

OBG

PART OF RAMBOLL

2019 ANNUAL REPORT – FINAL REPORT

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

**RACER TRUST
Detroit, Michigan**

February 2020

FEBRUARY 25, 2020 | CLIENT # 15388 | PROJECT # 72202

Landfill Leak Detection System Coldwater Road Landfill MID 005 356 860

Flint, Michigan

Prepared for: RACER Trust
Detroit, Michigan



CLIFFORD S. YANTZ
SENIOR HYDROGEOLOGIST
O'BRIEN & GERE ENGINEERS, INC., PART OF RAMBOLL

February 25, 2020

Mr. Jacob Runge

Environmental Engineer

Materials Management Division

Michigan Department of Environment, Great Lakes, and Energy

P.O. Box 30241

Lansing, Michigan 48909-7741

RE: Landfill Leak Detection System 2019 Annual Report

Coldwater Road Landfill, Flint, Michigan

MID 005 356 860

FILE: 15388 /72202/rep

Dear **Mr. Runge**,

On behalf of Revitalizing Auto Communities Environmental Response Trust (RACER), O'Brien & Gere Engineers, Inc., part of Ramboll (OBG) is pleased to present the results of the 2019 annual leak detection system (LDS) sampling event conducted in November 2019 for the Coldwater Road Landfill site ([Figure 1](#)). A total of 11,537 gallons of liquid were removed from the leak detection vaults during 2019, and a total of 12,185 gallons of leachate were removed from the leak detection sumps during 2019. Volumes are reported in the Quarterly Status Reports.

During this event samples were collected from the six leak detection vaults (A through F). Samples from the six leachate sumps (A through F) were not collected during this event, per the Post-Closure Care Plan (PCCP) that was revised and approved on January 24, 2017. Samples from the leachate sumps are collected on an annual basis during the late spring/early summer sampling events, typically conducted in the month of June.

The vault 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). The event also included field measurements for pH, specific conductivity, and temperature.

The analytical results are summarized in the attached tables: Landfill Leak Detection Vaults – Historical Analytical Results, Inorganics and Metals ([Table 1](#)) and Landfill Sump and Vault Sampling Log ([Table 2](#)). 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 were collected on November 19, 2019 and November 20, 2019 using a peristaltic pump and tubing for each vault. A duplicate sample was collected from Vault C. 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 historical consistent concentrations for the vaults ([Table 1](#)). A review of the analytical data presented in the attached table 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, which is similar or less than the historic sample results. Historic chromium results ranged from below the method detection limit to 30 µg/L at Vault A (6/20/2011).
- Copper concentrations were not detected above the method detection limit of 5 µg/L in Vault A, Vault B, Vault C, Vault D, and Vault F. Copper was detected in Vault E (7 µg/L). The results were similar or less than historic results, which ranged from below the method detection limit to 140 µg/L at Vault C (6/20/2000).
- Nickel concentrations were not detected above the method detection limit of 5 µg/L in Vault B and Vault E. Nickel was detected in Vault A (15 µg/L), Vault C (10 µg/L), Vault D (13 µg/L), and Vault F (14 µg/L). The results were similar or less than historic results, which ranged from below the method detection limit to 125 µg/L at Vault D (11/15/1997).
- Zinc concentrations were not detected above the method detection limit of 5 µg/L in Vault A and Vault C. Zinc was detected in Vault B (8 µg/L), Vault D (8 µg/L), Vault E (5 µg/L), Vault F (6 µg/L). The results were similar or less than historic results, which ranged from below the method detection limit to 230 µg/L at Vault C (5/29/2019).
- TOC concentrations ranged from 4.6 mg/L in Vault F to 6.9 mg/L in Vault C (duplicate). The results were similar or less than historic results, which ranged from 1.8 mg/L at Vault F (11/17/2008) to 140 mg/L at Vault A (3/27/1996).
- TSS concentrations were not detected above the method detection limit of 3 mg/L, which is similar or less than historic sample results. Historic TSS results ranged from below the method detection limit to 7,100 mg/L at Vault F (11/11/1996).
- pH concentrations ranged from 6.89 in Vault A to 7.20 in Vault F. The results were within the range of the historic results, which ranged from 5.47 at Vault F (6/15/2005) to 10.01 at Vault A (1/17/2006).
- Specific conductivity ranged from 1,235 µs/cm in Vault B to 1,671 µs/cm in Vault D. The results were similar or less than historic results, which ranged from 340 µs/cm at Vault C (8/30/1995) to 3,250 µs/cm at Vault A (5/6/1999).

A duplicate sample was collected during this sample event from Vault C and exhibited values consistent with the original results (within acceptable relative percent differences [RPD]).

There were no exceedances of the Shewart control limits (SCL) during this sampling event. No other trends or spikes were observed during this monitoring event. The Shewart control charts are included as [Appendix B](#).

The next semiannual sampling event will be completed in June 2020. If you have any questions, please feel free to contact Cliff at (313) 333-0211.

Very truly yours,

O'BRIEN & GERE ENGINEERS, INC., Part of Ramboll



Clifford S. Yantz
Senior Hydrogeologist

ENCLOSURES:

Table 1 – Vaults Historical Analytical Results

Table 2 – 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

cc: David Favero – RACER Trust
Kevin Schneider – OBG

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



Clifford S. Yantz
Senior Hydrogeologist – O'Brien & Gere Engineers Inc., Part of Ramboll
Agent for RACER Trust

Date: February 25, 2020

cc: file

TABLES

TABLE 1 RACER Trust - Coldwater Road Landfill Facility Landfill Leak Detection Vaults - Historical Analytical Results Inorganics and Metals										
Indicator Parameters							Dissolved Metals (µg/L)			
Vault	Sample Date	TOC (mg/L)	TSS (mg/L)	pH	SpC	Temp	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
	19-Nov-04	4.4	4.0	--	--	--	6	<5	18	16
Duplicate	15-Jun-05	6.0	8.0	6.00	1640	13.4	<5	<5	13	21
Re-sample	17-Jan-06	5.9	12785	10.01	1630	8.4	<5	<5	13	8
	14-Feb-06	--	--	7.88	1800	8.5	--	--	14	--
	29-Jun-06	NS	NS	NS	NS	NS	NS	NS	NS	NS
Vault A	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
	14-Jul-11	--	--	--	--	--	<5	--	--	--
Duplicate	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
	25-Jun-12	6.0	6	5.75	1872	11.9	<5	6	25	10
Duplicate	5-Dec-12	5.8	2	6.76	1820	10.6	<5	<4	24	10
	5-Dec-12	5.8	3	6.76	1814	10.6	<5	<4	24	8
Vault A	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
	17-Nov-15	3.6	1	6.64	1423	11.7	<5	<5	20	5
	21-Jun-16	3.8	<3	6.93	1364	12.0	<5	<5	14	<5
	21-Jun-16	3.9	<3	6.93	1362	12.0	<5	<5	13	<5
	28-Nov-16	3.3	<3	6.82	1378	11.4	<5	<5	15	<5
	19-Jun-17	4.2	<3	6.90	1450	11.4	<5	<5	15	<5
	6-Nov-17	3.6	<3	6.16	1363	11.8	<5	<5	17	<5
	11-Jun-18	4.3	<3	6.45	1447	11.0	<5	<5	15	10
	7-Nov-18	4.1	<3	6.50	1451	6.0	<5	<5	16	6
	29-May-19	8.4	<3	7.13	1436	9.1	<5	<5	15	<5
	19-Nov-19	5.8	<3	6.89	1291	10.6	<5	<5	15	<5

See notes on page 7.

TABLE 1 RACER Trust - Coldwater Road Landfill Facility Landfill Leak Detection Vaults - Historical Analytical Results Inorganics and Metals										
Indicator Parameters							Dissolved Metals (µg/L)			
Vault	Sample Date	TOC (mg/L)	TSS (mg/L)	pH	SpC	Temp	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
Duplicate	28-Nov-06	5.5	4.0	7.46	1380	13.0	<5	<4	8	11
	28-Nov-06	4.7	--	7.17	1340	13.0	5	4	7	11
Duplicate	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
	17-Nov-08	1.7	2.0	6.89	1820	9.6	<5	1	8	15
Vault B	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
Re-sample	8-Nov-10	4	3	6.93	1911	12.2	21	<4	11	17
	1-Dec-10	--	--	6.93	--	12.2	6	--	--	--
Re-sample	20-Jun-11	3.4	1	7.03	1496	12.2	28	<4	11	16
	14-Jul-11	--	--	--	--	--	<5	--	--	--
Duplicate	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
	17-Nov-15	2.6	3	6.76	1635	11.7	<5	<5	9	10
	21-Jun-16	2.7	<3	6.89	1176	13.7	<5	<5	<5	6
	28-Nov-16	2.2	<3	6.78	1654	11.3	<5	<5	<5	5
	19-Jun-17	2.5	<3	6.80	1110	11.6	<5	<5	<5	<5
	6-Nov-17	2.6	<3	6.28	1450	12.0	<5	<5	<5	7
	11-Jun-18	2.4	<3	6.51	1064	11.4	<5	<5	<5	5
	7-Nov-18	2.9	<3	6.60	1463	5.0	<5	<5	<5	5
	7-Nov-18	2.5	<3	6.60	1450	5.0	<5	<5	6	<5
	29-May-19	6.0	<3	7.21	1058	9.8	<5	<5	<5	7
	19-Nov-19	4.8	<3	7.00	1235	9.9	<5	<5	<5	8

See notes on page 7.

TABLE 1										
RACER Trust - Coldwater Road Landfill Facility										
Landfill Leak Detection Vaults - Historical Analytical Results										
Inorganics and Metals										
Indicator Parameters							Dissolved Metals (µg/L)			
Vault	Sample Date	TOC (mg/L)	TSS (mg/L)	pH	SpC	Temp	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
Vault C	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
	17-Nov-15	4.4	0	6.84	1706	12.1	<5	<5	17	<5
	21-Jun-16	5.0	6	6.82	1795	14.5	<5	<5	11	6
	28-Nov-16	4.9	4	6.89	1808	11.1	<5	<5	9	<5
	19-Jun-17	5.0	3	6.88	1805	12.2	<5	<5	11	<5
	6-Nov-17	4.9	3	6.36	1764	11.7	<5	<5	10	<5
Duplicate	6-Nov-17	4.9	<3	6.36	1761	11.7	<5	<5	10	<5
	11-Jun-18	4.7	5	6.75	1774	12.1	<5	<5	8	<5
Duplicate	11-Jun-18	5.2	3	6.75	1789	12.1	<5	<5	8	<5
	7-Nov-18	5.3	<3	6.90	1696	4.0	<5	<5	11	<5
	29-May-19	8.0	6	7.17	1668	9.6	<5	<5	8	230
Re-sample	7-Jun-19	--	--	--	--	--	--	--	--	<5
	19-Nov-19	6.7	<3	7.08	1635	10.6	<5	<5	9	<5
Duplicate	19-Nov-19	6.9	<3	7.08	1638	10.6	<5	<5	10	<5

See notes on page 7.

TABLE 1 RACER Trust - Coldwater Road Landfill Facility Landfill Leak Detection Vaults - Historical Analytical Results Inorganics and Metals										
Indicator Parameters							Dissolved Metals (µg/L)			
Vault	Sample Date	TOC (mg/L)	TSS (mg/L)	pH	SpC	Temp	Cr	Cu	Ni	Zn
MDEQ Residential Drinking Water Criteria & RBSLs							100 (A)	1,000 (E)	100 (A)	2,400
Vault D	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
	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	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	<20	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	--	--
Vault D	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
	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
	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
	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
	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
	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
	17-Nov-15	5.7	3	6.84	1729	12.2	<5	<5	17	10
	21-Jun-16	6.9	3	7.04	1656	14.7	<5	6	13	10
	28-Nov-16	5.2	<3	6.91	1659	10.7	<5	6	17	9
	19-Jun-17	7.3	<3	6.83	1655	16.7	<5	<5	15	10
	6-Nov-17	5.9	<3	6.44	1650	11.7	<5	<5	12	6
	11-Jun-18	6.5	<3	6.82	1655	13.6	<5	<5	14	9
	7-Nov-18	6.5	<3	7.00	1619	7.0	<5	<5	35	<5
	29-May-19	9.9	<3	7.37	1583	10.2	<5	<5	13	8
	19-Nov-19	6.7	<3	7.08	1671	10.6	<5	<5	13	8

See notes on page 7.

TABLE 1 RACER Trust - Coldwater Road Landfill Facility Landfill Leak Detection Vaults - Historical Analytical Results Inorganics and Metals										
Indicator Parameters							Dissolved Metals (µg/L)			
Vault	Sample Date	TOC (mg/L)	TSS (mg/L)	pH	SpC	Temp	Cr	Cu	Ni	Zn
MDEQ Residential Drinking Water Criteria & RBSLs							100 (A)	1,000 (E)	100 (A)	2,400
Vault E	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
	18-Jun-96	9.0	76.0	7.00	2400	--	<20	<20	<20	<20
	4-Oct-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
Duplicate	23-Jun-09	3.2	10.0	6.79	1950	14.0	<5	2	<5	15
	23-Jun-09	3.0	17.0	6.79	1960	14.0	<5	2	<5	14
Duplicate	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
	8-Nov-10	5.0	3	7.02	1715	12.4	20	<4	<5	7
Re-sample	20-Jun-11	3.4	5	6.91	1711	13.0	29	<4	10	15
	14-Jul-11	--	--	--	--	--	<5	--	--	--
Duplicate	14-Nov-11	4.0	9	6.89	1637	11.7	<5	<4	<5	<5
	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
Vault E	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
Duplicate	25-Jun-15	2.9	4	6.88	1456	12.6	<5	<5	7	8
	25-Jun-15	2.9	3	6.88	1460	12.6	<5	<5	7	7
	17-Nov-15	2.7	2	6.80	1435	12.9	<5	<5	5	<5
	21-Jun-16	2.6	<3	6.75	1408	13.9	<5	<5	<5	5
Duplicate	28-Nov-16	2.3	<3	6.88	1502	11.3	<5	<5	<5	<5
	19-Jun-17	2.6	3	6.79	1431	11.9	<5	<5	<5	<5
	19-Jun-17	2.7	<3	6.79	1430	11.9	<5	<5	<5	<5
	6-Nov-17	2.5	<3	6.37	1465	11.8	<5	<5	<5	<5
	11-Jun-18	2.6	<3	6.57	1300	14.3	<5	<5	<5	5
	7-Nov-18	3.1	<3	7.20	1274	5.0	<5	<5	<5	<5
	29-May-19	5.3	<3	7.16	1339	10.4	<5	<5	<5	<5
	29-May-19	5.1	<3	7.16	1334	10.4	<5	<5	<5	<5
	19-Nov-19	5.0	<3	6.95	1383	10.6	<5	7	<5	5
	19-Nov-19	5.0	<3	6.95	1383	10.6	<5	7	<5	5

See notes on page 7.

