS	NS	NS	NS	NS	NS	NS	NS
	30-Jun-04	6.5	5.0	6.96	1050	12.1	<5	<5	30	9
	19-Nov-04	NS	NS	NS	NS	NS	NS	NS	NS	NS
	15-Jun-05	6.0	6.0	5.90	1540	12.9	<5	<5	25	17
	17-Jan-06	6.2	8.0	7.34	1600	7.9	6	14	37	<5
Re-sample	14-Feb-06	--	--	7.96	1520	9.2	--	5	--	--
	29-Jun-06	5.9	51.0	6.98	1570	13.9	6	<4	26	14
	28-Nov-06	7.2	13.0	7.18	1590	13.1	<5	<4	17	7
	6-Jun-07	6.9	7.0	7.30	1530	14.2	9	5	34	8
	12-Nov-07	7.3	5.0	6.91	1580	12.3	3	5	23	12
Duplicate	12-Nov-07	6.0	7.0	6.91	1570	12.3	3	5	23	9
	24-Jun-08	4.1	4.0	6.87	1570	15.4	<5	<1	35	<5
	17-Nov-08	5.6	10.0	7.42	1580	8.0	<5	1	17	6
	23-Jun-09	7.0	20.0	7.17	1570	13.7	<5	<1	34	5
	17-Nov-09	6.0	7	7.28	1610	11.5	<5	<4	16	7
	14-Jun-10	7.0	35	7.10	1550	11.9	8	<4	32	11
Duplicate	14-Jun-10	7.0	1	7.10	1550	11.9	7	<4	33	11
	8-Nov-10	9.0	31	7.41	1555	13.4	19	<4	18	<5
	14-Jul-11	--	--	7.23	--	18.0	<5	<4	40	<5
	14-Nov-11	9.0	5	7.04	1513	11.8	<5	<4	25	<5
	25-Jun-12	5.0	3	5.70	1367	14.5	<5	16	29	15
	5-Dec-12	7.3	3	7.11	1471	10.4	<5	11	33	22
	6-Jun-13	7.5	3	6.76	1534	11.5	<5	5	18	75
	4-Nov-13	7.2	<1	7.03	1565	11.8	<5	4	13	7
Duplicate	4-Nov-13	7.6	<1	7.03	1562	11.8	<5	<4	13	9
	23-Jun-14	8.0	7	7.10	1592	12.2	<5	4	15	9
Duplicate	23-Jun-14	7.9	2	7.10	1591	12.2	<5	<4	16	8
	18-Nov-14	6.2	2	7.02	1635	7.6	<5	10	20	11
Duplicate	18-Nov-14	6.0	<1	7.02	1640	7.6	<5	5	21	12
	25-Jun-15	**6.9**	**3**	**6.93**	**1643**	**11.8**	**<5**	**8**	**23**	**17**

See notes on page 6.

Table 1
RACER Trust - Coldwater Road Landfill Facility
Landfill Leak Detection Vaults - Historical Analytical Results
Inorganics and Metals

Vault	Sample Date	Indicator Parameters					Dissolved Metals (µg/L)			
		TOC (mg/L)	TSS (mg/L)	pH	SpC	T	Cr	Cu	Ni	Zn
	MDEQ Residential Drinking Water Criteria & RBSLs						100 (A)	1,000 (E)	100 (A)	2,400
	23-Mar-95	NS	NS	NS	NS	NS	NS	NS	NS	NS
	20-Jun-95	NS	NS	NS	NS	NS	NS	NS	NS	NS
	30-Aug-95	NS	NS	NS	NS	NS	NS	NS	NS	NS
	28-Nov-95	NS	NS	NS	NS	NS	NS	NS	NS	NS
	27-Mar-96	110.0	<10	7.20	2000	--	<20	<20	46	<20
Vault E	18-Jun-96	9.0	76.0	7.00	2400	--	<20	<20	<20	<20
	10/04/96	5.9	19.0	6.90	2000	--	<20	<20	<20	20
	11-Nov-96	12.0	11.0	7.00	1800	--	<20	<20	<20	30
	19-Feb-97	NS	NS	NS	NS	NS	NS	NS	NS	NS
	7-May-97	7.0	2.0	6.33	2120	15.6	<10	<10	35	30
	12-Aug-97	5.0	27.0	6.70	1840	14.9	<10	<10	64	40
	15-Nov-97	5.0	12.0	6.50	2100	11.0	<10	<10	116	40
	9-Feb-98	6.0	4.0	6.60	1950	12.6	<10	<10	54	50
	14-May-98	6.0	32.0	7.10	1850	13.5	<10	<10	7	60
	14-Aug-98	4.0	8.0	6.70	--	--	<10	<10	8	40
	30-Nov-98	3.0	14.0	--	--	--	10	<10	46	60
	19-Mar-99	4.8	20.0	6.50	1302	14.3	<10	20	6	30
	6-May-99	8.2	14.0	6.90	1720	27.4	<10	<10	5	20
	23-Jul-99	4.6	9.0	6.50	1468	21.8	<5	11	6	19
	22-Oct-99	3.5	6.0	6.33	1382	11.0	<10	<10	6	20
	14-Mar-00	5.6	48.0	8.00	1500	13.9	<10	<10	5	10
	20-Jun-00	6.3	22.0	6.90	1430	19.6	<10	30	<5	30
	13-Sep-00	4.1	5.0	7.70	1360	15.7	<5	<10	5	20
	10-Nov-00	4.3	4.0	7.50	1290	11.8	<10	40	5	60
	12-Mar-01	5.4	9.0	7.33	--	12.7	<10	<10	5	10
	24-May-01	8.6	10.0	7.52	1900	13.6	<10	10	6	40
	31-Aug-01	5.7	5.3	7.58	1810	13.2	<5	10	6	70
	16-Nov-01	3.6	<1.0	7.46	1630	12.8	<10	10	6	60
	8-Mar-02	6.0	<1.0	7.01	1570	9.8	<10	10	6	90
	31-May-02	NS	NS	NS	NS	NS	NS	NS	NS	NS
	5-Sep-02	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12-Dec-02	NS	NS	NS	NS	NS	NS	NS	NS	NS
	18-Mar-03	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4-Jun-03	5.1	6.0	6.92	1470	11.0	<5	6.0	<5	50
	5-Oct-03	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8-Dec-03	NS	NS	NS	NS	NS	NS	NS	NS	NS
	27-Feb-04	5.4	4.0	7.61	1190	12.1	<5	6	7	43
	30-Jun-04	4.9	390	6.91	1337	12.7	<5	<5	6	43
	19-Nov-04	4.3	3	7.06	1230	11.4	<5	7	22	11
	15-Jun-05	7.0	3	6.77	1790	12.6	<5	<5	12	31
	1-Dec-05	3.7	<1	7.10	1630	10.9	<5	66	<5	73
	29-Jun-06	5.8	8.0	6.94	1790	14.0	5	4	6	13
	28-Nov-06	6.3	134.0	7.51	1680	13.1	5	5	<5	10
	6-Jun-07	4.6	3.0	6.48	1820	12.7	9	7	<5	9
Duplicate	6-Jun-07	4.8	3.0	--	1820	--	10	5	<5	8
	12-Nov-07	3.9	4.0	6.80	1740	12.0	2	4	11	13
	24-Jun-08	6.0	2.0	6.76	1860	13.9	<5	2	<5	6
	17-Nov-08	4.1	1.0	7.43	1630	10.3	<5	2	<5	19
	23-Jun-09	3.2	10.0	6.79	1950	14.0	<5	2	<5	15
Duplicate	23-Jun-09	3.0	17.0	6.79	1960	14.0	<5	2	<5	14
	17-Nov-09	5.0	9	6.89	1780	11.2	<5	<4	<5	14
	14-Jun-10	4.0	21	6.85	1910	12.5	9	<4	<5	13
	8-Nov-10	5.0	<1	7.02	1714	12.4	24	<4	<5	7
Duplicate	8-Nov-10	5.0	3	7.02	1715	12.4	20	<4	<5	7
	20-Jun-11	3.4	5	6.91	1711	13.0	29	<4	10	15
Re-sample	14-Jul-11	--	--	--	--	--	<5	--	--	--
	14-Nov-11	4.0	9	6.89	1637	11.7	<5	<4	<5	<5
Duplicate	14-Nov-11	3.0	5	6.89	1635	11.7	<5	<4	<5	<5
	25-Jun-12	3.0	3	6.00	1792	12.9	<5	<4	<5	7
	5-Dec-12	3.4	0	6.77	1776	10.4	<5	<4	6	11
	6-Jun-13	3.3	8	6.54	1397	10.6	<5	6	<5	<5
	4-Nov-13	3.0	2	6.74	1741	12.0	<5	4	12	9
	23-Jun-14	3.3	<1	6.88	1677	11.7	<5	<4	<5	<5
	18-Nov-14	3.0	2	7.08	1747	7.5	<5	<4	10	6
	25-Jun-15	**2.9**	**4**	**4.90**	**1456**	**12.6**	**<5**	**<5**	**7**	**8**
Duplicate	**25-Jun-15**	**2.9**	**3**	**4.88**	**1460**	**12.6**	**<5**	**<5**	**7**	**7**

See notes on page 6.

Table 1
RACER Trust - Coldwater Road Landfill Facility
Landfill Leak Detection Vaults - Historical Analytical Results
Inorganics and Metals

Vault	Sample Date	Indicator Parameters					Dissolved Metals (µg/L)			
		TOC (mg/L)	TSS (mg/L)	pH	SpC	T	Cr	Cu	Ni	Zn
	MDEQ Residential Drinking Water Criteria & RBSLs						100 (A)	1,000 (E)	100 (A)	2,400
	23-Mar-95	NS	NS	NS	NS	NS	NS	NS	NS	NS
	20-Jun-95	8.2	<1	6.80	1400	--	<20	<20	<30	190
	30-Aug-95	6.1	<1	6.80	1100	NS	<20	<20	<40	220
	28-Nov-95	NS	NS	NS	NS	NS	NS	NS	NS	NS
	27-Mar-96	NS	NS	NS	NS	NS	NS	NS	NS	NS
Vault F	18-Jun-96	6.2	77.0	6.80	1600	--	<20	<20	<20	<20
	20-Aug-96	4.8	1500.0	7.10	1500	--	<20	20	<20	50
	11-Nov-96	14.0	7100.0	7.00	1600	--	<20	<20	<20	30
	19-Feb-97	NS	NS	NS	NS	NS	NS	NS	NS	NS
	9-May-97	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8-Aug-97	3.0	21.0	6.14	1530	20.6	<10	<10	64	20
	15-Nov-97	7.0	56.0	6.70	1800	13.0	<10	<10	93	130
	9-Feb-98	5.0	30.0	6.50	1750	13.5	<10	<10	49	160
	14-May-98	5.0	16.0	7.07	1400	25.4	<10	20	7	130
	14-Aug-98	3.0	25.0	6.60	--	--	<10	<10	7	40
	30-Nov-98	4.0	38.0	--	--	--	10	<10	47	30
	19-Mar-99	4.2	52.0	6.80	982	14.4	<10	20	9	20
	6-May-99	4.6	50.0	7.00	1460	28.0	<10	10	5	30
	23-Jul-99	3.7	95.0	6.30	1262	21.2	6	17	6	26
	22-Oct-99	3.7	12.0	6.29	1116	12.3	<10	<10	6	20
	14-Mar-00	5.4	81.0	8.00	1250	14.9	<10	<10	6	30
	20-Jun-00	4.4	66.0	7.10	1310	20.1	<10	40	<5	80
	13-Sep-00	3.0	11.0	7.40	1440	15.6	<5	<10	6	20
	10-Nov-00	3.9	41.0	6.80	1040	11.6	<10	60	5	100
	12-Mar-01	5.5	24.0	7.12	1110	12.3	<10	<10	5	10
	24-May-01	7.4	16.0	7.44	1470	12.8	<10	60	5	100
	31-Aug-01	NS	NS	NS	NS	NS	NS	NS	NS	NS
	16-Nov-01	4.2	68.0	7.26	1110	12.9	<10	40	<5	100
	8-Mar-02	4.4	11.0	6.92	1290	10.4	<10	10	<5	60
	31-May-02	2.4	45.0	7.17	1200	14.3	<10	<10	6	20
	5-Sep-02	NS	NS	NS	NS	NS	NS	NS	NS	NS
	27-Feb-04	3.9	7.0	7.11	1920	12.2	<5	5	<5	30
	30-Jun-04	3.5	1.0	6.89	1300	12.0	<5	5	<5	10
	30-Jun-04	3.5	1.0	6.89	1300	12.0	<5	5	<5	10
	19-Nov-04	3.2	4.0	7.07	1160	11.0	<5	<5	15	8
	15-Jun-05	4.0	8.0	5.47	1780	12.3	<5	<5	9	17
	1-Dec-05	3.7	3.0	6.92	1640	10.7	<5	83	<5	62
Duplicate	7-Dec-05	4.7	5.0	--	1540	--	<5	31	19	<10
Re-sample	14-Feb-06	--	--	7.90	1710	7.2	--	<4	--	--
	29-Jun-06	2.9	90.0	6.72	1710	15.3	7	<4	<5	9
	28-Nov-06	4.4	3.0	7.04	1610	13.9	5	<4	<5	10
	6-Jun-07	3.9	2.0	6.44	1640	15.5	10	3	<5	8
	12-Nov-07	2.2	53.0	6.84	1600	12.2	2	3	9	11
	24-Jun-08	2.3	5.0	6.86	1510	14.5	<5	<1	<5	<5
Duplicate	24-Jun-08	2.8	3.0	6.86	1500	14.5	<5	<1	<5	<5
	17-Nov-08	1.8	9.0	7.20	1510	9.5	<5	<1	<5	15
	23-Jun-09	2.9	29.0	7.08	1530	13.1	<5	<1	<5	10
	17-Nov-09	3	16	7.03	1550	11.0	<5	<4	<5	11
	14-Jun-10	3	14	7.02	1540	12.1	6	<4	<5	17
	8-Nov-10	3	2	7.00	1590	12.3	16	<4	<5	14
	20-Jun-11	2.5	47	7.03	1642	14.6	23	<4	9	20
Re-sample	14-Jul-11	--	--	--	--	--	<5	--	--	--
	14-Nov-11	2.0	29	6.93	1651	11.4	<5	<4	<5	<5
	25-Jun-12	--	--	--	--	--	--	--	--	--
	5-Dec-12	2.8	7	6.69	1729	9.9	<5	<4	6	12
	6-Jun-13	2.7	2	6.78	1761	10.8	<5	<4	6	6
Duplicate	6-Jun-13	2.9	<1	6.78	1759	10.8	<5	<4	<5	6
	4-Nov-13	2.6	1	6.83	1736	11.6	<5	<4	<5	<5
	23-Jun-14	2.6	3	7.15	1710	13.3	<5	<4	<5	<5
	18-Nov-14	2.4	2	7.13	1724	7.4	<5	<4	10	8
	25-Jun-15	**2.3**	**3**	**7.08**	**1669**	**14.0**	**<5**	**<5**	**7**	**9**

Notes: "<" - Not detected above specified detection limit.
"NS" - Not sampled - no liquid.
"SpC" - Specific conductivity in micro siemens (uS).
"T" - Temperature in degrees celsius.
"--" - Physical parameter not measured (insturment failure or duplicate sample).
Exceeds MDEQ Residential Drinking Water Criteria
"A" - Criterion is the state of Michigan drinking water standard established pursuant to Section 5 of 1976 PA 399, MCL 325.1005.
"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 2
RACER Trust - Coldwater Road Landfill Facility
Landfill Leachate Sumps - Historical Analytical Results
Inorganics and Metals

Sump	Sample Date	Indicator Parameters					Dissolved Metals (µg/L)			
		TOC (mg/L)	TSS (mg/L)	pH	SpC	T	Cr	Cu	Ni	Zn
	MDEQ Residential Drinking Water Criteria & RBSLs						100 (A)	1,000 (E)	100 (A)	2,400
	23-Mar-95	400.0	22	11.2	4500	--	260	8900	1200	70
	30-Aug-95	290.0	9800	11.3	4000	--	250	7400	830	<20
Sump A	18-Jun-96	170.0	200	9.5	2800	--	50	4300	640	<20
	11-Nov-96	350.0	3000	10.0	4400	--	150	8800	1300	30
	7-May-97	85.0	62	7.9	2200	8.9	20	2450	422	10
	5-Nov-97	110.0	14	8.5	2800	11.0	<1	1050	376	20
	5-May-98	125.0	2	7.9	2280	9.1	40	1380	383	10
	6-Nov-98	136.0	984	7.5	2750	11.7	40	2950	519	<10
	26-Apr-99	110.0	253	9.5	1334	12.6	40	2380	375	<10
	22-Oct-99	44.7	8	6.6	1750	12.1	20	960	155	30
	20-Jun-00	53.4	16	8.2	1980	13.1	40	1160	187	20
	10-Nov-00	66.7	31	7.7	2130	11.1	30	1050	174	20
	24-May-01	70.0	16	8.6	2470	10.2	40	1030	163	20
	16-Nov-01	69.6	300	7.9	2130	12.3	40	990	160	20
	31-May-02	51.7	48	7.2	2340	15.3	80	880	127	20
	12-Dec-03	55.2	25	7.4	1840	11.2	37	770	121	7
	3-Jun-03	75.5	90	--	--	--	41	1180	156	22
	8-Dec-03	67.0	115	8.8	2210	11.6	74	969	138	31
	30-Jun-04	62.0	6	8.4	2501	12.6	104	1450	161	7
	19-Nov-04	36.9	2.7	8.2	2070	11.4	31	492	70	20
	15-Jun-05	89.0	18.0	9.0	3320	14.7	215	1930	200	<5
	17-Jan-06	83.7	980.0	8.4	3970	6.9	70	1350	155	14
	29-Jun-06	65.4	36.0	8.5	3640	11.7	192	1070	109	7
	28-Nov-06	78.2	258	8.2	3660	12.9	132	1240	126	6
	6-Jun-07	64.4	7	6.9	3350	10.0	95	1280	131	17
	12-Nov-07	71.7	3	7.2	3970	11.8	41	1460	150	22
	24-Jun-08	46.6	2	7.9	3210	12.4	123	1240	118	8
	17-Nov-08	48.5	4	7.3	3670	10.6	65	1190	114	12
	23-Jun-09	61.0	3	7.5	2900	12.8	222	1400	126	<5
	17-Nov-09	69	40	8.4	3570	9.6	71	1040	100	14
	14-Jun-10	120	4	9.1	2880	11.9	305	1380	124	<5
	8-Nov-10	71	10	8.3	3560	10.9	113	1110	1030	23
	20-Jun-11	52.4	3	9.2	2380	11.1	330	965	91	<5
	14-Nov-11	62.0	1	8.1	3420	11.4	116	1000	94	6
	25-Jun-12	53.0	3	7.4	3070	12.0	180	863	83	32
Duplicate	25-Jun-12	52.0	3	7.4	3070	12.0	183	882	86	5
	5-Dec-12	63.5	4	7.9	3640	9.2	115	1050	97	10
Duplicate	5-Dec-12	63.5	4	7.9	3630	9.2	104	990	88	10
	6-Jun-13	50.2	5	9.1	2210	11.2	323	936	87	<5
	4-Nov-13	58.9	<1	8.0	3100	10.9	129	819	73	8
	23-Jun-14	49.2	58	8.8	2290	12.3	196	860	82	<5
	25-Jun-15	**36.6**	**3**	**7.6**	**1831**	**11.5**	**452**	**437**	**42**	**27**

See notes on page 6.

Table 2
RACER Trust - Coldwater Road Landfill Facility
Landfill Leachate Sumps - Historical Analytical Results
Inorganics and Metals

Sump	Sample Date	Indicator Parameters					Dissolved Metals (µg/L)			
		TOC (mg/L)	TSS (mg/L)	pH	SpC	T	Cr	Cu	Ni	Zn
	MDEQ Residential Drinking Water Criteria & RBSLs						100 (A)	1,000 (E)	100 (A)	2,400
	23-Mar-95	800.0	310	12.1	7100	--	220	14000	1700	91
	30-Aug-95	590.0	7400	11.5	4600	--	220	9300	1100	<20
Sump B	18-Jun-96	36.0	<10	8.6	720	--	100	760	100	<20
	11-Nov-96	340.0	19	10.0	3100	--	180	6100	850	30
	7-May-97	184.0	963	8.5	2340	8.1	150	3910	607	10
	5-Nov-97	53.0	20	7.2	1600	10.0	50	1050	204	10
	5-May-98	241.0	24	9.6	3010	9.2	280	5600	644	10
	6-Nov-98	177.0	438	7.8	2950	12.1	100	2690	558	<10
	26-Apr-99	75.0	10600	10.2	835	8.9	30	500	238	<10
	22-Oct-99	126.0	1604	8.1	1410	11.9	30	750	387	<10
	20-Jun-00	49.2	4	9.1	1880	12.6	160	1180	160	<10
	10-Nov-00	78.2	80	8.6	1460	11.5	70	1170	205	<10
	24-May-01	101.0	502	9.1	2800	10.4	120	1490	225	<10
	16-Nov-01	189.0	13	9.5	3310	12.4	290	3050	426	<10
	31-May-02	65.7	434	7.2	2530	14.7	160	1070	154	<10
	12-Dec-03	118.0	15	8.9	2150	11.4	215	1790	260	27
	3-Jun-03	113.0	44	--	--	--	118	1510	216	<5
	8-Dec-03	87.8	22	7.1	1990	11.5	170	1380	199	45
	30-Jun-04	110	14	8.1	1598	12.5	508	1880	225	7
	19-Nov-04	66.2	2	8.2	2690	11.5	148	1100	163	13
	15-Jun-05	84.0	8	8.8	3200	14.1	324	1050	160	19
	5-Dec-05	35.7	6	7.1	2290	10.5	81	374	56	22
	29-Jun-06	26.6	6	7.7	1650	10.9	156	358	48	23
	28-Nov-06	47.5	6	8.2	2300	12.5	142	526	72	25
Duplicate	28-Nov-06	59.8	--	8.2	2370	12.5	142	522	72	15
	6-Jun-07	32.2	2	6.6	1950	9.8	18	275	46	18
	12-Nov-07	22.6	1	7.9	2060	12.2	28	226	32	24
	24-Jun-08	45.9	6	8.2	2430	11.9	659	877	99	16
	17-Nov-08	41.5	19	6.5	2560	10.6	401	767	91	20
Duplicate	17-Nov-08	39.8	38	6.5	2550	10.6	399	763	91	23
	23-Jun-09	52.3	1	7.4	2250	13.2	685	696	82	17
	17-Nov-09	52	2	8.1	2610	10.6	269	579	73	39
	14-Jun-10	90	3	7.9	2720	12.4	908	1050	118	21
	8-Nov-10	78	1	8.1	3450	12.1	163	669	76	8
	20-Jun-11	75.5	5	8.1	2520	11.9	1070	867	97	7
	14-Nov-11	83.0	3	8.1	3390	11.6	628	914	111	8
	25-Jun-12	82.0	5	7.5	3240	12.4	657	1000	124	13
	5-Dec-12	89.0	3	8.2	3830	9.5	352	904	111	17
	6-Jun-13	77.4	3	9.0	2150	10.2	1490	1060	104	<5
	4-Nov-13	79.0	2	8.0	3590	10.8	516	749	87	11
	23-Jun-14	64.8	1	7.9	2520	12.1	735	563	65	11
	25-Jun-15	**79.1**	**2**	**7.7**	**3430**	**11.9**	**349**	**689**	**93**	**12**

See notes on page 6.

Table 2
RACER Trust - Coldwater Road Landfill Facility
Landfill Leachate Sumps - Historical Analytical Results
Inorganics and Metals

Sump	Sample Date	Indicator Parameters					Dissolved Metals (µg/L)			
		TOC (mg/L)	TSS (mg/L)	pH	SpC	T	Cr	Cu	Ni	Zn
	MDEQ Residential Drinking Water Criteria & RBSLs						100 (A)	1,000 (E)	100 (A)	2,400
	23-Mar-95	750.0	18	11.8	6000	--	21	18000	2400	36
	30-Aug-95	660.0	30000	10.9	4900	--	21	15000	2100	26
Sump C	18-Jun-96	280.0	1200	9.1	2700	--	<20	5100	820	<20
	11-Nov-96	730.0	93	10.0	5200	--	<20	15000	2500	50
	7-May-97	433.0	1200	8.6	4210	10.0	10	10200	2070	40
	5-Nov-97	289.0	83	8.3	3400	10.0	<10	3150	1320	20
	5-May-98	235.0	24	9.8	3520	9.8	60	5640	891	10
	6-Nov-98	418.0	164	7.9	4590	11.9	<10	4660	145	<10
	26-Apr-99	278.0	24	9.5	2520	8.6	<10	1730	1148	<10
	22-Oct-99	351.0	1604	8.2	1210	12.1	<10	1330	1050	<10
	20-Jun-00	156.0	12	8.5	2270	11.9	<10	3370	802	<10
	10-Nov-00	250.0	30	8.4	1920	11.4	<10	620	998	<10
	24-May-01	200.0	120	9.0	3660	10.3	<10	4950	1110	20
	16-Nov-01	269.0	191	8.5	3930	12.1	10	5470	1800	10
	31-May-02	113.0	24	7.2	2530	14.4	<10	2510	612	10
	12-Dec-03	198.0	18	8.1	4100	11.2	12	3020	1060	15
	3-Jun-03	178.0	34	--	--	--	15	4790	1030	8
	8-Dec-03	85.2	742	8.0	2140	11.9	9	607	708	62
	30-Jun-04	96.0	10	8.5	2708	12.0	46	2470	539	5
	19-Nov-04	126	16	8.4	3200	11.6	32	3190	874	13
	15-Jun-05	95	10	7.2	2950	14.3	21	2350	505	16
	5-Dec-05	56.7	12	7.9	2830	10.9	30	1570	363	12
Duplicate	7-Dec-05	62.0	2	--	2860	--	28	1700	364	<10
	29-Jun-06	145.7	20	8.5	3810	11.4	25	3030	847	8
	28-Nov-06	60.3	6	8.0	2340	12.9	43	1380	353	<5
	6-Jun-07	3.9	1	7.0	2650	11.0	44	1570	365	<5
	12-Nov-07	83.7	1	8.2	3660	12.2	44	2080	543	8
	24-Jun-08	65.4	5	7.9	3530	13.0	8	1820	456	22
	17-Nov-08	120.0	10	8.2	4510	10.6	30	2940	939	22
	23-Jun-09	139.0	9	8.2	4240	12.7	25	3600	800	7
	17-Nov-09	90	4	7.9	3940	11.1	22	2280	447	12
Duplicate	17-Nov-09	98	7	7.9	3950	11.1	21	2260	438	12
	14-Jun-10	120	14	8.1	4580	11.9	32	3200	714	18
	8-Nov-10	130	4	7.8	4910	12.1	55	3170	555	10
	20-Jun-11	112	5	9.2	4560	12.1	133	2670	639	<5
Duplicate	20-Jun-11	112	7	9.2	4570	12.1	129	2580	623	<5
	14-Nov-11	134	8	8.3	5320	11.9	28	3830	761	6
	25-Jun-12	114	8	8.1	5380	12.2	29	3820	611	16
	5-Dec-12	121.7	6	8.3	5430	10.4	24	4130	580	8
	6-Jun-13	111.0	5	7.8	4950	10.9	25	3390	504	7
	4-Nov-13	132.0	1	8.2	5150	11.3	38	3410	539	7
	23-Jun-14	118.0	3	8.0	5040	11.2	17	3010	461	8
	25-Jun-15	**122.0**	**3**	**7.9**	**4050**	**11.2**	**29**	**2870**	**539**	**14**

See notes on page 6.

Table 2
RACER Trust - Coldwater Road Landfill Facility
Landfill Leachate Sumps - Historical Analytical Results
Inorganics and Metals

Sump	Sample Date	Indicator Parameters					Dissolved Metals (µg/L)			
		TOC (mg/L)	TSS (mg/L)	pH	SpC	T	Cr	Cu	Ni	Zn
	MDEQ Residential Drinking Water Criteria & RBSLs						100 (A)	1,000 (E)	100 (A)	2,400
	23-Mar-95	650.0	45	12.3	8400	--	360	7800	1600	<20
	30-Aug-95	550.0	69000	12.0	6400	--	260	6100	1400	<20
Sump D	18-Jun-96	300.0	230	11.0	3300	--	100	3100	850	<20
	11-Nov-96	660.0	3500	12.0	5700	--	220	7200	1800	30
	7-May-97	331.0	432	9.1	4020	10.2	30	4110	1330	<10
	5-Nov-97	208.0	546	8.8	3400	10.2	20	3000	1020	20
	5-May-98	251.0	<1	10.6	4200	9.7	110	3810	1120	10
	6-Nov-98	193.0	8280	7.9	3940	11.4	10	2530	101	<10
	26-Apr-99	177.0	29600	10.5	1237	8.0	10	770	1013	<10
	22-Oct-99	199.0	10748	8.9	910	10.9	<10	70	735	<10
	20-Jun-00	112.0	16	8.8	1190	11.6	<10	430	656	<10
	10-Nov-00	159.0	100	9.1	2360	11.5	20	760	831	<10
	24-May-01	196.0	124	10.8	3900	10.9	10	1000	1270	<10
	16-Nov-01	64.2	268	8.9	1690	12.0	<10	100	414	<10
	31-May-02	72.3	137	7.2	2020	14.3	<10	210	445	<10
	3-Jun-03	80.8	6	--	--	--	7	878	540	<5
	8-Dec-03	48.8	392	8.2	2470	10.9	7	651	423	18
	12-Dec-03	130.0	4	8.8	1430	11.5	11	926	798	<5
	30-Jun-04	160.0	34	10.2	3601	--	25	1670	1320	<5
	19-Nov-04	157	14	10.4	4320	11.4	34	1550	1680	8
	15-Jun-05	79	8	11.1	3160	12.2	14	737	822	<5
Duplicate	15-Jun-05	76.0	26.0	--	--	--	12	724	812	<5
	5-Dec-05	123.0	6.0	8.2	5320	10.9	35	1420	1340	<5
	29-Jun-06	87.6	14.0	10.0	4120	12.4	16	714	995	5
	28-Nov-06	128.9	2	10.1	5180	12.9	23	651	1300	<5
	6-Jun-07	157.0	11	9.3	5980	11.0	62	955	1770	<5
	12-Nov-07	115.0	78	10.2	5550	11.7	34	1680	1480	8
Duplicate	12-Nov-07	109.0	28	10.2	5550	11.7	31	1540	1400	3
	24-Jun-08	99.5	7	9.9	6170	11.8	20	990	1640	7
	17-Nov-08	295.0	2	11.1	6220	10.8	62	2460	2090	5
	23-Jun-09	308.0	7	10.9	6210	14.8	88	2170	1990	<5
	17-Nov-09	130	10	9.8	4870	11.6	37	2240	1180	<5
	14-Jun-10	15	12	10.0	4880	12.0	62	1160	1340	5
Duplicate	14-Jun-10	150	12	10.0	4860	12.0	62	1180	1340	6
	8-Nov-10	170	2	10.1	5830	12.6	119	1220	1520	<5
	20-Jun-11	99.5	9	11.7	3470	12.0	97	645	413	<5
	14-Nov-11	332.0	4	10.5	6440	11.6	92	3350	2200	<5
	25-Jun-12	282.0	10	10.1	6220	12.4	126	1730	2190	<5
	5-Dec-12	181.7	8	10.0	6070	8.8	81	1360	1610	5
	6-Jun-13	227.0	4	10.5	5570	10.7	66	1710	1440	5
	4-Nov-13	204.0	3	10.1	5740	11.4	78	2190	1400	6
Duplicate	4-Nov-13	208.0	2	10.1	5760	11.4	75	2140	1370	<5
	23-Jun-14	149.0	4	10.0	6350	12.6	37	890	1340	7
Duplicate	23-Jun-14	150.0	4	10.0	6360	12.6	37	916	1360	9
	25-Jun-15	**131.0**	**8**	**9.8**	**6060**	**11.6**	**52**	**1310**	**1500**	**11**

See notes on page 6.

Table 2
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Inorganics and Metals

Sump	Sample Date	Indicator Parameters					Dissolved Metals (µg/L)			
		TOC (mg/L)	TSS (mg/L)	pH	SpC	T	Cr	Cu	Ni	Zn
	MDEQ Residential Drinking Water Criteria & RBSLs						100 (A)	1,000 (E)	100 (A)	2,400
	23-Mar-95	250.0	1400	11.7	4000	--	79	1500	850	<20
	30-Aug-95	120.0	37000	9.7	2100	--	25	980	270	<20
Sump E	18-Jun-96	9.6	2000	7.6	1800	--	<20	<20	<20	40
	11-Nov-96	23.0	2200	8.2	1800	--	<20	20	50	<20
	7-May-97	6.0	188	6.8	1560	9.7	<10	<10	30	90
	11/05/97	10.0	3370	7.0	1600	10.0	<10	10	72	30
	5-May-98	10.0	13300	7.0	1750	10.1	<10	20	23	40
	6-Nov-98	5.0	2500	5.6	1500	11.9	<10	60	11	40
	26-Apr-99	8.6	7720	7.7	1428	8.2	<10	30	22	<10
	22-Oct-99	4.7	3485	6.8	1115	10.8	<10	50	10	30
	20-Jun-00	7.0	2	6.8	1410	12.4	<10	20	<10	20
	10-Nov-00	3.2	<1	7.3	1550	11.4	<10	30	7	20
	24-Feb-01	9.0	292	8.0	1660	10.6	<10	20	7	20
	16-Nov-01	4.4	350	7.3	1240	12.2	<10	10	23	30
	31-May-02	10.1	9	7.2	1470	14.6	<10	90	62	30
	12-Dec-03	4.5	310	7.7	1490	11.1	<5	21	12	<5
	3-Jun-03	9.0	1884	--	--	--	<5	20	11	7
	8-Dec-03	22.4	331	7.3	1320	11.4	63	132	53	34
	30-Jun-04	5.8	5	7.8	1061	--	<5	8	13	33
	19-Nov-04	6.2	2	7.6	1380	11.8	19	14	16	16
	15-Jun-05	230.0	10	--	19920	16.6	285	1220	337	5
	5-Dec-05	257.0	396	7.3	9460	10.7	142	514	232	<5
	29-Jun-06	11.4	4	8.2	1690	11.6	18	48	34	6
	28-Nov-06	45.6	<1	8.1	2220	12.9	29	728	180	<5
	6-Jun-07	6.9	3	6.4	1630	11.6	12	13	10	23
Duplicate	6-Jun-07	6.7	4	--	1630	--	11	15	10	20
	12-Nov-07	5.6	3	7.3	1570	12.0	5	11	14	19
	24-Jun-08	3.8	3	7.4	1600	11.5	<5	6	6	9
	17-Nov-08	4.9	1	7.3	1660	11.3	24	10	7	13
	23-Jun-09	4.7	<1	6.9	1600	11.6	<5	6	6	14
Duplicate	23-Jun-09	3.5	1	6.9	1580	11.6	<5	6	5	15
	17-Nov-09	5	1	7.4	1520	11.2	<5	4	20	24
	14-Jun-10	6	4	7.6	1530	12.7	17	8	<5	17
	8-Nov-10	6	2	7.4	1647	12.5	18	10	9	101
Duplicate	8-Nov-10	6	3	7.4	1647	12.5	16	10	9	108
	20-Jun-11	7.6	<1	8.8	1760	12.2	7	20	15	12
	14-Nov-11	15.0	<1	7.8	1856	11.7	5	67	25	10
Duplicate	14-Nov-11	15.0	2	7.8	1864	11.7	<5	69	24	10
	25-Jun-12	12.0	4	7.6	2150	13.1	7	40	14	5
	5-Dec-12	26.5	3	8.0	2670	10.0	9	124	51	11
	6-Jun-13	17.2	<1	6.7	2190	9.8	5	60	32	6
	4-Nov-13	14.3	<1	7.9	2020	11.5	10	45	21	<5
	23-Jun-14	29.1	3	8.0	2250	15.2	45	271	44	6
	25-Jun-15	**21.7**	**3**	**7.7**	**2220**	**11.6**	**15**	**151**	**34**	**8**
Duplicate	**25-Jun-15**	**21.9**	**3**	**7.7**	**2230**	**11.6**	**14**	**143**	**33**	**7**

See notes on page 6.

Table 2
RACER Trust - Coldwater Road Landfill Facility
Landfill Leachate Sumps - Historical Analytical Results
Inorganics and Metals

Sump	Sample Date	Indicator Parameters					Dissolved Metals (µg/L)			
		TOC (mg/L)	TSS (mg/L)	pH	SpC	T	Cr	Cu	Ni	Zn
	MDEQ Residential Drinking Water Criteria & RBSLs						100 (A)	1,000 (E)	100 (A)	2,400
Sump F	23-Mar-95	300.0	100	11.8	4100	--	61	3200	2200	<20
	30-Aug-95	100.0	250	7.5	1600	--	<20	300	85	<20
	18-Jun-96	5.4	19	7.4	1400	--	<20	<20	<20	40
	11-Nov-96	7.1	260	7.7	1200	--	<20	<20	30	50
	7-May-97	5.0	138	6.5	1190	9.6	<20	<20	18	80
	5-Nov-97	5.0	14	7.1	1300	11.0	<10	<10	49	40
	5-May-98	6.0	635	7.1	1250	10.5	<10	<10	6	30
	6-Nov-98	4.0	14	6.1	1340	12.3	<10	70	7	50
	26-Apr-99	5.3	38	8.1	682	8.2	<10	40	27	10
	22-Oct-99	3.4	11	6.6	1053	11.3	<10	30	6	20
	20-Jun-00	4.1	2	7.7	1170	11.4	<10	<10	<5	<10
	10-Nov-00	2.9	8	7.3	1340	11.1	<10	<10	30	30
	24-May-01	6.6	40	8.5	1310	10.6	<10	20	<10	20
	16-Nov-01	4.2	323	7.3	1070	12.1	<10	10	8	20
	31-May-02	5.2	150	7.2	1250	14.8	<10	20	<5	160
	12-Dec-03	3.4	7	7.7	1180	11.3	<5	<5	<5	<5
	3-Jun-03	5.9	336	--	--	--	<5	12	<5	21
	8-Dec-03	6.0	35	7.0	1210	11.3	<5	14	15	33
	30-Jun-04	4.7	2	7.7	949	11.1	<5	27	13	20
	19-Nov-04	6.7	3	7.9	1260	11.2	12	8	14	11
	15-Jun-05	13.0	8	6.4	1630	16.7	<5	9	13	55
	17-Jan-06	33.9	3263	7.5	2390	6.6	107	475	124	12
	29-Jun-06	7.0	2	7.6	1280	11.6	16	38	11	29
	28-Nov-06	4.9	<1	8.0	1250	12.9	5	18	9	8
	6-Jun-07	22.1	8	6.8	1710	11.7	11	74	22	10
	12-Nov-07	3.8	1	7.7	1350	11.9	3	16	13	30
	24-Jun-08	4.0	2	8.0	1160	12.3	12	15	6	102
Duplicate	24-Jun-08	3.9	1	8.0	1160	12.3	11	14	6	8
	17-Nov-08	13.6	2	7.6	1740	10.9	29	87	81	11
	23-Jun-09	14.4	<1	7.8	1500	12.2	43	100	30	9
	17-Nov-09	10	0	8.0	1570	10.9	25	46	19	23
	14-Jun-10	5	4	7.8	1010	11.7	9	15	<5	12
	8-Nov-10	9	<1	8.2	1260	12.1	17	19	8	6
	20-Jun-11	9	<1	7.9	1360	12.8	16	25	11	13
	14-Nov-11	38	2	8.1	3170	11.5	56	204	105	10
	25-Jun-12	40	4	7.7	3290	14.1	48	335	108	17
	5-Dec-12	44.3	5	8.4	3530	10.0	13	264	104	13
	6-Jun-13	41.9	2	8.0	3580	10.0	16	250	86	24
Duplicate	6-Jun-13	41.4	1	8.0	3580	10.0	15	238	85	28
	4-Nov-13	37.6	1	8.2	3770	11.2	23	124	55	37
	23-Jun-14	36.6	3	8.2	3800	11.5	17	117	46	29
	25-Jun-15	**45.2**	**3**	**8.0**	**3930**	**12.2**	**44**	**372**	**94**	**33**
Equipment Blank	24-Jun-08	<1	1	--	4	--	<5	<1	<5	<5
	17-Nov-08	1	2	--	4	--	<5	5	<5	23

Notes:
"<" - Not detected above specified detection limit.
"NS" - Not sampled - no liquid.
"SpC" - Specific conductivity in micro siemens (uS).
"T" - Temperature in degrees celsius.
"--" - Physical parameter not measured (insturment failure or duplicate sample).

Table 3
RACER Trust - Coldwater Road Landfill Facility
Landfill Leachate Sumps - Analytical Results
Volatile Organic Compounds (µg/L)

Parameter	Sample ID and Sample Date							
	Sump A	Sump B	Sump C	* Sump D	Sump E	Sump E (Dup 2)	Sump F	Trip Blank-1
	25-Jun-15	25-Jun-15	25-Jun-15	25-Jun-15	25-Jun-15	25-Jun-15	25-Jun-15	25-Jun-15
Diethyl ether	<10	<10	<10	<100	<10	<10	<10	<10
Acetone	<50	<50	<50	850	<50	<50	<50	<50
Methyl iodide	<1	<1	2	<10	<1	<1	<1	<1
Carbon Disulfide	<5	<5	<5	<50	<5	<5	<5	<5
tert-Methyl butyl ether (MTBE)	<5	<5	<5	<50	<5	<5	<5	<5
Acrylonitrile	<2	<2	<2	<20	<2	<2	<2	<2
2-Butanone	<25	<25	<25	<250	<25	<25	<25	<25
Dichlorodifluoromethane	<5	<5	<5	<50	<5	<5	<5	<5
Chloromethane	<5	<5	<5	<50	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<10	<1	<1	<1	<1
Bromomethane	<5	<5	<5	,50	<5	<5	<5	<5
Chloroethane	<5	<5	<5	<50	<5	<5	<5	<5
Trichlorofluoromethane	<1	<1	<1	<10	<1	<1	<1	<1
1,1-Dichloroethene	<1	<1	<1	<10	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<50	<5	<5	<5	<5
trans-1,2-Dichloroethene	<1	<1	<1	<10	<1	<1	<1	<1
1,1-Dichloroethane	<1	<1	<1	<10	<1	<1	<1	<1
cis-1,2-Dichloroethene	<1	<1	<1	<10	<1	<1	<1	<1
Tetrahydrofuran	<90	<90	<90	<900	<90	<90	<90	<90
Chloroform	<1	<1	<1	<10	<1	<1	<1	<1
Bromochloromethane	<1	<1	<1	<10	<1	<1	<1	<1
1,1,1-Trichloroethane	<1	<1	<1	<10	<1	<1	<1	<1
4-Methyl-2-pentanone	<50	<50	<50	<500	<50	<50	<50	<50
2-Hexanone	<50	<50	<50	<500	<50	<50	<50	<50
Carbon tetrachloride	<1	<1	<1	<10	<1	<1	<1	<1
Benzene	<1	<1	<1	<10	<1	<1	<1	<1
1,2-Dichloroethane	<1	<1	<1	<10	<1	<1	<1	<1
Trichloroethene	<1	<1	<1	<10	<1	<1	<1	<1
1,2-Dichloropropane	<1	<1	<1	<10	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<10	<1	<1	<1	<1
Dibromomethane	<5	<5	<5	<50	<5	<5	<5	<5
cis-1,3-Dichloropropene	<1	<1	<1	<10	<1	<1	<1	<1
Toluene	<1	<1	<1	<10	<1	<1	<1	<1
trans-1,3-Dichloropropene	<1	<1	<1	<10	<1	<1	<1	<1
1,1,2-Trichloroethane	<1	<1	<1	<10	<1	<1	<1	<1
Tetrachloroethene	<1	<1	<1	<10	<1	<1	<1	<1
trans-1,4-Dichloro-2-butene	<1	<1	<1	<10	<1	<1	<1	<1
Dibromochloromethane	<5	<5	<5	<50	<5	<5	<5	<5
1,2-Dibromoethane	<1	<1	<1	<10	<1	<1	<1	<1
Chlorobenzene	<1	<1	<1	<10	<1	<1	<1	<1
1,1,1,2-Tetrachloroethane	<1	<1	<1	<10	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<10	<1	<1	<1	<1
p,m-Xylene	<2	<2	<2	<20	<2	<2	<2	<2
o-Xylene	<1	<1	<1	<10	<1	<1	<1	<1
Styrene	<1	<1	<1	<10	<1	<1	<1	<1
Isopropylbenzene	<5	<5	<5	<50	<5	<5	<5	<5
Bromoform	<1	<1	<1	<10	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	<1	<1	<1	<10	<1	<1	<1	<1
1,2,3-Trichloropropane	<1	<1	<1	<10	<1	<1	<1	<1
n-Propylbenzene	<1	<1	<1	<10	<1	<1	<1	<1
Bromobenzene	<1	<1	<1	<10	<1	<1	<1	<1
1,3,5-Trimethylbenzene	<1	<1	<1	<10	<1	<1	<1	<1
tert-Butylbenzene	<1	<1	<1	<10	<1	<1	<1	<1
1,2,4-Trimethylbenzene	<1	<1	<1	<10	<1	<1	<1	<1
sec-Butylbenzene	<1	<1	<1	<10	<1	<1	<1	<1
p-Isopropyltoluene	<5	<5	<5	,50	<5	<5	<5	<5
1,3-Dichlorobenzene	<1	<1	<1	<10	<1	<1	<1	<1
1,4-Dichlorobenzene	<1	<1	<1	<10	<1	<1	<1	<1
1,2-Dichlorobenzene	<1	<1	<1	<10	<1	<1	<1	<1
1,2,3-Trimethylbenzene	<1	<1	<1	<10	<1	<1	<1	<1
n-Butylbenzene	<1	<1	<1	<10	<1	<1	<1	<1
Hexachloroethane	<5	<5	<5	<50	<5	<5	<5	<5
1,2-Dibromo-3-chloropropane	<5	<5	<5	<50	<5	<5	<5	<5
1,2,4-Trichlorobenzene	<5	<5	<5	<50	<5	<5	<5	<5
1,2,3-Trichlorobenzene	<5	<5	<5	<50	<5	<5	<5	<5
Napthalene	<5	<5	<5	<50	<5	<5	<5	<5
2-Methylnapthalene	<5	<5	<5	<50	<5	<5	<5	<5

Notes: * Elevated reporting limit due to high target concentration
EPA Method 8260 used for analysis.
Dup- Duplicate analysis
Analysis in µg/L

Table 4
RACER Trust - Coldwater Road Landfill Facility
Leachate Sump Depth to Water

June 25, 2015

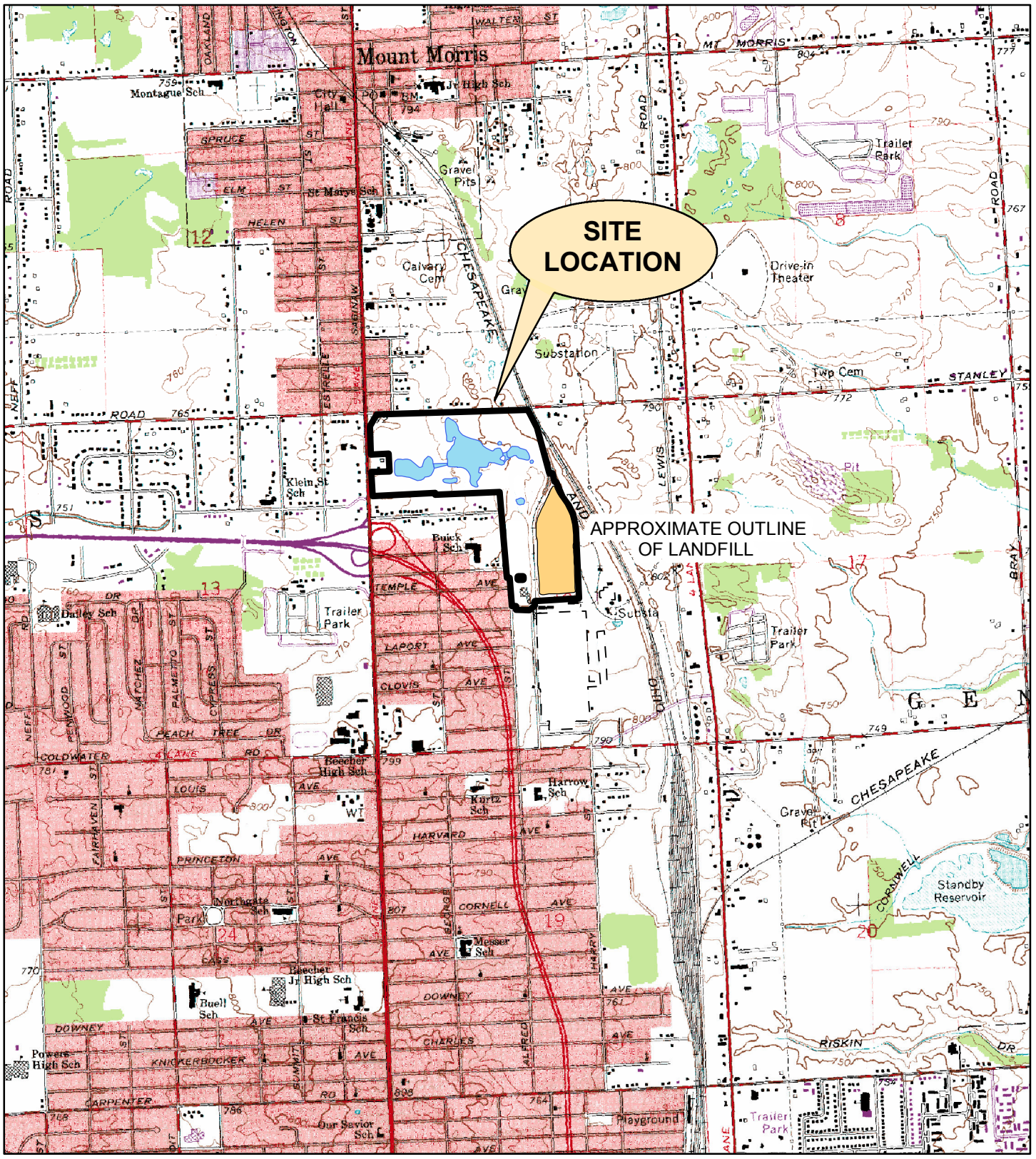
Sump	DTW
A	19.94
B	12.25
C	13.52
D	19.65
E	18.40
F	20.69

Notes:

DTW= Depth to Water, measured in feet below top of casing

FIGURES

FIGURE 1



AUGUST 2014
15388/51440/001

RACER TRUST
COLDWATER ROAD LANDFILL FACILITY
FLINT, MICHIGAN

SITE LOCATION MAP

N

0 0.8
Miles

O'BRIEN & GERE ENGINEERS, INC.

FIGURE 2

STANLEY ROAD

SAGINAW STREET

KLEIN STREET

WETLANDS

DIRT ROAD / TRAIL

RAILROAD

VAULT A
CELL A
SUMP A
VAULT B
CELL B
SUMP B
VAULT C
CELL C
SUMP C
VAULT D
CELL D
SUMP D
VAULT E
CELL E
SUMP E
SUMP F
CELL F
VAULT F

CONTROL BUILDING

DRAINAGE SWALE

DRAINAGE CULVERT (TYP)

ABANDONED RAILROAD

FENCE

CONCRETE / GRAVEL ROAD

MORRIS HILLS

I-475

MAP USES DATA FROM THE MICHIGAN CENTER FOR GEOGRAPHIC INFORMATION

N

LEGEND

LEACHATE COLLECTION SUMP

ACCESS PORT FOR LEAK DETECTION VAULT

RACER TRUST
COLDWATER ROAD
LANDFILL FACILITY
FLINT, MICHIGAN

SITE LAYOUT

0 140 280 420 560
Feet

AUGUST 2014
15388/51440-002

O'BRIEN & GERE ENGINEERS, INC.

Document Path: I:\Racer-Trust.15388\51440.Coldwater-Rd-Lal\Docs\Reports\LDS\Semi-Annual 06-14\Figures\002 - Site_Layout 2014 Annual Rpts (LDS Rpt) (2014-06).mxd

PLOT DATE: 8/14/2014 KBS

APPENDIX A

Analytical Laboratory Reports

Analytical Laboratory Report

Report ID: S66588.01(01)
Generated on 07/07/2015

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: Clifford.Yantz@obg.com

Report produced by

Merit Laboratories, Inc.
2680 East Lansing Drive
East Lansing, MI 48823

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

Contacts for report questions:
Kevin George (kgeorge@meritlabs.com)
Barbara Ball (bball@meritlabs.com)

Report Summary

Lab Sample ID(s): S66588.01-S66588.15
Project: RACER Coldwater Rd CF Semi Annual Sampling
Collected Date: 06/25/2015
Submitted Date/Time: 06/25/2015 16:00
Sampled by: Kevin Schneider
P.O. #: 11311200

Table of Contents

Maya Murshak
Technical Director

General Report Notes

Results relate only to items tested as received by 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 reporting limit (RL).
40 CFR Part 136 Table II Required Containers, Preservation Techniques and Holding Times for the Clean Water Act specify that samples for acrolein and acrylonitrile need to be preserved at a pH in the range of 4 to 5 or if not preserved, analyzed within 3 days of sampling.
QA/QC corresponding to this analytical report is a separate document with the same Merit ID reference and is available upon request.
Full accreditation certificates are available upon request.
Samples are held by the lab for 30 days from the final report date unless a written request to hold longer is provided by the client.

Report Narrative

There is no additional narrative for this analytical report

Laboratory Certifications

Authority	Certification ID
Michigan DEQ	#9956
DOD ELAP/ISO 17025	#69699
WBENC	#2005110032
Ohio VAP	#CL0002
Indiana DOH	#C-MI-07
New York NELAC	#11814
North Carolina DENR	#680
North Carolina DOH	#26702

Qualifier Descriptions

Qualifier	Description
!	Result is outside of stated limit criteria
B	Compound also found in associated method blank
E	Concentration exceeds calibration range
F	Analysis run outside of holding time
G	Estimated result due to extraction run outside of holding time
H	Sample submitted and run outside of holding time
I	Matrix interference with internal standard
J	Estimated value less than reporting limit, but greater than MDL
L	Elevated reporting limit due to low sample amount
M	Result reported to MDL not RDL
O	Analysis performed by outside laboratory. See attached report.
R	Preliminary result
S	Surrogate recovery outside of control limits
T	No correction for total solids
X	Elevated reporting limit due to matrix interference
Y	Elevated reporting limit due to high target concentration
b	Value detected less than reporting limit, but greater than MDL
e	Reported value estimated due to interference
j	Analyte also found in associated method blank
p	Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.
x	Preserved from bulk sample

Glossary of Abbreviations

Abbreviation	Description
RL/RDL	Reporting Limit
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
SW	EPA SW 846 (Soil and Wastewater) Methods
E	EPA Methods
SM	Standard Methods

Method Summary

Method	Version
E120.1	EPA Method 120.1 Revision 1982
E200.8	EPA Method 200.8 Revision 5.4
N/A	Not Applicable
SM2540D	Standard Method 2540 D 20th Edition
SM5310C	Standard Method 5310C 20th Edition
SW3015A	SW 846 Method 3015A Revision 1 February 2007
SW8260C	SW 846 Method 8260C Revision 3 August 2006

Sample Summary (15 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S66588.01	Sump A	Wastewater	06/25/15 09:10
S66588.02	Vault A	Wastewater	06/25/15 09:30
S66588.03	Sump B	Wastewater	06/25/15 10:05
S66588.04	Vault B	Wastewater	06/25/15 10:25
S66588.05	Sump C	Wastewater	06/25/15 10:50
S66588.06	Vault C	Wastewater	06/25/15 11:10
S66588.07	Sump D	Wastewater	06/25/15 11:45
S66588.08	Vault D	Wastewater	06/25/15 12:05
S66588.09	Sump E	Wastewater	06/25/15 12:45
S66588.10	Vault E	Wastewater	06/25/15 13:15
S66588.11	Sump F	Wastewater	06/25/15 13:55
S66588.12	Vault F	Wastewater	06/25/15 14:15
S66588.13	DUP-2	Wastewater	06/25/15 00:01
S66588.14	DUP-3	Wastewater	06/25/15 00:01
S66588.15	Trip Blank-3	Quality Control	06/25/15 00:01

Analytical Laboratory Report

Lab Sample ID: S66588.01
Sample Tag: Sump A
Collected Date/Time: 06/25/2015 09:10
Matrix: Wastewater
COC Reference: 74409

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	500ml Plastic	None	Yes	5.3	IR
2	40ml Glass	H2SO4	Yes	5.3	IR
1	125ml Plastic	HNO3	Yes	5.3	IR
3	40ml Glass	HCL	Yes	5.3	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Extraction / Prep.								
Metal Digestion	Completed			SW3015A	07/02/15 11:30	CCM		
pH check for VOCs	<2	STD Units		N/A	06/30/15 10:45	WAT		
Inorganics								
Conductivity	1,831	umhos/cm		E120.1	07/07/15 16:54	JKB		
TOC	36.6	mg/L	1	SM5310C	07/06/15 15:03	JKB		
Total Suspended Solids	3	mg/L	1	SM2540D	06/26/15 14:15	ASB		
Metals								
Chromium, Dissolved	0.452	mg/L	0.005	E200.8	07/06/15 13:57	CCM	7440-47-3	
Copper, Dissolved	0.437	mg/L	0.005	E200.8	07/06/15 13:57	CCM	7440-50-8	
Nickel, Dissolved	0.042	mg/L	0.005	E200.8	07/06/15 13:57	CCM	7440-02-0	
Zinc, Dissolved	0.027	mg/L	0.005	E200.8	07/06/15 13:57	CCM	7440-66-6	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260C	06/29/15 20:44	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260C	06/29/15 20:44	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260C	06/29/15 20:44	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260C	06/29/15 20:44	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260C	06/29/15 20:44	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260C	06/29/15 20:44	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260C	06/29/15 20:44	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260C	06/29/15 20:44	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260C	06/29/15 20:44	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260C	06/29/15 20:44	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260C	06/29/15 20:44	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260C	06/29/15 20:44	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260C	06/29/15 20:44	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260C	06/29/15 20:44	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260C	06/29/15 20:44	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260C	06/29/15 20:44	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260C	06/29/15 20:44	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260C	06/29/15 20:44	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260C	06/29/15 20:44	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260C	06/29/15 20:44	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260C	06/29/15 20:44	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260C	06/29/15 20:44	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260C	06/29/15 20:44	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260C	06/29/15 20:44	WAT	591-78-6	

Lab Sample ID: S66588.01 (continued)
Sample Tag: Sump A

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon tetrachloride	Not detected	ug/L	1	SW8260C	06/29/15 20:44	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260C	06/29/15 20:44	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260C	06/29/15 20:44	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260C	06/29/15 20:44	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260C	06/29/15 20:44	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260C	06/29/15 20:44	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260C	06/29/15 20:44	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260C	06/29/15 20:44	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260C	06/29/15 20:44	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260C	06/29/15 20:44	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260C	06/29/15 20:44	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260C	06/29/15 20:44	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260C	06/29/15 20:44	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260C	06/29/15 20:44	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260C	06/29/15 20:44	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260C	06/29/15 20:44	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260C	06/29/15 20:44	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260C	06/29/15 20:44	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260C	06/29/15 20:44	WAT		
o-Xylene	Not detected	ug/L	1	SW8260C	06/29/15 20:44	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260C	06/29/15 20:44	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260C	06/29/15 20:44	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260C	06/29/15 20:44	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260C	06/29/15 20:44	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260C	06/29/15 20:44	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260C	06/29/15 20:44	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260C	06/29/15 20:44	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260C	06/29/15 20:44	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260C	06/29/15 20:44	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260C	06/29/15 20:44	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260C	06/29/15 20:44	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260C	06/29/15 20:44	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260C	06/29/15 20:44	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260C	06/29/15 20:44	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260C	06/29/15 20:44	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260C	06/29/15 20:44	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260C	06/29/15 20:44	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260C	06/29/15 20:44	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260C	06/29/15 20:44	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260C	06/29/15 20:44	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260C	06/29/15 20:44	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260C	06/29/15 20:44	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260C	06/29/15 20:44	WAT	91-57-6	

Analytical Laboratory Report

Lab Sample ID: S66588.02
Sample Tag: Vault A
Collected Date/Time: 06/25/2015 09:30
Matrix: Wastewater
COC Reference: 74409

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	500ml Plastic	None	Yes	5.3	IR
2	40ml Glass	H2SO4	Yes	5.3	IR
1	125ml Plastic	HNO3	Yes	5.3	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Extraction / Prep.								
Metal Digestion	Completed			SW3015A	07/02/15 11:30	CCM		
Inorganics								
Conductivity	1,507	umhos/cm		E120.1	07/07/15 16:56	JKB		
TOC	4.5	mg/L	1	SM5310C	07/06/15 15:23	JKB		
Total Suspended Solids	2	mg/L	1	SM2540D	06/26/15 14:15	ASB		
Metals								
Chromium, Dissolved	Not detected	mg/L	0.005	E200.8	07/06/15 13:59	CCM	7440-47-3	
Copper, Dissolved	0.006	mg/L	0.005	E200.8	07/06/15 13:59	CCM	7440-50-8	
Nickel, Dissolved	0.021	mg/L	0.005	E200.8	07/06/15 13:59	CCM	7440-02-0	
Zinc, Dissolved	0.010	mg/L	0.005	E200.8	07/06/15 13:59	CCM	7440-66-6	

Analytical Laboratory Report

Lab Sample ID: S66588.03
Sample Tag: Sump B
Collected Date/Time: 06/25/2015 10:05
Matrix: Wastewater
COC Reference: 74409

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	500ml Plastic	None	Yes	5.3	IR
2	40ml Glass	H2SO4	Yes	5.3	IR
1	125ml Plastic	HNO3	Yes	5.3	IR
3	40ml Glass	HCL	Yes	5.3	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Extraction / Prep.								
Metal Digestion	Completed			SW3015A	07/02/15 11:30	CCM		
pH check for VOCs	<2	STD Units		N/A	06/30/15 10:45	WAT		
Inorganics								
Conductivity	3,430	umhos/cm		E120.1	07/07/15 16:58	JKB		
TOC	79.1	mg/L	1	SM5310C	07/06/15 16:22	JKB		
Total Suspended Solids	2	mg/L	1	SM2540D	07/02/15 12:30	ASB		
Metals								
Chromium, Dissolved	0.349	mg/L	0.005	E200.8	07/06/15 14:02	CCM	7440-47-3	
Copper, Dissolved	0.689	mg/L	0.005	E200.8	07/06/15 14:02	CCM	7440-50-8	
Nickel, Dissolved	0.093	mg/L	0.005	E200.8	07/06/15 14:02	CCM	7440-02-0	
Zinc, Dissolved	0.012	mg/L	0.005	E200.8	07/06/15 14:02	CCM	7440-66-6	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260C	06/29/15 21:06	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260C	06/29/15 21:06	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260C	06/29/15 21:06	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260C	06/29/15 21:06	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260C	06/29/15 21:06	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260C	06/29/15 21:06	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260C	06/29/15 21:06	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260C	06/29/15 21:06	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260C	06/29/15 21:06	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260C	06/29/15 21:06	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260C	06/29/15 21:06	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260C	06/29/15 21:06	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260C	06/29/15 21:06	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260C	06/29/15 21:06	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260C	06/29/15 21:06	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260C	06/29/15 21:06	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260C	06/29/15 21:06	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260C	06/29/15 21:06	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260C	06/29/15 21:06	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260C	06/29/15 21:06	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260C	06/29/15 21:06	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260C	06/29/15 21:06	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260C	06/29/15 21:06	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260C	06/29/15 21:06	WAT	591-78-6	

Lab Sample ID: S66588.03 (continued)
Sample Tag: Sump B

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon tetrachloride	Not detected	ug/L	1	SW8260C	06/29/15 21:06	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260C	06/29/15 21:06	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260C	06/29/15 21:06	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260C	06/29/15 21:06	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260C	06/29/15 21:06	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260C	06/29/15 21:06	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260C	06/29/15 21:06	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260C	06/29/15 21:06	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260C	06/29/15 21:06	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260C	06/29/15 21:06	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260C	06/29/15 21:06	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260C	06/29/15 21:06	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260C	06/29/15 21:06	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260C	06/29/15 21:06	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260C	06/29/15 21:06	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260C	06/29/15 21:06	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260C	06/29/15 21:06	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260C	06/29/15 21:06	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260C	06/29/15 21:06	WAT		
o-Xylene	Not detected	ug/L	1	SW8260C	06/29/15 21:06	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260C	06/29/15 21:06	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260C	06/29/15 21:06	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260C	06/29/15 21:06	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260C	06/29/15 21:06	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260C	06/29/15 21:06	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260C	06/29/15 21:06	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260C	06/29/15 21:06	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260C	06/29/15 21:06	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260C	06/29/15 21:06	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260C	06/29/15 21:06	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260C	06/29/15 21:06	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260C	06/29/15 21:06	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260C	06/29/15 21:06	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260C	06/29/15 21:06	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260C	06/29/15 21:06	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260C	06/29/15 21:06	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260C	06/29/15 21:06	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260C	06/29/15 21:06	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260C	06/29/15 21:06	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260C	06/29/15 21:06	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260C	06/29/15 21:06	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260C	06/29/15 21:06	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260C	06/29/15 21:06	WAT	91-57-6	

Analytical Laboratory Report

Lab Sample ID: S66588.04
Sample Tag: Vault B
Collected Date/Time: 06/25/2015 10:25
Matrix: Wastewater
COC Reference: 74409

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	500ml Plastic	None	Yes	5.3	IR
2	40ml Glass	H2SO4	Yes	5.3	IR
1	125ml Plastic	HNO3	Yes	5.3	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Extraction / Prep.								
Metal Digestion	Completed			SW3015A	07/02/15 11:30	CCM		
Inorganics								
Conductivity	1,513	umhos/cm		E120.1	07/07/15 17:00	JKB		
TOC	3.0	mg/L	1	SM5310C	07/06/15 16:42	JKB		
Total Suspended Solids	Not detected	mg/L	1	SM2540D	06/26/15 14:15	ASB		j
Metals								
Chromium, Dissolved	Not detected	mg/L	0.005	E200.8	07/06/15 14:05	CCM	7440-47-3	
Copper, Dissolved	0.005	mg/L	0.005	E200.8	07/06/15 14:05	CCM	7440-50-8	
Nickel, Dissolved	0.011	mg/L	0.005	E200.8	07/06/15 14:05	CCM	7440-02-0	
Zinc, Dissolved	0.012	mg/L	0.005	E200.8	07/06/15 14:05	CCM	7440-66-6	

j-Analyte also found in associated method blank

Analytical Laboratory Report

Lab Sample ID: S66588.05
Sample Tag: Sump C
Collected Date/Time: 06/25/2015 10:50
Matrix: Wastewater
COC Reference: 74409