TABLE 1 RACER Trust - Coldwater Road Landfill Facility Landfill Leak Detection Vaults - Historical Analytical Results Inorganics and Metals										
Indicator Parameters							Dissolved Metals (µg/L)			
Vault	Sample Date	TOC (mg/L)	TSS (mg/L)	pH	SpC	Temp	Cr	Cu	Ni	Zn
MDEQ Residential Drinking Water Criteria & RBSLs							100 (A)	1,000 (E)	100 (A)	2,400
Vault F	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
	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
	12-Dec-02	NS	NS	NS	NS	NS	NS	NS	NS	NS
	18-Mar-03	3.7	7.0	6.78	1270	12.4	<5	19	<5	119
	4-Jun-03	2.5	4.0	6.92	1300	10.9	<5	<5	<5	<5
	5-Oct-03	3.9	5.0	6.88	1040	13.5	<5	11	5	66
	8-Dec-03	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
	14-Feb-06	--	--	7.90	1710	7.2	--	<4	--	--
Re-sample	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
Duplicate	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
	24-Jun-08	2.8	3.0	6.86	1500	14.5	<5	<1	<5	<5
Vault F	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
Re-sample	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
	14-Jul-11	--	--	--	--	--	<5	--	--	--
	14-Nov-11	2.0	29	6.93	1651	11.4	<5	<4	<5	<5
Duplicate	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
	6-Jun-13	2.9	<1	6.78	1759	10.8	<5	<4	<5	6
Duplicate	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
Duplicate	17-Nov-15	2.1	1	6.95	1686	13.5	<5	<5	6	6
	17-Nov-15	2.1	1	6.95	1686	13.5	<5	<5	6	6
	21-Jun-16	2.4	<3	7.03	1640	14.2	<5	<5	<5	6
	28-Nov-16	1.9	3	6.84	1641	11.1	<5	<5	<5	<5
Duplicate	28-Nov-16	1.9	<3	6.84	1640	11.1	<5	<5	<5	6
	19-Jun-17	2.4	<3	6.89	1675	11.8	<5	<5	<5	<5
	6-Nov-17	2.2	<3	6.47	1626	11.0	<5	<5	<5	<5
	11-Jun-18	2.2	<3	6.75	1685	13.6	<5	<5	<5	6
Duplicate	7-Nov-18	2.9	<3	7.20	1637	5.0	<5	<5	<5	<5
	29-May-19	5.3	<3	7.13	1563	11.3	<5	<5	10	<5
	19-Nov-19	4.6	<3	7.20	1593	10.1	<5	<5	14	6

See notes on page 7.

TABLE 1 RACER Trust - Coldwater Road Landfill Facility Landfill Leak Detection Vaults - Historical Analytical Results Inorganics and Metals										
Indicator Parameters							Dissolved Metals (µg/L)			
Vault	Sample Date	TOC (mg/L)	TSS (mg/L)	pH	SpC	Temp	Cr	Cu	Ni	Zn
		MDEQ Residential Drinking Water Criteria & RBSLs					100 (A)	1,000 (E)	100 (A)	2,400

Notes: "c" - Not detected above specified detection limit.

"NS" - Not sampled - no liquid.

"SpC" - Specific conductivity in micro siemens (uS).

"Temp" - Temperature in degrees celsius.

"-" - Physical parameter not measured (instrument 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.

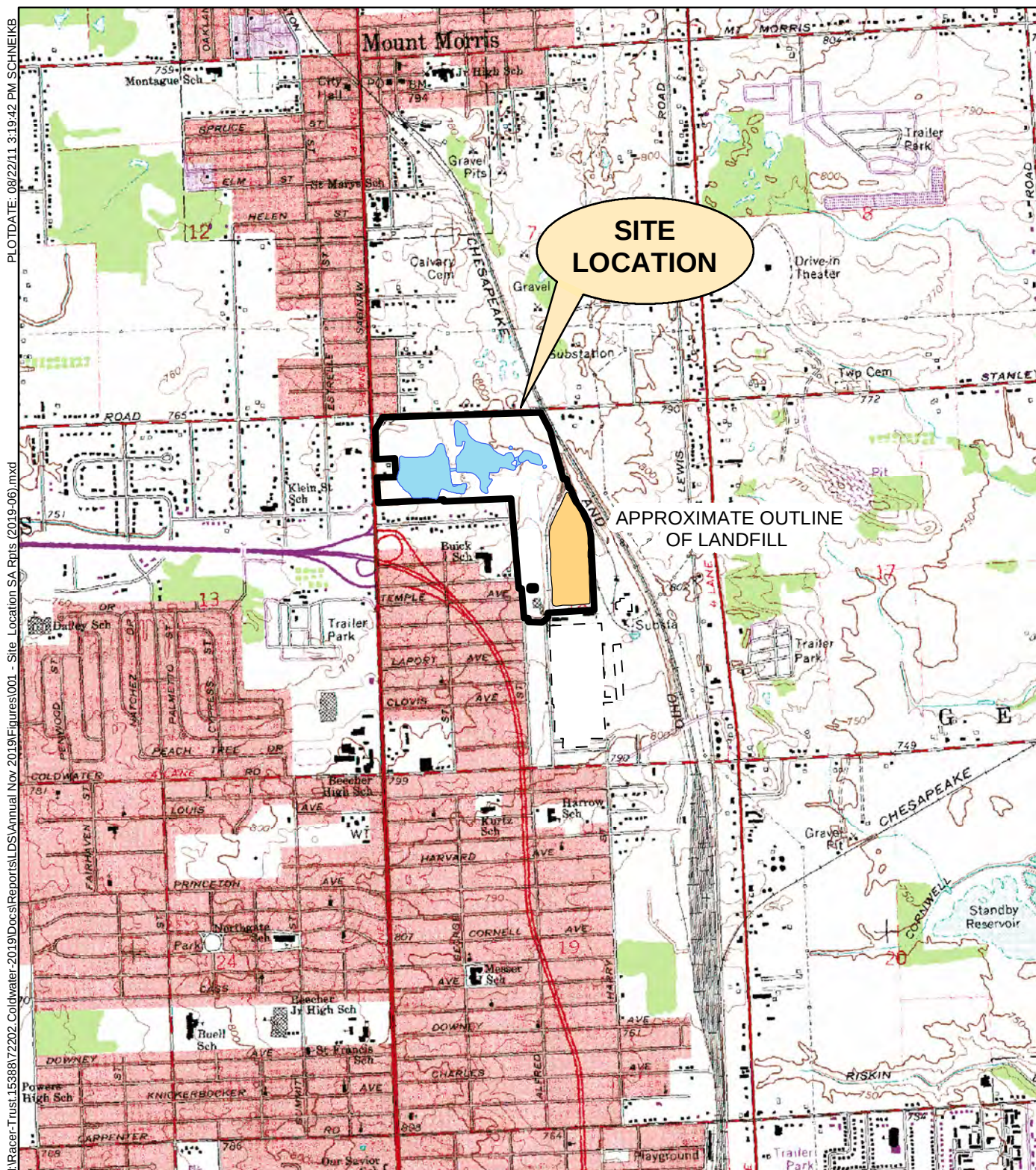
"E" - Criterion is the aesthetic drinking water value, as required by Section 20120a(5) of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA)

TABLE 2 RACER Trust - Coldwater Road Landfill Facility Landfill Leak Detection Sump and Vault Field Data November 19, 2019 and November 20, 2019						
<i>Name</i>	<i>DTW</i>	<i>Color</i>	<i>Temp</i>	<i>Spc (mS/cm)</i>	<i>pH</i>	<i>Sample Time</i>
Sump A	19.85	--	--	--	--	--
Sump B	14.11	--	--	--	--	--
Sump C	16.76	--	--	--	--	--
Sump D	19.59	--	--	--	--	--
Sump E	20.20	--	--	--	--	--
Sump F	18.85	--	--	--	--	--
<i>Name</i>	<i>DTW</i>	<i>Color</i>	<i>Temp</i>	<i>Spc (mS/cm)</i>	<i>pH</i>	<i>Sample Time</i>
Vault A	--	clear	10.6	1.33	6.89	14:10
Vault B	--	clear	9.9	1.22	7.00	14:38
Vault C	--	clear	10.6	1.67	7.08	15:09
Vault D	--	clear	10.6	1.63	7.08	15:45
Vault E	--	clear	10.6	1.41	6.95	16:15
Vault F	--	clear	10.1	1.62	7.20	9:35 (11/20/19)

Notes:

DUP-1 collected at Vault C

FIGURES



RACER TRUST
COLDWATER ROAD LANDFILL FACILITY
FLINT, MICHIGAN

SITE LOCATION MAP





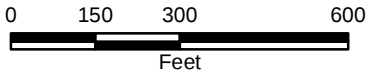
N

LEGEND

- LEACHATE COLLECTION SUMP
- ACCESS PORT FOR LEAK DETECTION VAULT
- PROPERTY BOUNDARY

RACER TRUST
COLDWATER ROAD
FLINT, MICHIGAN

**SITE LAYOUT
MAP**



FILE NO. 72202
DATE FEBRUARY 2020



O'BRIEN & GERE ENGINEERS, INC.

APPENDIX A
Analytical
Laboratory Reports



Analytical Laboratory Report

Report ID: S09544.01(01)
Generated on 12/02/2019

Report to

Attention: Clifford Yantz
O'Brien & Gere Engineers, Inc.
2260 E Saginaw St
East Lansing, MI 48823

Phone: 313-333-0211 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:
John Lavery (johnlavery@meritlabs.com)
Barbara Ball (bball@meritlabs.com)

Report Summary

Lab Sample ID(s): S09544.01-S09544.07
Project: RACER Coldwater Rd
Collected Date(s): 11/19/2019 - 11/20/2019
Submitted Date/Time: 11/20/2019 15:30
Sampled by: Kevin Schneider
P.O. #: PO

Table of Contents

Cover Page (Page 1)
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Sample Summary (Page 5)

Maya Murshak
Technical Director



Analytical Laboratory Report

General Report Notes

Analytical results relate only to the samples tested, in the condition received by the laboratory.
Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
'Not detected' indicates that parameter was not found at a level equal to or greater than the 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. Starred (*) analytes are not NELAP accredited.
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 shall not be reproduced except in full, without the written approval of Merit Laboratories, Inc.
Limits for drinking water samples, are listed as the MCL Limits (Maximum Contaminant Level Concentrations)

Report Narrative

There is no additional narrative for this analytical report



Analytical Laboratory 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
Alaska CSLAP	#17-001

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
LN	Linear
BR	Branched



Analytical Laboratory Report

Method Summary

Method	Version
E120.1	EPA Method 120.1 Revision 1982
E200.8	EPA Method 200.8 Revision 5.4
SM2540D	Standard Method 2540 D 2011
SM5310C	Standard Method 5310C 2011
SW3015A	SW 846 Method 3015A Revision 1 February 2007



Analytical Laboratory Report

Sample Summary (7 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S09544.01	Vault - A	Wastewater	11/19/19 14:10
S09544.02	Vault - B	Wastewater	11/19/19 14:38
S09544.03	Vault - C	Wastewater	11/19/19 15:09
S09544.04	Vault - D	Wastewater	11/19/19 15:45
S09544.05	Vault - E	Wastewater	11/19/19 16:15
S09544.06	Vault - F	Wastewater	11/20/19 09:35
S09544.07	DUP - 1	Wastewater	11/19/19 00:01



Analytical Laboratory Report

Lab Sample ID: S09544.01

Sample Tag: Vault - A

Collected Date/Time: 11/19/2019 14:10

Matrix: Wastewater

COC Reference: 114919

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	1L Plastic	None	Yes	2.5	IR
1	125ml Plastic	HNO3	Yes	2.5	IR
2	40ml Glass	H2SO4	Yes	2.5	IR
1	250ml Plastic	None	Yes	2.5	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Metal Digestion	Completed	SW3015A	11/21/19 13:00	CCM	

Inorganics

Method: E120.1, Run Date: 12/02/19 12:10, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Conductivity	1,291	1		umhos/cm	1		

Method: SM2540D, Run Date: 11/26/19 23:00, Analyst: DMK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Suspended Solids	Not detected	3		mg/L	1		

Method: SM5310C, Run Date: 11/26/19 16:38, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
TOC	5.8	1		mg/L	1		

Metals

Method: E200.8, Run Date: 11/21/19 16:27, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chromium, Dissolved	Not detected	0.005		mg/L	5	7440-47-3	
Copper, Dissolved	Not detected	0.005		mg/L	5	7440-50-8	
Nickel, Dissolved	0.015	0.005		mg/L	5	7440-02-0	
Zinc, Dissolved	Not detected	0.005		mg/L	5	7440-66-6	



Analytical Laboratory Report

Lab Sample ID: S09544.02

Sample Tag: Vault - B

Collected Date/Time: 11/19/2019 14:38

Matrix: Wastewater

COC Reference: 114919

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	1L Plastic	None	Yes	2.5	IR
1	125ml Plastic	HNO3	Yes	2.5	IR
2	40ml Glass	H2SO4	Yes	2.5	IR
1	250ml Plastic	None	Yes	2.5	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Metal Digestion	Completed	SW3015A	11/21/19 13:00	CCM	

Inorganics

Method: E120.1, Run Date: 12/02/19 12:14, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Conductivity	1,235	1		umhos/cm	1		

Method: SM2540D, Run Date: 11/26/19 23:00, Analyst: DMK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Suspended Solids	Not detected	3		mg/L	1		

Method: SM5310C, Run Date: 11/26/19 17:00, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
TOC	4.8	1		mg/L	1		

Metals

Method: E200.8, Run Date: 11/21/19 16:29, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chromium, Dissolved	Not detected	0.005		mg/L	5	7440-47-3	
Copper, Dissolved	Not detected	0.005		mg/L	5	7440-50-8	
Nickel, Dissolved	Not detected	0.005		mg/L	5	7440-02-0	
Zinc, Dissolved	0.008	0.005		mg/L	5	7440-66-6	



Analytical Laboratory Report

Lab Sample ID: S09544.03

Sample Tag: Vault - C

Collected Date/Time: 11/19/2019 15:09

Matrix: Wastewater

COC Reference: 114919

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	1L Plastic	None	Yes	2.5	IR
1	125ml Plastic	HNO3	Yes	2.5	IR
2	40ml Glass	H2SO4	Yes	2.5	IR
1	250ml Plastic	None	Yes	2.5	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Metal Digestion	Completed	SW3015A	11/21/19 13:00	CCM	

Inorganics

Method: E120.1, Run Date: 12/02/19 12:16, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Conductivity	1,635	1		umhos/cm	1		

Method: SM2540D, Run Date: 11/26/19 23:00, Analyst: DMK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Suspended Solids	Not detected	3		mg/L	1		

Method: SM5310C, Run Date: 11/26/19 17:22, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
TOC	6.7	1		mg/L	1		

Metals

Method: E200.8, Run Date: 11/21/19 16:29, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chromium, Dissolved	Not detected	0.005		mg/L	5	7440-47-3	
Copper, Dissolved	Not detected	0.005		mg/L	5	7440-50-8	
Nickel, Dissolved	0.009	0.005		mg/L	5	7440-02-0	
Zinc, Dissolved	Not detected	0.005		mg/L	5	7440-66-6	



Analytical Laboratory Report

Lab Sample ID: S09544.04

Sample Tag: Vault - D

Collected Date/Time: 11/19/2019 15:45

Matrix: Wastewater

COC Reference: 114919

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	1L Plastic	None	Yes	2.5	IR
1	125ml Plastic	HNO3	Yes	2.5	IR
2	40ml Glass	H2SO4	Yes	2.5	IR
1	250ml Plastic	None	Yes	2.5	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Metal Digestion	Completed	SW3015A	11/21/19 13:00	CCM	

Inorganics

Method: E120.1, Run Date: 12/02/19 12:18, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Conductivity	1,671	1		umhos/cm	1		

Method: SM2540D, Run Date: 11/26/19 23:00, Analyst: DMK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Suspended Solids	Not detected	3		mg/L	1		

Method: SM5310C, Run Date: 11/26/19 17:44, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
TOC	6.7	1		mg/L	1		

Metals

Method: E200.8, Run Date: 11/21/19 16:30, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chromium, Dissolved	Not detected	0.005		mg/L	5	7440-47-3	
Copper, Dissolved	Not detected	0.005		mg/L	5	7440-50-8	
Nickel, Dissolved	0.013	0.005		mg/L	5	7440-02-0	
Zinc, Dissolved	0.008	0.005		mg/L	5	7440-66-6	



Analytical Laboratory Report

Lab Sample ID: S09544.05

Sample Tag: Vault - E

Collected Date/Time: 11/19/2019 16:15

Matrix: Wastewater

COC Reference: 114919

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	1L Plastic	None	Yes	2.5	IR
1	125ml Plastic	HNO3	Yes	2.5	IR
2	40ml Glass	H2SO4	Yes	2.5	IR
1	250ml Plastic	None	Yes	2.5	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Metal Digestion	Completed	SW3015A	11/21/19 13:00	CCM	

Inorganics

Method: E120.1, Run Date: 12/02/19 12:20, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Conductivity	1,383	1		umhos/cm	1		