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	500ml Plastic	None	Yes	5.3	IR
2	40ml Glass	H2SO4	Yes	5.3	IR
1	125ml Plastic	HNO3	Yes	5.3	IR
3	40ml Glass	HCL	Yes	5.3	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Extraction / Prep.								
Metal Digestion	Completed			SW3015A	07/02/15 11:30	CCM		
pH check for VOCs	<2	STD Units		N/A	06/30/15 10:45	WAT		
Inorganics								
Conductivity	4,050	umhos/cm		E120.1	07/07/15 17:02	JKB		
TOC	122	mg/L	1	SM5310C	07/06/15 17:01	JKB		
Total Suspended Solids	3	mg/L	1	SM2540D	06/26/15 14:15	ASB		j
Metals								
Chromium, Dissolved	0.029	mg/L	0.005	E200.8	07/06/15 14:07	CCM	7440-47-3	
Copper, Dissolved	2.87	mg/L	0.005	E200.8	07/06/15 14:07	CCM	7440-50-8	
Nickel, Dissolved	0.539	mg/L	0.005	E200.8	07/06/15 14:07	CCM	7440-02-0	
Zinc, Dissolved	0.014	mg/L	0.005	E200.8	07/06/15 14:07	CCM	7440-66-6	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260C	07/06/15 15:46	JGH	60-29-7	
Acetone	Not detected	ug/L	50	SW8260C	07/06/15 15:46	JGH	67-64-1	
Methyl iodide	2	ug/L	1	SW8260C	07/06/15 15:46	JGH	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260C	07/06/15 15:46	JGH	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260C	07/06/15 15:46	JGH	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260C	07/06/15 15:46	JGH	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260C	07/06/15 15:46	JGH	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260C	07/06/15 15:46	JGH	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260C	07/06/15 15:46	JGH	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260C	07/06/15 15:46	JGH	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260C	07/06/15 15:46	JGH	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260C	07/06/15 15:46	JGH	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260C	07/06/15 15:46	JGH	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260C	07/06/15 15:46	JGH	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260C	07/06/15 15:46	JGH	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260C	07/06/15 15:46	JGH	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260C	07/06/15 15:46	JGH	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260C	07/06/15 15:46	JGH	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260C	07/06/15 15:46	JGH	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260C	07/06/15 15:46	JGH	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260C	07/06/15 15:46	JGH	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260C	07/06/15 15:46	JGH	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260C	07/06/15 15:46	JGH	108-10-1	

j-Analyte also found in associated method blank

Lab Sample ID: S66588.05 (continued)
Sample Tag: Sump C

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
2-Hexanone	Not detected	ug/L	50	SW8260C	07/06/15 15:46	JGH	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260C	07/06/15 15:46	JGH	56-23-5	
Benzene	Not detected	ug/L	1	SW8260C	07/06/15 15:46	JGH	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260C	07/06/15 15:46	JGH	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260C	07/06/15 15:46	JGH	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260C	07/06/15 15:46	JGH	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260C	07/06/15 15:46	JGH	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260C	07/06/15 15:46	JGH	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260C	07/06/15 15:46	JGH	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260C	07/06/15 15:46	JGH	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260C	07/06/15 15:46	JGH	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260C	07/06/15 15:46	JGH	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260C	07/06/15 15:46	JGH	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260C	07/06/15 15:46	JGH	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260C	07/06/15 15:46	JGH	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260C	07/06/15 15:46	JGH	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260C	07/06/15 15:46	JGH	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260C	07/06/15 15:46	JGH	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260C	07/06/15 15:46	JGH	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260C	07/06/15 15:46	JGH		
o-Xylene	Not detected	ug/L	1	SW8260C	07/06/15 15:46	JGH	95-47-6	
Styrene	Not detected	ug/L	1	SW8260C	07/06/15 15:46	JGH	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260C	07/06/15 15:46	JGH	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260C	07/06/15 15:46	JGH	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260C	07/06/15 15:46	JGH	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260C	07/06/15 15:46	JGH	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260C	07/06/15 15:46	JGH	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260C	07/06/15 15:46	JGH	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260C	07/06/15 15:46	JGH	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260C	07/06/15 15:46	JGH	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260C	07/06/15 15:46	JGH	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260C	07/06/15 15:46	JGH	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260C	07/06/15 15:46	JGH	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260C	07/06/15 15:46	JGH	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260C	07/06/15 15:46	JGH	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260C	07/06/15 15:46	JGH	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260C	07/06/15 15:46	JGH	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260C	07/06/15 15:46	JGH	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260C	07/06/15 15:46	JGH	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260C	07/06/15 15:46	JGH	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260C	07/06/15 15:46	JGH	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260C	07/06/15 15:46	JGH	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260C	07/06/15 15:46	JGH	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260C	07/06/15 15:46	JGH	91-57-6	

Analytical Laboratory Report

Lab Sample ID: S66588.06
Sample Tag: Vault C
Collected Date/Time: 06/25/2015 11:10
Matrix: Wastewater
COC Reference: 74409

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	500ml Plastic	None	Yes	5.3	IR
2	40ml Glass	H2SO4	Yes	5.3	IR
1	125ml Plastic	HNO3	Yes	5.3	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Extraction / Prep.								
Metal Digestion	Completed			SW3015A	07/02/15 11:30	CCM		
Inorganics								
Conductivity	1,788	umhos/cm		E120.1	07/07/15 17:04	JKB		
TOC	5.1	mg/L	1	SM5310C	07/06/15 17:21	JKB		
Total Suspended Solids	6	mg/L	1	SM2540D	06/26/15 14:15	ASB		j
Metals								
Chromium, Dissolved	Not detected	mg/L	0.005	E200.8	07/06/15 14:10	CCM	7440-47-3	
Copper, Dissolved	0.006	mg/L	0.005	E200.8	07/06/15 14:10	CCM	7440-50-8	
Nickel, Dissolved	0.014	mg/L	0.005	E200.8	07/06/15 14:10	CCM	7440-02-0	
Zinc, Dissolved	0.008	mg/L	0.005	E200.8	07/06/15 14:10	CCM	7440-66-6	

j-Analyte also found in associated method blank

Analytical Laboratory Report

Lab Sample ID: S66588.07
Sample Tag: Sump D
Collected Date/Time: 06/25/2015 11:45
Matrix: Wastewater
COC Reference: 74409

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	500ml Plastic	None	Yes	5.3	IR
2	40ml Glass	H2SO4	Yes	5.3	IR
1	125ml Plastic	HNO3	Yes	5.3	IR
3	40ml Glass	HCL	Yes	5.3	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Extraction / Prep.								
Metal Digestion	Completed			SW3015A	07/02/15 11:30	CCM		
pH check for VOCs	<2	STD Units		N/A	06/30/15 10:45	WAT		
Inorganics								
Conductivity	6,060	umhos/cm		E120.1	07/07/15 17:06	JKB		
TOC	131	mg/L	1	SM5310C	07/06/15 17:41	JKB		
Total Suspended Solids	8	mg/L	1	SM2540D	06/26/15 14:15	ASB		j
Metals								
Chromium, Dissolved	0.052	mg/L	0.005	E200.8	07/06/15 14:12	CCM	7440-47-3	
Copper, Dissolved	1.31	mg/L	0.005	E200.8	07/06/15 14:12	CCM	7440-50-8	
Nickel, Dissolved	1.50	mg/L	0.005	E200.8	07/06/15 14:12	CCM	7440-02-0	
Zinc, Dissolved	0.011	mg/L	0.005	E200.8	07/06/15 14:12	CCM	7440-66-6	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	100	SW8260C	07/06/15 21:28	JGH	60-29-7	Y
Acetone	850	ug/L	500	SW8260C	07/06/15 21:28	JGH	67-64-1	Y
Methyl iodide	Not detected	ug/L	10	SW8260C	07/06/15 21:28	JGH	74-88-4	Y
Carbon disulfide	Not detected	ug/L	50	SW8260C	07/06/15 21:28	JGH	75-15-0	Y
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	50	SW8260C	07/06/15 21:28	JGH	1634-04-4	Y
Acrylonitrile	Not detected	ug/L	20	SW8260C	07/06/15 21:28	JGH	107-13-1	Y
2-Butanone (MEK)	Not detected	ug/L	250	SW8260C	07/06/15 21:28	JGH	78-93-3	Y
Dichlorodifluoromethane	Not detected	ug/L	50	SW8260C	07/06/15 21:28	JGH	75-71-8	Y
Chloromethane	Not detected	ug/L	50	SW8260C	07/06/15 21:28	JGH	74-87-3	Y
Vinyl chloride	Not detected	ug/L	10	SW8260C	07/06/15 21:28	JGH	75-01-4	Y
Bromomethane	Not detected	ug/L	50	SW8260C	07/06/15 21:28	JGH	74-83-9	Y
Chloroethane	Not detected	ug/L	50	SW8260C	07/06/15 21:28	JGH	75-00-3	Y
Trichlorofluoromethane	Not detected	ug/L	10	SW8260C	07/06/15 21:28	JGH	75-69-4	Y
1,1-Dichloroethene	Not detected	ug/L	10	SW8260C	07/06/15 21:28	JGH	75-35-4	Y
Methylene chloride	Not detected	ug/L	50	SW8260C	07/06/15 21:28	JGH	75-09-2	Y
trans-1,2-Dichloroethene	Not detected	ug/L	10	SW8260C	07/06/15 21:28	JGH	156-60-5	Y
1,1-Dichloroethane	Not detected	ug/L	10	SW8260C	07/06/15 21:28	JGH	75-34-3	Y
cis-1,2-Dichloroethene	Not detected	ug/L	10	SW8260C	07/06/15 21:28	JGH	156-59-2	Y
Tetrahydrofuran	Not detected	ug/L	900	SW8260C	07/06/15 21:28	JGH	109-99-9	Y
Chloroform	Not detected	ug/L	10	SW8260C	07/06/15 21:28	JGH	67-66-3	Y
Bromochloromethane	Not detected	ug/L	10	SW8260C	07/06/15 21:28	JGH	74-97-5	Y
1,1,1-Trichloroethane	Not detected	ug/L	10	SW8260C	07/06/15 21:28	JGH	71-55-6	Y

j-Analyte also found in associated method blank
Y-Elevated reporting limit due to high target concentration

Lab Sample ID: S66588.07 (continued)
Sample Tag: Sump D

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	500	SW8260C	07/06/15 21:28	JGH	108-10-1	Y
2-Hexanone	Not detected	ug/L	500	SW8260C	07/06/15 21:28	JGH	591-78-6	Y
Carbon tetrachloride	Not detected	ug/L	10	SW8260C	07/06/15 21:28	JGH	56-23-5	Y
Benzene	Not detected	ug/L	10	SW8260C	07/06/15 21:28	JGH	71-43-2	Y
1,2-Dichloroethane	Not detected	ug/L	10	SW8260C	07/06/15 21:28	JGH	107-06-2	Y
Trichloroethene	Not detected	ug/L	10	SW8260C	07/06/15 21:28	JGH	79-01-6	Y
1,2-Dichloropropane	Not detected	ug/L	10	SW8260C	07/06/15 21:28	JGH	78-87-5	Y
Bromodichloromethane	Not detected	ug/L	10	SW8260C	07/06/15 21:28	JGH	75-27-4	Y
Dibromomethane	Not detected	ug/L	50	SW8260C	07/06/15 21:28	JGH	74-95-3	Y
cis-1,3-Dichloropropene	Not detected	ug/L	10	SW8260C	07/06/15 21:28	JGH	10061-01-5	Y
Toluene	Not detected	ug/L	10	SW8260C	07/06/15 21:28	JGH	108-88-3	Y
trans-1,3-Dichloropropene	Not detected	ug/L	10	SW8260C	07/06/15 21:28	JGH	10061-02-6	Y
1,1,2-Trichloroethane	Not detected	ug/L	10	SW8260C	07/06/15 21:28	JGH	79-00-5	Y
Tetrachloroethene	Not detected	ug/L	10	SW8260C	07/06/15 21:28	JGH	127-18-4	Y
trans-1,4-Dichloro-2-butene	Not detected	ug/L	10	SW8260C	07/06/15 21:28	JGH	110-57-6	Y
Dibromochloromethane	Not detected	ug/L	50	SW8260C	07/06/15 21:28	JGH	124-48-1	Y
1,2-Dibromoethane	Not detected	ug/L	10	SW8260C	07/06/15 21:28	JGH	106-93-4	Y
Chlorobenzene	Not detected	ug/L	10	SW8260C	07/06/15 21:28	JGH	108-90-7	Y
1,1,1,2-Tetrachloroethane	Not detected	ug/L	10	SW8260C	07/06/15 21:28	JGH	630-20-6	Y
Ethylbenzene	Not detected	ug/L	10	SW8260C	07/06/15 21:28	JGH	100-41-4	Y
p,m-Xylene	Not detected	ug/L	20	SW8260C	07/06/15 21:28	JGH		Y
o-Xylene	Not detected	ug/L	10	SW8260C	07/06/15 21:28	JGH	95-47-6	Y
Styrene	Not detected	ug/L	10	SW8260C	07/06/15 21:28	JGH	100-42-5	Y
Isopropylbenzene	Not detected	ug/L	50	SW8260C	07/06/15 21:28	JGH	98-82-8	Y
Bromoform	Not detected	ug/L	10	SW8260C	07/06/15 21:28	JGH	75-25-2	Y
1,1,2,2-Tetrachloroethane	Not detected	ug/L	10	SW8260C	07/06/15 21:28	JGH	79-34-5	Y
1,2,3-Trichloropropane	Not detected	ug/L	10	SW8260C	07/06/15 21:28	JGH	96-18-4	Y
n-Propylbenzene	Not detected	ug/L	10	SW8260C	07/06/15 21:28	JGH	103-65-1	Y
Bromobenzene	Not detected	ug/L	10	SW8260C	07/06/15 21:28	JGH	108-86-1	Y
1,3,5-Trimethylbenzene	Not detected	ug/L	10	SW8260C	07/06/15 21:28	JGH	108-67-8	Y
tert-Butylbenzene	Not detected	ug/L	10	SW8260C	07/06/15 21:28	JGH	98-06-6	Y
1,2,4-Trimethylbenzene	Not detected	ug/L	10	SW8260C	07/06/15 21:28	JGH	95-63-6	Y
sec-Butylbenzene	Not detected	ug/L	10	SW8260C	07/06/15 21:28	JGH	135-98-8	Y
p-Isopropyltoluene	Not detected	ug/L	50	SW8260C	07/06/15 21:28	JGH	99-87-6	Y
1,3-Dichlorobenzene	Not detected	ug/L	10	SW8260C	07/06/15 21:28	JGH	541-73-1	Y
1,4-Dichlorobenzene	Not detected	ug/L	10	SW8260C	07/06/15 21:28	JGH	106-46-7	Y
1,2-Dichlorobenzene	Not detected	ug/L	10	SW8260C	07/06/15 21:28	JGH	95-50-1	Y
1,2,3-Trimethylbenzene	Not detected	ug/L	10	SW8260C	07/06/15 21:28	JGH	526-73-8	Y
n-Butylbenzene	Not detected	ug/L	10	SW8260C	07/06/15 21:28	JGH	104-51-8	Y
Hexachloroethane	Not detected	ug/L	50	SW8260C	07/06/15 21:28	JGH	67-72-1	Y
1,2-Dibromo-3-chloropropane	Not detected	ug/L	50	SW8260C	07/06/15 21:28	JGH	96-12-8	Y
1,2,4-Trichlorobenzene	Not detected	ug/L	50	SW8260C	07/06/15 21:28	JGH	120-82-1	Y
1,2,3-Trichlorobenzene	Not detected	ug/L	50	SW8260C	07/06/15 21:28	JGH	87-61-6	Y
Naphthalene	Not detected	ug/L	50	SW8260C	07/06/15 21:28	JGH	91-20-3	Y
2-Methylnaphthalene	Not detected	ug/L	50	SW8260C	07/06/15 21:28	JGH	91-57-6	Y

Y-Elevated reporting limit due to high target concentration

Analytical Laboratory Report

Lab Sample ID: S66588.08
Sample Tag: Vault D
Collected Date/Time: 06/25/2015 12:05
Matrix: Wastewater
COC Reference: 74409

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	500ml Plastic	None	Yes	5.3	IR
2	40ml Glass	H2SO4	Yes	5.3	IR
1	125ml Plastic	HNO3	Yes	5.3	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Extraction / Prep.								
Metal Digestion	Completed			SW3015A	07/02/15 11:30	CCM		
Inorganics								
Conductivity	1,643	umhos/cm		E120.1	07/07/15 17:08	JKB		
TOC	6.9	mg/L	1	SM5310C	07/06/15 18:01	JKB		
Total Suspended Solids	3	mg/L	1	SM2540D	06/26/15 14:15	ASB		j
Metals								
Chromium, Dissolved	Not detected	mg/L	0.005	E200.8	07/06/15 14:15	CCM	7440-47-3	
Copper, Dissolved	0.008	mg/L	0.005	E200.8	07/06/15 14:15	CCM	7440-50-8	
Nickel, Dissolved	0.023	mg/L	0.005	E200.8	07/06/15 14:15	CCM	7440-02-0	
Zinc, Dissolved	0.017	mg/L	0.005	E200.8	07/06/15 14:15	CCM	7440-66-6	

j-Analyte also found in associated method blank

Analytical Laboratory Report

Lab Sample ID: S66588.09
Sample Tag: Sump E
Collected Date/Time: 06/25/2015 12:45
Matrix: Wastewater
COC Reference: 74409

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	500ml Plastic	None	Yes	5.3	IR
2	40ml Glass	H2SO4	Yes	5.3	IR
1	125ml Plastic	HNO3	Yes	5.3	IR
3	40ml Glass	HCL	Yes	5.3	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Extraction / Prep.								
Metal Digestion	Completed			SW3015A	07/02/15 11:30	CCM		
pH check for VOCs	<2	STD Units		N/A	06/30/15 10:45	WAT		
Inorganics								
Conductivity	2,220	umhos/cm		E120.1	07/07/15 17:10	JKB		
TOC	21.7	mg/L	1	SM5310C	07/06/15 18:43	JKB		
Total Suspended Solids	3	mg/L	1	SM2540D	06/26/15 14:15	ASB		j
Metals								
Chromium, Dissolved	0.015	mg/L	0.005	E200.8	07/06/15 14:18	CCM	7440-47-3	
Copper, Dissolved	0.151	mg/L	0.005	E200.8	07/06/15 14:18	CCM	7440-50-8	
Nickel, Dissolved	0.034	mg/L	0.005	E200.8	07/06/15 14:18	CCM	7440-02-0	
Zinc, Dissolved	0.008	mg/L	0.005	E200.8	07/06/15 14:18	CCM	7440-66-6	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260C	06/29/15 21:28	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260C	06/29/15 21:28	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260C	06/29/15 21:28	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260C	06/29/15 21:28	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260C	06/29/15 21:28	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260C	06/29/15 21:28	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260C	06/29/15 21:28	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260C	06/29/15 21:28	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260C	06/29/15 21:28	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260C	06/29/15 21:28	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260C	06/29/15 21:28	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260C	06/29/15 21:28	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260C	06/29/15 21:28	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260C	06/29/15 21:28	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260C	06/29/15 21:28	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260C	06/29/15 21:28	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260C	06/29/15 21:28	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260C	06/29/15 21:28	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260C	06/29/15 21:28	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260C	06/29/15 21:28	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260C	06/29/15 21:28	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260C	06/29/15 21:28	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260C	06/29/15 21:28	WAT	108-10-1	

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Lab Sample ID: S66588.09 (continued)
Sample Tag: Sump E

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
2-Hexanone	Not detected	ug/L	50	SW8260C	06/29/15 21:28	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260C	06/29/15 21:28	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260C	06/29/15 21:28	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260C	06/29/15 21:28	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260C	06/29/15 21:28	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260C	06/29/15 21:28	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260C	06/29/15 21:28	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260C	06/29/15 21:28	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260C	06/29/15 21:28	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260C	06/29/15 21:28	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260C	06/29/15 21:28	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260C	06/29/15 21:28	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260C	06/29/15 21:28	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260C	06/29/15 21:28	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260C	06/29/15 21:28	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260C	06/29/15 21:28	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260C	06/29/15 21:28	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260C	06/29/15 21:28	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260C	06/29/15 21:28	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260C	06/29/15 21:28	WAT		
o-Xylene	Not detected	ug/L	1	SW8260C	06/29/15 21:28	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260C	06/29/15 21:28	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260C	06/29/15 21:28	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260C	06/29/15 21:28	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260C	06/29/15 21:28	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260C	06/29/15 21:28	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260C	06/29/15 21:28	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260C	06/29/15 21:28	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260C	06/29/15 21:28	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260C	06/29/15 21:28	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260C	06/29/15 21:28	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260C	06/29/15 21:28	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260C	06/29/15 21:28	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260C	06/29/15 21:28	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260C	06/29/15 21:28	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260C	06/29/15 21:28	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260C	06/29/15 21:28	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260C	06/29/15 21:28	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260C	06/29/15 21:28	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260C	06/29/15 21:28	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260C	06/29/15 21:28	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260C	06/29/15 21:28	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260C	06/29/15 21:28	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260C	06/29/15 21:28	WAT	91-57-6	

Analytical Laboratory Report

Lab Sample ID: S66588.10
Sample Tag: Vault E
Collected Date/Time: 06/25/2015 13:15
Matrix: Wastewater
COC Reference: 74409

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	500ml Plastic	None	Yes	5.3	IR
2	40ml Glass	H2SO4	Yes	5.3	IR
1	125ml Plastic	HNO3	Yes	5.3	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Extraction / Prep.								
Metal Digestion	Completed			SW3015A	07/02/15 11:30	CCM		
Inorganics								
Conductivity	1,456	umhos/cm		E120.1	07/07/15 17:12	JKB		
TOC	2.9	mg/L	1	SM5310C	07/06/15 19:03	JKB		
Total Suspended Solids	4	mg/L	1	SM2540D	06/26/15 14:15	ASB		j
Metals								
Chromium, Dissolved	Not detected	mg/L	0.005	E200.8	07/06/15 14:20	CCM	7440-47-3	
Copper, Dissolved	Not detected	mg/L	0.005	E200.8	07/06/15 14:20	CCM	7440-50-8	
Nickel, Dissolved	0.007	mg/L	0.005	E200.8	07/06/15 14:20	CCM	7440-02-0	
Zinc, Dissolved	0.008	mg/L	0.005	E200.8	07/06/15 14:20	CCM	7440-66-6	

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Analytical Laboratory Report

Lab Sample ID: S66588.11
Sample Tag: Sump F
Collected Date/Time: 06/25/2015 13:55
Matrix: Wastewater
COC Reference: 74409

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	500ml Plastic	None	Yes	5.3	IR
2	40ml Glass	H2SO4	Yes	5.3	IR
1	125ml Plastic	HNO3	Yes	5.3	IR
3	40ml Glass	HCL	Yes	5.3	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Extraction / Prep.								
Metal Digestion	Completed			SW3015A	07/02/15 11:30	CCM		
pH check for VOCs	<2	STD Units		N/A	06/30/15 10:45	WAT		
Inorganics								
Conductivity	3,930	umhos/cm		E120.1	07/07/15 17:14	JKB		
TOC	45.2	mg/L	1	SM5310C	07/06/15 19:23	JKB		
Total Suspended Solids	3	mg/L	1	SM2540D	06/26/15 14:15	ASB		j
Metals								
Chromium, Dissolved	0.044	mg/L	0.005	E200.8	07/06/15 14:36	CCM	7440-47-3	
Copper, Dissolved	0.372	mg/L	0.005	E200.8	07/06/15 14:36	CCM	7440-50-8	
Nickel, Dissolved	0.094	mg/L	0.005	E200.8	07/06/15 14:36	CCM	7440-02-0	
Zinc, Dissolved	0.033	mg/L	0.005	E200.8	07/06/15 14:36	CCM	7440-66-6	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260C	06/29/15 21:50	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260C	06/29/15 21:50	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260C	06/29/15 21:50	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260C	06/29/15 21:50	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260C	06/29/15 21:50	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260C	06/29/15 21:50	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260C	06/29/15 21:50	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260C	06/29/15 21:50	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260C	06/29/15 21:50	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260C	06/29/15 21:50	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260C	06/29/15 21:50	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260C	06/29/15 21:50	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260C	06/29/15 21:50	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260C	06/29/15 21:50	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260C	06/29/15 21:50	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260C	06/29/15 21:50	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260C	06/29/15 21:50	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260C	06/29/15 21:50	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260C	06/29/15 21:50	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260C	06/29/15 21:50	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260C	06/29/15 21:50	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260C	06/29/15 21:50	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260C	06/29/15 21:50	WAT	108-10-1	

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Lab Sample ID: S66588.11 (continued)
Sample Tag: Sump F

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
2-Hexanone	Not detected	ug/L	50	SW8260C	06/29/15 21:50	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260C	06/29/15 21:50	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260C	06/29/15 21:50	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260C	06/29/15 21:50	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260C	06/29/15 21:50	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260C	06/29/15 21:50	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260C	06/29/15 21:50	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260C	06/29/15 21:50	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260C	06/29/15 21:50	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260C	06/29/15 21:50	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260C	06/29/15 21:50	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260C	06/29/15 21:50	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260C	06/29/15 21:50	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260C	06/29/15 21:50	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260C	06/29/15 21:50	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260C	06/29/15 21:50	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260C	06/29/15 21:50	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260C	06/29/15 21:50	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260C	06/29/15 21:50	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260C	06/29/15 21:50	WAT		
o-Xylene	Not detected	ug/L	1	SW8260C	06/29/15 21:50	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260C	06/29/15 21:50	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260C	06/29/15 21:50	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260C	06/29/15 21:50	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260C	06/29/15 21:50	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260C	06/29/15 21:50	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260C	06/29/15 21:50	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260C	06/29/15 21:50	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260C	06/29/15 21:50	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260C	06/29/15 21:50	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260C	06/29/15 21:50	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260C	06/29/15 21:50	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260C	06/29/15 21:50	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260C	06/29/15 21:50	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260C	06/29/15 21:50	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260C	06/29/15 21:50	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260C	06/29/15 21:50	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260C	06/29/15 21:50	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260C	06/29/15 21:50	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260C	06/29/15 21:50	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260C	06/29/15 21:50	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260C	06/29/15 21:50	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260C	06/29/15 21:50	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260C	06/29/15 21:50	WAT	91-57-6	

Analytical Laboratory Report

Lab Sample ID: S66588.12
Sample Tag: Vault F
Collected Date/Time: 06/25/2015 14:15
Matrix: Wastewater
COC Reference: 74409

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	500ml Plastic	None	Yes	5.3	IR
2	40ml Glass	H2SO4	Yes	5.3	IR
1	125ml Plastic	HNO3	Yes	5.3	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Extraction / Prep.								
Metal Digestion	Completed			SW3015A	07/02/15 11:30	CCM		
Inorganics								
Conductivity	1,669	umhos/cm		E120.1	07/07/15 17:16	JKB		
TOC	2.3	mg/L	1	SM5310C	07/06/15 19:42	JKB		
Total Suspended Solids	3	mg/L	1	SM2540D	06/26/15 14:15	ASB		j
Metals								
Chromium, Dissolved	Not detected	mg/L	0.005	E200.8	07/06/15 14:38	CCM	7440-47-3	
Copper, Dissolved	Not detected	mg/L	0.005	E200.8	07/06/15 14:38	CCM	7440-50-8	
Nickel, Dissolved	0.007	mg/L	0.005	E200.8	07/06/15 14:38	CCM	7440-02-0	
Zinc, Dissolved	0.009	mg/L	0.005	E200.8	07/06/15 14:38	CCM	7440-66-6	

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Analytical Laboratory Report

Lab Sample ID: S66588.13
Sample Tag: DUP-2
Collected Date/Time: 06/25/2015 00:01
Matrix: Wastewater
COC Reference: 74408

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	500ml Plastic	None	Yes	5.3	IR
2	40ml Glass	H2SO4	Yes	5.3	IR
1	125ml Plastic	HNO3	Yes	5.3	IR
3	40ml Glass	HCL	Yes	5.3	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Extraction / Prep.								
Metal Digestion	Completed			SW3015A	07/02/15 11:30	CCM		
pH check for VOCs	<2	STD Units		N/A	06/30/15 10:45	WAT		
Inorganics								
Conductivity	2,230	umhos/cm		E120.1	07/07/15 17:18	JKB		
TOC	21.9	mg/L	1	SM5310C	07/06/15 20:02	JKB		
Total Suspended Solids	3	mg/L	1	SM2540D	06/26/15 14:15	ASB		j
Metals								
Chromium, Dissolved	0.014	mg/L	0.005	E200.8	07/06/15 14:41	CCM	7440-47-3	
Copper, Dissolved	0.143	mg/L	0.005	E200.8	07/06/15 14:41	CCM	7440-50-8	
Nickel, Dissolved	0.033	mg/L	0.005	E200.8	07/06/15 14:41	CCM	7440-02-0	
Zinc, Dissolved	0.007	mg/L	0.005	E200.8	07/06/15 14:41	CCM	7440-66-6	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260C	07/06/15 16:08	JGH	60-29-7	
Acetone	Not detected	ug/L	50	SW8260C	07/06/15 16:08	JGH	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260C	07/06/15 16:08	JGH	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260C	07/06/15 16:08	JGH	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260C	07/06/15 16:08	JGH	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260C	07/06/15 16:08	JGH	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260C	07/06/15 16:08	JGH	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260C	07/06/15 16:08	JGH	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260C	07/06/15 16:08	JGH	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260C	07/06/15 16:08	JGH	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260C	07/06/15 16:08	JGH	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260C	07/06/15 16:08	JGH	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260C	07/06/15 16:08	JGH	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260C	07/06/15 16:08	JGH	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260C	07/06/15 16:08	JGH	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260C	07/06/15 16:08	JGH	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260C	07/06/15 16:08	JGH	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260C	07/06/15 16:08	JGH	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260C	07/06/15 16:08	JGH	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260C	07/06/15 16:08	JGH	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260C	07/06/15 16:08	JGH	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260C	07/06/15 16:08	JGH	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260C	07/06/15 16:08	JGH	108-10-1	

j-Analyte also found in associated method blank

Lab Sample ID: S66588.13 (continued)
Sample Tag: DUP-2

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
2-Hexanone	Not detected	ug/L	50	SW8260C	07/06/15 16:08	JGH	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260C	07/06/15 16:08	JGH	56-23-5	
Benzene	Not detected	ug/L	1	SW8260C	07/06/15 16:08	JGH	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260C	07/06/15 16:08	JGH	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260C	07/06/15 16:08	JGH	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260C	07/06/15 16:08	JGH	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260C	07/06/15 16:08	JGH	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260C	07/06/15 16:08	JGH	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260C	07/06/15 16:08	JGH	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260C	07/06/15 16:08	JGH	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260C	07/06/15 16:08	JGH	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260C	07/06/15 16:08	JGH	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260C	07/06/15 16:08	JGH	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260C	07/06/15 16:08	JGH	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260C	07/06/15 16:08	JGH	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260C	07/06/15 16:08	JGH	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260C	07/06/15 16:08	JGH	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260C	07/06/15 16:08	JGH	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260C	07/06/15 16:08	JGH	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260C	07/06/15 16:08	JGH		
o-Xylene	Not detected	ug/L	1	SW8260C	07/06/15 16:08	JGH	95-47-6	
Styrene	Not detected	ug/L	1	SW8260C	07/06/15 16:08	JGH	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260C	07/06/15 16:08	JGH	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260C	07/06/15 16:08	JGH	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260C	07/06/15 16:08	JGH	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260C	07/06/15 16:08	JGH	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260C	07/06/15 16:08	JGH	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260C	07/06/15 16:08	JGH	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260C	07/06/15 16:08	JGH	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260C	07/06/15 16:08	JGH	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260C	07/06/15 16:08	JGH	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260C	07/06/15 16:08	JGH	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260C	07/06/15 16:08	JGH	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260C	07/06/15 16:08	JGH	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260C	07/06/15 16:08	JGH	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260C	07/06/15 16:08	JGH	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260C	07/06/15 16:08	JGH	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260C	07/06/15 16:08	JGH	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260C	07/06/15 16:08	JGH	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260C	07/06/15 16:08	JGH	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260C	07/06/15 16:08	JGH	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260C	07/06/15 16:08	JGH	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260C	07/06/15 16:08	JGH	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260C	07/06/15 16:08	JGH	91-57-6	

Analytical Laboratory Report

Lab Sample ID: S66588.14
Sample Tag: DUP-3
Collected Date/Time: 06/25/2015 00:01
Matrix: Wastewater
COC Reference: 74408

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	500ml Plastic	None	Yes	5.3	IR
2	40ml Glass	H2SO4	Yes	5.3	IR
1	125ml Plastic	HNO3	Yes	5.3	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Extraction / Prep.								
Metal Digestion	Completed			SW3015A	07/02/15 11:30	CCM		
Inorganics								
Conductivity	1,460	umhos/cm		E120.1	07/07/15 17:20	JKB		
TOC	2.9	mg/L	1	SM5310C	07/06/15 20:22	JKB		
Total Suspended Solids	3	mg/L	1	SM2540D	07/02/15 12:30	ASB		
Metals								
Chromium, Dissolved	Not detected	mg/L	0.005	E200.8	07/06/15 14:43	CCM	7440-47-3	
Copper, Dissolved	Not detected	mg/L	0.005	E200.8	07/06/15 14:43	CCM	7440-50-8	
Nickel, Dissolved	0.007	mg/L	0.005	E200.8	07/06/15 14:43	CCM	7440-02-0	
Zinc, Dissolved	0.007	mg/L	0.005	E200.8	07/06/15 14:43	CCM	7440-66-6	

Analytical Laboratory Report

Lab Sample ID: S66588.15
Sample Tag: Trip Blank-3
Collected Date/Time: 06/25/2015 00:01
Matrix: Quality Control
COC Reference: 74408

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	40ml Glass	HCL	Yes	5.3	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Extraction / Prep.								
pH check for VOCs	<2	STD Units		N/A	06/27/15 22:10	WAT		
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260C	06/26/15 18:56	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260C	06/26/15 18:56	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260C	06/26/15 18:56	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260C	06/26/15 18:56	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260C	06/26/15 18:56	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260C	06/26/15 18:56	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260C	06/26/15 18:56	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260C	06/26/15 18:56	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260C	06/26/15 18:56	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260C	06/26/15 18:56	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260C	06/26/15 18:56	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260C	06/26/15 18:56	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260C	06/26/15 18:56	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260C	06/26/15 18:56	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260C	06/26/15 18:56	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260C	06/26/15 18:56	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260C	06/26/15 18:56	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260C	06/26/15 18:56	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260C	06/26/15 18:56	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260C	06/26/15 18:56	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260C	06/26/15 18:56	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260C	06/26/15 18:56	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260C	06/26/15 18:56	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260C	06/26/15 18:56	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260C	06/26/15 18:56	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260C	06/26/15 18:56	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260C	06/26/15 18:56	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260C	06/26/15 18:56	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260C	06/26/15 18:56	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260C	06/26/15 18:56	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260C	06/26/15 18:56	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260C	06/26/15 18:56	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260C	06/26/15 18:56	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260C	06/26/15 18:56	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260C	06/26/15 18:56	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260C	06/26/15 18:56	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260C	06/26/15 18:56	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260C	06/26/15 18:56	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260C	06/26/15 18:56	WAT	106-93-4	

Lab Sample ID: S66588.15 (continued)
Sample Tag: Trip Blank-3

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Chlorobenzene	Not detected	ug/L	1	SW8260C	06/26/15 18:56	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260C	06/26/15 18:56	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260C	06/26/15 18:56	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260C	06/26/15 18:56	WAT		
o-Xylene	Not detected	ug/L	1	SW8260C	06/26/15 18:56	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260C	06/26/15 18:56	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260C	06/26/15 18:56	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260C	06/26/15 18:56	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260C	06/26/15 18:56	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260C	06/26/15 18:56	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260C	06/26/15 18:56	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260C	06/26/15 18:56	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260C	06/26/15 18:56	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260C	06/26/15 18:56	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260C	06/26/15 18:56	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260C	06/26/15 18:56	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260C	06/26/15 18:56	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260C	06/26/15 18:56	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260C	06/26/15 18:56	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260C	06/26/15 18:56	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260C	06/26/15 18:56	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260C	06/26/15 18:56	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260C	06/26/15 18:56	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260C	06/26/15 18:56	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260C	06/26/15 18:56	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260C	06/26/15 18:56	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260C	06/26/15 18:56	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260C	06/26/15 18:56	WAT	91-57-6	

Merit Laboratories, Inc.