Method: SM2540D, Run Date: 11/26/19 23:00, Analyst: DMK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Suspended Solids	Not detected	3		mg/L	1		

Method: SM5310C, Run Date: 11/26/19 18:05, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
TOC	5.0	1		mg/L	1		

Metals

Method: E200.8, Run Date: 11/21/19 16:31, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chromium, Dissolved	Not detected	0.005		mg/L	5	7440-47-3	
Copper, Dissolved	0.007	0.005		mg/L	5	7440-50-8	
Nickel, Dissolved	Not detected	0.005		mg/L	5	7440-02-0	
Zinc, Dissolved	0.005	0.005		mg/L	5	7440-66-6	



Analytical Laboratory Report

Lab Sample ID: S09544.06

Sample Tag: Vault - F

Collected Date/Time: 11/20/2019 09:35

Matrix: Wastewater

COC Reference: 114919

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	1L Plastic	None	Yes	2.5	IR
1	125ml Plastic	HNO3	Yes	2.5	IR
2	40ml Glass	H2SO4	Yes	2.5	IR
1	250ml Plastic	None	Yes	2.5	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Metal Digestion	Completed	SW3015A	11/21/19 13:00	CCM	

Inorganics

Method: E120.1, Run Date: 12/02/19 12:22, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Conductivity	1,593	1		umhos/cm	1		

Method: SM2540D, Run Date: 11/26/19 23:00, Analyst: DMK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Suspended Solids	Not detected	3		mg/L	1		

Method: SM5310C, Run Date: 11/26/19 18:27, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
TOC	4.6	1		mg/L	1		

Metals

Method: E200.8, Run Date: 11/21/19 16:32, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chromium, Dissolved	Not detected	0.005		mg/L	5	7440-47-3	
Copper, Dissolved	Not detected	0.005		mg/L	5	7440-50-8	
Nickel, Dissolved	0.014	0.005		mg/L	5	7440-02-0	
Zinc, Dissolved	0.006	0.005		mg/L	5	7440-66-6	



Analytical Laboratory Report

Lab Sample ID: S09544.07

Sample Tag: DUP - 1

Collected Date/Time: 11/19/2019 00:01

Matrix: Wastewater

COC Reference: 114919

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	1L Plastic	None	Yes	2.5	IR
1	125ml Plastic	HNO3	Yes	2.5	IR
2	40ml Glass	H2SO4	Yes	2.5	IR
1	250ml Plastic	None	Yes	2.5	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Metal Digestion	Completed	SW3015A	11/22/19 09:45	JRH	

Inorganics

Method: E120.1, Run Date: 12/02/19 12:24, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Conductivity	1,638	1		umhos/cm	1		

Method: SM2540D, Run Date: 11/26/19 23:00, Analyst: DMK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Suspended Solids	Not detected	3		mg/L	1		

Method: SM5310C, Run Date: 11/26/19 18:49, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
TOC	6.9	1		mg/L	1		

Metals

Method: E200.8, Run Date: 11/22/19 12:00, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chromium, Dissolved	Not detected	0.005		mg/L	5	7440-47-3	
Copper, Dissolved	Not detected	0.005		mg/L	5	7440-50-8	
Nickel, Dissolved	0.010	0.005		mg/L	5	7440-02-0	
Zinc, Dissolved	Not detected	0.005		mg/L	5	7440-66-6	

Merit Laboratories Login Checklist

Lab Set ID:S09544

Client:OBG02 (O'Brien & Gere Engineers, Inc.)

Project: RACER Coldwater Rd

Submitted: 11/20/2019 15:30 Login User: MMC

Attention: Clifford Yantz

Address: O'Brien & Gere Engineers, Inc.
2260 E Saginaw St
East Lansing, MI 48823

Phone: 313-333-0211

FAX:

Email: Clifford.Yantz@obg.com

Selection	Description	Note
Sample Receiving		
01. ☒ Yes ☐ No ☐ N/A	Samples are received at 4C +/- 2C Thermometer #	IR 2.5
02. ☒ Yes ☐ No ☐ N/A	Received on ice/ cooling process begun	
03. ☐ Yes ☒ No ☐ N/A	Samples shipped	
04. ☐ Yes ☒ No ☐ N/A	Samples left in 24 hr. drop box	
05. ☐ Yes ☐ No ☒ N/A	Are there custody seals/tape or is the drop box locked	
Chain of Custody		
06. ☒ Yes ☐ No ☐ N/A	COC adequately filled out	
07. ☒ Yes ☐ No ☐ N/A	COC signed and relinquished to the lab	
08. ☒ Yes ☐ No ☐ N/A	Sample tag on bottles match COC	
09. ☐ Yes ☒ No ☐ N/A	Subcontracting needed? Subcontracted to:	
Preservation		
10. ☒ Yes ☐ No ☐ N/A	Do sample have correct chemical preservation	
11. ☒ Yes ☐ No ☐ N/A	Completed pH checks on preserved samples? (no VOAs)	
12. ☐ Yes ☒ No ☐ N/A	Did any samples need to be preserved in the lab?	
Bottle Conditions		
13. ☒ Yes ☐ No ☐ N/A	All bottles intact	
14. ☒ Yes ☐ No ☐ N/A	Appropriate analytical bottles are used	
15. ☒ Yes ☐ No ☐ N/A	Merit bottles used	
16. ☒ Yes ☐ No ☐ N/A	Sufficient sample volume received	
17. ☐ Yes ☒ No ☐ N/A	Samples require laboratory filtration	
18. ☒ Yes ☐ No ☐ N/A	Samples submitted within holding time	
19. ☐ Yes ☐ No ☒ N/A	Do water VOC or TOX bottles contain headspace	

Corrective action for all exceptions is to call the client and to notify the project manager.

Client Review By: _____ Date: _____

Merit Laboratories Bottle Preservation Check

Lab Set ID: S09544 Initials: MMC

Attention: Clifford Yantz
Address: O'Brien & Gere Engineers, Inc.
2260 E Saginaw St
East Lansing, MI 48823

Client: OBG02 (O'Brien & Gere Engineers, Inc.)

Project: RACER Coldwater Rd

Submitted: 11/20/2019 15:30 Login User:

Phone: 313-333-0211 FAX:
Email: Clifford.Yantz@obg.com

Lab ID	125 ml Plastic HNO ₃	250 ml Plastic HNO ₃	1 L Plastic HNO ₃	250 ml Plastic H ₂ SO ₄	125 ml Amber H ₂ SO ₄	32 oz Glass HCl	125 ml Plastic NaOH	125 ml Amber PbCO ₃ NaOH	pH					Notes
									<2	>12	other	ml add	new pH	
S09544.01	X								X					
S09544.02	X								X					
S09544.03	X								X					
S09544.04	X								X					
S09544.05	X								X					
S09544.06	X								X					
S09544.07	X								X					



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

C.O.C. PAGE # 1 OF 1

114919

REPORT TO

CHAIN OF CUSTODY RECORD

INVOICE TO

CONTACT NAME - Clifford Vant Z		CONTACT NAME SAME	
COMPANY O'Brien & Gere Part of Ramboll		COMPANY	
ADDRESS 2260 East Saginaw		ADDRESS	
CITY East Lansing	STATE MI	ZIP CODE 48823	CITY
PHONE NO. 313-333-0211	FAX NO.	P.O. NO.	E-MAIL ADDRESS
E-MAIL ADDRESS clifford.vantz@obg.com		QUOTE NO.	

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

PROJECT NO./NAME RACER Coldwater Rd		SAMPLER(S) - PLEASE PRINT/SIGN NAME Kurt 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=WIFE A=AIR W=WASTE		# Containers & Preservatives	
MERIT LAB NO. FOR LAB USE ONLY	YEAR DATE TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX # OF BOTTLES NONE HCl HNO ₃ H ₂ SO ₄ NaOH MeOH OTHER
0954401	11/19/19 1410	Vault-A	12
.02	1438	Vault-B	
.03	1509	Vault-C	
.04	1545	Vault-D	
.05	1615	Vault-E	
.06	11/20/19 935	Vault-F	
.07	11/19/19	DUP-1	

Certifications
☐ OHIO VAP ☐ Drinking Water
☐ DoD ☐ NPDES
Project Locations
☐ Detroit ☐ New York
☐ Other
Special Instructions

Metals are!
Cu, Cr, Ni, Zn
Dissolved metals
were field filtered

RELINQUISHED BY: SIGNATURE/ORGANIZATION Kurt Schneider	DATE 11/20/19	TIME 14:10	RELINQUISHED BY: SIGNATURE/ORGANIZATION	DATE 11/20/19	TIME 14:10
RECEIVED BY: SIGNATURE/ORGANIZATION Kurt Schneider	DATE 11/20/19	TIME 15:30	RECEIVED BY: SIGNATURE/ORGANIZATION	DATE 11/20/19	TIME 15:30
RELINQUISHED BY: SIGNATURE/ORGANIZATION Kurt Schneider	DATE 11/20/19	TIME 15:30	RELINQUISHED BY: SIGNATURE/ORGANIZATION	DATE 11/20/19	TIME 15:30
RECEIVED BY: SIGNATURE/ORGANIZATION Kurt Schneider	DATE 11/20/19	TIME 15:30	RECEIVED BY: SIGNATURE/ORGANIZATION	DATE 11/20/19	TIME 15:30

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

Rev. 5.18.12

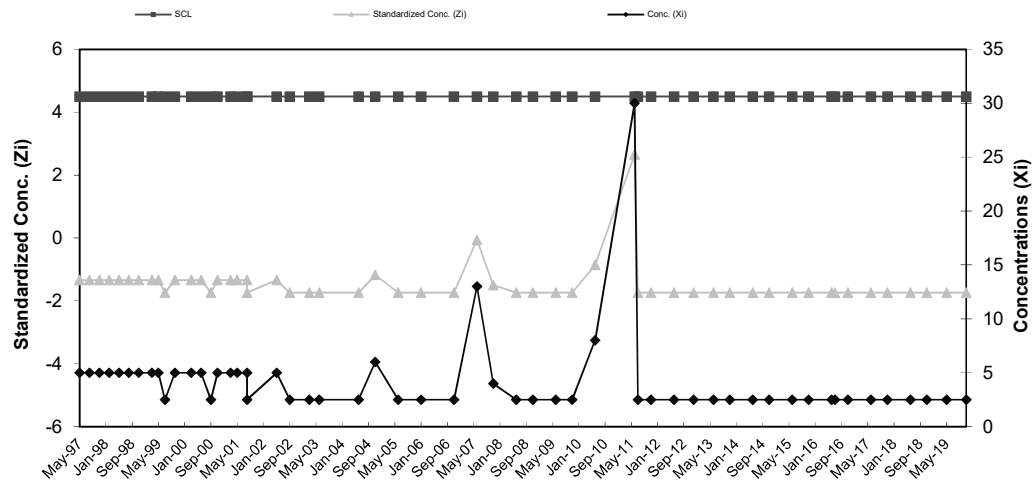
APPENDIX B
Leak Detection Vault
Control Charts

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	13.38	6.25
2	Jun-95	24		
3	Aug-95	10		
4	Nov-95	23		
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	54	Nov-15	4.5	2.5	-1.74
18	Jul-99	4.5	2.5	-1.74	55	Jun-16	4.5	2.5	-1.74
19	Oct-99	4.5	5	-1.34	56	Jul-16	4.5	2.5	-1.74
20	Mar-00	4.5	5	-1.34	57	Nov-16	4.5	2.5	-1.74
21	Jun-00	4.5	5	-1.34	58	Jun-17	4.5	2.5	-1.74
22	Sep-00	4.5	2.5	-1.74	59	Nov-17	4.5	2.5	-1.74
23	Nov-00	4.5	5	-1.34	60	Jun-18	4.5	2.5	-1.74
24	Mar-01	4.5	5	-1.34	61	Nov-18	4.5	2.5	-1.74
25	May-01	4.5	5	-1.34	62	May-19	4.5	2.5	-1.74
26	Aug-01	4.5	2.5	-1.74	63	Nov-19	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

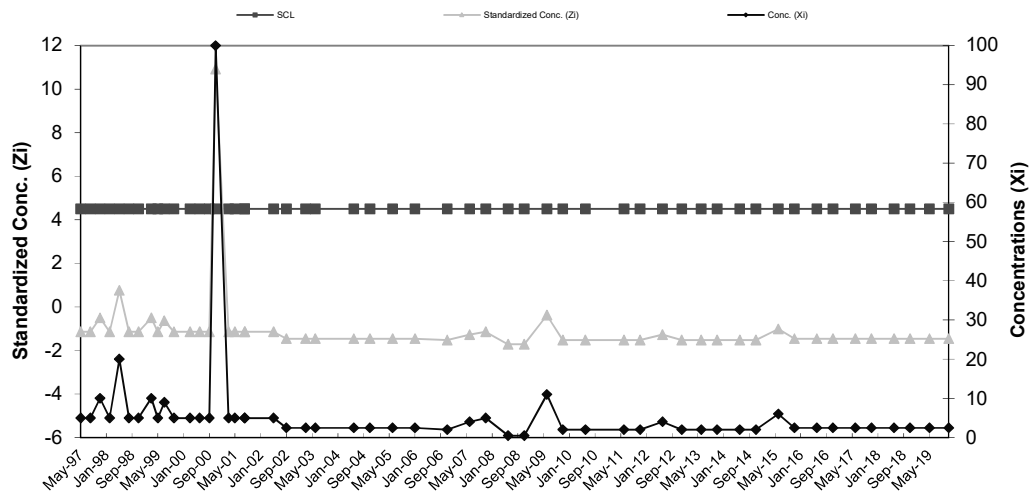


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault A - Copper

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Mar-95	10	14	7.87
2	Jun-95	21		
3	Aug-95	10		
4	Nov-95	31		
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	53	Nov-15	4.5	2.5	-1.46
18	Jul-99	4.5	9	-0.64	54	Jun-16	4.5	2.5	-1.46
19	Oct-99	4.5	5	-1.14	55	Nov-16	4.5	2.5	-1.46
20	Mar-00	4.5	5	-1.14	56	Jun-17	4.5	2.5	-1.46
21	Jun-00	4.5	5	-1.14	57	Nov-17	4.5	2.5	-1.46
22	Sep-00	4.5	5	-1.14	58	Jun-18	4.5	2.5	-1.46
23	Nov-00	4.5	100	10.92	59	Nov-18	4.5	2.5	-1.46
24	Mar-01	4.5	5	-1.14	60	May-19	4.5	2.5	-1.46
25	May-01	4.5	5	-1.14	61	Nov-19	4.5	2.5	-1.46
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

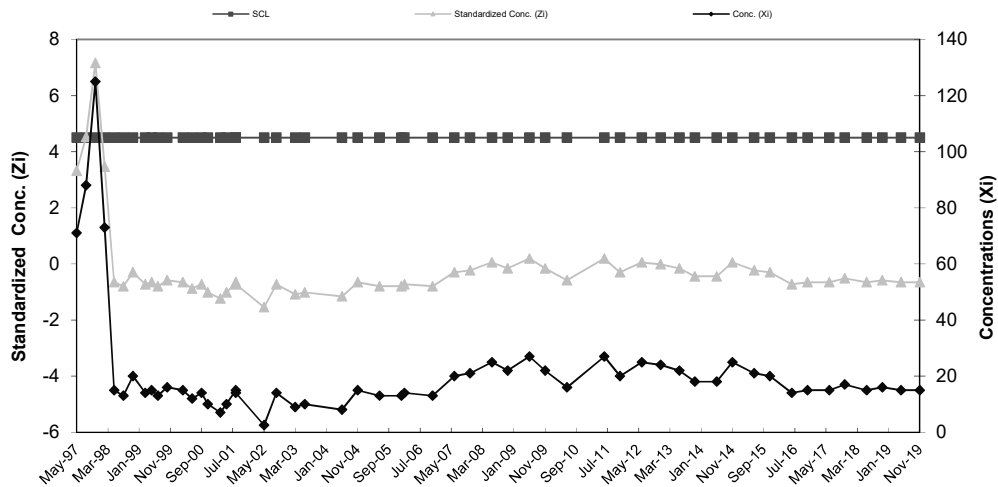


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault A - Nickel

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Mar-95	20	24.25	14.07
2	Jun-95	15		
3	Aug-95	20		
4	Nov-95	43		
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	54	Nov-15	4.5	20	-0.30
18	Jul-99	4.5	13	-0.80	55	Jun-16	4.5	14	-0.73
19	Oct-99	4.5	16	-0.59	56	Nov-16	4.5	15	-0.66
20	Mar-00	4.5	15	-0.66	57	Jun-17	4.5	15	-0.66
21	Jun-00	4.5	12	-0.87	58	Nov-17	4.5	17	-0.52
22	Sep-00	4.5	14	-0.73	59	Jun-18	4.5	15	-0.66
23	Nov-00	4.5	10	-1.01	60	Nov-18	4.5	16	-0.59
24	Mar-01	4.5	7	-1.23	61	May-19	4.5	15	-0.66
25	May-01	4.5	10	-1.01	62	Nov-19	4.5	15	-0.66
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