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www.meritlabs.com

C.O.C. PAGE # 1 OF 2

74409

CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: Clifford 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.:
E-MAIL ADDRESS: RACER Coldwater Rd CF semi annual sampling P.O. NO.:
QUOTE NO.:

INVOICE TO

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

PROJECT NO./NAME: clifford.yantz@OBG.com
SAMPLER(S) - PLEASE PRINT/SIGN NAME: Kevin Schneider

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

DELIVERABLES REQUIRED ☒ STD ☐ 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

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	TOC	Specific conductivity	TSS	VOCs	Special Instructions
100588.01	6/25/15	910	Sump A	wsw	7	1	3	1	2				X	X	X	X	Metals are
.02		930	Vault A	ww	4	1		1	2				X	X	X		cu, cr, Ni, Zn
.03		1005	Sump B	wsw	7	1	3	1	2				X	X	X	X	
.04		1025	Vault B	ww	4	1		1	2				X	X	X		
.05		1050	Sump C	wsw	7	1	3	1	2				X	X	X	X	
.06		1110	Vault C	ww	4	1		1	2				X	X	X		
.07		1145	Sump D	wsw	7	1	3	1	2				X	X	X	X	
.08		1205	Vault D	ww	4	1		1	2				X	X	X		
.09		1245	Sump E	wsw	7	1	3	1	2				X	X	X	X	
.10		1315	Vault E	ww	4	1		1	2				X	X	X		
.11		1355	Sump F	wsw	7	1	3	1	2				X	X	X	X	
.12		1415	Vault F	ww	4	1		1	2				X	X	X		

RELINQUISHED BY: SIGNATURE/ORGANIZATION	X OBG ☒ Sampler	DATE 6/25/15	TIME 1450
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE 6-25-15	TIME 1850
RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE	TIME
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE	TIME

RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE 6-25-15	TIME 1600
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE 6/25/15	TIME 1600

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

NOTES: TEMP. ON ARRIVAL 5.3

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

Rev. 5.18.12

Merit Laboratories, Inc.

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C.O.C. PAGE # 2 OF 2

74408

CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: Clifford 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.:
E-MAIL ADDRESS: clifford.yantz@obg.com QUOTE NO.:

INVOICE TO

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

PROJECT NO./NAME: RACER Coldwater Rd LF semiannual sampling
SAMPLER(S) - PLEASE PRINT/SIGN NAME: Kevin Schroeder

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

DELIVERABLES REQUIRED ☒ STD ☐ 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	TDC	Specific conductivity	TSS	VOCs	Special Instructions
606588.13	6/25/15	—	DUP-2	WW	7	1	3	1	2				X	X	X	X	
.14	↓	—	DUP-3	WW	4	1		1	2				X	X	X		
.15	↓	—	Trip Blank-3	QC			2									X	Same Trip Blank on COC #~~74408~~ 90116 KBS

RELINQUISHED BY: SIGNATURE/ORGANIZATION	☒ Sampler	DATE 6/25/15	TIME 1450	
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE 6-25-15	TIME 1450	
RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE	TIME	
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE	TIME	

RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE 6/25/15	TIME 1600
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE 6/25/15	TIME 1600
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS	
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS	

NOTES: TEMP. ON ARRIVAL 5.3

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

Rev. 5.18.12

APPENDIX B

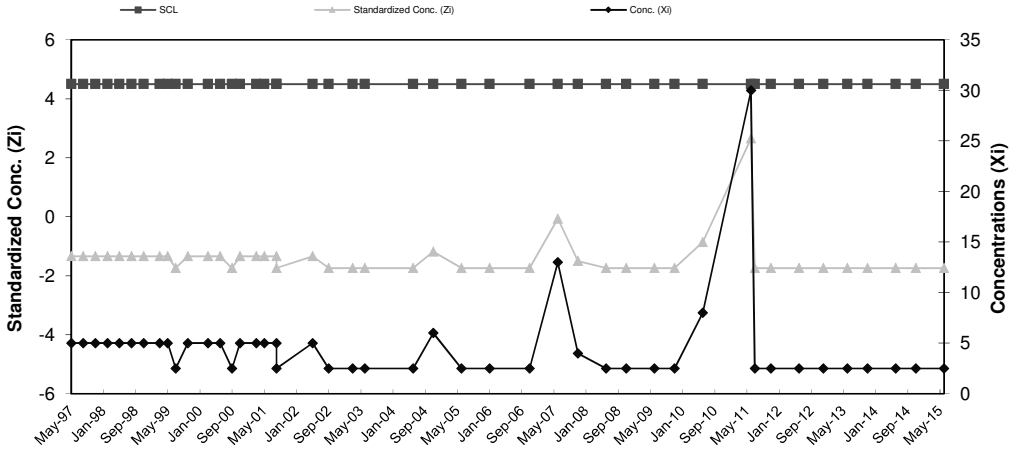
Leak Detection Vault Control Charts

COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault A - Chromium

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Mar-95	10		
2	Jun-95	24		
3	Aug-95	10		
4	Nov-95	23	**13.38**	**6.25**
5	Mar-96	10		
6	Jun-96	10		
7	Aug-96	10		
8	Nov-96	10		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-97	4.5	5	-1.34	46	Nov-11	4.5	2.5	-1.74
10	Aug-97	4.5	5	-1.34	47	Jun-12	4.5	2.5	-1.74
11	Nov-97	4.5	5	-1.34	48	Dec-12	4.5	2.5	-1.74
12	Feb-98	4.5	5	-1.34	49	Jun-13	4.5	2.5	-1.74
13	May-98	4.5	5	-1.34	50	Nov-13	4.5	2.5	-1.74
14	Aug-98	4.5	5	-1.34	51	Jun-14	4.5	2.5	-1.74
15	Nov-98	4.5	5	-1.34	52	Nov-14	4.5	2.5	-1.74
16	Mar-99	4.5	5	-1.34	53	Jun-15	4.5	2.5	-1.74
17	May-99	4.5	5	-1.34					
18	Jul-99	4.5	2.5	-1.74					
19	Oct-99	4.5	5	-1.34					
20	Mar-00	4.5	5	-1.34					
21	Jun-00	4.5	5	-1.34					
22	Sep-00	4.5	2.5	-1.74					
23	Nov-00	4.5	5	-1.34					
24	Mar-01	4.5	5	-1.34					
25	May-01	4.5	5	-1.34					
26	Aug-01	4.5	2.5	-1.74					
27	Aug-01	4.5	5	-1.34					
28	May-02	4.5	5	-1.34					
29	Sep-02	4.5	2.5	-1.74					
30	Mar-03	4.5	2.5	-1.74					
31	Jun-03	4.5	2.5	-1.74					
32	Jun-04	4.5	2.5	-1.74					
33	Nov-04	4.5	6	-1.18					
34	Jun-05	4.5	2.5	-1.74					
35	Jan-06	4.5	2.5	-1.74					
36	Nov-06	4.5	2.5	-1.74					
37	Jun-07	4.5	13	-0.06					
38	Nov-07	4.5	4	-1.50					
39	Jun-08	4.5	2.5	-1.74					
40	Nov-08	4.5	2.5	-1.74					
41	Jun-09	4.5	2.5	-1.74					
42	Nov-09	4.5	2.5	-1.74					
43	Jun-10	4.5	8	-0.86					
44	Jun-11	4.5	30	2.66					
45	Jul-11	4.5	2.5	-1.74					

h = Decision Value for CUSUM, SCL = Shewart Control Limit, k = Standard Error Shift Detection Parameter, Zi = Standardized Mean

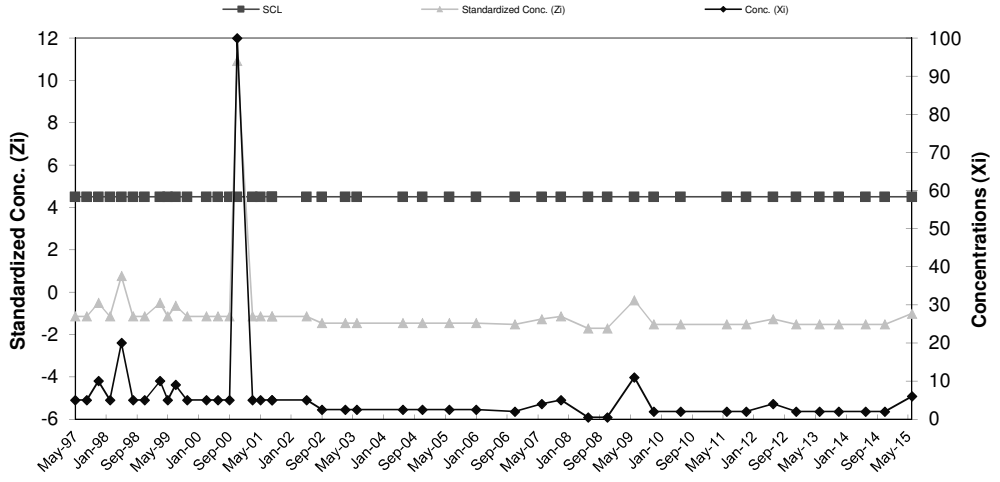


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault A - Copper

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Mar-95	10		
2	Jun-95	21		
3	Aug-95	10		
4	Nov-95	31	**14**	**7.87**
5	Mar-96	10		
6	Jun-96	10		
7	Aug-96	10		
8	Nov-96	10		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-97	4.5	5	-1.14	45	Nov-11	4.5	2	-1.52
10	Aug-97	4.5	5	-1.14	46	Jun-12	4.5	4	-1.27
11	Nov-97	4.5	10	-0.51	47	Dec-12	4.5	2	-1.52
12	Feb-98	4.5	5	-1.14	48	Jun-13	4.5	2	-1.52
13	May-98	4.5	20	0.76	49	Nov-13	4.5	2	-1.52
14	Aug-98	4.5	5	-1.14	50	Jun-14	4.5	2	-1.52
15	Nov-98	4.5	5	-1.14	51	Nov-14	4.5	2	-1.52
16	Mar-99	4.5	10	-0.51	52	Jun-15	4.5	6	-1.02
17	May-99	4.5	5	-1.14					
18	Jul-99	4.5	9	-0.64					
19	Oct-99	4.5	5	-1.14					
20	Mar-00	4.5	5	-1.14					
21	Jun-00	4.5	5	-1.14					
22	Sep-00	4.5	5	-1.14					
23	Nov-00	4.5	100	10.92					
24	Mar-01	4.5	5	-1.14					
25	May-01	4.5	5	-1.14					
26	Aug-01	4.5	5	-1.14					
27	Aug-01	4.5	5	-1.14					
28	May-02	4.5	5	-1.14					
29	Sep-02	4.5	2.5	-1.46					
30	Mar-03	4.5	2.5	-1.46					
31	Jun-03	4.5	2.5	-1.46					
32	Jun-04	4.5	2.5	-1.46					
33	Nov-04	4.5	2.5	-1.46					
34	Jun-05	4.5	2.5	-1.46					
35	Jan-06	4.5	2.5	-1.46					
36	Nov-06	4.5	2	-1.52					
37	Jun-07	4.5	4	-1.27					
38	Nov-07	4.5	5	-1.14					
39	Jun-08	4.5	0.5	-1.71					
40	Nov-08	4.5	0.5	-1.71					
41	Jun-09	4.5	11	-0.38					
42	Nov-09	4.5	2	-1.52					
43	Jun-10	4.5	2	-1.52					
44	Jun-11	4.5	2	-1.52					

h = Decision Value for CUSUM, SCL = Shewart Control Limit, k = Standard Error Shift Detection Parameter, Zi = Standardized Mean

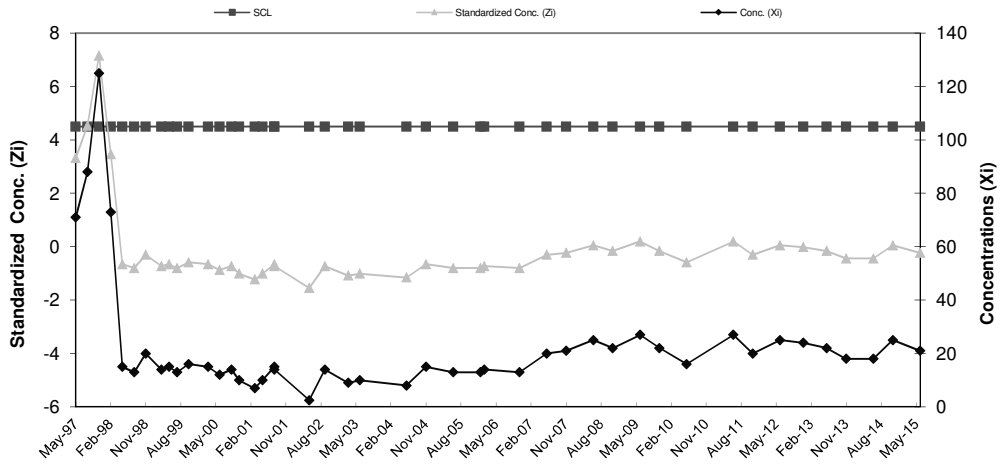


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault A - Nickel

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Mar-95	20		
2	Jun-95	15		
3	Aug-95	20		
4	Nov-95	43	**24.25**	**14.07**
5	Mar-96	46		
6	Jun-96	10		
7	Aug-96	10		
8	Nov-96	30		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-97	4.5	71	3.32	46	Nov-11	4.5	20	-0.30
10	Aug-97	4.5	88	4.53	47	Jun-12	4.5	25	0.05
11	Nov-97	4.5	125	7.16	48	Dec-12	4.5	24	-0.02
12	Feb-98	4.5	73	3.47	49	Jun-13	4.5	22	-0.16
13	May-98	4.5	15	-0.66	50	Nov-13	4.5	18	-0.44
14	Aug-98	4.5	13	-0.80	51	Jun-14	4.5	18	-0.44
15	Nov-98	4.5	20	-0.30	52	Nov-14	4.5	25	0.05
16	Mar-99	4.5	14	-0.73	53	Jun-15	4.5	21	-0.23
17	May-99	4.5	15	-0.66					
18	Jul-99	4.5	13	-0.80					
19	Oct-99	4.5	16	-0.59					
20	Mar-00	4.5	15	-0.66					
21	Jun-00	4.5	12	-0.87					
22	Sep-00	4.5	14	-0.73					
23	Nov-00	4.5	10	-1.01					
24	Mar-01	4.5	7	-1.23					
25	May-01	4.5	10	-1.01					
26	Aug-01	4.5	14	-0.73					
27	Aug-01	4.5	15	-0.66					
28	May-02	4.5	2.5	-1.55					
29	Sep-02	4.5	14	-0.73					
30	Mar-03	4.5	9	-1.08					
31	Jun-03	4.5	10	-1.01					
32	Jun-04	4.5	8	-1.16					
33	Nov-04	4.5	15	-0.66					
34	Jun-05	4.5	13	-0.80					
35	Jan-06	4.5	13	-0.80					
36	Feb-06	4.5	14	-0.73					
37	Nov-06	4.5	13	-0.80					
38	Jun-07	4.5	20	-0.30					
39	Nov-07	4.5	21	-0.23					
40	Jun-08	4.5	25	0.05					
41	Nov-08	4.5	22	-0.16					
42	Jun-09	4.5	27	0.20					
43	Nov-09	4.5	22	-0.16					
44	Jun-10	4.5	16	-0.59					
45	Jun-11	4.5	27	0.20					

h = Decision Value for CUSUM, SCL = Shewart Control Limit, k = Standard Error Shift Detection Parameter, Zi = Standardized Mean

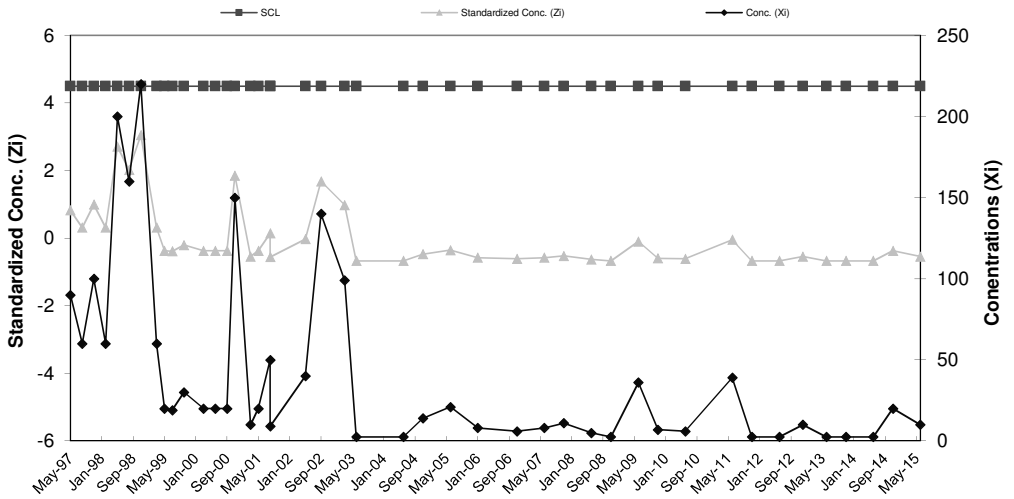


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault A - Zinc

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Mar-95	180		
2	Jun-95	10		
3	Aug-95	10		
4	Nov-95	24	**41.75**	**58.47**
5	Mar-96	10		
6	Jun-96	10		
7	Aug-96	30		
8	Nov-96	60		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-97	4.5	90	0.83	45	Nov-11	4.5	2.5	-0.67
10	Aug-97	4.5	60	0.31	46	Jun-12	4.5	2.5	-0.67
11	Nov-97	4.5	100	1.00	47	Dec-12	4.5	10	-0.54
12	Feb-98	4.5	60	0.31	48	Jun-13	4.5	2.5	-0.67
13	May-98	4.5	200	2.71	49	Nov-13	4.5	2.5	-0.67
14	Aug-98	4.5	160	2.02	50	Jun-14	4.5	2.5	-0.67
15	Nov-98	4.5	220	3.05	51	Nov-14	4.5	20	-0.37
16	Mar-99	4.5	60	0.31	52	Jun-15	4.5	10	-0.54
17	May-99	4.5	20	-0.37					
18	Jul-99	4.5	19	-0.39					
19	Oct-99	4.5	30	-0.20					
20	Mar-00	4.5	20	-0.37					
21	Jun-00	4.5	20	-0.37					
22	Sep-00	4.5	20	-0.37					
23	Nov-00	4.5	150	1.85					
24	Mar-01	4.5	10	-0.54					
25	May-01	4.5	20	-0.37					
26	Aug-01	4.5	9	-0.56					
27	Aug-01	4.5	50	0.14					
28	May-02	4.5	40	-0.03					
29	Sep-02	4.5	140	1.68					
30	Mar-03	4.5	99	0.98					
31	Jun-03	4.5	2.5	-0.67					
32	Jun-04	4.5	2.5	-0.67					
33	Nov-04	4.5	14	-0.47					
34	Jun-05	4.5	21	-0.35					
35	Jan-06	4.5	8	-0.58					
36	Nov-06	4.5	6	-0.61					
37	Jun-07	4.5	8	-0.58					
38	Nov-07	4.5	11	-0.53					
39	Jun-08	4.5	5	-0.63					
40	Nov-08	4.5	2.5	-0.67					
41	Jun-09	4.5	36	-0.10					
42	Nov-09	4.5	7	-0.59					
43	Jun-10	4.5	6	-0.61					
44	Jun-11	4.5	39	-0.05					

h = Decision Value for CUSUM, SCL = Shewart Control Limit, k = Standard Error Shift Detection Parameter, Zi = Standardized Mean

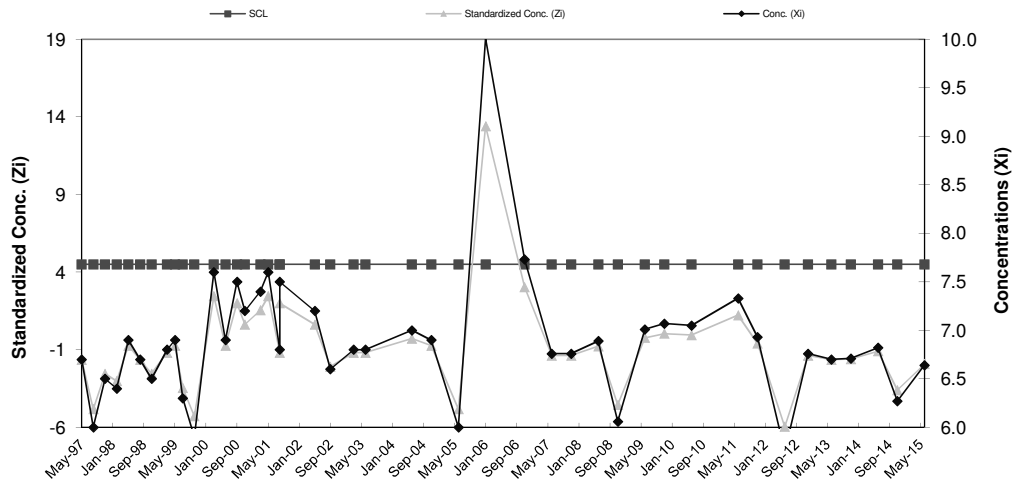


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault A - pH

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Mar-95	7.5	**7.06**	**0.22**
2	Jun-95	6.8		
3	Aug-95	6.9		
4	Nov-95	7		
5	Mar-96	7.2		
6	Jun-96	6.9		
7	Aug-96	7.1		
8	Nov-96	7.1		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-97	4.5	6.70	-1.65	45	Nov-11	4.5	6.93	-0.60
10	Aug-97	4.5	6.00	-4.83	46	Jun-12	4.5	5.75	-5.97
11	Nov-97	4.5	6.50	-2.56	47	Dec-12	4.5	6.76	-1.38
12	Feb-98	4.5	6.40	-3.01	48	Jun-13	4.5	6.7	-1.65
13	May-98	4.5	6.90	-0.74	49	Nov-13	4.5	6.71	-1.60
14	Aug-98	4.5	6.70	-1.65	50	Jun-14	4.5	6.82	-1.10
15	Nov-98	4.5	6.50	-2.56	51	Nov-14	4.5	6.27	-3.60
16	Mar-99	4.5	6.80	-1.19	52	Jun-15	4.5	6.64	-1.92
17	May-99	4.5	6.90	-0.74					
18	Jul-99	4.5	6.30	-3.47					
19	Oct-99	4.5	5.90	-5.28					
20	Mar-00	4.5	7.60	2.44					
21	Jun-00	4.5	6.90	-0.74					
22	Sep-00	4.5	7.50	1.99					
23	Nov-00	4.5	7.20	0.63					
24	Mar-01	4.5	7.40	1.53					
25	May-01	4.5	7.60	2.44					
26	Aug-01	4.5	7.50	1.99					
27	Aug-01	4.5	6.80	-1.19					
28	May-02	4.5	7.20	0.63					
29	Sep-02	4.5	6.60	-2.10					
30	Mar-03	4.5	6.80	-1.19					
31	Jun-03	4.5	6.80	-1.19					
32	Jun-04	4.5	7.00	-0.28					
33	Nov-04	4.5	6.90	-0.74					
34	Jun-05	4.5	6.00	-4.83					
35	Jan-06	4.5	10.01	13.40					
36	Nov-06	4.5	7.73	3.03					
37	Jun-07	4.5	6.76	-1.38					
38	Nov-07	4.5	6.76	-1.38					
39	Jun-08	4.5	6.89	-0.78					
40	Nov-08	4.5	6.06	-4.56					
41	Jun-09	4.5	7.01	-0.24					
42	Nov-09	4.5	7.07	0.03					
43	Jun-10	4.5	7.05	-0.06					
44	Jun-11	4.5	7.33	1.22					

h = Decision Value for CUSUM, SCL = Shewart Control Limit, k = Standard Error Shift Detection Parameter, Zi = Standardized Mean

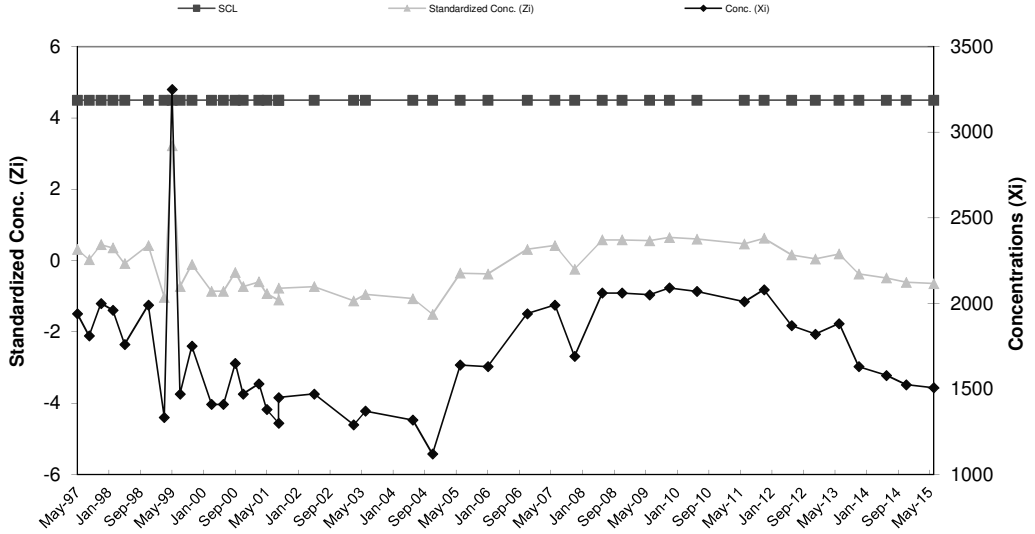


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault A - SpC

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Mar-95	690		
2	Jun-95	1900		
3	Aug-95	2000		
4	Nov-95	1900	**1,798.75**	**450.73**
5	Mar-96	2000		
6	Jun-96	2000		
7	Aug-96	1900		
8	Nov-96	2000		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-97	4.5	1940	0.31	43	Nov-11	4.5	2080	0.62
10	Aug-97	4.5	1810	0.02	44	Jun-12	4.5	1870	0.16
11	Nov-97	4.5	2000	0.45	45	Dec-12	4.5	1820	0.05
12	Feb-98	4.5	1960	0.36	46	Jun-13	4.5	1882	0.18
13	May-98	4.5	1760	-0.09	47	Nov-13	4.5	1630	-0.37
14	Nov-98	4.5	1990	0.42	48	Jun-14	4.5	1579	-0.49
15	Mar-99	4.5	1334	-1.03	49	Nov-14	4.5	1525	-0.61
16	May-99	4.5	3250	3.22	50	Jun-15	4.5	1507	-0.65
17	Jul-99	4.5	1470	-0.73					
18	Oct-99	4.5	1750	-0.11					
19	Mar-00	4.5	1410	-0.86					
20	Jun-00	4.5	1410	-0.86					
21	Sep-00	4.5	1650	-0.33					
22	Nov-00	4.5	1470	-0.73					
23	Mar-01	4.5	1530	-0.60					
24	May-01	4.5	1380	-0.93					
25	Aug-01	4.5	1450	-0.77					
26	Aug-01	4.5	1300	-1.11					
27	May-02	4.5	1470	-0.73					
28	Mar-03	4.5	1290	-1.13					
29	Jun-03	4.5	1370	-0.95					
30	Jun-04	4.5	1318	-1.07					
31	Nov-04	4.5	1120	-1.51					
32	Jun-05	4.5	1640	-0.35					
33	Jan-06	4.5	1630	-0.37					
34	Nov-06	4.5	1940	0.31					
35	Jun-07	4.5	1990	0.42					
36	Nov-07	4.5	1690	-0.24					
37	Jun-08	4.5	2060	0.58					
38	Nov-08	4.5	2060	0.58					
39	Jun-09	4.5	2050	0.56					
40	Nov-09	4.5	2090	0.65					
41	Jun-10	4.5	2070	0.60					
42	Jun-11	4.5	2010	0.47					

h = Decision Value for CUSUM, SCL = Shewart Control Limit, k = Standard Error Shift Detection Parameter, Zi = Standardized Mean

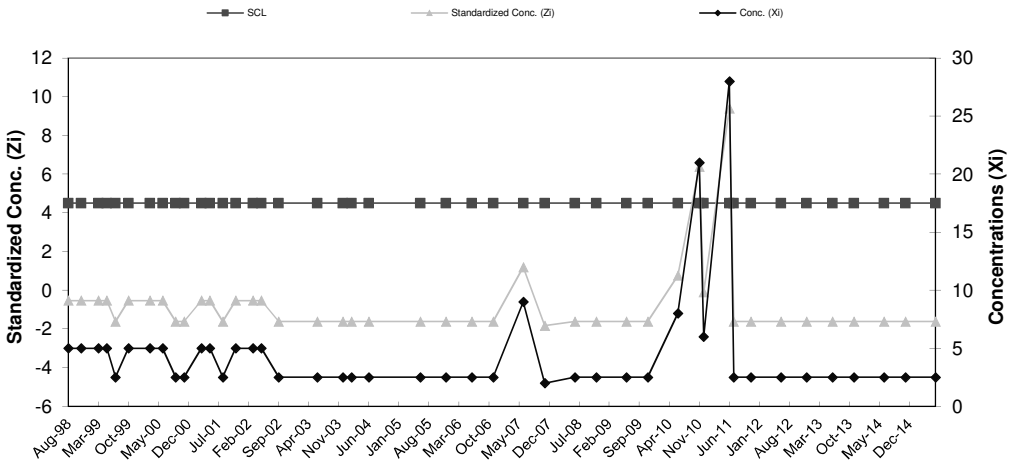


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault B - Chromium

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-96	10		
2	Nov-96	10		
3	Feb-97	5		
4	May-97	5	**6.25**	**2.31**
5	Aug-97	5		
6	Nov-97	5		
7	Feb-98	5		
8	May-98	5		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Aug-98	4.5	5	-0.54	45	Nov-11	4.5	2.5	-1.62
10	Nov-98	4.5	5	-0.54	46	Jun-12	4.5	2.5	-1.62
11	Mar-99	4.5	5	-0.54	47	Dec-12	4.5	2.5	-1.62
12	May-99	4.5	5	-0.54	48	Jun-13	4.5	2.5	-1.62
13	Jul-99	4.5	2.5	-1.62	49	Nov-13	4.5	2.5	-1.62
14	Oct-99	4.5	5	-0.54	50	Jun-14	4.5	2.5	-1.62
15	Mar-00	4.5	5	-0.54	51	Nov-14	4.5	2.5	-1.62
16	Jun-00	4.5	5	-0.54	52	Jun-15	4.5	2.5	-1.62
17	Sep-00	4.5	2.5	-1.62					
18	Nov-00	4.5	2.5	-1.62					
19	Mar-01	4.5	5	-0.54					
20	May-01	4.5	5	-0.54					
21	Aug-01	4.5	2.5	-1.62					
22	Nov-01	4.5	5	-0.54					
23	Mar-02	4.5	5	-0.54					
24	May-02	4.5	5	-0.54					
25	Sep-02	4.5	2.5	-1.62					
26	Jun-03	4.5	2.5	-1.62					
27	Dec-03	4.5	2.5	-1.62					
28	Feb-04	4.5	2.5	-1.62					
29	Jun-04	4.5	2.5	-1.62					
30	Jun-05	4.5	2.5	-1.62					
31	Dec-05	4.5	2.5	-1.62					
32	Jun-06	4.5	2.5	-1.62					
33	Nov-06	4.5	2.5	-1.62					
34	Jun-07	4.5	9	1.19					
35	Nov-07	4.5	2	-1.84					
36	Jun-08	4.5	2.5	-1.62					
37	Nov-08	4.5	2.5	-1.62					
38	Jun-09	4.5	2.5	-1.62					
39	Nov-09	4.5	2.5	-1.62					
40	Jun-10	4.5	8	0.76					
41	Nov-10	4.5	21	6.37					
42	Dec-10	4.5	6	-0.11					
43	Jun-11	4.5	28	9.40					
44	Jul-11	4.5	2.5	-1.62					

h = Decision Value for CUSUM, SCL = Shewart Control Limit, k = Standard Error Shift Detection Parameter, Zi = Standardized Mean