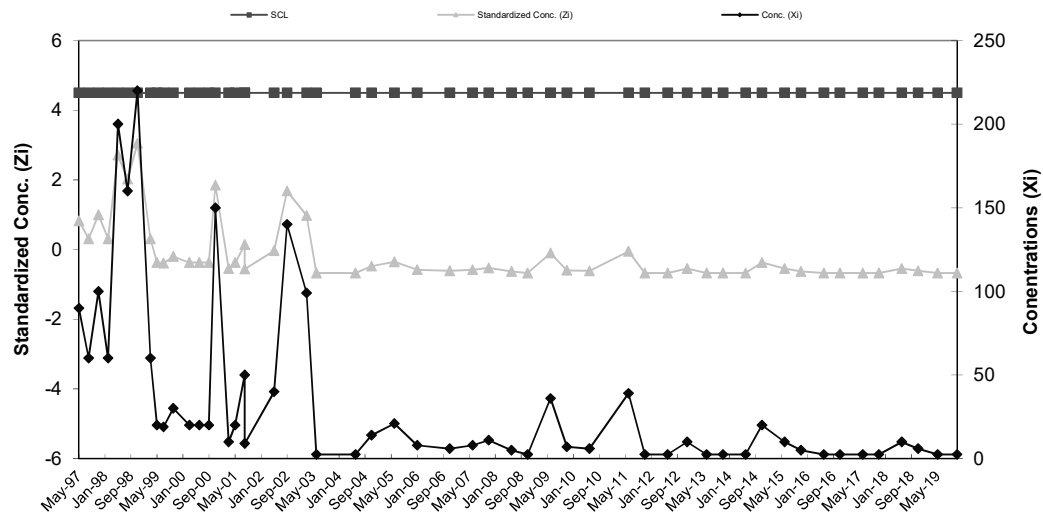


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault A - Zinc

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Mar-95	180	41.75	58.47
2	Jun-95	10		
3	Aug-95	10		
4	Nov-95	24		
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	53	Nov-15	4.5	5	-0.63
18	Jul-99	4.5	19	-0.39	54	Jun-16	4.5	2.5	-0.67
19	Oct-99	4.5	30	-0.20	55	Nov-16	4.5	2.5	-0.67
20	Mar-00	4.5	20	-0.37	56	Jun-17	4.5	2.5	-0.67
21	Jun-00	4.5	20	-0.37	57	Nov-17	4.5	2.5	-0.67
22	Sep-00	4.5	20	-0.37	58	Jun-18	4.5	10	-0.54
23	Nov-00	4.5	150	1.85	59	Nov-18	4.5	6	-0.61
24	Mar-01	4.5	10	-0.54	60	May-19	4.5	2.5	-0.67
25	May-01	4.5	20	-0.37	61	Nov-19	4.5	2.5	-0.67
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

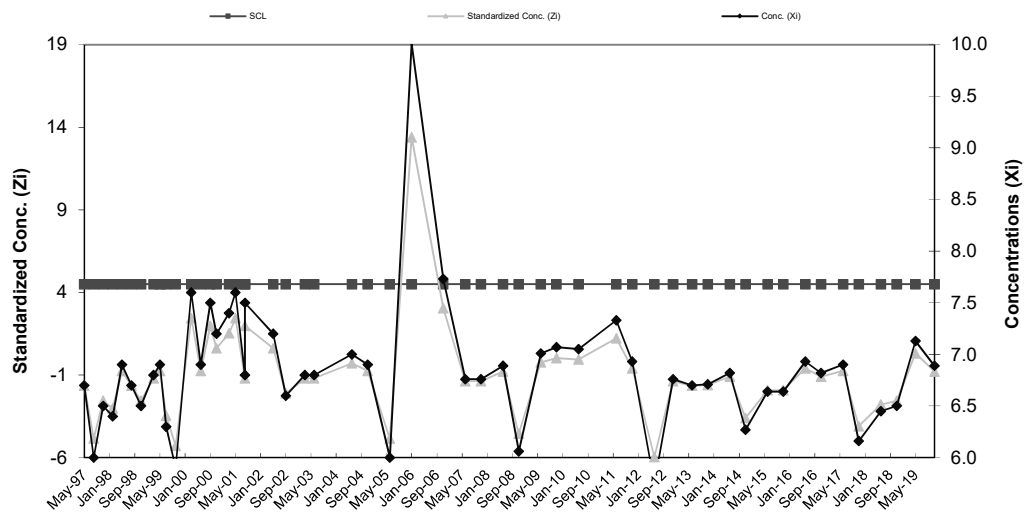


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault A - pH

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	53	Nov-15	4.5	6.64	-1.92
18	Jul-99	4.5	6.30	-3.47	54	Jun-16	4.5	6.93	-0.60
19	Oct-99	4.5	5.90	-5.28	55	Nov-16	4.5	6.82	-1.10
20	Mar-00	4.5	7.60	2.44	56	Jun-17	4.5	6.9	-0.74
21	Jun-00	4.5	6.90	-0.74	57	Nov-17	4.5	6.16	-4.10
22	Sep-00	4.5	7.50	1.99	58	Jun-18	4.5	6.45	-2.78
23	Nov-00	4.5	7.20	0.63	59	Nov-18	4.5	6.5	-2.56
24	Mar-01	4.5	7.40	1.53	60	May-19	4.5	7.13	0.31
25	May-01	4.5	7.60	2.44	61	Nov-19	4.5	6.89	-0.78
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

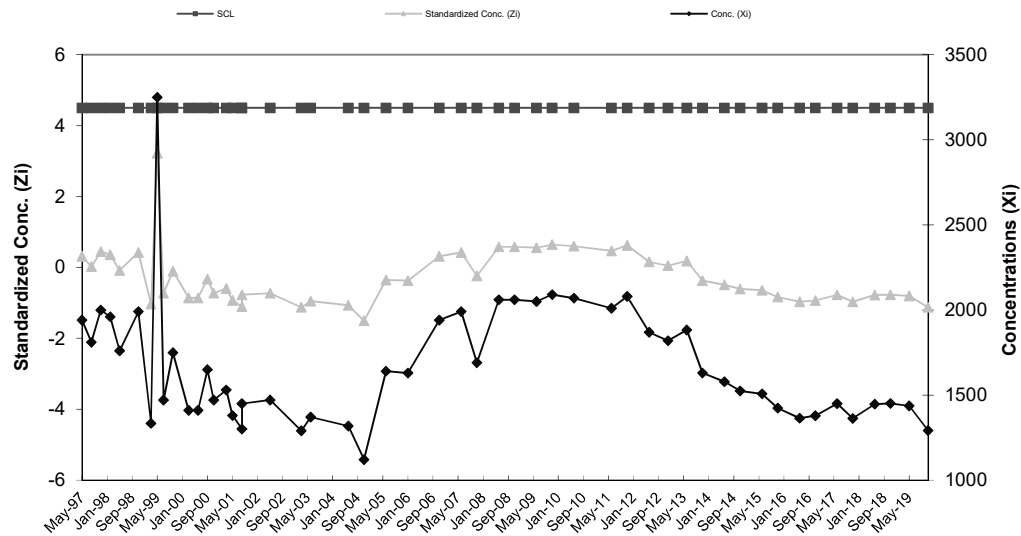


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault A - SpC

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Mar-95	690	1,798.75	450.73
2	Jun-95	1900		
3	Aug-95	2000		
4	Nov-95	1900		
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	51	Nov-15	4.5	1423	-0.83
18	Oct-99	4.5	1750	-0.11	52	Jun-16	4.5	1364	-0.96
19	Mar-00	4.5	1410	-0.86	53	Nov-16	4.5	1378	-0.93
20	Jun-00	4.5	1410	-0.86	54	Jun-17	4.5	1450	-0.77
21	Sep-00	4.5	1650	-0.33	55	Nov-17	4.5	1363	-0.97
22	Nov-00	4.5	1470	-0.73	56	Jun-18	4.5	1447	-0.78
23	Mar-01	4.5	1530	-0.60	57	Nov-18	4.5	1451	-0.77
24	May-01	4.5	1380	-0.93	58	May-19	4.5	1436	-0.80
25	Aug-01	4.5	1450	-0.77	59	Nov-19	4.5	1291	-1.13
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

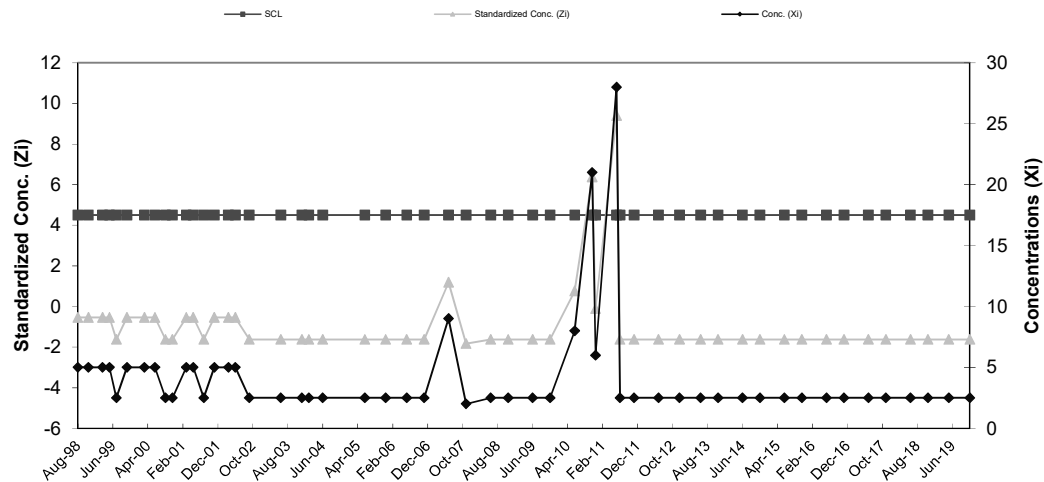


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault B - Chromium

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-96	10	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	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	53	Nov-15	4.5	2.5	-1.62
18	Nov-00	4.5	2.5	-1.62	54	Jun-16	4.5	2.5	-1.62
19	Mar-01	4.5	5	-0.54	55	Nov-16	4.5	2.5	-1.62
20	May-01	4.5	5	-0.54	56	Jun-17	4.5	2.5	-1.62
21	Aug-01	4.5	2.5	-1.62	57	Nov-17	4.5	2.5	-1.62
22	Nov-01	4.5	5	-0.54	58	Jun-18	4.5	2.5	-1.62
23	Mar-02	4.5	5	-0.54	59	Nov-18	4.5	2.5	-1.62
24	May-02	4.5	5	-0.54	60	May-19	4.5	2.5	-1.62
25	Sep-02	4.5	2.5	-1.62	61	Nov-19	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

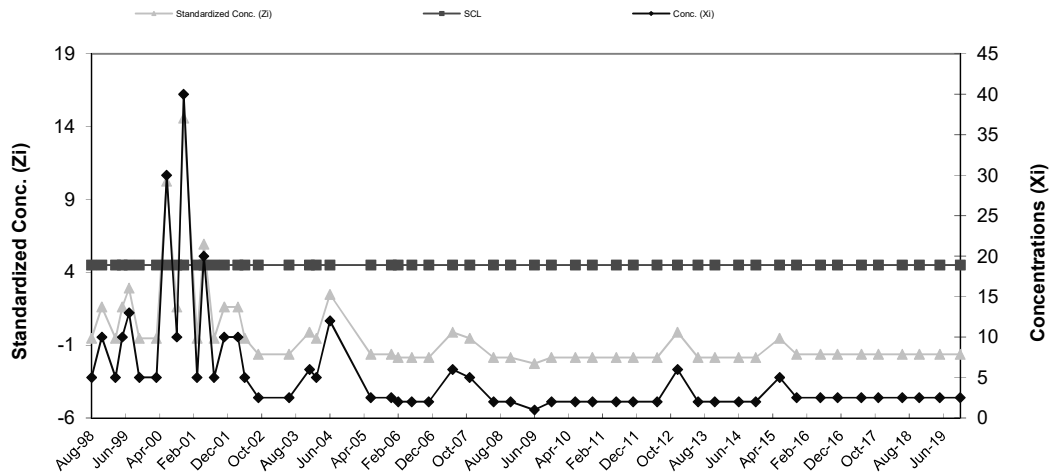


**COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault B - Copper**

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	52	Nov-15	4.5	2.5	-1.62
18	Nov-00	4.5	40	14.58	53	Jun-16	4.5	2.5	-1.62
19	Mar-01	4.5	5	-0.54	54	Nov-16	4.5	2.5	-1.62
20	May-01	4.5	20	5.94	55	Jun-17	4.5	2.5	-1.62
21	Aug-01	4.5	5	-0.54	56	Nov-17	4.5	2.5	-1.62
22	Nov-01	4.5	10	1.62	57	Jun-18	4.5	2.5	-1.62
23	Mar-02	4.5	10	1.62	58	Nov-18	4.5	2.5	-1.62
24	May-02	4.5	5	-0.54	59	May-19	4.5	2.5	-1.62
25	Sep-02	4.5	2.5	-1.62	60	Nov-19	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

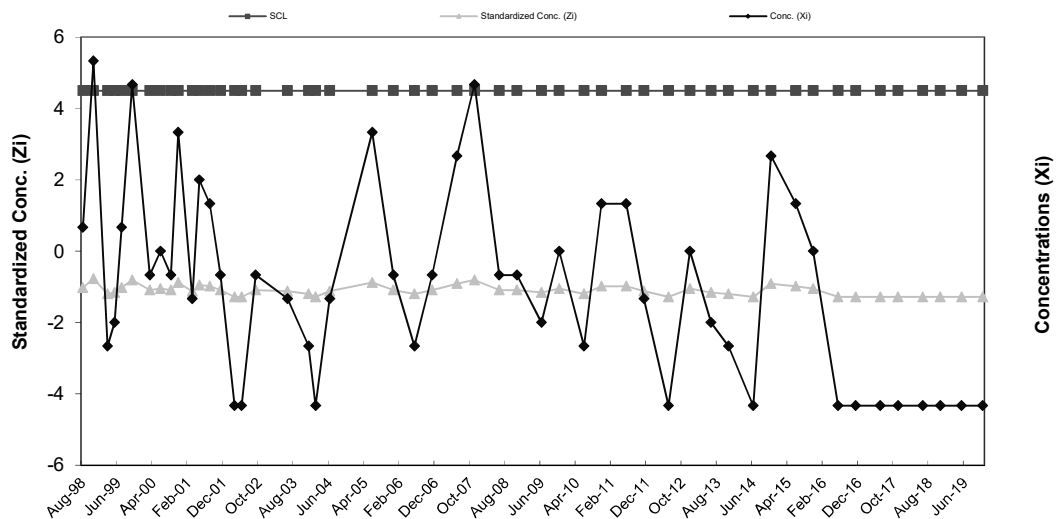


**COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault B - Nickel**

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-96	10	38.88	28.34
2	Nov-96	20		
3	Feb-97	43		
4	May-97	45		
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	51	Nov-15	4.5	9	-1.05
18	Nov-00	4.5	14	-0.88	52	Jun-16	4.5	2.5	-1.28
19	Mar-01	4.5	7	-1.12	53	Nov-16	4.5	2.5	-1.28
20	May-01	4.5	12	-0.95	54	Jun-17	4.5	2.5	-1.28
21	Aug-01	4.5	11	-0.98	55	Nov-17	4.5	2.5	-1.28
22	Nov-01	4.5	8	-1.09	56	Jun-18	4.5	2.5	-1.28
23	Mar-02	4.5	2.5	-1.28	57	Nov-18	4.5	2.5	-1.28
24	May-02	4.5	2.5	-1.28	58	May-19	4.5	2.5	-1.28
25	Sep-02	4.5	8	-1.09	59	Nov-19	4.5	2.5	-1.28
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