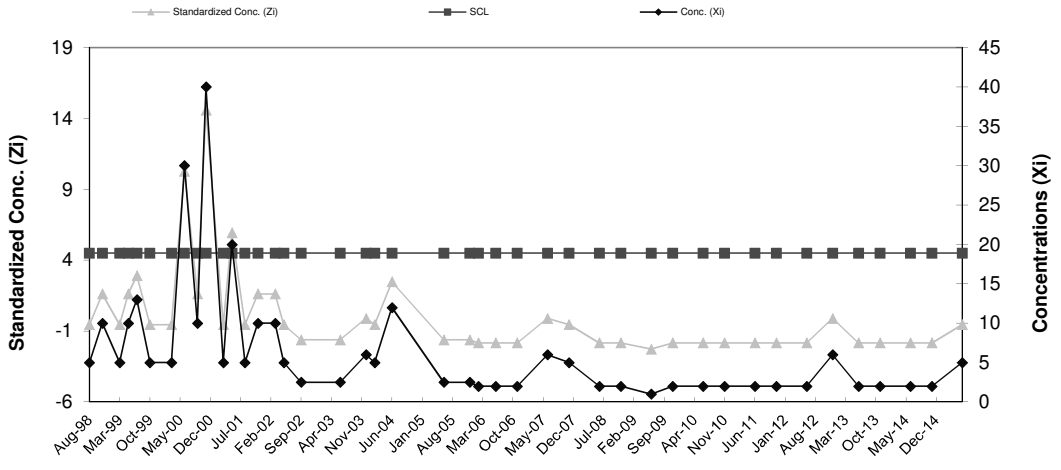


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault B - Copper

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-96	10	**6.25**	**2.31**
2	Nov-96	10		
3	Feb-97	5		
4	May-97	5		
5	Aug-97	5		
6	Nov-97	5		
7	Feb-98	5		
8	May-98	5		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Aug-98	4.5	5	-0.54	44	Nov-11	4.5	2	-1.84
10	Nov-98	4.5	10	1.62	45	Jun-12	4.5	2	-1.84
11	Mar-99	4.5	5	-0.54	46	Dec-12	4.5	6	-0.11
12	May-99	4.5	10	1.62	47	Jun-13	4.5	2	-1.84
13	Jul-99	4.5	13	2.92	48	Nov-13	4.5	2	-1.84
14	Oct-99	4.5	5	-0.54	49	Jun-14	4.5	2	-1.84
15	Mar-00	4.5	5	-0.54	50	Nov-14	4.5	2	-1.84
16	Jun-00	4.5	30	10.26	51	Jun-15	4.5	5	-0.54
17	Sep-00	4.5	10	1.62					
18	Nov-00	4.5	40	14.58					
19	Mar-01	4.5	5	-0.54					
20	May-01	4.5	20	5.94					
21	Aug-01	4.5	5	-0.54					
22	Nov-01	4.5	10	1.62					
23	Mar-02	4.5	10	1.62					
24	May-02	4.5	5	-0.54					
25	Sep-02	4.5	2.5	-1.62					
26	Jun-03	4.5	2.5	-1.62					
27	Dec-03	4.5	6	-0.11					
28	Feb-04	4.5	5	-0.54					
29	Jun-04	4.5	12	2.48					
30	Jun-05	4.5	2.5	-1.62					
31	Dec-05	4.5	2.5	-1.62					
32	Feb-06	4.5	2	-1.84					
33	Jun-06	4.5	2	-1.84					
34	Nov-06	4.5	2	-1.84					
35	Jun-07	4.5	6	-0.11					
36	Nov-07	4.5	5	-0.54					
37	Jun-08	4.5	2	-1.84					
38	Nov-08	4.5	2	-1.84					
39	Jun-09	4.5	1	-2.27					
40	Nov-09	4.5	2	-1.84					
41	Jun-10	4.5	2	-1.84					
42	Nov-10	4.5	2	-1.84					
43	Jun-11	4.5	2	-1.84					

h = Decision Value for CUSUM, SCL = Shewart Control Limit, k = Standard Error Shift Detection Parameter, Zi = Standardized Mean

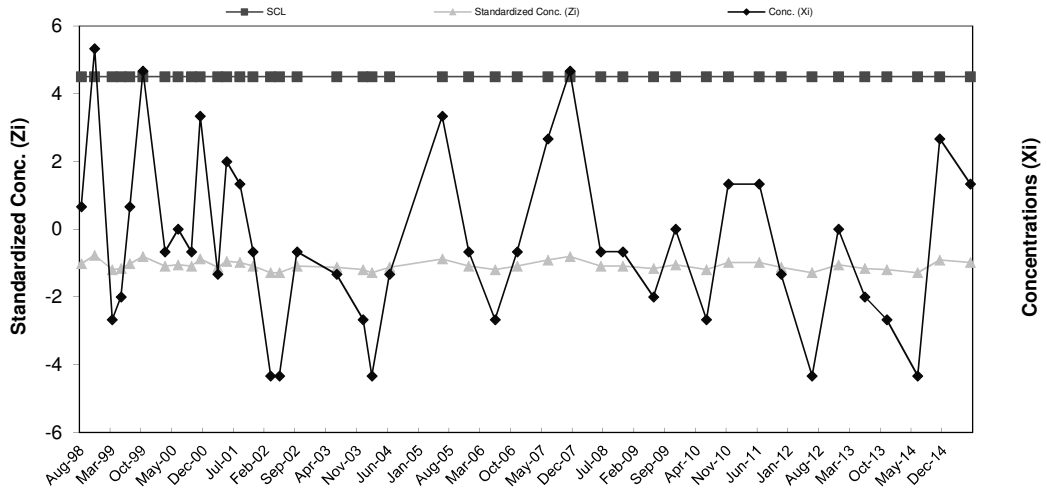


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault B - Nickel

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-96	10		
2	Nov-96	20		
3	Feb-97	43		
4	May-97	45	**38.88**	**28.34**
5	Aug-97	26		
6	Nov-97	96		
7	Feb-98	57		
8	May-98	14		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Aug-98	4.5	10	-1.02	43	Nov-11	4.5	7	-1.12
10	Nov-98	4.5	17	-0.77	44	Jun-12	4.5	2.5	-1.28
11	Mar-99	4.5	5	-1.20	45	Dec-12	4.5	9	-1.05
12	May-99	4.5	6	-1.16	46	Jun-13	4.5	6	-1.16
13	Jul-99	4.5	10	-1.02	47	Nov-13	4.5	5	-1.20
14	Oct-99	4.5	16	-0.81	48	Jun-14	4.5	2.5	-1.28
15	Mar-00	4.5	8	-1.09	49	Nov-14	4.5	13	-0.91
16	Jun-00	4.5	9	-1.05	50	Jun-15	4.5	11	-0.98
17	Sep-00	4.5	8	-1.09					
18	Nov-00	4.5	14	-0.88					
19	Mar-01	4.5	7	-1.12					
20	May-01	4.5	12	-0.95					
21	Aug-01	4.5	11	-0.98					
22	Nov-01	4.5	8	-1.09					
23	Mar-02	4.5	2.5	-1.28					
24	May-02	4.5	2.5	-1.28					
25	Sep-02	4.5	8	-1.09					
26	Jun-03	4.5	7	-1.12					
27	Dec-03	4.5	5	-1.20					
28	Feb-04	4.5	2.5	-1.28					
29	Jun-04	4.5	7	-1.12					
30	Jun-05	4.5	14	-0.88					
31	Dec-05	4.5	8	-1.09					
32	Jun-06	4.5	5	-1.20					
33	Nov-06	4.5	8	-1.09					
34	Jun-07	4.5	13	-0.91					
35	Nov-07	4.5	16	-0.81					
36	Jun-08	4.5	8	-1.09					
37	Nov-08	4.5	8	-1.09					
38	Jun-09	4.5	6	-1.16					
39	Nov-09	4.5	9	-1.05					
40	Jun-10	4.5	5	-1.20					
41	Nov-10	4.5	11	-0.98					
42	Jun-11	4.5	11	-0.98					

h = Decision Value for CUSUM, SCL = Shewart Control Limit, k = Standard Error Shift Detection Parameter, Zi = Standardized Mean

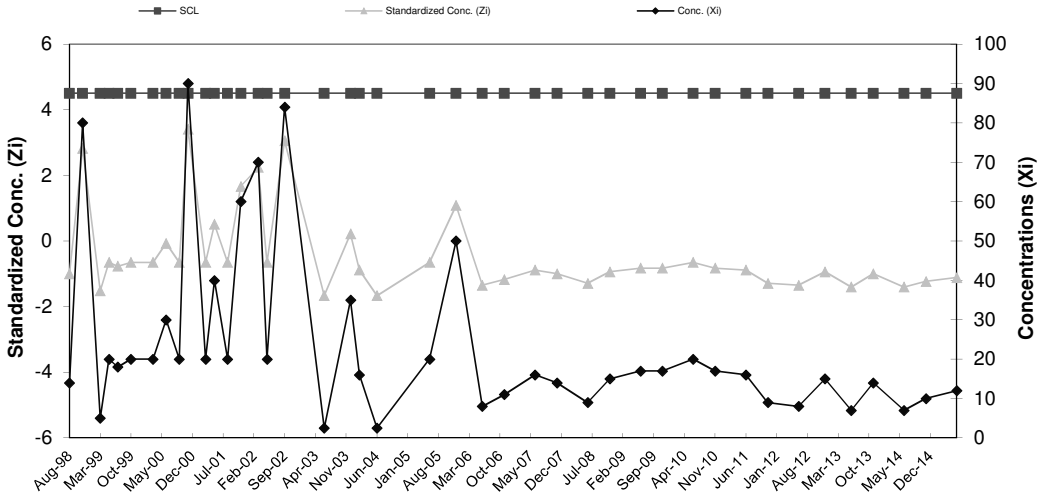


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault B - Zinc

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-96	10		
2	Nov-96	40		
3	Feb-97	20		
4	May-97	20	**31.25**	**17.27**
5	Aug-97	60		
6	Nov-97	50		
7	Feb-98	20		
8	May-98	30		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Aug-98	4.5	14	-1.00	43	Nov-11	4.5	9	-1.29
10	Nov-98	4.5	80	2.82	44	Jun-12	4.5	8	-1.35
11	Mar-99	4.5	5	-1.52	45	Dec-12	4.5	15	-0.94
12	May-99	4.5	20	-0.65	46	Jun-13	4.5	7	-1.40
13	Jul-99	4.5	18	-0.77	47	Nov-13	4.5	14	-1.00
14	Oct-99	4.5	20	-0.65	48	Jun-14	4.5	7	-1.40
15	Mar-00	4.5	20	-0.65	49	Nov-14	4.5	10	-1.23
16	Jun-00	4.5	30	-0.07	50	Jun-15	4.5	12	-1.11
17	Sep-00	4.5	20	-0.65					
18	Nov-00	4.5	90	3.40					
19	Mar-01	4.5	20	-0.65					
20	May-01	4.5	40	0.51					
21	Aug-01	4.5	20	-0.65					
22	Nov-01	4.5	60	1.66					
23	Mar-02	4.5	70	2.24					
24	May-02	4.5	20	-0.65					
25	Sep-02	4.5	84	3.05					
26	Jun-03	4.5	2.5	-1.66					
27	Dec-03	4.5	35	0.22					
28	Feb-04	4.5	16	-0.88					
29	Jun-04	4.5	2.5	-1.66					
30	Jun-05	4.5	20	-0.65					
31	Dec-05	4.5	50	1.09					
32	Jun-06	4.5	8	-1.35					
33	Nov-06	4.5	11	-1.17					
34	Jun-07	4.5	16	-0.88					
35	Nov-07	4.5	14	-1.00					
36	Jun-08	4.5	9	-1.29					
37	Nov-08	4.5	15	-0.94					
38	Jun-09	4.5	17	-0.83					
39	Nov-09	4.5	17	-0.83					
40	Jun-10	4.5	20	-0.65					
41	Nov-10	4.5	17	-0.83					
42	Jun-11	4.5	16	-0.88					

h = Decision Value for CUSUM, SCL = Shewart Control Limit, k = Standard Error Shift Detection Parameter, Zi = Standardized Mean

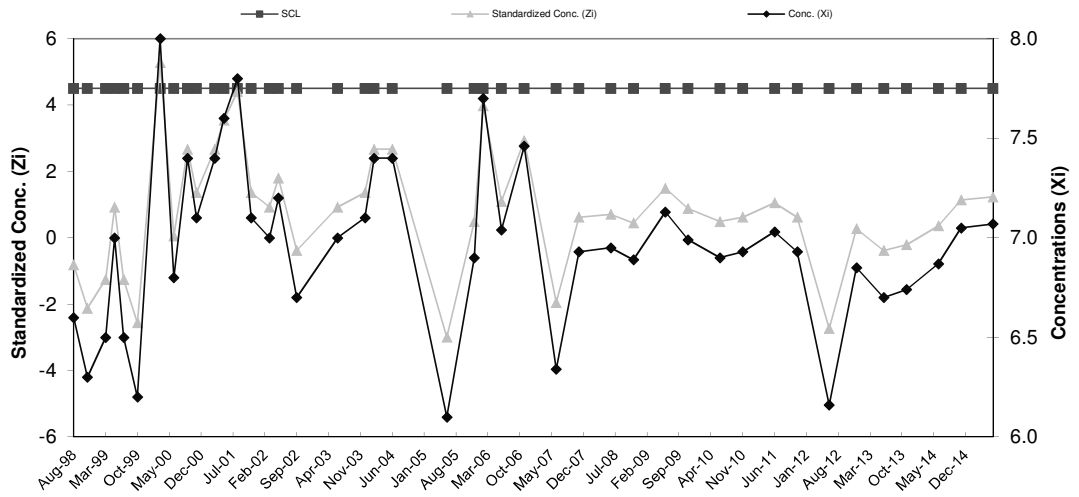


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault B - pH

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-96	6.9		
2	Nov-96	7		
3	Feb-97	7.1		
4	May-97	6.5	**6.79**	**0.23**
5	Aug-97	6.5		
6	Nov-97	6.8		
7	Feb-98	6.6		
8	May-98	6.9		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Aug-98	4.5	6.60	-0.82	44	Nov-11	4.5	6.93	0.62
10	Nov-98	4.5	6.30	-2.12	45	Jun-12	4.5	6.16	-2.73
11	Mar-99	4.5	6.50	-1.25	46	Dec-12	4.5	6.85	0.27
12	May-99	4.5	7.00	0.93	47	Jun-13	4.5	6.7	-0.38
13	Jul-99	4.5	6.50	-1.25	48	Nov-13	4.5	6.74	-0.21
14	Oct-99	4.5	6.20	-2.56	49	Jun-14	4.5	6.87	0.36
15	Mar-00	4.5	8.00	5.28	50	Nov-14	4.5	7.05	1.14
16	Jun-00	4.5	6.80	0.05	51	Jun-15	4.5	7.07	1.23
17	Sep-00	4.5	7.40	2.67					
18	Nov-00	4.5	7.10	1.36					
19	Mar-01	4.5	7.40	2.67					
20	May-01	4.5	7.60	3.54					
21	Aug-01	4.5	7.80	4.41					
22	Nov-01	4.5	7.10	1.36					
23	Mar-02	4.5	7.00	0.93					
24	May-02	4.5	7.20	1.80					
25	Sep-02	4.5	6.70	-0.38					
26	Jun-03	4.5	7.00	0.93					
27	Dec-03	4.5	7.10	1.36					
28	Feb-04	4.5	7.40	2.67					
29	Jun-04	4.5	7.40	2.67					
30	Jun-05	4.5	6.10	-3.00					
31	Dec-05	4.5	6.90	0.49					
32	Feb-06	4.5	7.70	3.98					
33	Jun-06	4.5	7.04	1.10					
34	Nov-06	4.5	7.46	2.93					
35	Jun-07	4.5	6.34	-1.95					
36	Nov-07	4.5	6.93	0.62					
37	Jun-08	4.5	6.95	0.71					
38	Nov-08	4.5	6.89	0.45					
39	Jun-09	4.5	7.13	1.49					
40	Nov-09	4.5	6.99	0.88					
41	Jun-10	4.5	6.90	0.49					
42	Nov-10	4.5	6.93	0.62					
43	Jun-11	4.5	7.03	1.06					

h = Decision Value for CUSUM, SCL = Shewart Control Limit, k = Standard Error Shift Detection Parameter, Zi = Standardized Mean

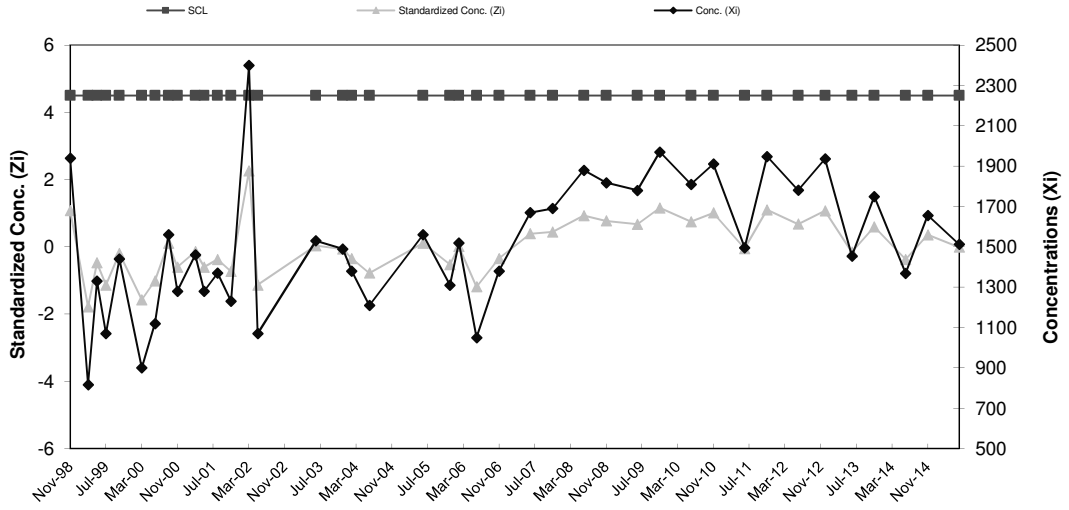


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault B - SpC

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-96	1900		
2	Nov-96	1600		
3	Feb-97	1590		
4	May-97	1930	**1,516.63**	**391.89**
5	Aug-97	663		
6	Nov-97	1400		
7	Feb-98	1560		
8	May-98	1490		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Nov-98	4.5	1940	1.08	42	Nov-11	4.5	1948	1.10
10	Mar-99	4.5	817	-1.79	43	Jun-12	4.5	1781	0.67
11	May-99	4.5	1330	-0.48	44	Dec-12	4.5	1936	1.07
12	Jul-99	4.5	1070	-1.14	45	Jun-13	4.5	1455	-0.16
13	Oct-99	4.5	1440	-0.20	46	Nov-13	4.5	1750	0.60
14	Mar-00	4.5	900	-1.57	47	Jun-14	4.5	1369	-0.38
15	Jun-00	4.5	1120	-1.01	48	Nov-14	4.5	1656	0.36
16	Sep-00	4.5	1560	0.11	49	Jun-15	4.5	1513	-0.01
17	Nov-00	4.5	1280	-0.60					
18	Mar-01	4.5	1460	-0.14					
19	May-01	4.5	1280	-0.60					
20	Aug-01	4.5	1370	-0.37					
21	Nov-01	4.5	1230	-0.73					
22	Mar-02	4.5	2400	2.25					
23	May-02	4.5	1070	-1.14					
24	Jun-03	4.5	1530	0.03					
25	Dec-03	4.5	1490	-0.07					
26	Feb-04	4.5	1380	-0.35					
27	Jun-04	4.5	1210	-0.78					
28	Jun-05	4.5	1560	0.11					
29	Dec-05	4.5	1310	-0.53					
30	Feb-06	4.5	1520	0.01					
31	Jun-06	4.5	1050	-1.19					
32	Nov-06	4.5	1380	-0.35					
33	Jun-07	4.5	1670	0.39					
34	Nov-07	4.5	1690	0.44					
35	Jun-08	4.5	1880	0.93					
36	Nov-08	4.5	1818	0.77					
37	Jun-09	4.5	1780	0.67					
38	Nov-09	4.5	1970	1.16					
39	Jun-10	4.5	1810	0.75					
40	Nov-10	4.5	1911	1.01					
41	Jun-11	4.5	1496	-0.05					

h = Decision Value for CUSUM, SCL = Shewart Control Limit, k = Standard Error Shift Detection Parameter, Zi = Standardized Mean

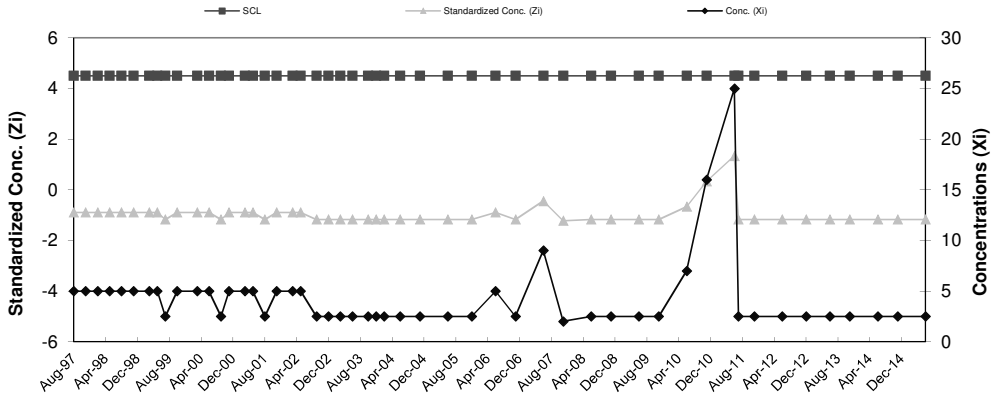


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault C - Chromium

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	25		
2	Aug-95	10		
3	Nov-95	29		
4	Jun-96	10	**13.00**	**8.98**
5	Aug-96	10		
6	Nov-96	10		
7	Feb-97	5		
8	May-97	5		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Aug-97	4.5	5	-0.89	53	Nov-11	4.5	2.5	-1.17
10	Nov-97	4.5	5	-0.89	54	Jun-12	4.5	2.5	-1.17
11	Feb-98	4.5	5	-0.89	55	Dec-12	4.5	2.5	-1.17
12	May-98	4.5	5	-0.89	56	Jun-13	4.5	2.5	-1.17
14	Aug-98	4.5	5	-0.89	57	Nov-13	4.5	2.5	-1.17
15	Nov-98	4.5	5	-0.89	58	Jun-14	4.5	2.5	-1.17
16	Mar-99	4.5	5	-0.89	59	Nov-14	4.5	2.5	-1.17
17	May-99	4.5	5	-0.89	60	Jun-15	4.5	2.5	-1.17
18	Jul-99	4.5	2.5	-1.17					
19	Oct-99	4.5	5	-0.89					
20	Mar-00	4.5	5	-0.89					
21	Jun-00	4.5	5	-0.89					
22	Sep-00	4.5	2.5	-1.17					
23	Nov-00	4.5	5	-0.89					
24	Mar-01	4.5	5	-0.89					
25	May-01	4.5	5	-0.89					
26	Aug-01	4.5	2.5	-1.17					
27	Nov-01	4.5	5	-0.89					
28	Mar-02	4.5	5	-0.89					
29	May-02	4.5	5	-0.89					
30	Sep-02	4.5	2.5	-1.17					
31	Dec-02	4.5	2.5	-1.17					
32	Mar-03	4.5	2.5	-1.17					
33	Jun-03	4.5	2.5	-1.17					
34	Oct-03	4.5	2.5	-1.17					
35	Dec-03	4.5	2.5	-1.17					
36	Feb-04	4.5	2.5	-1.17					
37	Jun-04	4.5	2.5	-1.17					
38	Nov-04	4.5	2.5	-1.17					
39	Jun-05	4.5	2.5	-1.17					
40	Dec-05	4.5	2.5	-1.17					
41	Jun-06	4.5	5	-0.89					
42	Nov-06	4.5	2.5	-1.17					
43	Jun-07	4.5	9	-0.45					
44	Nov-07	4.5	2	-1.23					
45	Jun-08	4.5	2.5	-1.17					
46	Nov-08	4.5	2.5	-1.17					
47	Jun-09	4.5	2.5	-1.17					
48	Nov-09	4.5	2.5	-1.17					
49	Jun-10	4.5	7	-0.67					
50	Nov-10	4.5	16	0.33					
51	Jun-11	4.5	25	1.34					
52	Jul-11	4.5	2.5	-1.17					

h = Decision Value for CUSUM, SCL = Shewart Control Limit, k = Standard Error Shift Detection Parameter, Zi = Standardized Mean

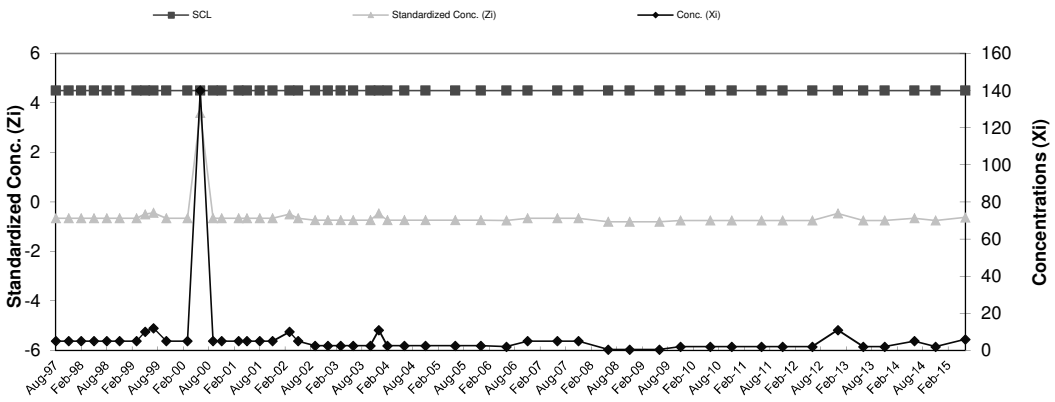


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault C - Copper

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	25	**25.88**	**31.76**
2	Aug-95	10		
3	Nov-95	37		
4	Jun-96	10		
5	Aug-96	10		
6	Nov-96	10		
7	Feb-97	5		
8	May-97	100		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Aug-97	4.5	5	-0.66	52	Nov-11	4.5	2	-0.75
10	Nov-97	4.5	5	-0.66	53	Jun-12	4.5	2	-0.75
11	Feb-98	4.5	5	-0.66	54	Dec-12	4.5	11	-0.47
12	May-98	4.5	5	-0.66	55	Jun-13	4.5	2	-0.75
14	Aug-98	4.5	5	-0.66	56	Nov-13	4.5	2	-0.75
15	Nov-98	4.5	5	-0.66	57	Jun-14	4.5	5	-0.66
16	Mar-99	4.5	5	-0.66	58	Nov-14	4.5	2	-0.75
17	May-99	4.5	10	-0.50	59	Jun-15	4.5	6	-0.63
18	Jul-99	4.5	12	-0.44					
19	Oct-99	4.5	5	-0.66					
20	Mar-00	4.5	5	-0.66					
21	Jun-00	4.5	140	3.59					
22	Sep-00	4.5	5	-0.66					
23	Nov-00	4.5	5	-0.66					
24	Mar-01	4.5	5	-0.66					
25	May-01	4.5	5	-0.66					
26	Aug-01	4.5	5	-0.66					
27	Nov-01	4.5	5	-0.66					
28	Mar-02	4.5	10	-0.50					
29	May-02	4.5	5	-0.66					
30	Sep-02	4.5	2.5	-0.74					
31	Dec-02	4.5	2.5	-0.74					
32	Mar-03	4.5	2.5	-0.74					
33	Jun-03	4.5	2.5	-0.74					
34	Oct-03	4.5	2.5	-0.74					
35	Dec-03	4.5	11	-0.47					
36	Feb-04	4.5	2.5	-0.74					
37	Jun-04	4.5	2.5	-0.74					
38	Nov-04	4.5	2.5	-0.74					
39	Jun-05	4.5	2.5	-0.74					
40	Dec-05	4.5	2.5	-0.74					
41	Jun-06	4.5	2	-0.75					
42	Nov-06	4.5	5	-0.66					
43	Jun-07	4.5	5	-0.66					
44	Nov-07	4.5	5	-0.66					
45	Jun-08	4.5	0.5	-0.80					
46	Nov-08	4.5	0.5	-0.80					
47	Jun-09	4.5	0.5	-0.80					
48	Nov-09	4.5	2	-0.75					
49	Jun-10	4.5	2	-0.75					
50	Nov-10	4.5	2	-0.75					
51	Jun-11	4.5	2	-0.75					

h = Decision Value for CUSUM, SCL = Shewart Control Limit, k = Standard Error Shift Detection Parameter, Zi = Standardized Mean

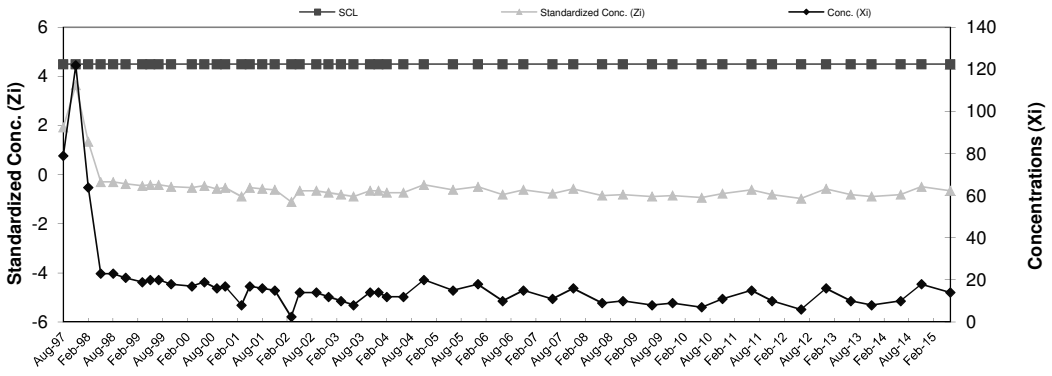


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault C - Nickel

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	15		
2	Aug-95	20		
3	Nov-95	67		
4	Jun-96	10	**30.38**	**25.11**
5	Aug-96	10		
6	Nov-96	10		
7	Feb-97	45		
8	May-97	66		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Aug-97	4.5	79	1.94	52	Nov-11	4.5	10	-0.81
10	Nov-97	4.5	122	3.65	53	Jun-12	4.5	6	-0.97
11	Feb-98	4.5	64	1.34	54	Dec-12	4.5	16	-0.57
12	May-98	4.5	23	-0.29	55	Jun-13	4.5	10	-0.81
14	Aug-98	4.5	23	-0.29	56	Nov-13	4.5	8	-0.89
15	Nov-98	4.5	21	-0.37	57	Jun-14	4.5	10	-0.81
16	Mar-99	4.5	19	-0.45	58	Nov-14	4.5	18	-0.49
17	May-99	4.5	20	-0.41	59	Jun-15	4.5	14	-0.65
18	Jul-99	4.5	20	-0.41					
19	Oct-99	4.5	18	-0.49					
20	Mar-00	4.5	17	-0.53					
21	Jun-00	4.5	19	-0.45					
22	Sep-00	4.5	16	-0.57					
23	Nov-00	4.5	17	-0.53					
24	Mar-01	4.5	8	-0.89					
25	May-01	4.5	17	-0.53					
26	Aug-01	4.5	16	-0.57					
27	Nov-01	4.5	15	-0.61					
28	Mar-02	4.5	2.5	-1.11					
29	May-02	4.5	14	-0.65					
30	Sep-02	4.5	14	-0.65					
31	Dec-02	4.5	12	-0.73					
32	Mar-03	4.5	10	-0.81					
33	Jun-03	4.5	8	-0.89					
34	Oct-03	4.5	14	-0.65					
35	Dec-03	4.5	14	-0.65					
36	Feb-04	4.5	12	-0.73					
37	Jun-04	4.5	12	-0.73					
38	Nov-04	4.5	20	-0.41					
39	Jun-05	4.5	15	-0.61					
40	Dec-05	4.5	18	-0.49					
41	Jun-06	4.5	10	-0.81					
42	Nov-06	4.5	15	-0.61					
43	Jun-07	4.5	11	-0.77					
44	Nov-07	4.5	16	-0.57					
45	Jun-08	4.5	9	-0.85					
46	Nov-08	4.5	10	-0.81					
47	Jun-09	4.5	8	-0.89					
48	Nov-09	4.5	9	-0.85					
49	Jun-10	4.5	7	-0.93					
50	Nov-10	4.5	11	-0.77					
51	Jun-11	4.5	15	-0.61					

h = Decision Value for CUSUM, SCL = Shewart Control Limit, k = Standard Error Shift Detection Parameter, Zi = Standardized Mean

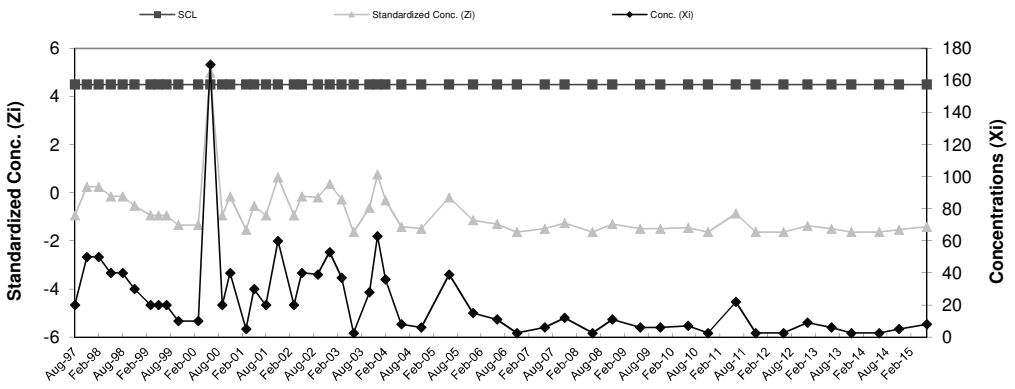


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault C - Zinc

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	60		
2	Aug-95	74		
3	Nov-95	36		
4	Jun-96	10	**43.75**	**25.24**
5	Aug-96	40		
6	Nov-96	80		
7	Feb-97	30		
8	May-97	20		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Aug-97	4.5	20	-0.94	52	Nov-11	4.5	2.5	-1.63
10	Nov-97	4.5	50	0.25	53	Jun-12	4.5	2.5	-1.63
11	Feb-98	4.5	50	0.25	54	Dec-12	4.5	9	-1.38
12	May-98	4.5	40	-0.15	55	Jun-13	4.5	6	-1.50
14	Aug-98	4.5	40	-0.15	56	Nov-13	4.5	2.5	-1.63
15	Nov-98	4.5	30	-0.54	57	Jun-14	4.5	2.5	-1.63
16	Mar-99	4.5	20	-0.94	58	Nov-14	4.5	5	-1.54
17	May-99	4.5	20	-0.94	59	Jun-15	4.5	8	-1.42
18	Jul-99	4.5	20	-0.94					
19	Oct-99	4.5	10	-1.34					
20	Mar-00	4.5	10	-1.34					
21	Jun-00	4.5	170	5.00					
22	Sep-00	4.5	20	-0.94					
23	Nov-00	4.5	40	-0.15					
24	Mar-01	4.5	5	-1.54					
25	May-01	4.5	30	-0.54					
26	Aug-01	4.5	20	-0.94					
27	Nov-01	4.5	60	0.64					
28	Mar-02	4.5	20	-0.94					
29	May-02	4.5	40	-0.15					
30	Sep-02	4.5	39	-0.19					
31	Dec-02	4.5	53	0.37					
32	Mar-03	4.5	37	-0.27					
33	Jun-03	4.5	2.5	-1.63					
34	Oct-03	4.5	28	-0.62					
35	Dec-03	4.5	63	0.76					
36	Feb-04	4.5	36	-0.31					
37	Jun-04	4.5	8	-1.42					
38	Nov-04	4.5	6	-1.50					
39	Jun-05	4.5	39	-0.19					
40	Dec-05	4.5	15	-1.14					
41	Jun-06	4.5	11	-1.30					
42	Nov-06	4.5	2.5	-1.63					
43	Jun-07	4.5	6	-1.50					
44	Nov-07	4.5	12	-1.26					
45	Jun-08	4.5	2.5	-1.63					
46	Nov-08	4.5	11	-1.30					
47	Jun-09	4.5	6	-1.50					
48	Nov-09	4.5	6	-1.50					
49	Jun-10	4.5	7	-1.46					
50	Nov-10	4.5	2.5	-1.63					
51	Jun-11	4.5	22	-0.86					

h = Decision Value for CUSUM, SCL = Shewart Control Limit, k = Standard Error Shift Detection Parameter, Zi = Standardized Mean

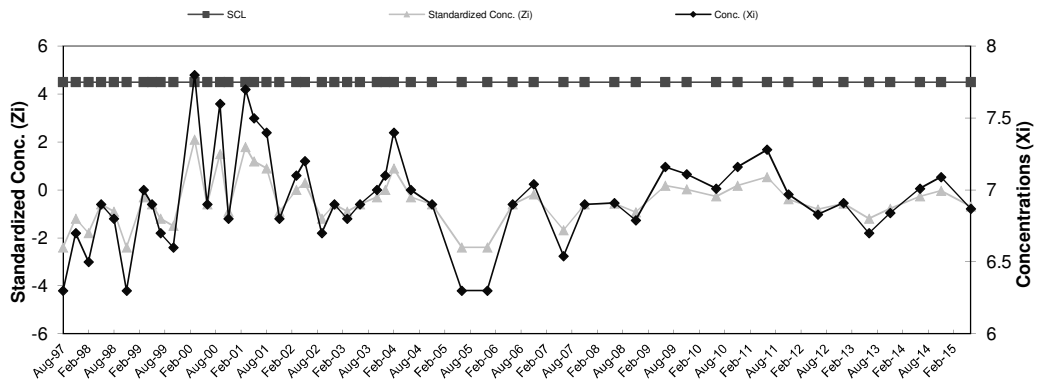


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault C - pH

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	7.4		
2	Aug-95	7.4		
3	Nov-95	7		
4	Jun-96	6.9	**7.10**	**0.33**
5	Aug-96	6.9		
6	Nov-96	7		
7	Feb-97	7.6		
8	May-97	6.6		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Aug-97	4.5	6.3	-2.40	52	Nov-11	4.5	7.0	-0.39
10	Nov-97	4.5	6.7	-1.20	53	Jun-12	4.5	6.83	-0.81
11	Feb-98	4.5	6.5	-1.80	54	Dec-12	4.5	6.91	-0.57
12	May-98	4.5	6.9	-0.60	55	Jun-13	4.5	6.7	-1.20
14	Aug-98	4.5	6.8	-0.90	56	Nov-13	4.5	6.84	-0.78
15	Nov-98	4.5	6.3	-2.40	57	Jun-14	4.5	7.01	-0.27
16	Mar-99	4.5	7	-0.30	58	Nov-14	4.5	7.09	-0.03
17	May-99	4.5	6.9	-0.60	59	Jun-15	4.5	6.87	-0.69
18	Jul-99	4.5	6.7	-1.20					
19	Oct-99	4.5	6.6	-1.50					
20	Mar-00	4.5	7.8	2.10					
21	Jun-00	4.5	6.9	-0.60					
22	Sep-00	4.5	7.6	1.50					
23	Nov-00	4.5	6.8	-0.90					
24	Mar-01	4.5	7.7	1.80					
25	May-01	4.5	7.5	1.20					
26	Aug-01	4.5	7.4	0.90					
27	Nov-01	4.5	6.8	-0.90					
28	Mar-02	4.5	7.1	0.00					
29	May-02	4.5	7.2	0.30					
30	Sep-02	4.5	6.7	-1.20					
31	Dec-02	4.5	6.9	-0.60					
32	Mar-03	4.5	6.8	-0.90					
33	Jun-03	4.5	6.9	-0.60					
34	Oct-03	4.5	7	-0.30					
35	Dec-03	4.5	7.1	0.00					
36	Feb-04	4.5	7.4	0.90					
37	Jun-04	4.5	7	-0.30					
38	Nov-04	4.5	6.9	-0.60					
39	Jun-05	4.5	6.3	-2.40					
40	Dec-05	4.5	6.3	-2.40					
41	Jun-06	4.5	6.9	-0.60					
42	Nov-06	4.5	7.0	-0.18					
43	Jun-07	4.5	6.5	-1.68					
44	Nov-07	4.5	6.9	-0.60					
45	Jun-08	4.5	6.9	-0.57					
46	Nov-08	4.5	6.8	-0.93					
47	Jun-09	4.5	7.2	0.18					
48	Nov-09	4.5	7.1	0.03					
49	Jun-10	4.5	7.0	-0.27					
50	Nov-10	4.5	7.2	0.18					
51	Jun-11	4.5	7.3	0.54					

h = Decision Value for CUSUM, SCL = Shewart Control Limit, k = Standard Error Shift Detection Parameter, Zi = Standardized Mean

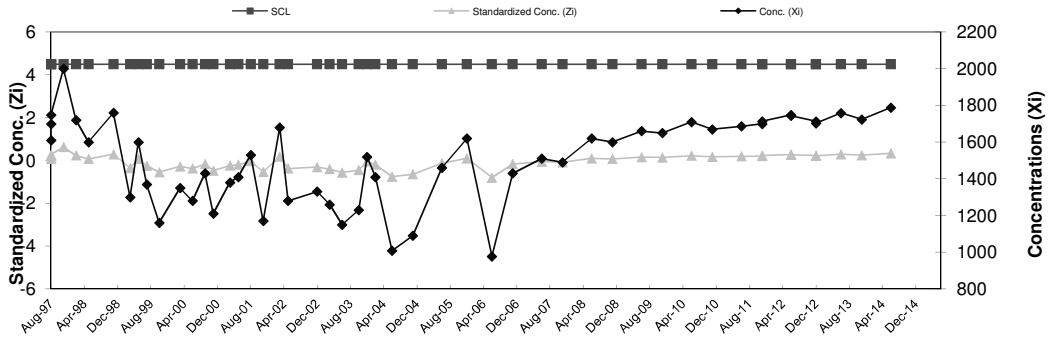


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault C - SpC

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	530	**1,551.25**	**716.19**
2	Aug-95	340		
3	Nov-95	2200		
4	Jun-96	2000		
5	Aug-96	1900		
6	Nov-96	2100		
7	Feb-97	1610		
8	May-97	1730		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Aug-97	4.5	1610	0.08	52	Nov-11	4.5	1699	0.21
10	Nov-97	4.5	2000	0.63	53	Jun-12	4.5	1748	0.27
11	Feb-98	4.5	1720	0.24	54	Dec-12	4.5	1713	0.23
12	May-98	4.5	1600	0.07	55	Jun-13	4.5	1744	0.27
14	Nov-98	4.5	1760	0.29	56	Nov-13	4.5	1703	0.21
15	Mar-99	4.5	1300	-0.35	57	Jun-14	4.5	1759	0.29
16	May-99	4.5	1600	0.07	58	Nov-14	4.5	1724	0.24
17	Jul-99	4.5	1370	-0.25	59	Jun-15	4.5	1788	0.33
18	Oct-99	4.5	1160	-0.55					
19	Mar-00	4.5	1350	-0.28					
20	Jun-00	4.5	1280	-0.38					
21	Sep-00	4.5	1430	-0.17					
22	Nov-00	4.5	1210	-0.48					
23	Mar-01	4.5	1380	-0.24					
24	May-01	4.5	1410	-0.20					
25	Aug-01	4.5	1530	-0.03					
26	Nov-01	4.5	1170	-0.53					
27	Mar-02	4.5	1680	0.18					
28	May-02	4.5	1280	-0.38					
29	Dec-02	4.5	1330	-0.31					
30	Mar-03	4.5	1260	-0.41					
31	Jun-03	4.5	1150	-0.56					
32	Oct-03	4.5	1230	-0.45					
33	Dec-03	4.5	1520	-0.04					
34	Feb-04	4.5	1410	-0.20					
35	Jun-04	4.5	1008	-0.76					
36	Nov-04	4.5	1090	-0.64					
37	Jun-05	4.5	1460	-0.13					
38	Dec-05	4.5	1620	0.10					
39	Jun-06	4.5	977	-0.80					
40	Nov-06	4.5	1430	-0.17					
41	Jun-07	4.5	1510	-0.06					
42	Nov-07	4.5	1490	-0.09					
43	Jun-08	4.5	1620	0.10					
44	Nov-08	4.5	1600	0.07					
45	Jun-09	4.5	1660	0.15					
46	Nov-09	4.5	1650	0.14					
47	Jun-10	4.5	1710	0.22					
50	Nov-10	4.5	1670	0.17					
51	Jun-11	4.5	1686	0.19					
52	Nov-11	4.5	1699	0.21					
53	Jun-12	4.5	1748	0.27					
54	Dec-12	4.5	1713	0.23					

h = Decision Value for CUSUM, SCL = Shewart Control Limit, k = Standard Error Shift Detection Parameter, Zi = Standardized Mean

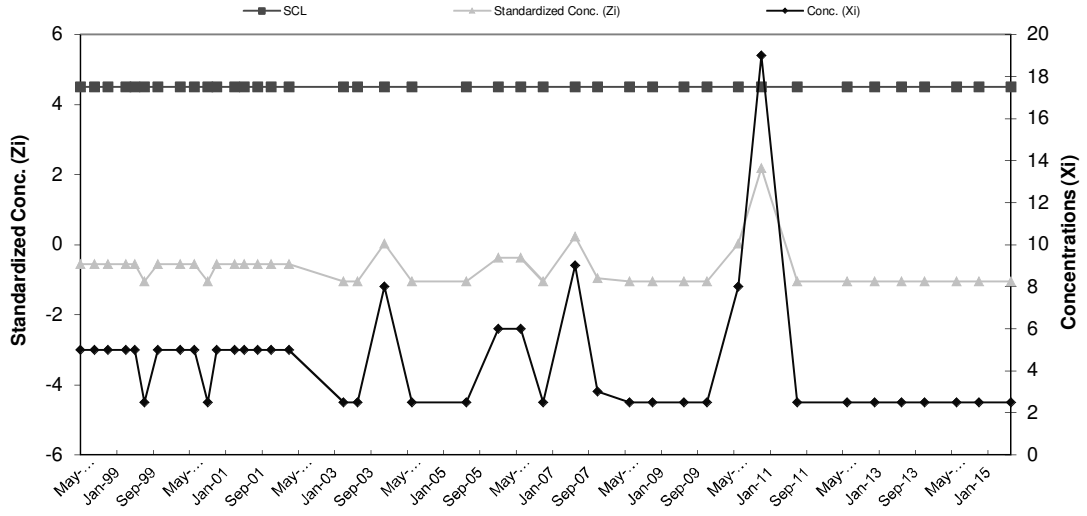


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault D - Chromium

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Mar-95	13	**7.86**	**5.11**
2	Jun-96	10		
3	Aug-96	10		
4	Nov-96	10		
5	May-97	5		
6	Aug-97	5		
7	Nov-97	5		
8	Feb-98	5		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-98	4.5	5	-0.56	41	Jul-11	4.5	2.5	-1.05
10	Aug-98	4.5	5	-0.56	42	Jun-12	4.5	2.5	-1.05
11	Nov-98	4.5	5	-0.56	43	Dec-12	4.5	2.5	-1.05
12	Mar-99	4.5	5	-0.56	44	Jun-13	4.5	2.5	-1.05
13	May-99	4.5	5	-0.56	45	Nov-13	4.5	2.5	-1.05
14	Jul-99	4.5	2.5	-1.05	46	Jun-14	4.5	2.5	-1.05
15	Oct-99	4.5	5	-0.56	47	Nov-14	4.5	2.5	-1.05
16	Mar-00	4.5	5	-0.56	48	Jun-15	4.5	2.5	-1.05
17	Jun-00	4.5	5	-0.56					
18	Sep-00	4.5	2.5	-1.05					
19	Nov-00	4.5	5	-0.56					
20	Mar-01	4.5	5	-0.56					
21	May-01	4.5	5	-0.56					
22	Aug-01	4.5	5	-0.56					
23	Nov-01	4.5	5	-0.56					
24	Mar-02	4.5	5	-0.56					
25	Mar-03	4.5	2.5	-1.05					
26	Jun-03	4.5	2.5	-1.05					
27	Dec-03	4.5	8	0.03					
28	Jun-04	4.5	2.5	-1.05					
29	Jun-05	4.5	2.5	-1.05					
30	Jan-06	4.5	6	-0.36					
31	Jun-06	4.5	6	-0.36					
32	Nov-06	4.5	2.5	-1.05					
33	Jun-07	4.5	9	0.22					
34	Nov-07	4.5	3	-0.95					
35	Jun-08	4.5	2.5	-1.05					
36	Nov-08	4.5	2.5	-1.05					
37	Jun-09	4.5	2.5	-1.05					
38	Nov-09	4.5	2.5	-1.05					
39	Jun-10	4.5	8	0.03					
40	Nov-10	4.5	19	2.18					

h = Decision Value for CUSUM, SCL = Shewart Control Limit, k = Standard Error Shift Detection Parameter, Zi = Standardized Mean

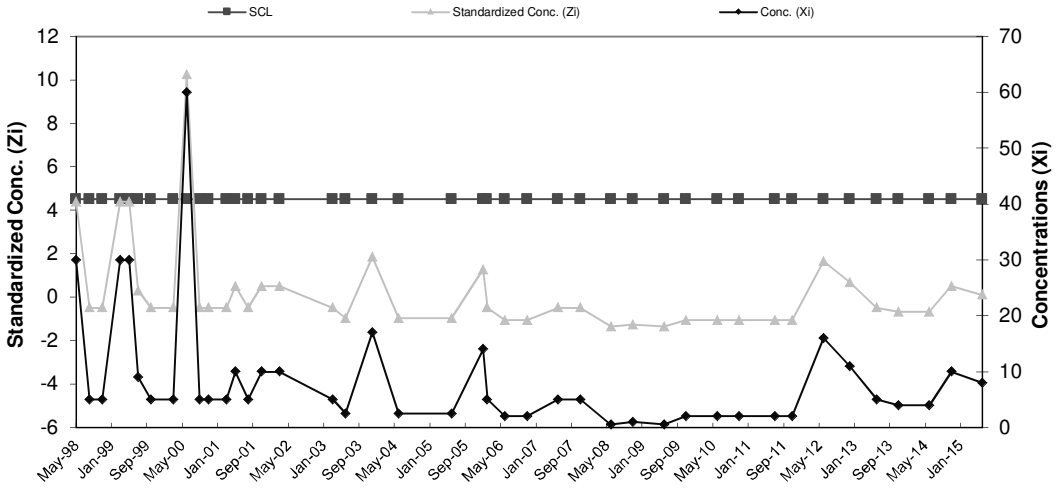


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault D - Copper

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Mar-95	10		
2	Jun-96	10		
3	Aug-96	10		
4	Nov-96	10	**7.48**	**5.13**
5	May-97	5		
6	Aug-97	5		
7	Nov-97	5		
8	Feb-98	5		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-98	4.5	30	4.39	41	Nov-10	4.5	2	-1.07
10	Aug-98	4.5	5	-0.48	42	Jul-11	4.5	2	-1.07
11	Nov-98	4.5	5	-0.48	43	Nov-11	4.5	2	-1.07
12	Mar-99	4.5	30	4.39	44	Jun-12	4.5	16	1.66
13	May-99	4.5	30	4.39	45	Dec-12	4.5	11	0.69
14	Jul-99	4.5	9	0.30	46	Jun-13	4.5	5	-0.48
15	Oct-99	4.5	5	-0.48	47	Nov-13	4.5	4	-0.68
16	Mar-00	4.5	5	-0.48	48	Jun-14	4.5	4	-0.68
17	Jun-00	4.5	60	10.24	49	Nov-14	4.5	10	0.49
18	Sep-00	4.5	5	-0.48	50	Jun-15	4.5	8	0.10
19	Nov-00	4.5	5	-0.48					
20	Mar-01	4.5	5	-0.48					
21	May-01	4.5	10	0.49					
22	Aug-01	4.5	5	-0.48					
23	Nov-01	4.5	10	0.49					
24	Mar-02	4.5	10	0.49					
25	Mar-03	4.5	5	-0.48					
26	Jun-03	4.5	2.5	-0.97					
27	Dec-03	4.5	17	1.86					
28	Jun-04	4.5	2.5	-0.97					
29	Jun-05	4.5	2.5	-0.97					
30	Jan-06	4.5	14	1.27					
31	Feb-06	4.5	5	-0.48					
32	Jun-06	4.5	2	-1.07					
33	Nov-06	4.5	2	-1.07					
34	Jun-07	4.5	5	-0.48					
35	Nov-07	4.5	5	-0.48					
36	Jun-08	4.5	0.5	-1.36					
37	Nov-08	4.5	1	-1.26					
38	Jun-09	4.5	0.5	-1.36					
39	Nov-09	4.5	2	-1.07					
40	Jun-10	4.5	2	-1.07					

h = Decision Value for CUSUM, SCL = Shewart Control Limit, k = Standard Error Shift Detection Parameter, Zi = Standardized Mean

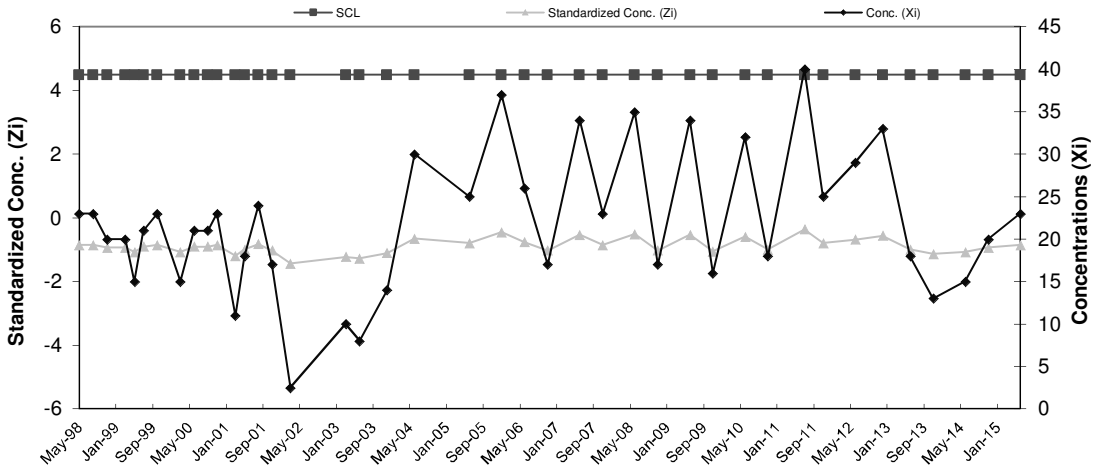


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault D - Nickel

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Mar-95	44		
2	Jun-96	10		
3	Aug-96	10		
4	Nov-96	40	**52.63**	**35.01**
5	May-97	58		
6	Aug-97	79		
7	Nov-97	114		
8	Feb-98	66		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-98	4.5	23	-0.85	41	Jul-11	4.5	40	-0.36
10	Aug-98	4.5	23	-0.85	42	Nov-11	4.5	25	-0.79
11	Nov-98	4.5	20	-0.93	43	Jun-12	4.5	29	-0.67
12	Mar-99	4.5	20	-0.93	44	Dec-12	4.5	33	-0.56
13	May-99	4.5	15	-1.07	45	Jun-13	4.5	18	-0.99
14	Jul-99	4.5	21	-0.90	46	Nov-13	4.5	13	-1.13
15	Oct-99	4.5	23	-0.85	47	Jun-14	4.5	15	-1.07
16	Mar-00	4.5	15	-1.07	48	Nov-14	4.5	20	-0.93
17	Jun-00	4.5	21	-0.90	49	Jun-15	4.5	23	-0.85
18	Sep-00	4.5	21	-0.90					
19	Nov-00	4.5	23	-0.85					
20	Mar-01	4.5	11	-1.19					
21	May-01	4.5	18	-0.99					
22	Aug-01	4.5	24	-0.82					
23	Nov-01	4.5	17	-1.02					
24	Mar-02	4.5	2.5	-1.43					
25	Mar-03	4.5	10	-1.22					
26	Jun-03	4.5	8	-1.27					
27	Dec-03	4.5	14	-1.10					
28	Jun-04	4.5	30	-0.65					
29	Jun-05	4.5	25	-0.79					
30	Jan-06	4.5	37	-0.45					
31	Jun-06	4.5	26	-0.76					
32	Nov-06	4.5	17	-1.02					
33	Jun-07	4.5	34	-0.53					
34	Nov-07	4.5	23	-0.85					
35	Jun-08	4.5	35	-0.50					
36	Nov-08	4.5	17	-1.02					
37	Jun-09	4.5	34	-0.53					
38	Nov-09	4.5	16	-1.05					
39	Jun-10	4.5	32	-0.59					
40	Nov-10	4.5	18	-0.99					

h = Decision Value for CUSUM, SCL = Shewart Control Limit, k = Standard Error Shift Detection Parameter, Zi = Standardized Mean

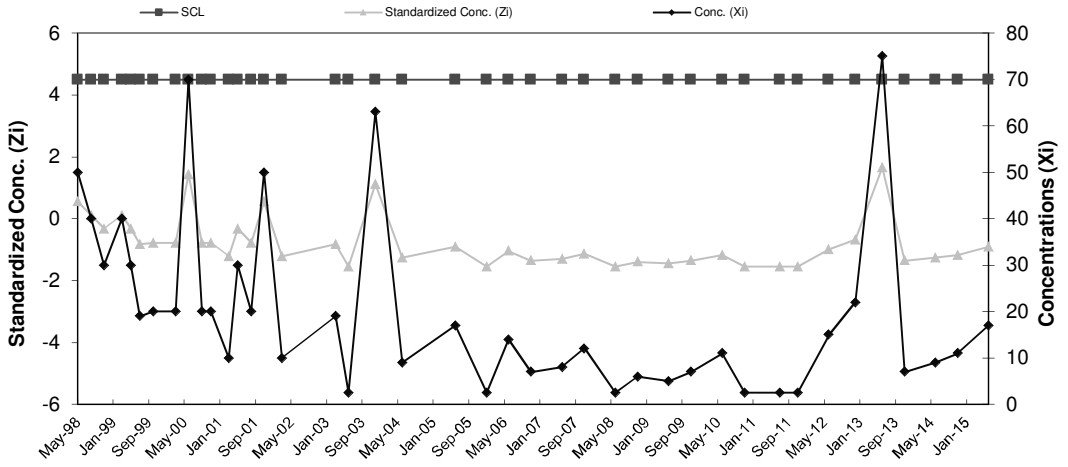


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault D - Zinc

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Mar-95	20		
2	Jun-96	10		
3	Aug-96	40		
4	Nov-96	70	**37.49**	**22.59**
5	May-97	70		
6	Aug-97	20		
7	Nov-97	30		
8	Feb-98	40		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-98	4.5	50	0.55	42	Nov-11	4.5	2.5	-1.55
10	Aug-98	4.5	40	0.11	43	Jun-12	4.5	15	-1.00
11	Nov-98	4.5	30	-0.33	44	Dec-12	4.5	22	-0.69
12	Mar-99	4.5	40	0.11	45	Jun-13	4.5	75	1.66
13	May-99	4.5	30	-0.33	46	Nov-13	4.5	7	-1.35
14	Jul-99	4.5	19	-0.82	47	Jun-14	4.5	9	-1.26
15	Oct-99	4.5	20	-0.77	48	Nov-14	4.5	11	-1.17
16	Mar-00	4.5	20	-0.77	49	Jun-15	4.5	17	-0.91
17	Jun-00	4.5	70	1.44					
18	Sep-00	4.5	20	-0.77					
19	Nov-00	4.5	20	-0.77					
20	Mar-01	4.5	10	-1.22					
21	May-01	4.5	30	-0.33					
22	Aug-01	4.5	20	-0.77					
23	Nov-01	4.5	50	0.55					
24	Mar-02	4.5	10	-1.22					
25	Mar-03	4.5	19	-0.82					
26	Jun-03	4.5	2.5	-1.55					
27	Dec-03	4.5	63	1.13					
28	Jun-04	4.5	9	-1.26					
29	Jun-05	4.5	17	-0.91					
30	Jan-06	4.5	2.5	-1.55					
31	Jun-06	4.5	14	-1.04					
32	Nov-06	4.5	7	-1.35					
33	Jun-07	4.5	8	-1.31					
34	Nov-07	4.5	12	-1.13					
35	Jun-08	4.5	2.5	-1.55					
36	Nov-08	4.5	6	-1.39					
37	Jun-09	4.5	5	-1.44					
38	Nov-09	4.5	7	-1.35					
39	Jun-10	4.5	11	-1.17					
40	Nov-10	4.5	2.5	-1.55					
41	Jul-11	4.5	2.5	-1.55					

h = Decision Value for CUSUM, SCL = Shewart Control Limit, k = Standard Error Shift Detection Parameter, Zi = Standardized Mean

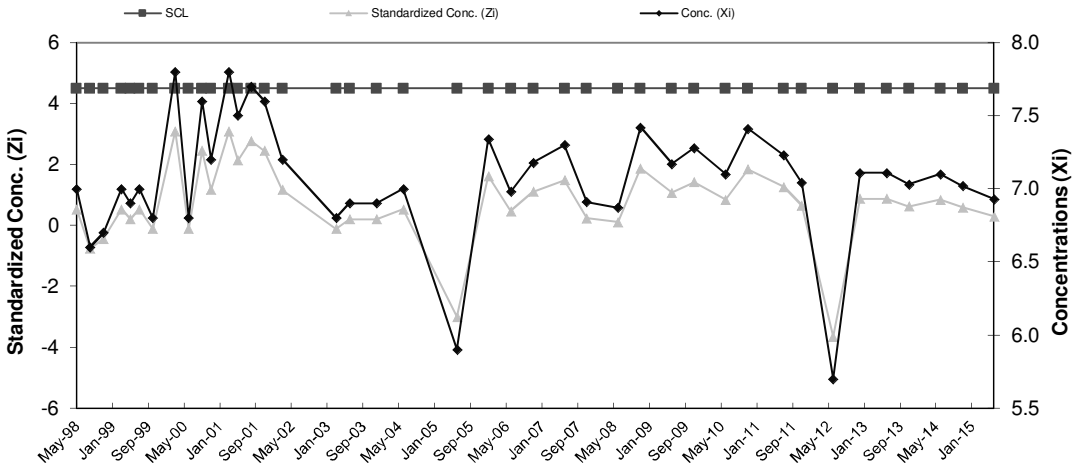


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault D - pH

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Mar-95	7.3		
2	Jun-96	6.9		
3	Aug-96	7.2		
4	Nov-96	7	**6.84**	**0.31**
5	May-97	6.7		
6	Aug-97	6.5		
7	Nov-97	6.6		
8	Feb-98	6.5		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-98	4.5	7.00	0.52	42	Nov-11	4.5	7.0	0.65
10	Aug-98	4.5	6.60	-0.76	43	Jun-12	4.5	5.7	-3.65
11	Nov-98	4.5	6.70	-0.44	44	Dec-12	4.5	7.11	0.88
12	Mar-99	4.5	7.00	0.52	45	Jun-13	4.5	7.11	0.88
13	May-99	4.5	6.90	0.20	46	Nov-13	4.5	7.03	0.62
14	Jul-99	4.5	7.00	0.52	47	Jun-14	4.5	7.1	0.84
15	Oct-99	4.5	6.80	-0.12	48	Nov-14	4.5	7.02	0.59
16	Mar-00	4.5	7.80	3.09	49	Jun-15	4.5	6.93	0.30
17	Jun-00	4.5	6.80	-0.12					
18	Sep-00	4.5	7.60	2.45					
19	Nov-00	4.5	7.20	1.16					
20	Mar-01	4.5	7.80	3.09					
21	May-01	4.5	7.50	2.13					
22	Aug-01	4.5	7.70	2.77					
23	Nov-01	4.5	7.60	2.45					
24	Mar-02	4.5	7.20	1.16					
25	Mar-03	4.5	6.80	-0.12					
26	Jun-03	4.5	6.90	0.20					
27	Dec-03	4.5	6.90	0.20					
28	Jun-04	4.5	7.00	0.52					
29	Jun-05	4.5	5.90	-3.01					
30	Jan-06	4.5	7.34	1.61					
31	Jun-06	4.5	6.98	0.46					
32	Nov-06	4.5	7.18	1.10					
33	Jun-07	4.5	7.30	1.49					
34	Nov-07	4.5	6.91	0.23					
35	Jun-08	4.5	6.87	0.10					
36	Nov-08	4.5	7.42	1.87					
37	Jun-09	4.5	7.17	1.07					
38	Nov-09	4.5	7.28	1.42					
39	Jun-10	4.5	7.10	0.84					
40	Nov-10	4.5	7.41	1.84					
41	Jul-11	4.5	7.23	1.26					

h = Decision Value for CUSUM, SCL = Shewart Control Limit, k = Standard Error Shift Detection Parameter, Zi = Standardized Mean