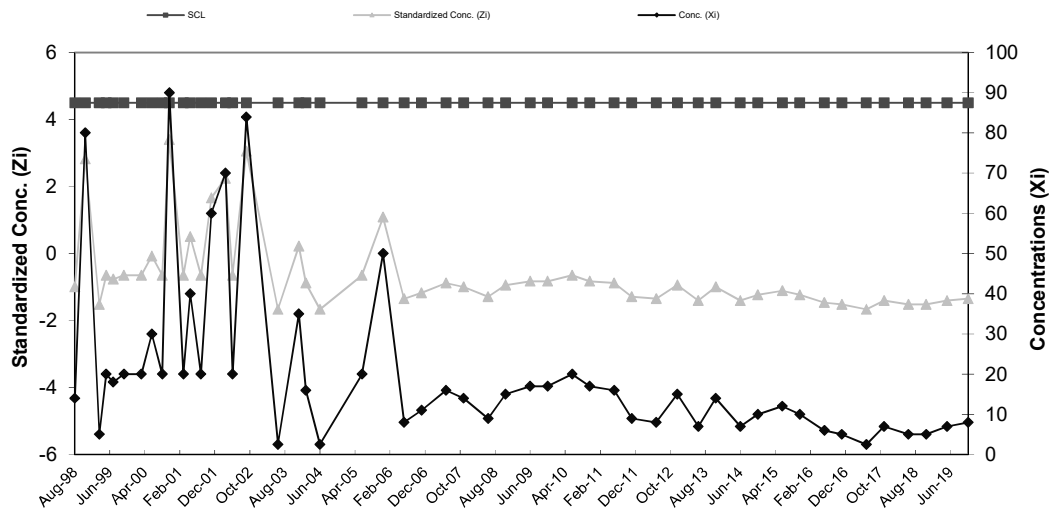


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault B - Zinc

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-96	10	31.25	17.27
2	Nov-96	40		
3	Feb-97	20		
4	May-97	20		
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	51	Nov-15	4.5	10	-1.23
18	Nov-00	4.5	90	3.40	52	Jun-16	4.5	6	-1.46
19	Mar-01	4.5	20	-0.65	53	Nov-16	4.5	5	-1.52
20	May-01	4.5	40	0.51	54	Jun-17	4.5	2.5	-1.66
21	Aug-01	4.5	20	-0.65	55	Nov-17	4.5	7	-1.40
22	Nov-01	4.5	60	1.66	56	Jun-18	4.5	5	-1.52
23	Mar-02	4.5	70	2.24	57	Nov-18	4.5	5	-1.52
24	May-02	4.5	20	-0.65	58	May-19	4.5	7	-1.40
25	Sep-02	4.5	84	3.05	59	Nov-19	4.5	8	-1.35
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

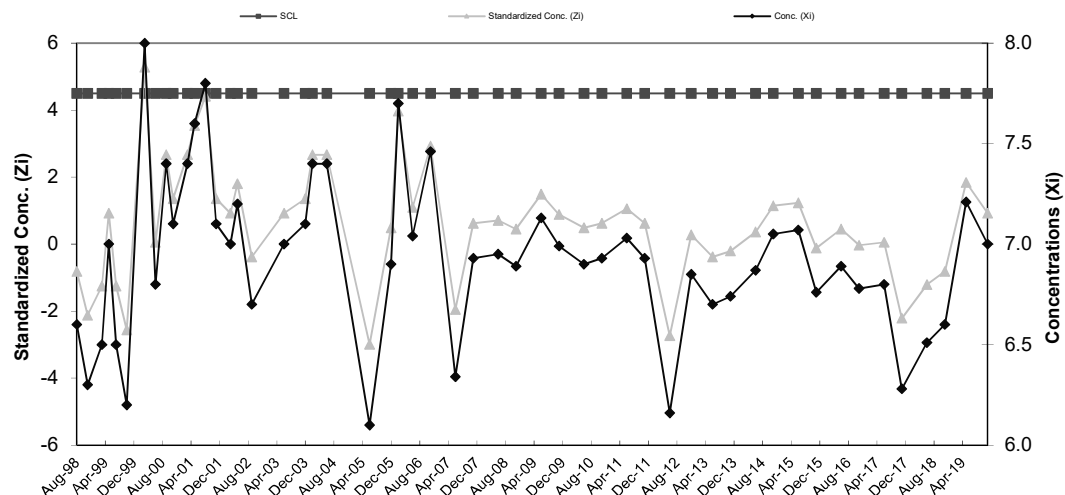


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault B - pH

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-96	6.9	6.79	0.23
2	Nov-96	7		
3	Feb-97	7.1		
4	May-97	6.5		
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	52	Nov-15	4.5	6.76	-0.12
18	Nov-00	4.5	7.10	1.36	53	Jun-16	4.5	6.89	0.45
19	Mar-01	4.5	7.40	2.67	54	Nov-16	4.5	6.78	-0.03
20	May-01	4.5	7.60	3.54	55	Jun-17	4.5	6.8	0.05
21	Aug-01	4.5	7.80	4.41	56	Nov-17	4.5	6.28	-2.21
22	Nov-01	4.5	7.10	1.36	57	Jun-18	4.5	6.51	-1.21
23	Mar-02	4.5	7.00	0.93	58	Nov-18	4.5	6.6	-0.82
24	May-02	4.5	7.20	1.80	59	May-19	4.5	7.21	1.84
25	Sep-02	4.5	6.70	-0.38	60	Nov-19	4.5	7	0.93
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

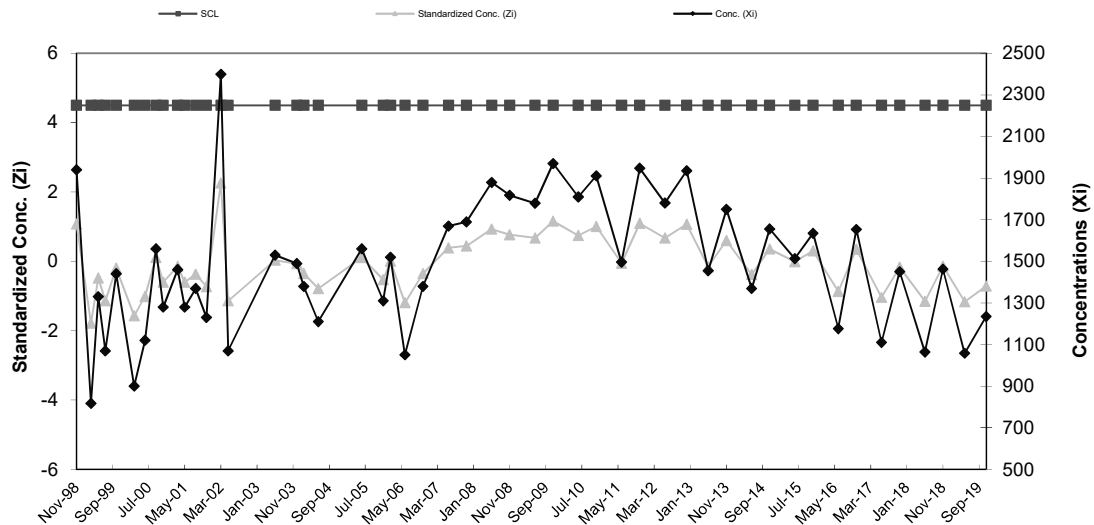


**COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault B - SpC**

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-96	1900	1,516.63	391.89
2	Nov-96	1600		
3	Feb-97	1590		
4	May-97	1930		
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	50	Nov-15	4.5	1635	0.30
18	Mar-01	4.5	1460	-0.14	51	Jun-16	4.5	1176	-0.87
19	May-01	4.5	1280	-0.60	52	Nov-16	4.5	1654	0.35
20	Aug-01	4.5	1370	-0.37	53	Jun-17	4.5	1110	-1.04
21	Nov-01	4.5	1230	-0.73	54	Nov-17	4.5	1450	-0.17
22	Mar-02	4.5	2400	2.25	55	Jun-18	4.5	1064	-1.15
23	May-02	4.5	1070	-1.14	56	Nov-18	4.5	1463	-0.14
24	Jun-03	4.5	1530	0.03	57	May-19	4.5	1058	-1.17
25	Dec-03	4.5	1490	-0.07	58	Nov-19	4.5	1235	-0.72
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

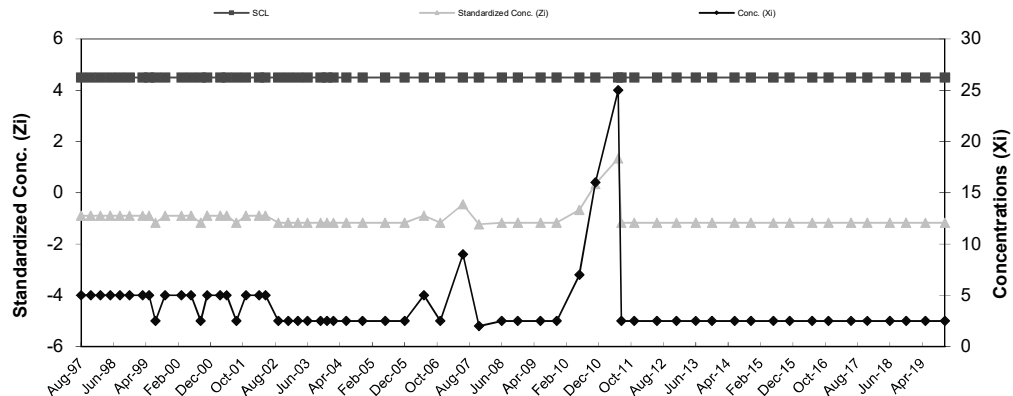


**COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault C - Chromium**

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	25	13.00	8.98
2	Aug-95	10		
3	Nov-95	29		
4	Jun-96	10		
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	61	Nov-15	4.5	2.5	-1.17
19	Oct-99	4.5	5	-0.89	62	Jun-16	4.5	2.5	-1.17
20	Mar-00	4.5	5	-0.89	63	Nov-16	4.5	2.5	-1.17
21	Jun-00	4.5	5	-0.89	64	Jun-17	4.5	2.5	-1.17
22	Sep-00	4.5	2.5	-1.17	65	Nov-17	4.5	2.5	-1.17
23	Nov-00	4.5	5	-0.89	66	Jun-18	4.5	2.5	-1.17
24	Mar-01	4.5	5	-0.89	67	Nov-18	4.5	2.5	-1.17
25	May-01	4.5	5	-0.89	68	May-19	4.5	2.5	-1.17
26	Aug-01	4.5	2.5	-1.17	69	Nov-19	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

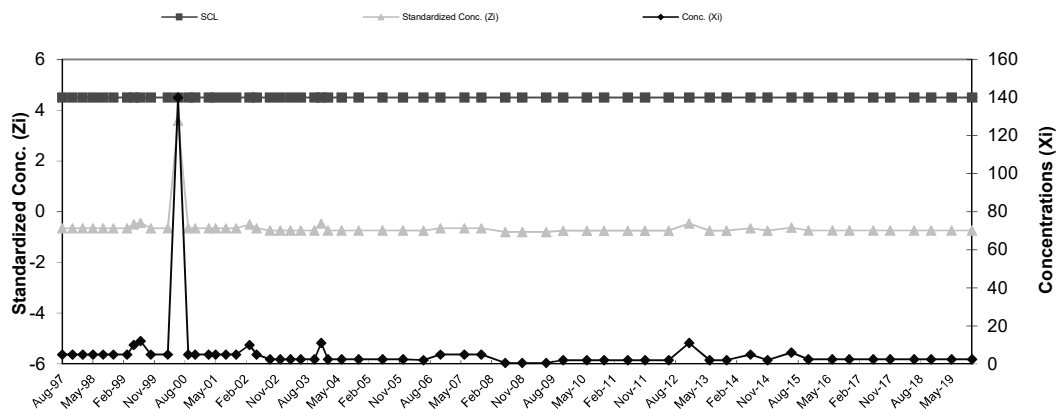


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHewart CONTROL CHART
Vault C - Copper

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	60	Nov-15	4.5	2.5	-0.74
19	Oct-99	4.5	5	-0.66	61	Jun-16	4.5	2.5	-0.74
20	Mar-00	4.5	5	-0.66	62	Nov-16	4.5	2.5	-0.74
21	Jun-00	4.5	140	3.59	63	Jun-17	4.5	2.5	-0.74
22	Sep-00	4.5	5	-0.66	64	Nov-17	4.5	2.5	-0.74
23	Nov-00	4.5	5	-0.66	65	Jun-18	4.5	2.5	-0.74
24	Mar-01	4.5	5	-0.66	66	Nov-18	4.5	2.5	-0.74
25	May-01	4.5	5	-0.66	67	May-19	4.5	2.5	-0.74
26	Aug-01	4.5	5	-0.66	68	Nov-19	4.5	2.5	-0.74
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

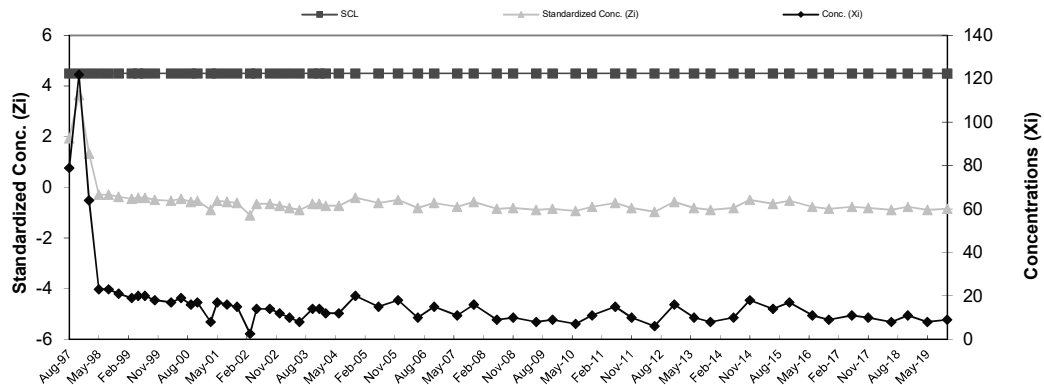


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault C - Nickel

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	15	30.38	25.11
2	Aug-95	20		
3	Nov-95	67		
4	Jun-96	10		
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	60	Nov-15	4.5	17	-0.53
19	Oct-99	4.5	18	-0.49	61	Jun-16	4.5	11	-0.77
20	Mar-00	4.5	17	-0.53	62	Nov-16	4.5	9	-0.85
21	Jun-00	4.5	19	-0.45	63	Jun-17	4.5	11	-0.77
22	Sep-00	4.5	16	-0.57	64	Nov-17	4.5	10	-0.81
23	Nov-00	4.5	17	-0.53	65	Jun-18	4.5	8	-0.89
24	Mar-01	4.5	8	-0.89	66	Nov-18	4.5	11	-0.77
25	May-01	4.5	17	-0.53	67	May-19	4.5	8	-0.89
26	Aug-01	4.5	16	-0.57	68	Nov-19	4.5	9	-0.85
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