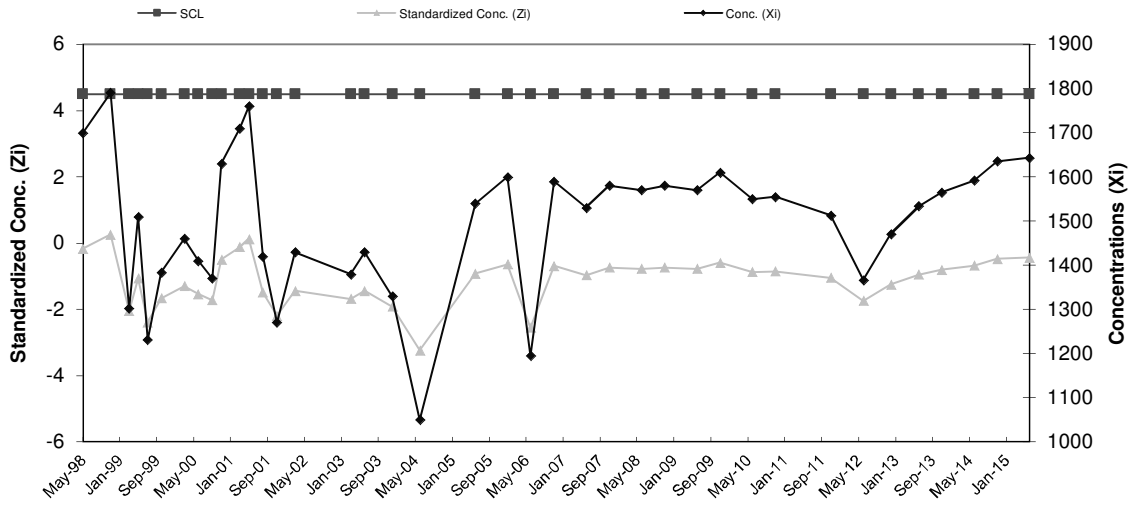


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault D - SpC

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Mar-95	2200		
2	Jun-96	1800		
3	Aug-96	1600		
4	Nov-96	1700	**1,734.38**	**211.31**
5	May-97	1580		
6	Aug-97	1540		
7	Nov-97	1800		
8	Feb-98	1655		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-98	4.5	1700	-0.16	41	Nov-11	4.5	1513	-1.05
11	Nov-98	4.5	1790	0.26	42	Jun-12	4.5	1367	-1.74
12	Mar-99	4.5	1302	-2.05	43	Dec-12	4.5	1471	-1.25
13	May-99	4.5	1510	-1.06	44	Jun-13	4.5	1534	-0.95
14	Jul-99	4.5	1231	-2.38	45	Nov-13	4.5	1565	-0.80
15	Oct-99	4.5	1384	-1.66	46	Jun-14	4.5	1592	-0.67
16	Mar-00	4.5	1460	-1.30	47	Nov-14	4.5	1635	-0.47
17	Jun-00	4.5	1410	-1.54	48	Jun-15	4.5	1643	-0.43
18	Sep-00	4.5	1370	-1.72					
19	Nov-00	4.5	1630	-0.49					
20	Mar-01	4.5	1710	-0.12					
21	May-01	4.5	1760	0.12					
22	Aug-01	4.5	1420	-1.49					
23	Nov-01	4.5	1270	-2.20					
24	Mar-02	4.5	1430	-1.44					
25	Mar-03	4.5	1380	-1.68					
26	Jun-03	4.5	1430	-1.44					
27	Dec-03	4.5	1330	-1.91					
28	Jun-04	4.5	1050	-3.24					
29	Jun-05	4.5	1540	-0.92					
30	Jan-06	4.5	1600	-0.64					
31	Jun-06	4.5	1195	-2.55					
32	Nov-06	4.5	1590	-0.68					
33	Jun-07	4.5	1530	-0.97					
34	Nov-07	4.5	1580	-0.73					
35	Jun-08	4.5	1570	-0.78					
36	Nov-08	4.5	1580	-0.73					
37	Jun-09	4.5	1570	-0.78					
38	Nov-09	4.5	1610	-0.59					
39	Jun-10	4.5	1550	-0.87					
40	Nov-10	4.5	1555	-0.85					

h = Decision Value for CUSUM, SCL = Shewart Control Limit, k = Standard Error Shift Detection Parameter, Zi = Standardized Mean

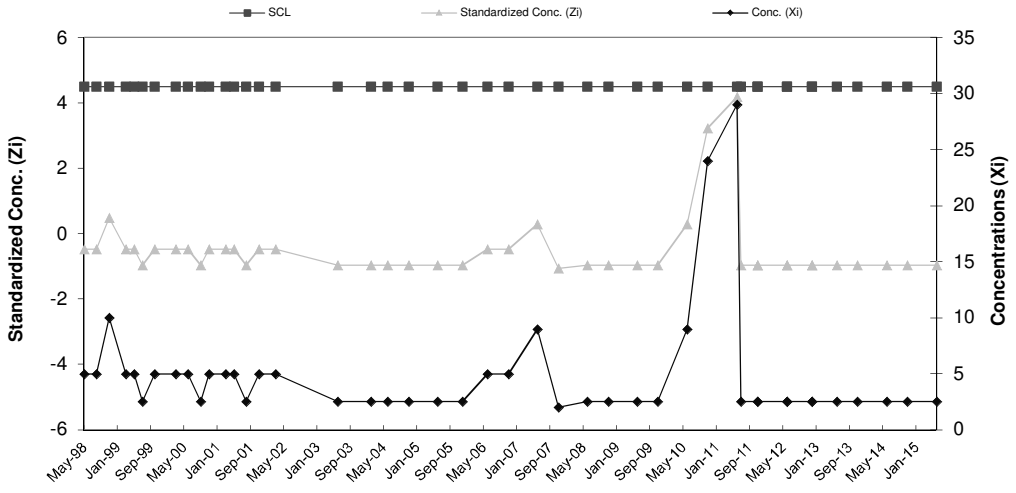


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault E - Chromium

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Mar-96	10		
2	Jun-96	10		
3	Oct-96	10		
4	Nov-96	10	**7.48**	**5.13**
5	May-97	5		
6	Aug-97	5		
7	Nov-97	5		
8	Feb-98	5		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-98	4.5	5	-0.48	43	Nov-11	4.5	2.5	-0.97
10	Aug-98	4.5	5	-0.48	44	Jun-12	4.5	2.5	-0.97
11	Nov-98	4.5	10	0.49	45	Dec-12	4.5	2.5	-0.97
12	Mar-99	4.5	5	-0.48	46	Jun-13	4.5	2.5	-0.97
13	May-99	4.5	5	-0.48	47	Nov-13	4.5	2.5	-0.97
14	Jul-99	4.5	2.5	-0.97	48	Jun-14	4.5	2.5	-0.97
15	Oct-99	4.5	5	-0.48	49	Nov-14	4.5	2.5	-0.97
16	Mar-00	4.5	5	-0.48	50	Jun-15	4.5	2.5	-0.97
17	Jun-00	4.5	5	-0.48					
18	Sep-00	4.5	2.5	-0.97					
19	Nov-00	4.5	5	-0.48					
20	Mar-01	4.5	5	-0.48					
21	May-01	4.5	5	-0.48					
22	Aug-01	4.5	2.5	-0.97					
23	Nov-01	4.5	5	-0.48					
24	Mar-02	4.5	5	-0.48					
25	Jun-03	4.5	2.5	-0.97					
26	Feb-04	4.5	2.5	-0.97					
27	Jun-04	4.5	2.5	-0.97					
28	Nov-04	4.5	2.5	-0.97					
29	Jun-05	4.5	2.5	-0.97					
30	Dec-05	4.5	2.5	-0.97					
31	Jun-06	4.5	5	-0.48					
32	Nov-06	4.5	5	-0.48					
33	Jun-07	4.5	9	0.30					
34	Nov-07	4.5	2	-1.07					
35	Jun-08	4.5	2.5	-0.97					
36	Nov-08	4.5	2.5	-0.97					
37	Jun-09	4.5	2.5	-0.97					
38	Nov-09	4.5	2.5	-0.97					
39	Jun-10	4.5	9	0.30					
40	Nov-10	4.5	24	3.22					
41	Jun-11	4.5	29	4.19					
42	Jul-11	4.5	2.5	-0.97					
43	Nov-11	4.5	2.5	-0.97					
44	Jun-12	4.5	2.5	-0.97					
45	Dec-12	4.5	2.5	-0.97					

h = Decision Value for CUSUM, SCL = Shewart Control Limit, k = Standard Error Shift Detection Parameter, Zi = Standardized Mean

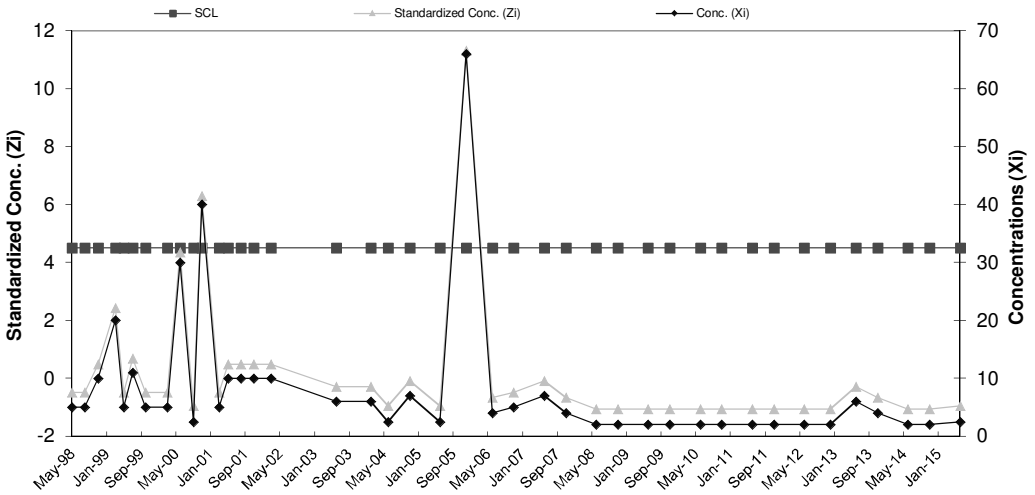


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault E - Copper

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Mar-96	10		
2	Jun-96	10		
3	Oct-96	10		
4	Nov-96	10	**7.50**	**5.17**
5	May-97	5		
6	Aug-97	5		
7	Nov-97	5		
8	Feb-98	5		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-98	4.5	5	-0.48	42	Nov-11	4.5	2	-1.06
10	Aug-98	4.5	5	-0.48	43	Jun-12	4.5	2	-1.06
11	Nov-98	4.5	10	0.48	44	Dec-12	4.5	2	-1.06
12	Mar-99	4.5	20	2.42	45	Jun-13	4.5	6	-0.29
13	May-99	4.5	5	-0.48	46	Nov-13	4.5	4	-0.68
14	Jul-99	4.5	11	0.68	47	Jun-14	4.5	2	-1.06
15	Oct-99	4.5	5	-0.48	48	Nov-14	4.5	2	-1.06
16	Mar-00	4.5	5	-0.48	49	Jun-15	4.5	2.5	-0.97
17	Jun-00	4.5	30	4.35					
18	Sep-00	4.5	2.5	-0.97					
19	Nov-00	4.5	40	6.29					
20	Mar-01	4.5	5	-0.48					
21	May-01	4.5	10	0.48					
22	Aug-01	4.5	10	0.48					
23	Nov-01	4.5	10	0.48					
24	Mar-02	4.5	10	0.48					
25	Jun-03	4.5	6	-0.29					
26	Feb-04	4.5	6	-0.29					
27	Jun-04	4.5	2.5	-0.97					
28	Nov-04	4.5	7	-0.10					
29	Jun-05	4.5	2.5	-0.97					
30	Dec-05	4.5	66	11.32					
31	Jun-06	4.5	4	-0.68					
32	Nov-06	4.5	5	-0.48					
33	Jun-07	4.5	7	-0.10					
34	Nov-07	4.5	4	-0.68					
35	Jun-08	4.5	2	-1.06					
36	Nov-08	4.5	2	-1.06					
37	Jun-09	4.5	2	-1.06					
38	Nov-09	4.5	2	-1.06					
39	Jun-10	4.5	2	-1.06					
40	Nov-10	4.5	2	-1.06					
41	Jun-11	4.5	2	-1.06					

h = Decision Value for CUSUM, SCL = Shewart Control Limit, k = Standard Error Shift Detection Parameter, Zi = Standardized Mean

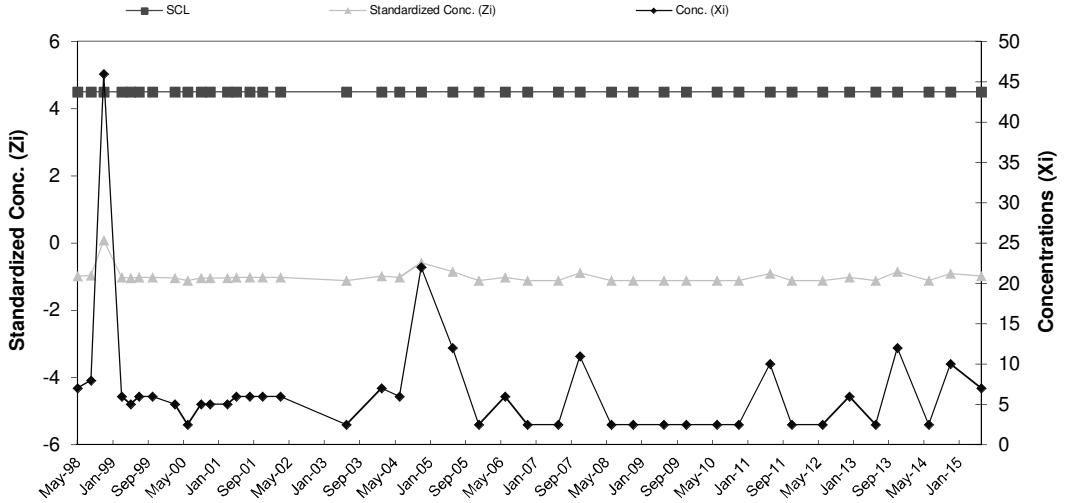


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault E - Nickel

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Mar-96	46		
2	Jun-96	10		
3	Oct-96	10		
4	Nov-96	10	**43.13**	**36.46**
5	May-97	35		
6	Aug-97	64		
7	Nov-97	116		
8	Feb-98	54		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-98	4.5	7	-0.99	42	Nov-11	4.5	2.5	-1.11
10	Aug-98	4.5	8	-0.96	43	Jun-12	4.5	2.5	-1.11
11	Nov-98	4.5	46	0.08	44	Dec-12	4.5	6	-1.02
12	Mar-99	4.5	6	-1.02	45	Jun-13	4.5	2.5	-1.11
13	May-99	4.5	5	-1.05	46	Nov-13	4.5	12	-0.85
14	Jul-99	4.5	6	-1.02	47	Jun-14	4.5	2.5	-1.11
15	Oct-99	4.5	6	-1.02	48	Nov-14	4.5	10	-0.91
16	Mar-00	4.5	5	-1.05	49	Jun-15	4.5	7	-0.99
17	Jun-00	4.5	2.5	-1.11					
18	Sep-00	4.5	5	-1.05					
19	Nov-00	4.5	5	-1.05					
20	Mar-01	4.5	5	-1.05					
21	May-01	4.5	6	-1.02					
22	Aug-01	4.5	6	-1.02					
23	Nov-01	4.5	6	-1.02					
24	Mar-02	4.5	6	-1.02					
25	Jun-03	4.5	2.5	-1.11					
26	Feb-04	4.5	7	-0.99					
27	Jun-04	4.5	6	-1.02					
28	Nov-04	4.5	22	-0.58					
29	Jun-05	4.5	12	-0.85					
30	Dec-05	4.5	2.5	-1.11					
31	Jun-06	4.5	6	-1.02					
32	Nov-06	4.5	2.5	-1.11					
33	Jun-07	4.5	2.5	-1.11					
34	Nov-07	4.5	11	-0.88					
35	Jun-08	4.5	2.5	-1.11					
36	Nov-08	4.5	2.5	-1.11					
37	Jun-09	4.5	2.5	-1.11					
38	Nov-09	4.5	2.5	-1.11					
39	Jun-10	4.5	2.5	-1.11					
40	Nov-10	4.5	2.5	-1.11					
41	Jun-11	4.5	10	-0.91					

h = Decision Value for CUSUM, SCL = Shewart Control Limit, k = Standard Error Shift Detection Parameter, Zi = Standardized Mean

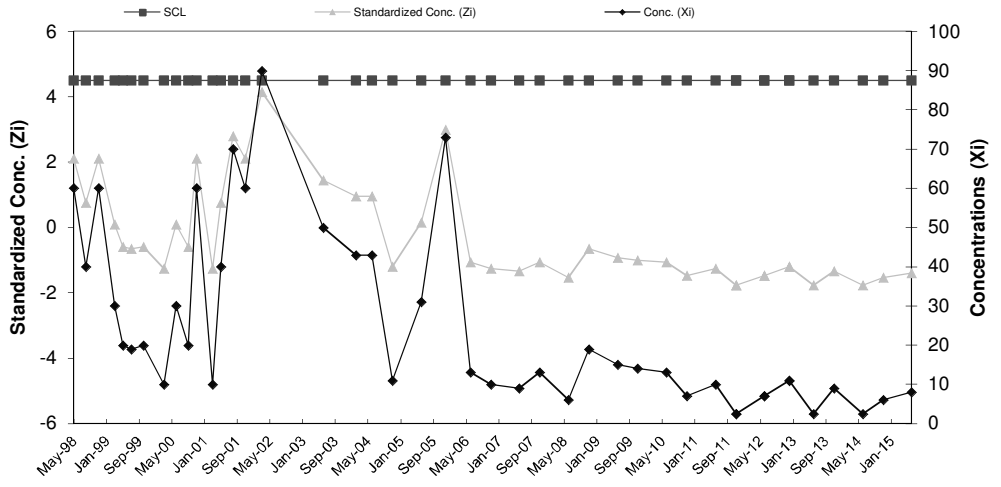


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault E - Zinc

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Mar-96	10		
2	Jun-96	10		
3	Oct-96	20		
4	Nov-96	30	**28.75**	**14.79**
5	May-97	30		
6	Aug-97	40		
7	Nov-97	40		
8	Feb-98	50		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-98	4.5	60	2.11	42	Nov-11	4.5	2.5	-1.77
10	Aug-98	4.5	40	0.76	43	Jun-12	4.5	7	-1.47
11	Nov-98	4.5	60	2.11	44	Dec-12	4.5	11	-1.20
12	Mar-99	4.5	30	0.08	45	Jun-13	4.5	2.5	-1.77
13	May-99	4.5	20	-0.59	46	Nov-13	4.5	9	-1.34
14	Jul-99	4.5	19	-0.66	47	Jun-14	4.5	2.5	-1.77
15	Oct-99	4.5	20	-0.59	48	Nov-14	4.5	6	-1.54
16	Mar-00	4.5	10	-1.27	49	Jun-15	4.5	8	-1.40
17	Jun-00	4.5	30	0.08					
18	Sep-00	4.5	20	-0.59					
19	Nov-00	4.5	60	2.11					
20	Mar-01	4.5	10	-1.27					
21	May-01	4.5	40	0.76					
22	Aug-01	4.5	70	2.79					
23	Nov-01	4.5	60	2.11					
24	Mar-02	4.5	90	4.14					
25	Jun-03	4.5	50	1.44					
26	Feb-04	4.5	43	0.96					
27	Jun-04	4.5	43	0.96					
28	Nov-04	4.5	11	-1.20					
29	Jun-05	4.5	31	0.15					
30	Dec-05	4.5	73	2.99					
31	Jun-06	4.5	13	-1.06					
32	Nov-06	4.5	10	-1.27					
33	Jun-07	4.5	9	-1.34					
34	Nov-07	4.5	13	-1.06					
35	Jun-08	4.5	6	-1.54					
36	Nov-08	4.5	19	-0.66					
37	Jun-09	4.5	15	-0.93					
38	Nov-09	4.5	14	-1.00					
39	Jun-10	4.5	13	-1.06					
40	Nov-10	4.5	7	-1.47					
41	Jun-11	4.5	10	-1.27					
42	Nov-11	4.5	2.5	-1.77					
43	Jun-12	4.5	7	-1.47					
44	Dec-12	4.5	11	-1.20					

h = Decision Value for CUSUM, SCL = Shewart Control Limit, k = Standard Error Shift Detection Parameter, Zi = Standardized Mean

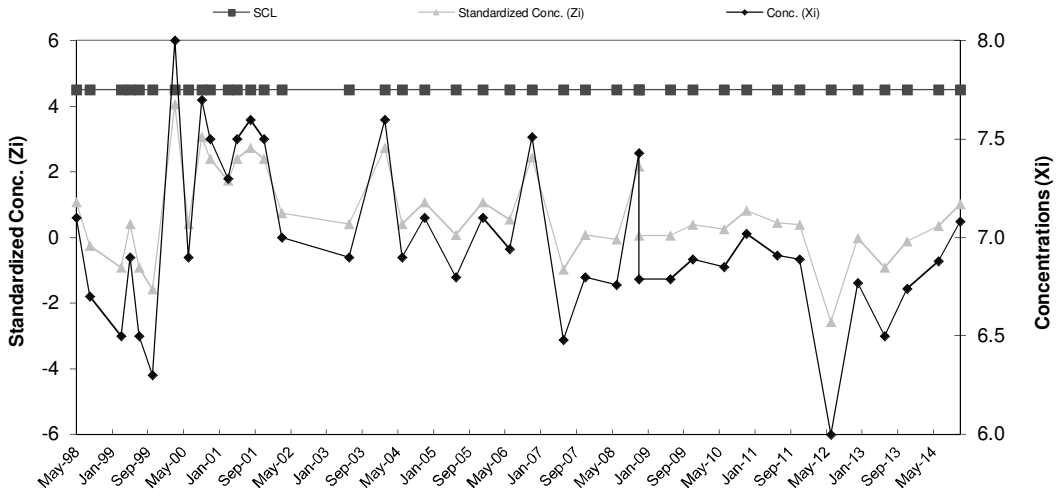


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault E - pH

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Mar-96	7.2		
2	Jun-96	7		
3	Oct-96	6.9		
4	Nov-96	7	**6.78**	**0.30**
5	May-97	6.3		
6	Aug-97	6.7		
7	Nov-97	6.5		
8	Feb-98	6.6		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-98	4.5	7.10	1.08	41	Nov-11	4.5	6.9	0.38
10	Aug-98	4.5	6.70	-0.25	42	Jun-12	4.5	6	-2.57
11	Mar-99	4.5	6.50	-0.91	43	Dec-12	4.5	6.77	-0.02
12	May-99	4.5	6.90	0.42	44	Jun-13	4.5	6.5	-0.91
13	Jul-99	4.5	6.50	-0.91	45	Nov-13	4.5	6.74	-0.12
14	Oct-99	4.5	6.30	-1.58	46	Jun-14	4.5	6.88	0.35
15	Mar-00	4.5	8.00	4.07	47	Nov-14	4.5	7.08	1.01
16	Jun-00	4.5	6.90	0.42					
17	Sep-00	4.5	7.70	3.07					
18	Nov-00	4.5	7.50	2.41					
19	Mar-01	4.5	7.30	1.74					
20	May-01	4.5	7.50	2.41					
21	Aug-01	4.5	7.60	2.74					
22	Nov-01	4.5	7.50	2.41					
23	Mar-02	4.5	7.00	0.75					
24	Jun-03	4.5	6.90	0.42					
25	Feb-04	4.5	7.60	2.74					
26	Jun-04	4.5	6.90	0.42					
27	Nov-04	4.5	7.10	1.08					
28	Jun-05	4.5	6.80	0.08					
29	Dec-05	4.5	7.10	1.08					
30	Jun-06	4.5	6.94	0.55					
31	Nov-06	4.5	7.51	2.44					
32	Jun-07	4.5	6.48	-0.98					
33	Nov-07	4.5	6.80	0.08					
34	Jun-08	4.5	6.76	-0.05					
35	Nov-08	4.5	7.43	2.17					
35	Nov-08	4.5	6.79	0.05					
36	Jun-09	4.5	6.79	0.05					
37	Nov-09	4.5	6.89	0.38					
38	Jun-10	4.5	6.85	0.25					
39	Nov-10	4.5	7.02	0.81					
40	Jun-11	4.5	6.91	0.45					

h = Decision Value for CUSUM, SCL = Shewart Control Limit, k = Standard Error Shift Detection Parameter, Zi = Standardized Mean

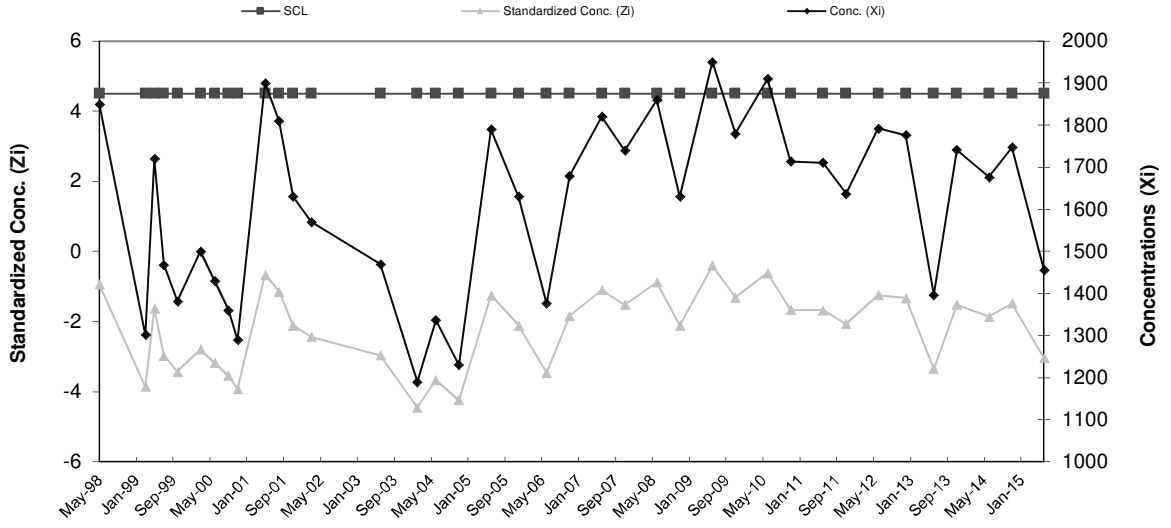


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault E - SpC

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Mar-96	2000		
2	Jun-96	2400		
3	Oct-96	2000		
4	Nov-96	1800	**2,026.25**	**187.84**
5	May-97	2120		
6	Aug-97	1840		
7	Nov-97	2100		
8	Feb-98	1950		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-98	4.5	1850	-0.94	39	Nov-11	4.5	1637	-2.07
10	Mar-99	4.5	1302	-3.86	40	Jun-12	4.5	1792	-1.25
11	May-99	4.5	1720	-1.63	41	Dec-12	4.5	1776	-1.33
12	Jul-99	4.5	1468	-2.97	42	Jun-13	4.5	1397	-3.35
13	Oct-99	4.5	1382	-3.43	43	Nov-13	4.5	1741	-1.52
14	Mar-00	4.5	1500	-2.80	44	Jun-14	4.5	1677	-1.86
15	Jun-00	4.5	1430	-3.17	45	Nov-14	4.5	1747	-1.49
16	Sep-00	4.5	1360	-3.55	46	Jun-15	4.5	1456	-3.04
17	Nov-00	4.5	1290	-3.92					
18	May-01	4.5	1900	-0.67					
19	Aug-01	4.5	1810	-1.15					
20	Nov-01	4.5	1630	-2.11					
21	Mar-02	4.5	1570	-2.43					
22	Jun-03	4.5	1470	-2.96					
23	Feb-04	4.5	1190	-4.45					
24	Jun-04	4.5	1337	-3.67					
25	Nov-04	4.5	1230	-4.24					
26	Jun-05	4.5	1790	-1.26					
27	Dec-05	4.5	1630	-2.11					
28	Jun-06	4.5	1376	-3.46					
29	Nov-06	4.5	1680	-1.84					
30	Jun-07	4.5	1820	-1.10					
31	Nov-07	4.5	1740	-1.52					
32	Jun-08	4.5	1860	-0.89					
33	Nov-08	4.5	1630	-2.11					
34	Jun-09	4.5	1950	-0.41					
35	Nov-09	4.5	1780	-1.31					
36	Jun-10	4.5	1910	-0.62					
37	Nov-10	4.5	1714	-1.66					
38	Jun-11	4.5	1711	-1.68					

h = Decision Value for CUSUM, SCL = Shewart Control Limit, k = Standard Error Shift Detection Parameter, Zi = Standardized Mean

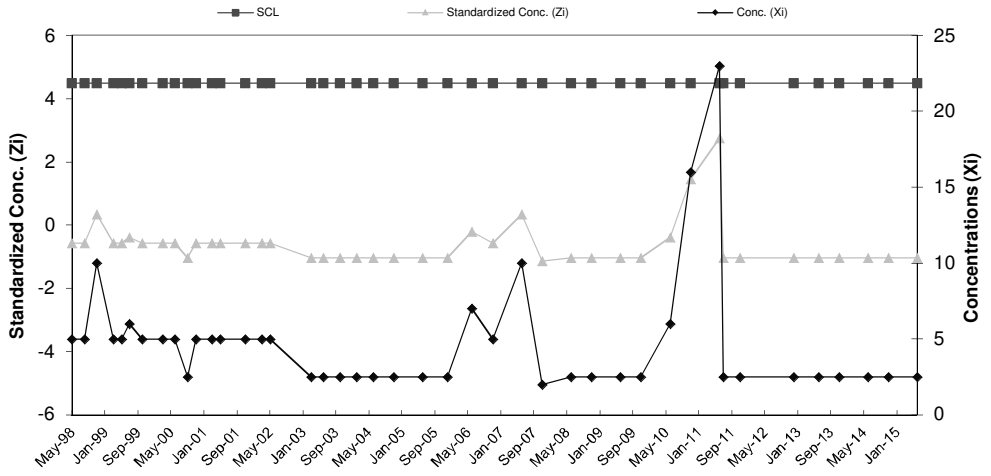


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault F - Chromium

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

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-98	4.5	5	-0.58	44	Jul-11	4.5	2.5	-1.04
10	Aug-98	4.5	5	-0.58	45	Nov-11	4.5	2.5	-1.04
11	Nov-98	4.5	10	0.35	46	Dec-12	4.5	2.5	-1.04
12	Mar-99	4.5	5	-0.58	47	Jun-13	4.5	2.5	-1.04
13	May-99	4.5	5	-0.58	48	Nov-13	4.5	2.5	-1.04
14	Jul-99	4.5	6	-0.39	49	Jun-14	4.5	2.5	-1.04
15	Oct-99	4.5	5	-0.58	50	Nov-14	4.5	2.5	-1.04
16	Mar-00	4.5	5	-0.58	51	Jun-15	4.5	2.5	-1.04
17	Jun-00	4.5	5	-0.58					
18	Sep-00	4.5	2.5	-1.04					
19	Nov-00	4.5	5	-0.58					
20	Mar-01	4.5	5	-0.58					
21	May-01	4.5	5	-0.58					
22	Nov-01	4.5	5	-0.58					
23	Mar-02	4.5	5	-0.58					
24	May-02	4.5	5	-0.58					
25	Mar-03	4.5	2.5	-1.04					
26	Jun-03	4.5	2.5	-1.04					
27	Oct-03	4.5	2.5	-1.04					
28	Feb-04	4.5	2.5	-1.04					
29	Jun-04	4.5	2.5	-1.04					
30	Nov-04	4.5	2.5	-1.04					
31	Jun-05	4.5	2.5	-1.04					
32	Dec-05	4.5	2.5	-1.04					
33	Jun-06	4.5	7	-0.21					
34	Nov-06	4.5	5	-0.58					
35	Jun-07	4.5	10	0.35					
36	Nov-07	4.5	2	-1.14					
37	Jun-08	4.5	2.5	-1.04					
38	Nov-08	4.5	2.5	-1.04					
39	Jun-09	4.5	2.5	-1.04					
40	Nov-09	4.5	2.5	-1.04					
41	Jun-10	4.5	6	-0.39					
42	Nov-10	4.5	16	1.46					
43	Jun-11	4.5	23	2.75					

h = Decision Value for CUSUM, SCL = Shewart Control Limit, k = Standard Error Shift Detection Parameter, Zi = Standardized Mean

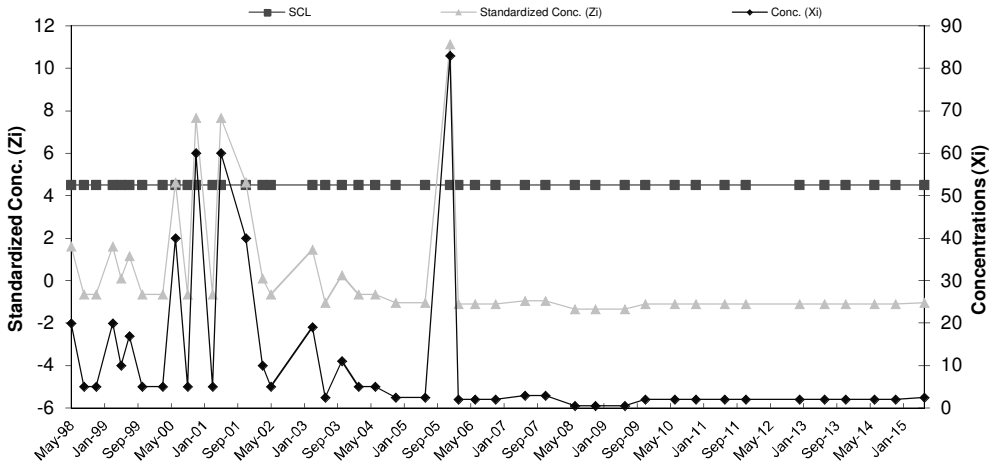


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault F - Copper

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	10		
2	Aug-95	10		
3	Jun-96	10		
4	Aug-96	20	**9.38**	**6.61**
5	Nov-96	10		
6	Aug-97	5		
7	Nov-97	5		
8	Feb-98	5		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-98	4.5	20	1.61	44	Jun-11	4.5	2	-1.12
10	Aug-98	4.5	5	-0.66	45	Nov-11	4.5	2	-1.12
11	Nov-98	4.5	5	-0.66	46	Dec-12	4.5	2	-1.12
12	Mar-99	4.5	20	1.61	47	Jun-13	4.5	2	-1.12
13	May-99	4.5	10	0.09	48	Nov-13	4.5	2	-1.12
14	Jul-99	4.5	17	1.15	49	Jun-14	4.5	2	-1.12
15	Oct-99	4.5	5	-0.66	50	Nov-14	4.5	2	-1.12
16	Mar-00	4.5	5	-0.66	51	Jun-15	4.5	2.5	-1.04
17	Jun-00	4.5	40	4.63					
18	Sep-00	4.5	5	-0.66					
19	Nov-00	4.5	60	7.66					
20	Mar-01	4.5	5	-0.66					
21	May-01	4.5	60	7.66					
22	Nov-01	4.5	40	4.63					
23	Mar-02	4.5	10	0.09					
24	May-02	4.5	5	-0.66					
25	Mar-03	4.5	19	1.46					
26	Jun-03	4.5	2.5	-1.04					
27	Oct-03	4.5	11	0.25					
28	Feb-04	4.5	5	-0.66					
29	Jun-04	4.5	5	-0.66					
30	Nov-04	4.5	2.5	-1.04					
31	Jun-05	4.5	2.5	-1.04					
32	Dec-05	4.5	83	11.14					
33	Feb-06	4.5	2	-1.12					
34	Jun-06	4.5	2	-1.12					
35	Nov-06	4.5	2	-1.12					
36	Jun-07	4.5	3	-0.97					
37	Nov-07	4.5	3	-0.97					
38	Jun-08	4.5	0.5	-1.34					
39	Nov-08	4.5	0.5	-1.34					
40	Jun-09	4.5	0.5	-1.34					
41	Nov-09	4.5	2	-1.12					
42	Jun-10	4.5	2	-1.12					
43	Nov-10	4.5	2	-1.12					

h = Decision Value for CUSUM, SCL = Shewart Control Limit, k = Standard Error Shift Detection Parameter, Zi = Standardized Mean

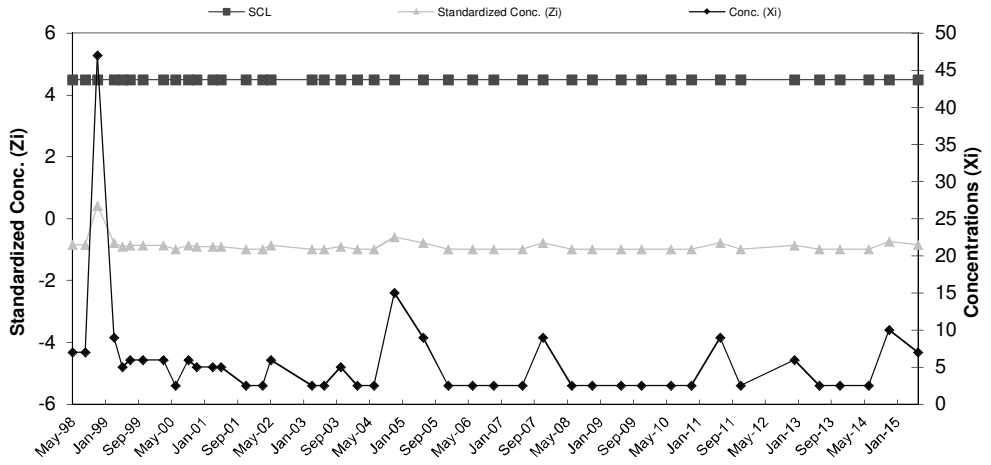


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault F - Nickel

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	15		
2	Aug-95	20		
3	Jun-96	10		
4	Aug-96	10	**33.88**	**31.96**
5	Nov-96	10		
6	Aug-97	64		
7	Nov-97	93		
8	Feb-98	49		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-98	4.5	7	-0.84	43	Jun-11	4.5	9	-0.78
10	Aug-98	4.5	7	-0.84	44	Nov-11	4.5	2.5	-0.98
11	Nov-98	4.5	47	0.41	45	Dec-12	4.5	6	-0.87
12	Mar-99	4.5	9	-0.78	46	Jun-13	4.5	2.5	-0.98
13	May-99	4.5	5	-0.90	47	Nov-13	4.5	2.5	-0.98
14	Jul-99	4.5	6	-0.87	48	Jun-14	4.5	2.5	-0.98
15	Oct-99	4.5	6	-0.87	49	Nov-14	4.5	10	-0.75
16	Mar-00	4.5	6	-0.87	50	Jun-15	4.5	7	-0.84
17	Jun-00	4.5	2.5	-0.98					
18	Sep-00	4.5	6	-0.87					
19	Nov-00	4.5	5	-0.90					
20	Mar-01	4.5	5	-0.90					
21	May-01	4.5	5	-0.90					
22	Nov-01	4.5	2.5	-0.98					
23	Mar-02	4.5	2.5	-0.98					
24	May-02	4.5	6	-0.87					
25	Mar-03	4.5	2.5	-0.98					
26	Jun-03	4.5	2.5	-0.98					
27	Oct-03	4.5	5	-0.90					
28	Feb-04	4.5	2.5	-0.98					
29	Jun-04	4.5	2.5	-0.98					
30	Nov-04	4.5	15	-0.59					
31	Jun-05	4.5	9	-0.78					
32	Dec-05	4.5	2.5	-0.98					
33	Jun-06	4.5	2.5	-0.98					
34	Nov-06	4.5	2.5	-0.98					
35	Jun-07	4.5	2.5	-0.98					
36	Nov-07	4.5	9	-0.78					
37	Jun-08	4.5	2.5	-0.98					
38	Nov-08	4.5	2.5	-0.98					
39	Jun-09	4.5	2.5	-0.98					
40	Nov-09	4.5	2.5	-0.98					
41	Jun-10	4.5	2.5	-0.98					
42	Nov-10	4.5	2.5	-0.98					

h = Decision Value for CUSUM, SCL = Shewart Control Limit, k = Standard Error Shift Detection Parameter, Zi = Standardized Mean

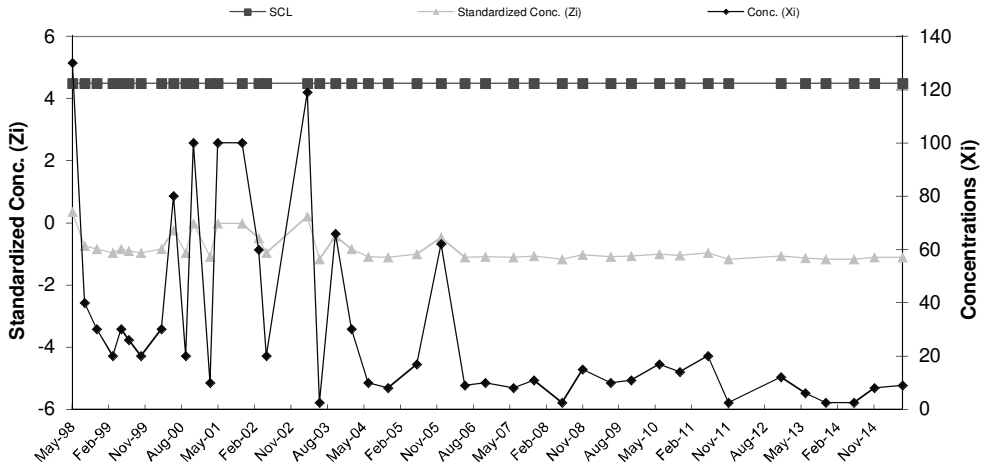


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault F - Zinc

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	190		
2	Aug-95	220		
3	Jun-96	10		
4	Aug-96	50	**101.24**	**83.60**
5	Nov-96	30		
6	Aug-97	20		
7	Nov-97	130		
8	Feb-98	160		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-98	4.5	130	0.34	43	Jun-11	4.5	20	-0.97
10	Aug-98	4.5	40	-0.73	44	Nov-11	4.5	2.5	-1.18
11	Nov-98	4.5	30	-0.85	45	Dec-12	4.5	12	-1.07
12	Mar-99	4.5	20	-0.97	46	Jun-13	4.5	6	-1.14
13	May-99	4.5	30	-0.85	47	Nov-13	4.5	2.5	-1.18
14	Jul-99	4.5	26	-0.90	48	Jun-14	4.5	2.5	-1.18
15	Oct-99	4.5	20	-0.97	49	Nov-14	4.5	8	-1.12
16	Mar-00	4.5	30	-0.85	50	Jun-15	4.5	9	-1.10
17	Jun-00	4.5	80	-0.25					
18	Sep-00	4.5	20	-0.97					
19	Nov-00	4.5	100	-0.01					
20	Mar-01	4.5	10	-1.09					
21	May-01	4.5	100	-0.01					
22	Nov-01	4.5	100	-0.01					
23	Mar-02	4.5	60	-0.49					
24	May-02	4.5	20	-0.97					
25	Mar-03	4.5	119	0.21					
26	Jun-03	4.5	2.5	-1.18					
27	Oct-03	4.5	66	-0.42					
28	Feb-04	4.5	30	-0.85					
29	Jun-04	4.5	10	-1.09					
30	Nov-04	4.5	8	-1.12					
31	Jun-05	4.5	17	-1.01					
32	Dec-05	4.5	62	-0.47					
33	Jun-06	4.5	9	-1.10					
34	Nov-06	4.5	10	-1.09					
35	Jun-07	4.5	8	-1.12					
36	Nov-07	4.5	11	-1.08					
37	Jun-08	4.5	2.5	-1.18					
38	Nov-08	4.5	15	-1.03					
39	Jun-09	4.5	10	-1.09					
40	Nov-09	4.5	11	-1.08					
41	Jun-10	4.5	17	-1.01					
42	Nov-10	4.5	14	-1.04					

h = Decision Value for CUSUM, SCL = Shewart Control Limit, k = Standard Error Shift Detection Parameter, Zi = Standardized Mean

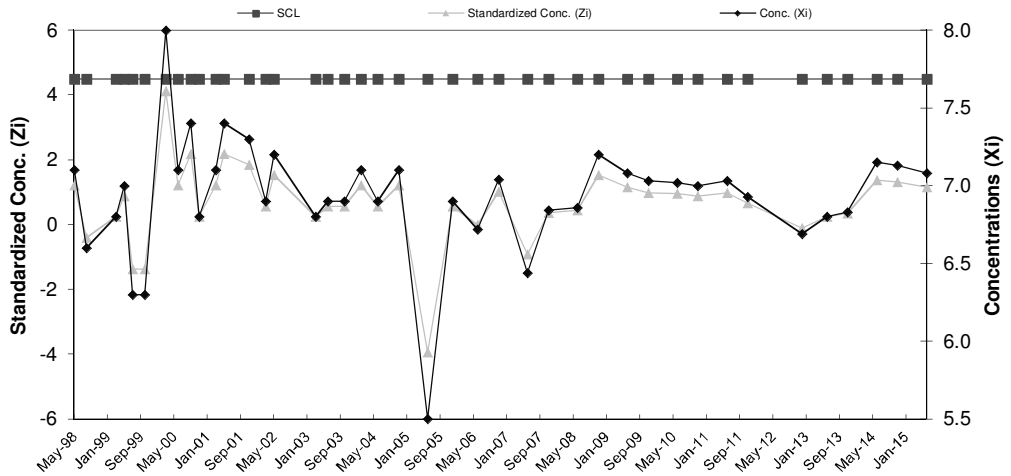


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault F - pH

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	6.8		
2	Aug-95	6.8		
3	Jun-96	6.8		
4	Aug-96	7.1	**6.73**	**0.31**
5	Nov-96	7		
6	Aug-97	6.1		
7	Nov-97	6.7		
8	Feb-98	6.5		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-98	4.5	7.10	1.21	42	Jun-11	4.5	7.0	0.98
10	Aug-98	4.5	6.60	-0.40	43	Nov-11	4.5	6.93	0.66
11	Mar-99	4.5	6.80	0.24	44	Dec-12	4.5	6.69	-0.11
12	May-99	4.5	7.00	0.89	45	Jun-13	4.5	6.8	0.24
13	Jul-99	4.5	6.30	-1.37	46	Nov-13	4.5	6.83	0.34
14	Oct-99	4.5	6.30	-1.37	47	Jun-14	4.5	7.15	1.37
15	Mar-00	4.5	8.00	4.11	48	Nov-14	4.5	7.13	1.30
16	Jun-00	4.5	7.10	1.21	49	Jun-15	4.5	7.08	1.14
17	Sep-00	4.5	7.40	2.17					
18	Nov-00	4.5	6.80	0.24					
19	Mar-01	4.5	7.10	1.21					
20	May-01	4.5	7.40	2.17					
21	Nov-01	4.5	7.30	1.85					
22	Mar-02	4.5	6.90	0.56					
23	May-02	4.5	7.20	1.53					
24	Mar-03	4.5	6.80	0.24					
25	Jun-03	4.5	6.90	0.56					
26	Oct-03	4.5	6.90	0.56					
27	Feb-04	4.5	7.10	1.21					
28	Jun-04	4.5	6.90	0.56					
29	Nov-04	4.5	7.10	1.21					
30	Jun-05	4.5	5.50	-3.94					
31	Dec-05	4.5	6.90	0.56					
32	Jun-06	4.5	6.72	-0.02					
33	Nov-06	4.5	7.04	1.01					
34	Jun-07	4.5	6.44	-0.92					
35	Nov-07	4.5	6.84	0.37					
36	Jun-08	4.5	6.86	0.43					
37	Nov-08	4.5	7.20	1.53					
38	Jun-09	4.5	7.08	1.14					
39	Nov-09	4.5	7.03	0.98					
40	Jun-10	4.5	7.02	0.95					
41	Nov-10	4.5	7.00	0.89					

h = Decision Value for CUSUM, SCL = Shewart Control Limit, k = Standard Error Shift Detection Parameter, Zi = Standardized Mean

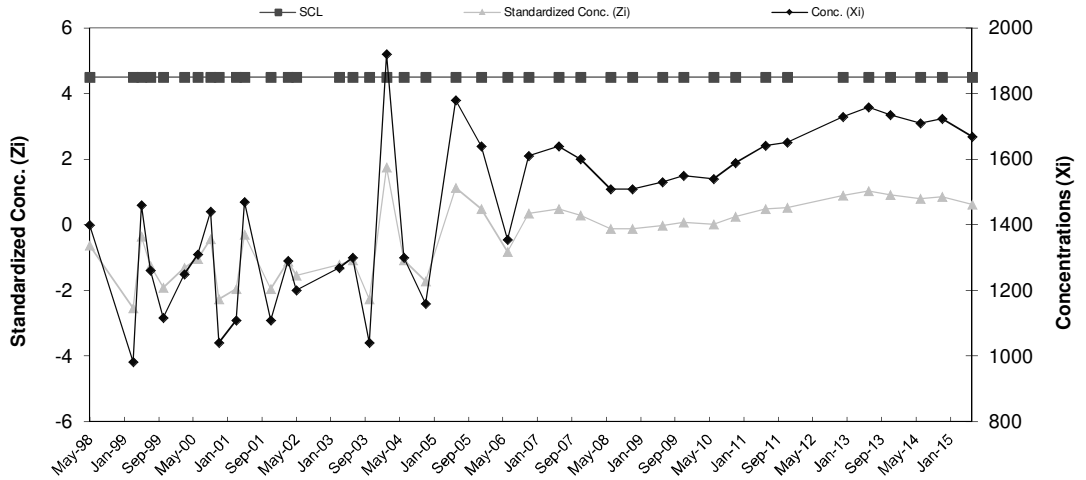


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault F - SpC

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	1400		
2	Aug-95	1100		
3	Jun-96	1600		
4	Aug-96	1500	**1,535.00**	**218.31**
5	Nov-96	1600		
6	Aug-97	1530		
7	Nov-97	1800		
8	Feb-98	1750		

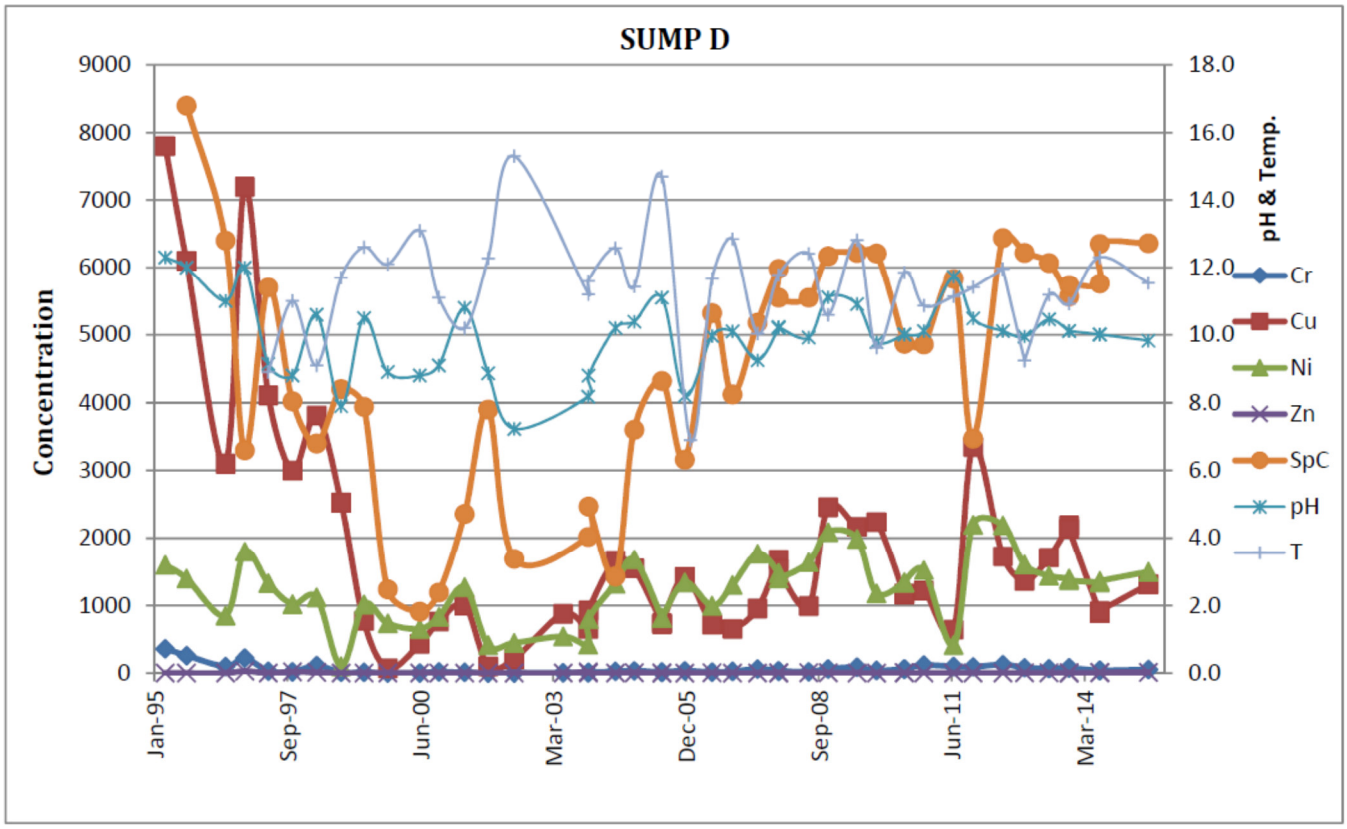
Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-98	4.5	1400	-0.62	41	Jun-11	4.5	1642	0.49
10	Mar-99	4.5	982	-2.53	42	Nov-11	4.5	1651	0.53
11	May-99	4.5	1460	-0.34	43	Dec-12	4.5	1729	0.89
12	Jul-99	4.5	1262	-1.25	44	Jun-13	4.5	1759	1.03
13	Oct-99	4.5	1116	-1.92	45	Nov-13	4.5	1736	0.92
14	Mar-00	4.5	1250	-1.31	46	Jun-14	4.5	1710	0.80
15	Jun-00	4.5	1310	-1.03	47	Nov-14	4.5	1724	0.87
16	Sep-00	4.5	1440	-0.44	48	Jun-15	4.5	1669	0.61
17	Nov-00	4.5	1040	-2.27					
18	Mar-01	4.5	1110	-1.95					
19	May-01	4.5	1470	-0.30					
20	Nov-01	4.5	1110	-1.95					
21	Mar-02	4.5	1290	-1.12					
22	May-02	4.5	1200	-1.53					
23	Mar-03	4.5	1270	-1.21					
24	Jun-03	4.5	1300	-1.08					
25	Oct-03	4.5	1040	-2.27					
26	Feb-04	4.5	1920	1.76					
27	Jun-04	4.5	1300	-1.08					
28	Nov-04	4.5	1160	-1.72					
29	Jun-05	4.5	1780	1.12					
30	Dec-05	4.5	1640	0.48					
31	Jun-06	4.5	1355	-0.82					
32	Nov-06	4.5	1610	0.34					
33	Jun-07	4.5	1640	0.48					
34	Nov-07	4.5	1600	0.30					
35	Jun-08	4.5	1510	-0.11					
36	Nov-08	4.5	1510	-0.11					
37	Jun-09	4.5	1530	-0.02					
38	Nov-09	4.5	1550	0.07					
39	Jun-10	4.5	1540	0.02					
40	Nov-10	4.5	1590	0.25					

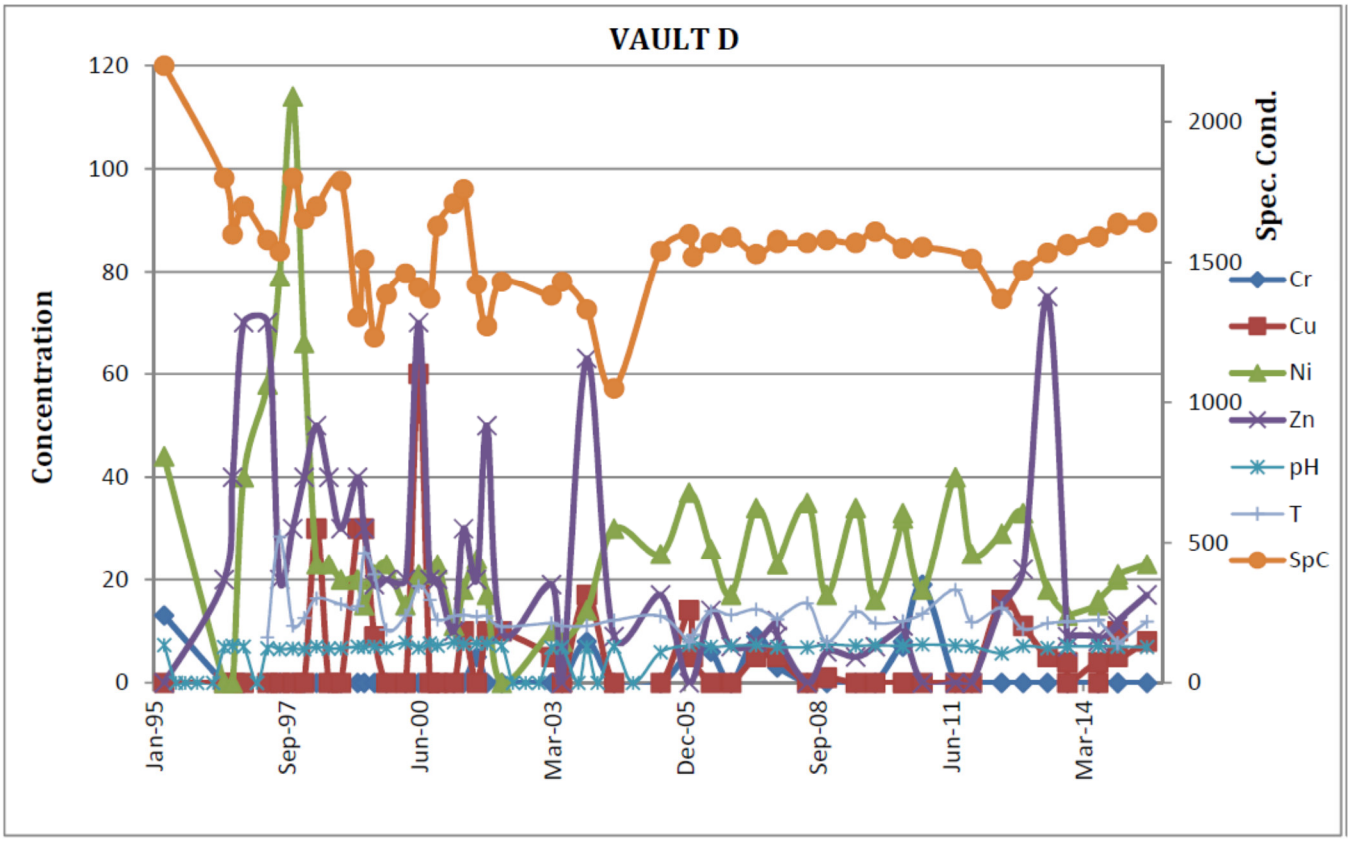
h = Decision Value for CUSUM, SCL = Shewart Control Limit, k = Standard Error Shift Detection Parameter, Zi = Standardized Mean

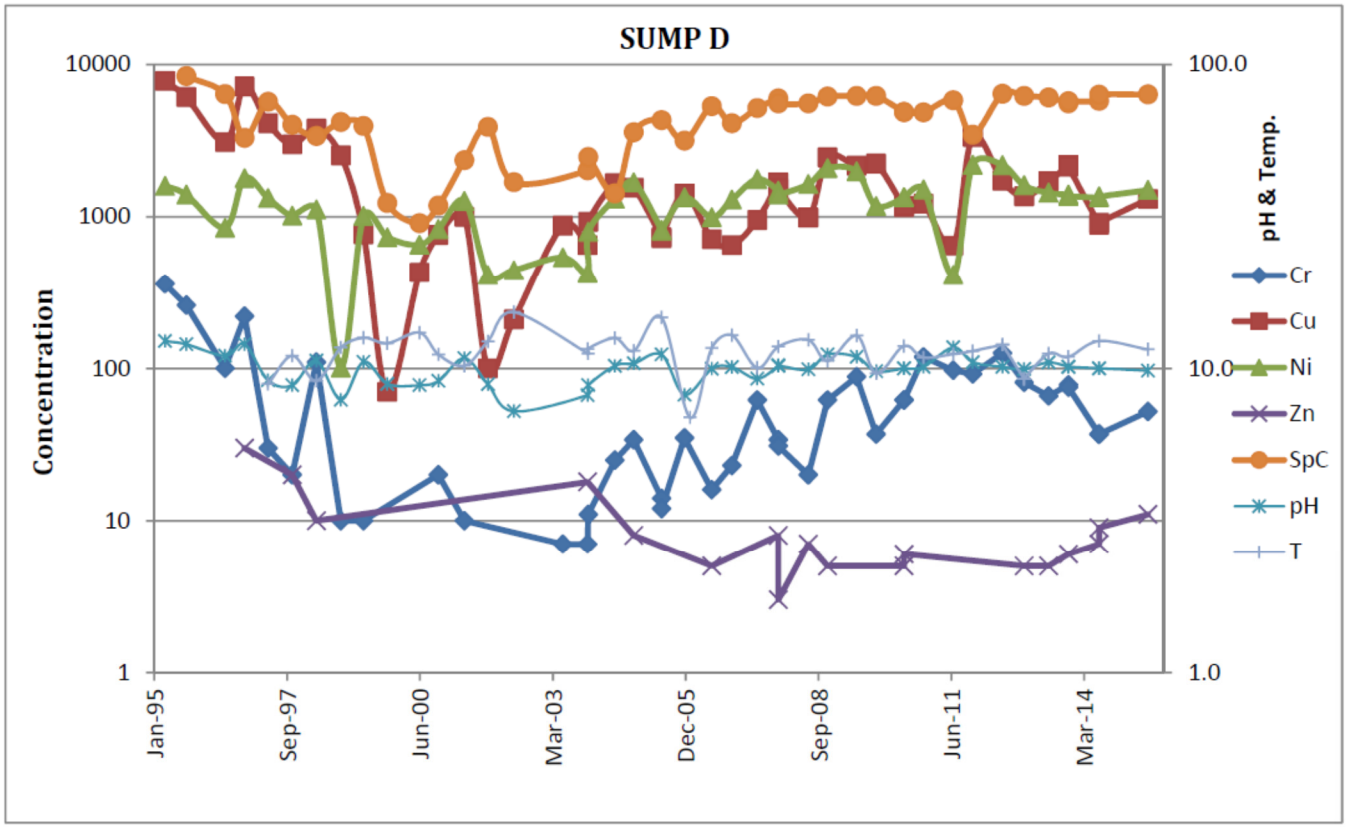


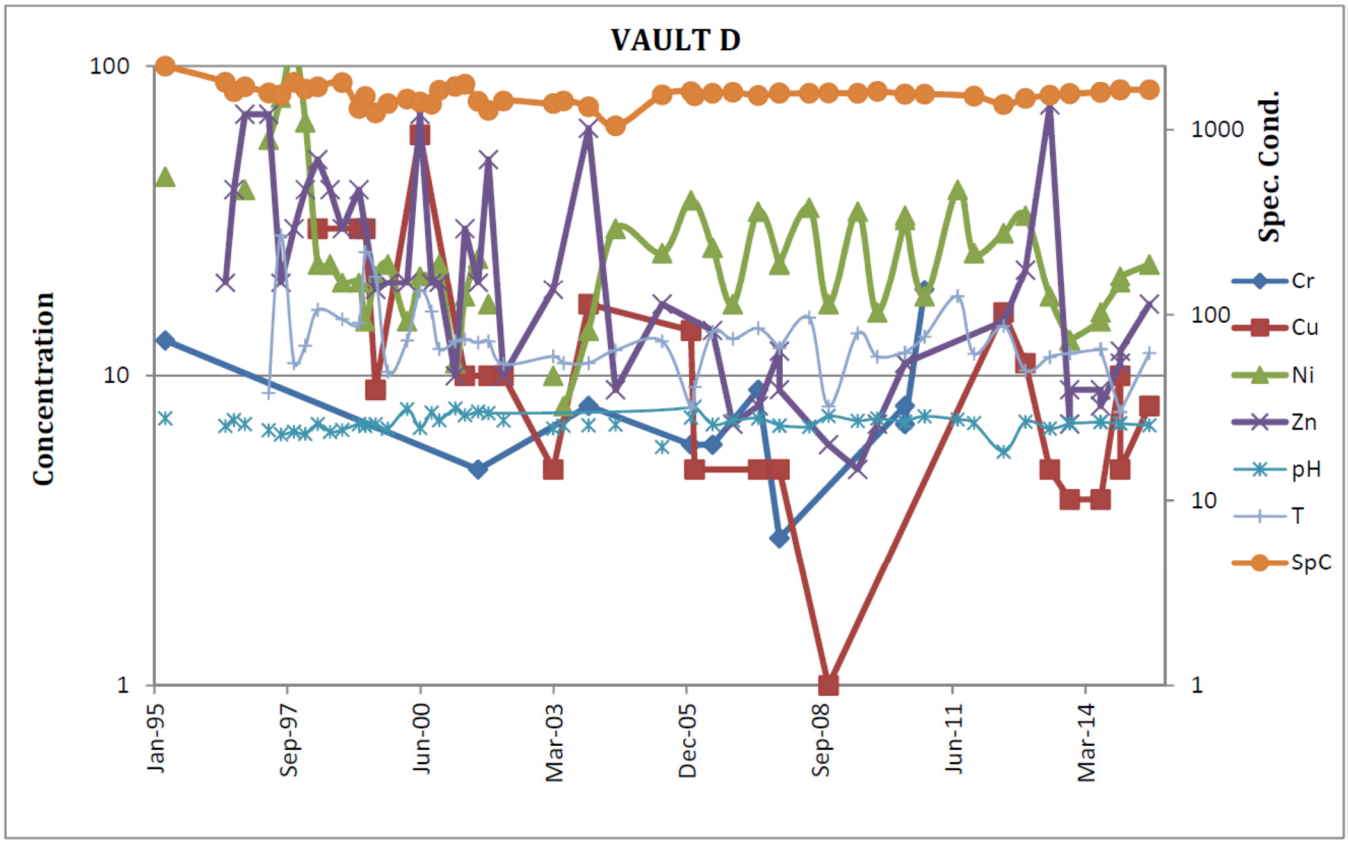
APPENDIX C

Further Evaluation of Vault D Trends


SUMP D
Concentration
pH & Temp.
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
18.0
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
Jan-95
Sep-97
Jun-00
Mar-03
Dec-05
Sep-08
Jun-11
Mar-14
Cr
Cu
Ni
Zn
SpC
pH
T


VAULT D
Concentration
Spec. Cond.
120
100
80
60
40
20
0
2000
1500
1000
500
0
Jan-95
Sep-97
Jun-00
Mar-03
Dec-05
Sep-08
Jun-11
Mar-14
Cr
Cu
Ni
Zn
pH
T
SpC


SUMP D
Concentration
10000
1000
100
10
1
100.0
10.0
1.0
pH & Temp.
Cr
Cu
Ni
Zn
SpC
pH
T
Jan-95
Sep-97
Jun-00
Mar-03
Dec-05
Sep-08
Jun-11
Mar-14


VAULT D
Concentration
100
10
1
1000
100
10
1
Spec. Cond.
Cr
Cu
Ni
Zn
pH
T
SpC
Jan-95
Sep-97
Jun-00
Mar-03
Dec-05
Sep-08
Jun-11
Mar-14

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