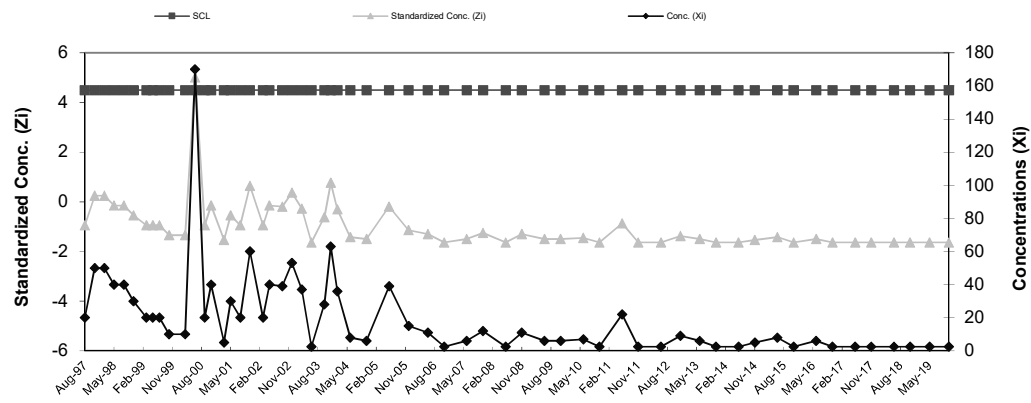


**COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault C - Zinc**

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	60	43.75	25.24
2	Aug-95	74		
3	Nov-95	36		
4	Jun-96	10		
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	60	Nov-15	4.5	2.5	-1.63
19	Oct-99	4.5	10	-1.34	61	Jun-16	4.5	6	-1.50
20	Mar-00	4.5	10	-1.34	62	Nov-16	4.5	2.5	-1.63
21	Jun-00	4.5	170	5.00	63	Jun-17	4.5	2.5	-1.63
22	Sep-00	4.5	20	-0.94	64	Nov-17	4.5	2.5	-1.63
23	Nov-00	4.5	40	-0.15	65	Jun-18	4.5	2.5	-1.63
24	Mar-01	4.5	5	-1.54	66	Nov-18	4.5	2.5	-1.63
25	May-01	4.5	30	-0.54	67	May-19	4.5	2.5	-1.63
26	Aug-01	4.5	20	-0.94	68	Nov-19	4.5	2.5	-1.63
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

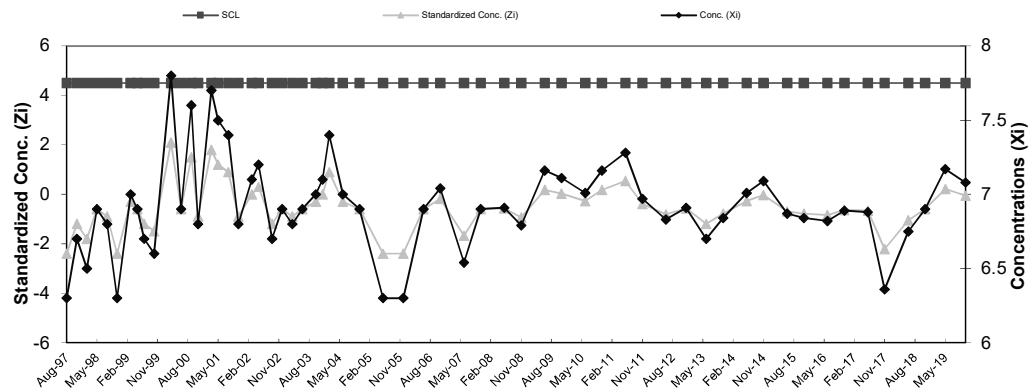


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault C - pH

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	7.4	7.10	0.33
2	Aug-95	7.4		
3	Nov-95	7		
4	Jun-96	6.9		
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	60	Nov-15	4.5	6.84	-0.78
19	Oct-99	4.5	6.6	-1.50	61	Jun-16	4.5	6.82	-0.84
20	Mar-00	4.5	7.8	2.10	62	Nov-16	4.5	6.89	-0.63
21	Jun-00	4.5	6.9	-0.60	63	Jun-17	4.5	6.88	-0.66
22	Sep-00	4.5	7.6	1.50	64	Nov-17	4.5	6.36	-2.22
23	Nov-00	4.5	6.8	-0.90	65	Jun-18	4.5	6.75	-1.05
24	Mar-01	4.5	7.7	1.80	66	Nov-18	4.5	6.9	-0.60
25	May-01	4.5	7.5	1.20	67	May-19	4.5	7.17	0.21
26	Aug-01	4.5	7.4	0.90	68	Nov-19	4.5	7.08	-0.06
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

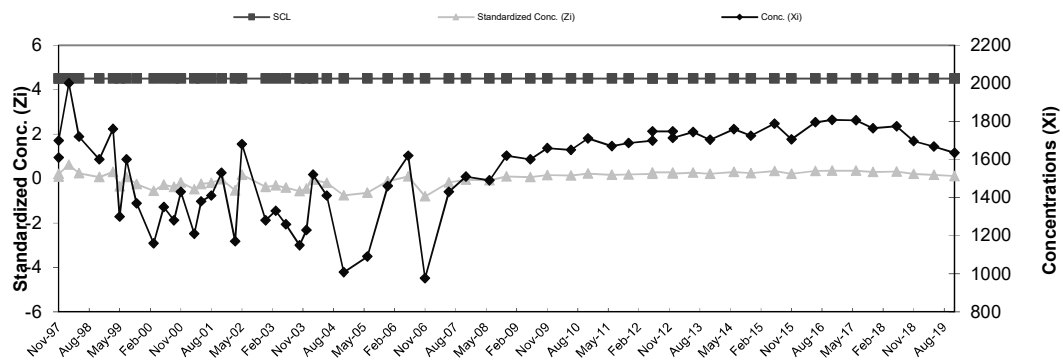


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault C - SpC

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	60	Nov-15	4.5	1706	0.22
19	Mar-00	4.5	1350	-0.28	61	Jun-16	4.5	1795	0.34
20	Jun-00	4.5	1280	-0.38	62	Nov-16	4.5	1808	0.36
21	Sep-00	4.5	1430	-0.17	63	Jun-17	4.5	1805	0.35
22	Nov-00	4.5	1210	-0.48	64	Nov-17	4.5	1764	0.30
23	Mar-01	4.5	1380	-0.24	65	Jun-18	4.5	1774	0.31
24	May-01	4.5	1410	-0.20	66	Nov-18	4.5	1696	0.20
25	Aug-01	4.5	1530	-0.03	67	May-19	4.5	1668	0.16
26	Nov-01	4.5	1170	-0.53	68	Nov-19	4.5	1635	0.12
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

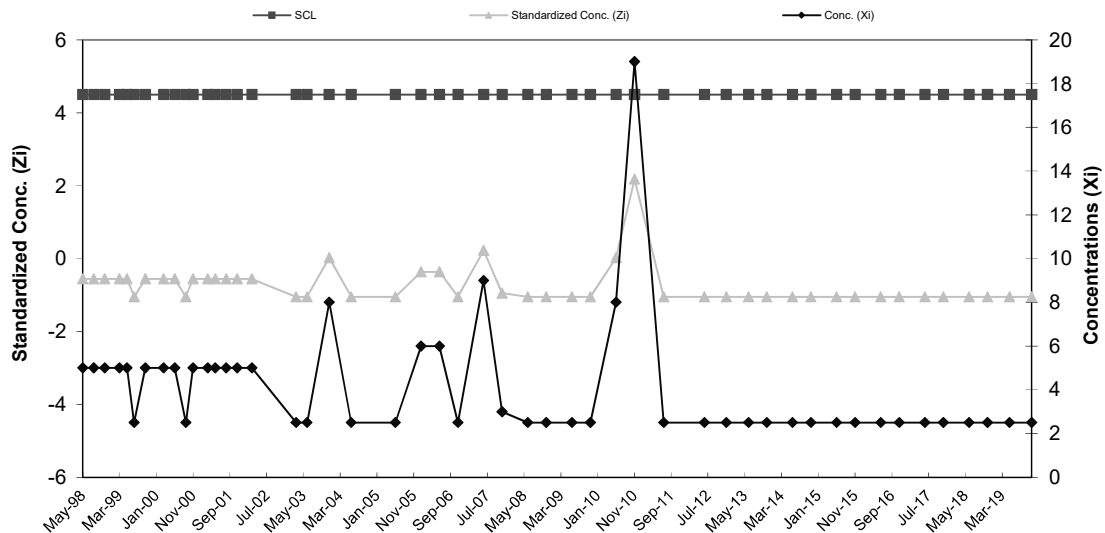


**COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault D - Chromium**

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	49	Nov-15	4.5	2.5	-1.05
18	Sep-00	4.5	2.5	-1.05	50	Jun-16	4.5	2.5	-1.05
19	Nov-00	4.5	5	-0.56	51	Nov-16	4.5	2.5	-1.05
20	Mar-01	4.5	5	-0.56	52	Jun-17	4.5	2.5	-1.05
21	May-01	4.5	5	-0.56	53	Nov-17	4.5	2.5	-1.05
22	Aug-01	4.5	5	-0.56	54	Jun-18	4.5	2.5	-1.05
23	Nov-01	4.5	5	-0.56	55	Nov-18	4.5	2.5	-1.05
24	Mar-02	4.5	5	-0.56	56	May-19	4.5	2.5	-1.05
25	Mar-03	4.5	2.5	-1.05	57	Nov-19	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

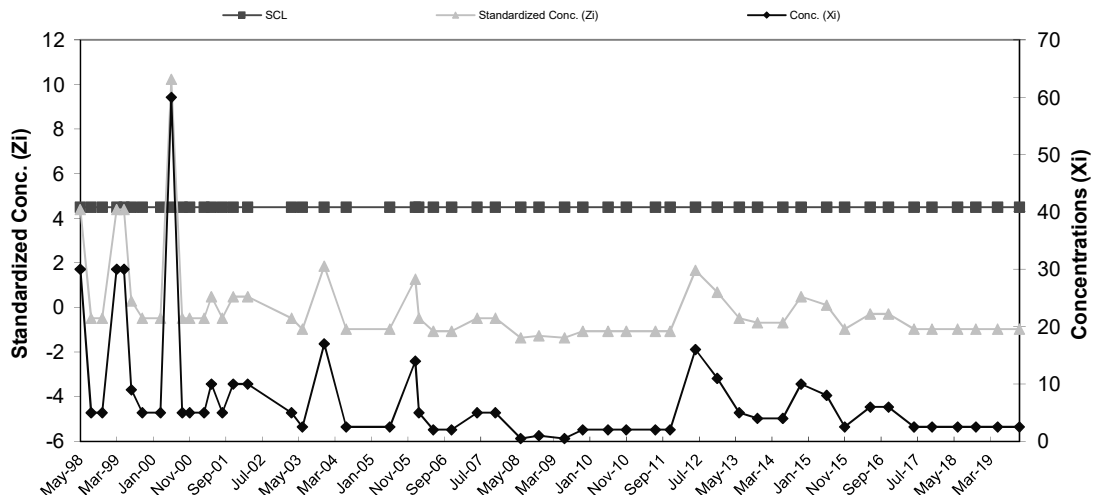


**COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault D - Copper**

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Mar-95	10	7.48	5.13
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	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	51	Nov-15	4.5	2.5	-0.97
20	Mar-01	4.5	5	-0.48	52	Jun-16	4.5	6	-0.29
21	May-01	4.5	10	0.49	53	Nov-16	4.5	6	-0.29
22	Aug-01	4.5	5	-0.48	54	Jun-17	4.5	2.5	-0.97
23	Nov-01	4.5	10	0.49	55	Nov-17	4.5	2.5	-0.97
24	Mar-02	4.5	10	0.49	56	Jun-18	4.5	2.5	-0.97
25	Mar-03	4.5	5	-0.48	57	Nov-18	4.5	2.5	-0.97
26	Jun-03	4.5	2.5	-0.97	58	May-19	4.5	2.5	-0.97
27	Dec-03	4.5	17	1.86	59	Nov-19	4.5	2.5	-0.97
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

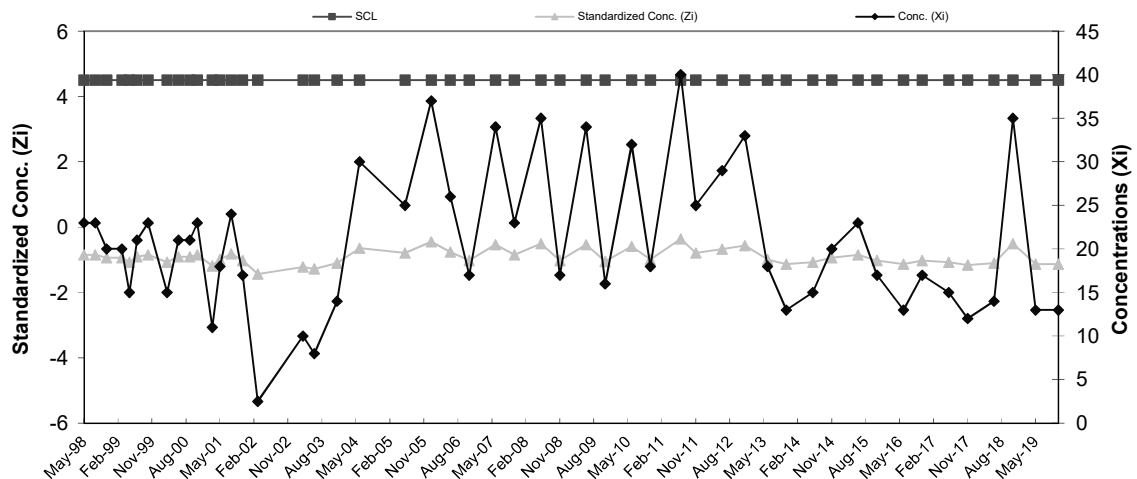


**COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault D - Nickel**

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Mar-95	44	52.63	35.01
2	Jun-96	10		
3	Aug-96	10		
4	Nov-96	40		
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	50	Nov-15	4.5	17	-1.02
19	Nov-00	4.5	23	-0.85	51	Jun-16	4.5	13	-1.13
20	Mar-01	4.5	11	-1.19	52	Nov-16	4.5	17	-1.02
21	May-01	4.5	18	-0.99	53	Jun-17	4.5	15	-1.07
22	Aug-01	4.5	24	-0.82	54	Nov-17	4.5	12	-1.16
23	Nov-01	4.5	17	-1.02	55	Jun-18	4.5	14	-1.10
24	Mar-02	4.5	2.5	-1.43	56	Nov-18	4.5	35	-0.50
25	Mar-03	4.5	10	-1.22	57	May-19	4.5	13	-1.13
26	Jun-03	4.5	8	-1.27	58	Nov-19	4.5	13	-1.13
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

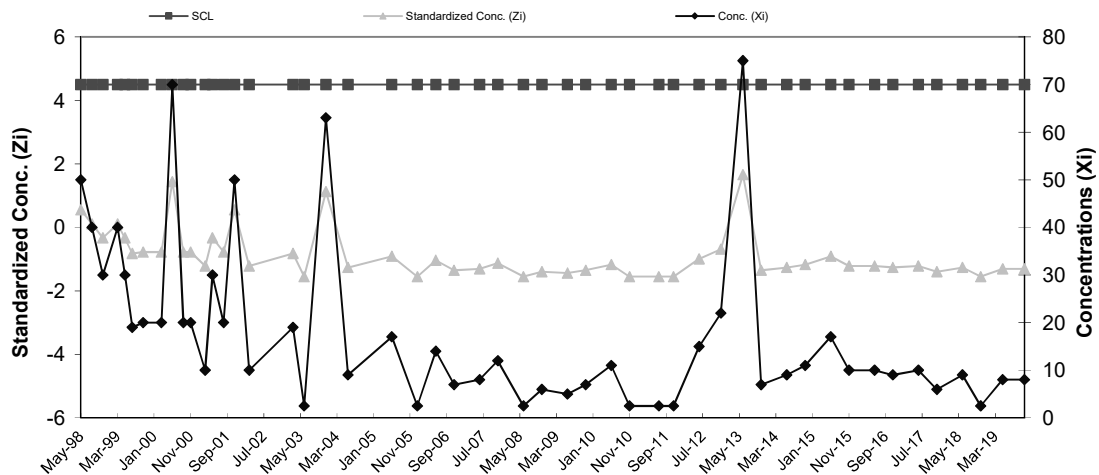


**COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault D - Zinc**

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Mar-95	20	37.49	22.59
2	Jun-96	10		
3	Aug-96	40		
4	Nov-96	70		
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	50	Nov-15	4.5	10	-1.22
18	Sep-00	4.5	20	-0.77	51	Jun-16	4.5	10	-1.22
19	Nov-00	4.5	20	-0.77	52	Nov-16	4.5	9	-1.26
20	Mar-01	4.5	10	-1.22	53	Jun-17	4.5	10	-1.22
21	May-01	4.5	30	-0.33	54	Nov-17	4.5	6	-1.39
22	Aug-01	4.5	20	-0.77	55	Jun-18	4.5	9	-1.26
23	Nov-01	4.5	50	0.55	56	Nov-18	4.5	2.5	-1.55
24	Mar-02	4.5	10	-1.22	57	May-19	4.5	8	-1.31
25	Mar-03	4.5	19	-0.82	58	Nov-19	4.5	8	-1.31
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

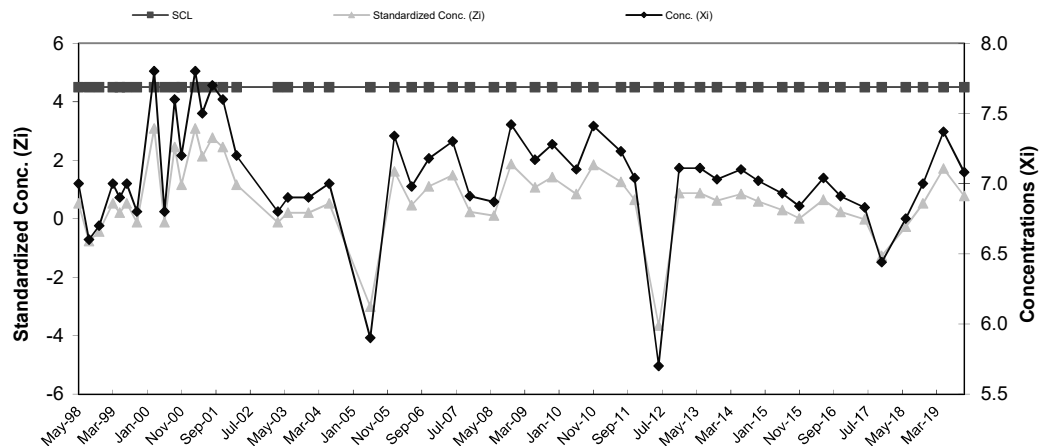


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault D - pH

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Mar-95	7.3	6.84	0.31
2	Jun-96	6.9		
3	Aug-96	7.2		
4	Nov-96	7		
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	50	Nov-15	4.5	6.84	0.01
18	Sep-00	4.5	7.60	2.45	51	Jun-16	4.5	7.04	0.65
19	Nov-00	4.5	7.20	1.16	52	Nov-16	4.5	6.91	0.23
20	Mar-01	4.5	7.80	3.09	53	Jun-17	4.5	6.83	-0.02
21	May-01	4.5	7.50	2.13	54	Nov-17	4.5	6.44	-1.28
22	Aug-01	4.5	7.70	2.77	55	Jun-18	4.5	6.75	-0.28
23	Nov-01	4.5	7.60	2.45	56	Nov-18	4.5	7	0.52
24	Mar-02	4.5	7.20	1.16	57	May-19	4.5	7.37	1.71
25	Mar-03	4.5	6.80	-0.12	58	Nov-19	4.5	7.08	0.78
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

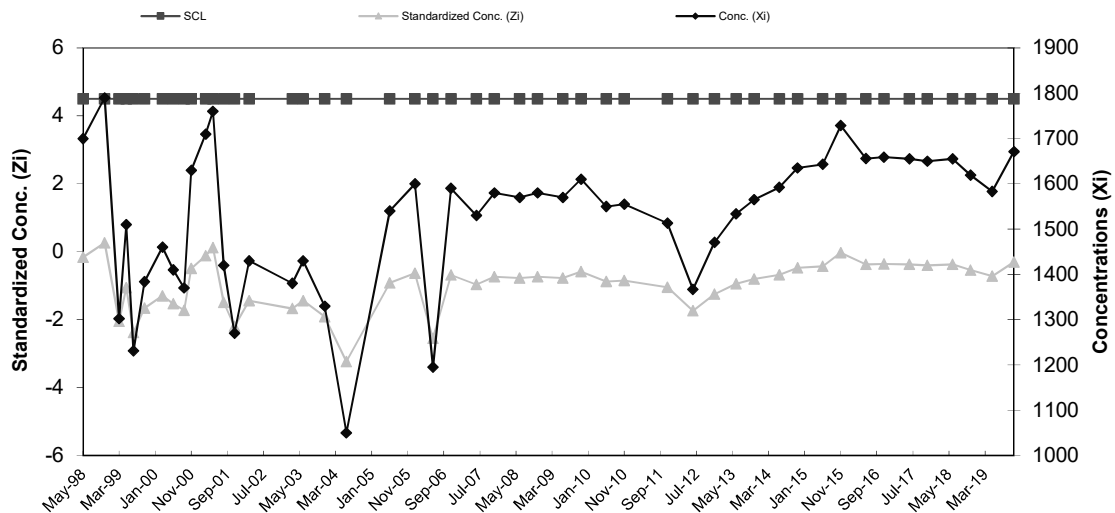


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault D - SpC

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Mar-95	2200	1,734.38	211.31
2	Jun-96	1800		
3	Aug-96	1600		
4	Nov-96	1700		
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	49	Nov-15	4.5	1729	-0.03
19	Nov-00	4.5	1630	-0.49	50	Jun-16	4.5	1656	-0.37
20	Mar-01	4.5	1710	-0.12	51	Nov-16	4.5	1659	-0.36
21	May-01	4.5	1760	0.12	52	Jun-17	4.5	1655	-0.38
22	Aug-01	4.5	1420	-1.49	53	Nov-17	4.5	1650	-0.40
23	Nov-01	4.5	1270	-2.20	54	Jun-18	4.5	1655	-0.38
24	Mar-02	4.5	1430	-1.44	55	Nov-18	4.5	1619	-0.55
25	Mar-03	4.5	1380	-1.68	56	May-19	4.5	1583	-0.72
26	Jun-03	4.5	1430	-1.44	57	Nov-19	4.5	1671	-0.30
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

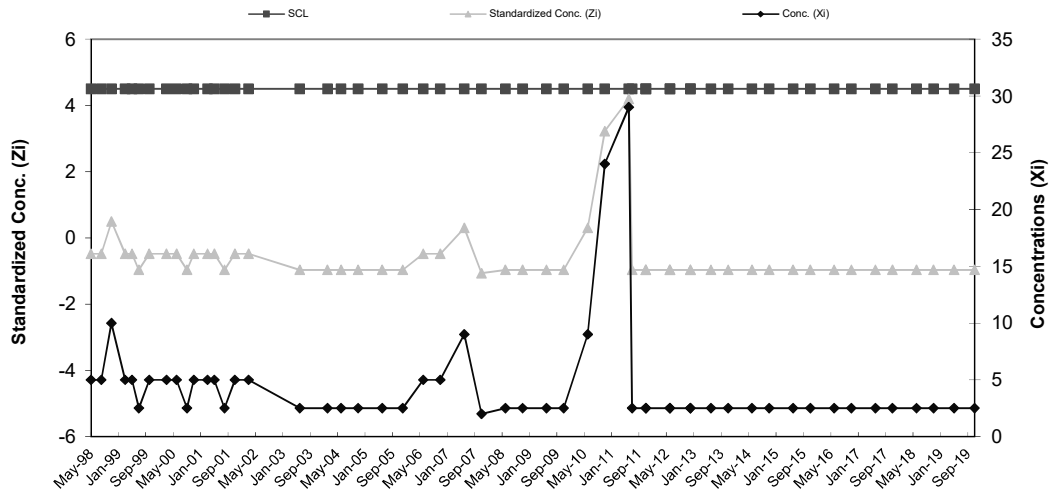


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault E - Chromium

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Mar-96	10	7.48	5.13
2	Jun-96	10		
3	Oct-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	-0.48	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	51	Nov-15	4.5	2.5	-0.97
18	Sep-00	4.5	2.5	-0.97	52	Jun-16	4.5	2.5	-0.97
19	Nov-00	4.5	5	-0.48	53	Nov-16	4.5	2.5	-0.97
20	Mar-01	4.5	5	-0.48	54	Jun-17	4.5	2.5	-0.97
21	May-01	4.5	5	-0.48	55	Nov-17	4.5	2.5	-0.97
22	Aug-01	4.5	2.5	-0.97	56	Jun-18	4.5	2.5	-0.97
23	Nov-01	4.5	5	-0.48	57	Nov-18	4.5	2.5	-0.97
24	Mar-02	4.5	5	-0.48	58	May-19	4.5	2.5	-0.97
25	Jun-03	4.5	2.5	-0.97	59	Nov-19	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

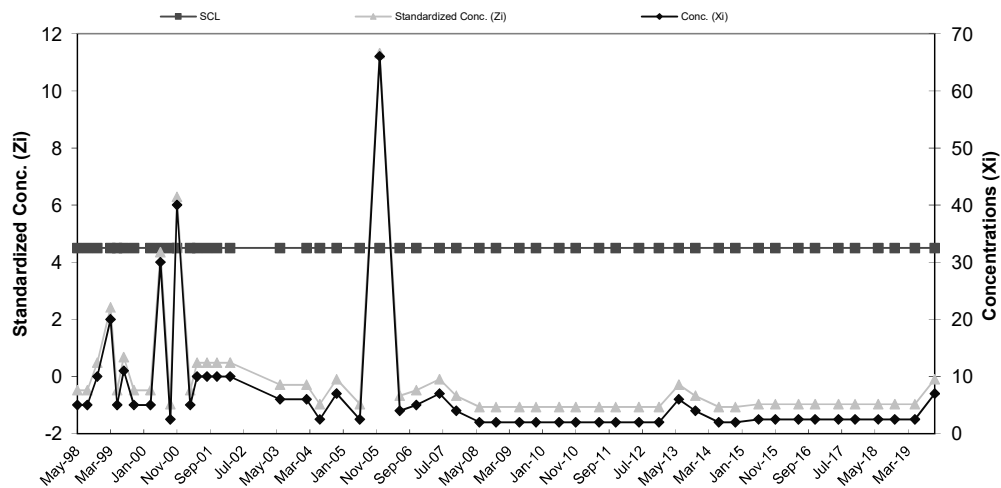


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault E - Copper

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Mar-96	10	7.50	5.17
2	Jun-96	10		
3	Oct-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	-0.48	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	50	Nov-15	4.5	2.5	-0.97
18	Sep-00	4.5	2.5	-0.97	51	Jun-16	4.5	2.5	-0.97
19	Nov-00	4.5	40	6.29	52	Nov-16	4.5	2.5	-0.97
20	Mar-01	4.5	5	-0.48	53	Jun-17	4.5	2.5	-0.97
21	May-01	4.5	10	0.48	54	Nov-17	4.5	2.5	-0.97
22	Aug-01	4.5	10	0.48	55	Jun-18	4.5	2.5	-0.97
23	Nov-01	4.5	10	0.48	56	Nov-18	4.5	2.5	-0.97
24	Mar-02	4.5	10	0.48	57	May-19	4.5	2.5	-0.97
25	Jun-03	4.5	6	-0.29	58	Nov-19	4.5	7	-0.10
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

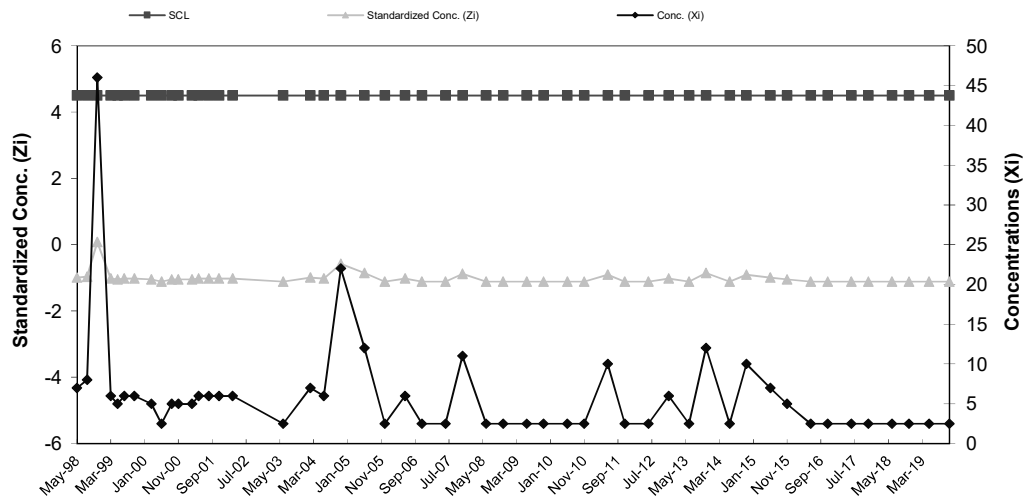


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault E - Nickel

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Mar-96	46	43.13	36.46
2	Jun-96	10		
3	Oct-96	10		
4	Nov-96	10		
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	50	Nov-15	4.5	5	-1.05
18	Sep-00	4.5	5	-1.05	51	Jun-16	4.5	2.5	-1.11
19	Nov-00	4.5	5	-1.05	52	Nov-16	4.5	2.5	-1.11
20	Mar-01	4.5	5	-1.05	53	Jun-17	4.5	2.5	-1.11
21	May-01	4.5	6	-1.02	54	Nov-17	4.5	2.5	-1.11
22	Aug-01	4.5	6	-1.02	55	Jun-18	4.5	2.5	-1.11
23	Nov-01	4.5	6	-1.02	56	Nov-18	4.5	2.5	-1.11
24	Mar-02	4.5	6	-1.02	57	May-19	4.5	2.5	-1.11
25	Jun-03	4.5	2.5	-1.11	58	Nov-19	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

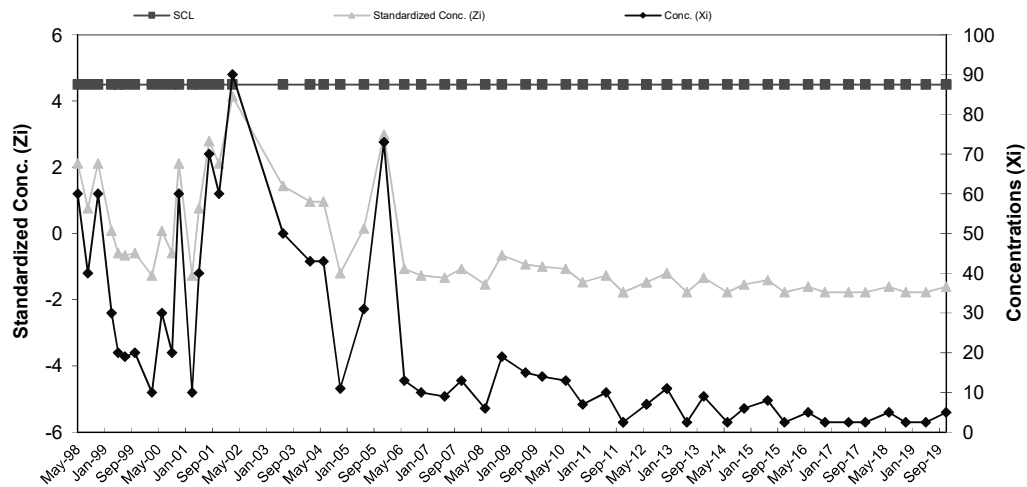


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault E - Zinc

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Mar-96	10	28.75	14.79
2	Jun-96	10		
3	Oct-96	20		
4	Nov-96	30		
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	50	Nov-15	4.5	2.5	-1.77
18	Sep-00	4.5	20	-0.59	51	Jun-16	4.5	5	-1.61
19	Nov-00	4.5	60	2.11	52	Nov-16	4.5	2.5	-1.77
20	Mar-01	4.5	10	-1.27	53	Jun-17	4.5	2.5	-1.77
21	May-01	4.5	40	0.76	54	Nov-17	4.5	2.5	-1.77
22	Aug-01	4.5	70	2.79	55	Jun-18	4.5	5	-1.61
23	Nov-01	4.5	60	2.11	56	Nov-18	4.5	2.5	-1.77
24	Mar-02	4.5	90	4.14	57	May-19	4.5	2.5	-1.77
25	Jun-03	4.5	50	1.44	58	Nov-19	4.5	5	-1.61
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

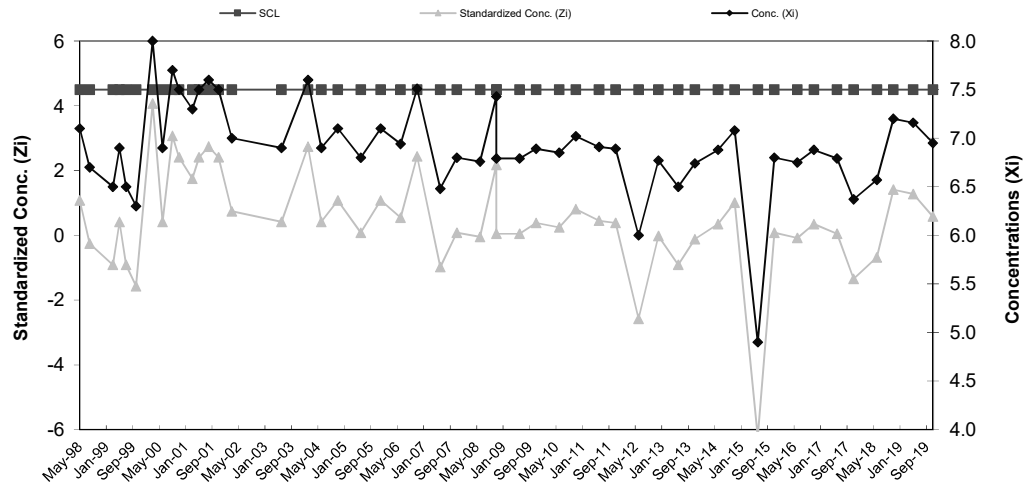


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault E - pH

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Mar-96	7.2	6.78	0.30
2	Jun-96	7		
3	Oct-96	6.9		
4	Nov-96	7		
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	48	Jun-15	4.5	4.9	-6.23
17	Sep-00	4.5	7.70	3.07	49	Nov-15	4.5	6.8	0.08
18	Nov-00	4.5	7.50	2.41	50	Jun-16	4.5	6.75	-0.08
19	Mar-01	4.5	7.30	1.74	51	Nov-16	4.5	6.88	0.35
20	May-01	4.5	7.50	2.41	52	Jun-17	4.5	6.79	0.05
21	Aug-01	4.5	7.60	2.74	53	Nov-17	4.5	6.37	-1.34
22	Nov-01	4.5	7.50	2.41	54	Jun-18	4.5	6.57	-0.68
23	Mar-02	4.5	7.00	0.75	55	Nov-18	4.5	7.2	1.41
24	Jun-03	4.5	6.90	0.42	56	May-19	4.5	7.16	1.28
25	Feb-04	4.5	7.60	2.74	57	Nov-19	4.5	6.95	0.58
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

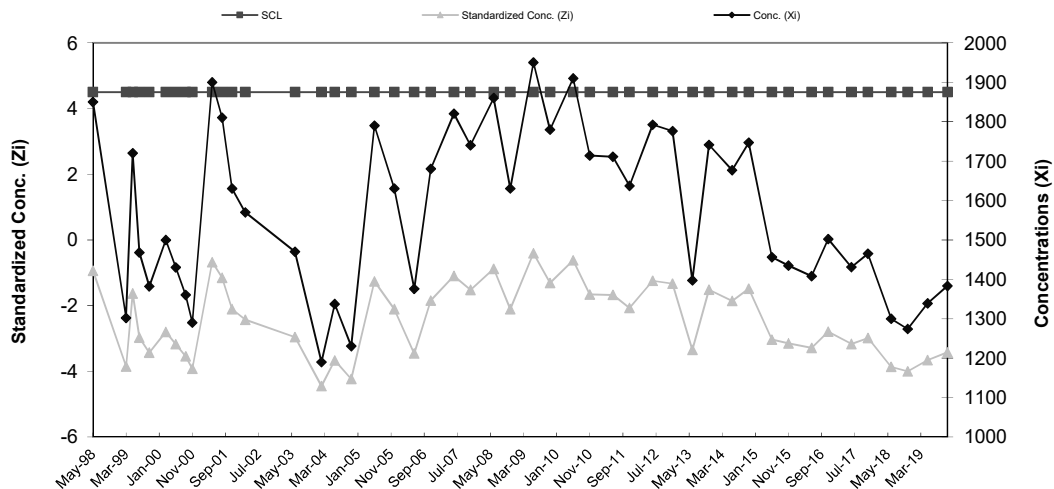


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault E - SpC

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Mar-96	2000	2,026.25	187.84
2	Jun-96	2400		
3	Oct-96	2000		
4	Nov-96	1800		
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	47	Nov-15	4.5	1435	-3.15
18	May-01	4.5	1900	-0.67	48	Jun-16	4.5	1408	-3.29
19	Aug-01	4.5	1810	-1.15	49	Nov-16	4.5	1502	-2.79
20	Nov-01	4.5	1630	-2.11	50	Jun-17	4.5	1431	-3.17
21	Mar-02	4.5	1570	-2.43	51	Nov-17	4.5	1465	-2.99
22	Jun-03	4.5	1470	-2.96	52	Jun-18	4.5	1300	-3.87
23	Feb-04	4.5	1190	-4.45	53	Nov-18	4.5	1274	-4.00
24	Jun-04	4.5	1337	-3.67	54	May-19	4.5	1339	-3.66
25	Nov-04	4.5	1230	-4.24	55	Nov-19	4.5	1383	-3.42
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

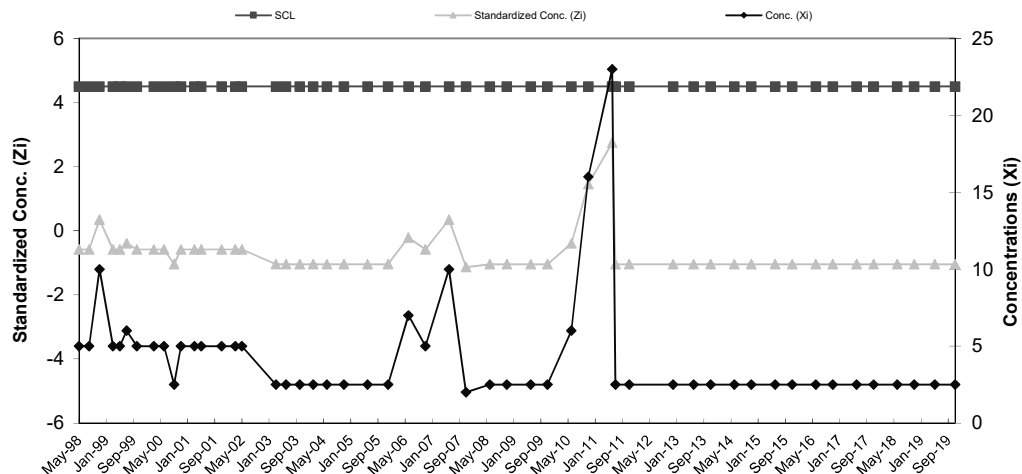


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault F - Chromium

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	10	8.13	5.40
2	Aug-95	10		
3	Jun-96	10		
4	Aug-96	10		
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	52	Nov-15	4.5	2.5	-1.04
18	Sep-00	4.5	2.5	-1.04	53	Jun-16	4.5	2.5	-1.04
19	Nov-00	4.5	5	-0.58	54	Nov-16	4.5	2.5	-1.04
20	Mar-01	4.5	5	-0.58	55	Jun-17	4.5	2.5	-1.04
21	May-01	4.5	5	-0.58	56	Nov-17	4.5	2.5	-1.04
22	Nov-01	4.5	5	-0.58	57	Jun-18	4.5	2.5	-1.04
23	Mar-02	4.5	5	-0.58	58	Nov-18	4.5	2.5	-1.04
24	May-02	4.5	5	-0.58	59	May-19	4.5	2.5	-1.04
25	Mar-03	4.5	2.5	-1.04	60	Nov-19	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

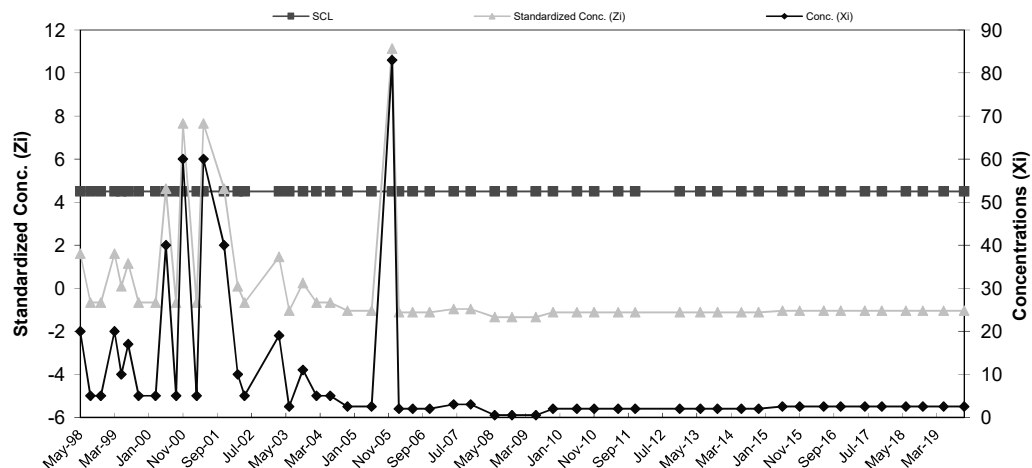


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault F - Copper

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	10	9.38	6.61
2	Aug-95	10		
3	Jun-96	10		
4	Aug-96	20		
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	52	Nov-15	4.5	2.5	-1.04
18	Sep-00	4.5	5	-0.66	53	Jun-16	4.5	2.5	-1.04
19	Nov-00	4.5	60	7.66	54	Nov-16	4.5	2.5	-1.04
20	Mar-01	4.5	5	-0.66	55	Jun-17	4.5	2.5	-1.04
21	May-01	4.5	60	7.66	56	Nov-17	4.5	2.5	-1.04
22	Nov-01	4.5	40	4.63	57	Jun-18	4.5	2.5	-1.04
23	Mar-02	4.5	10	0.09	58	Nov-18	4.5	2.5	-1.04
24	May-02	4.5	5	-0.66	59	May-19	4.5	2.5	-1.04
25	Mar-03	4.5	19	1.46	60	Nov-19	4.5	2.5	-1.04
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

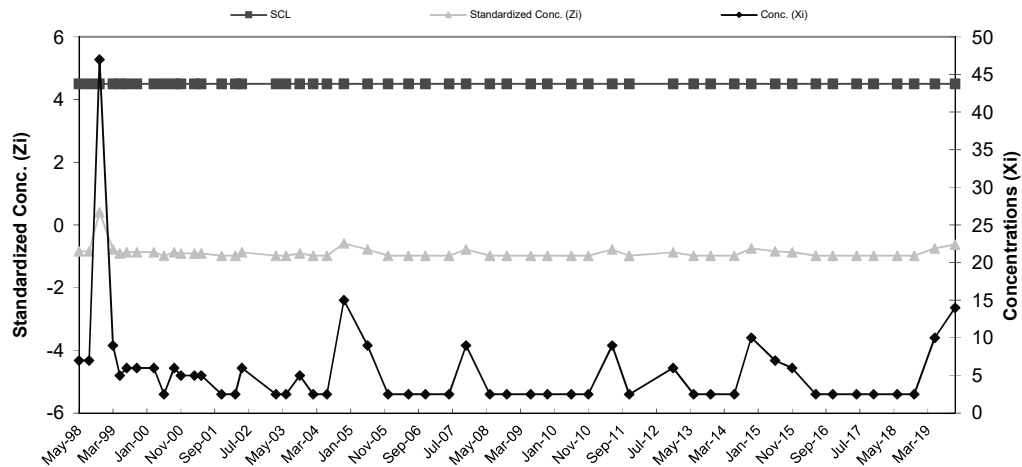


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault F - Nickel

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	15	33.88	31.96
2	Aug-95	20		
3	Jun-96	10		
4	Aug-96	10		
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	51	Nov-15	4.5	6	-0.87
18	Sep-00	4.5	6	-0.87	52	Jun-16	4.5	2.5	-0.98
19	Nov-00	4.5	5	-0.90	53	Nov-16	4.5	2.5	-0.98
20	Mar-01	4.5	5	-0.90	54	Jun-17	4.5	2.5	-0.98
21	May-01	4.5	5	-0.90	55	Nov-17	4.5	2.5	-0.98
22	Nov-01	4.5	2.5	-0.98	56	Jun-18	4.5	2.5	-0.98
23	Mar-02	4.5	2.5	-0.98	57	Nov-18	4.5	2.5	-0.98
24	May-02	4.5	6	-0.87	58	May-19	4.5	10	-0.75
25	Mar-03	4.5	2.5	-0.98	59	Nov-19	4.5	14	-0.62
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

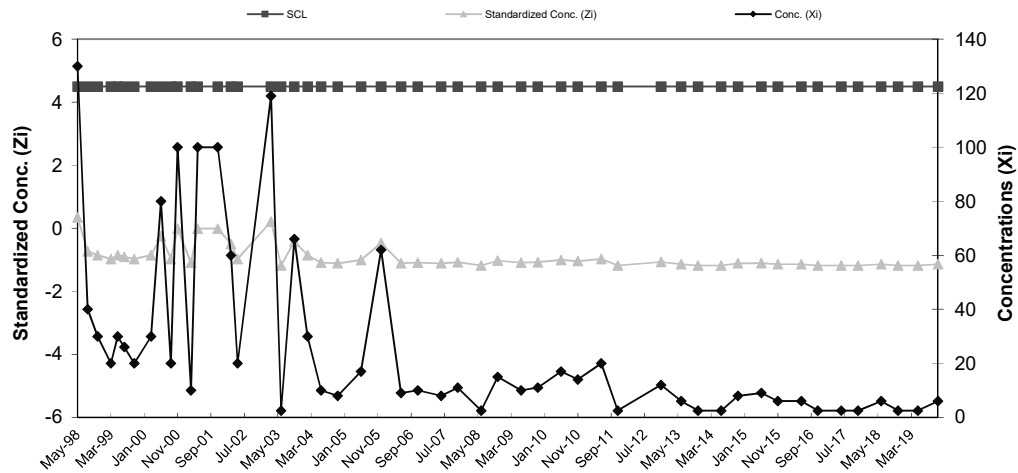


COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault F - Zinc

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	190	101.24	83.60
2	Aug-95	220		
3	Jun-96	10		
4	Aug-96	50		
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	51	Nov-15	4.5	6	-1.14
18	Sep-00	4.5	20	-0.97	52	Jun-16	4.5	6	-1.14
19	Nov-00	4.5	100	-0.01	53	Nov-16	4.5	2.5	-1.18
20	Mar-01	4.5	10	-1.09	54	Jun-17	4.5	2.5	-1.18
21	May-01	4.5	100	-0.01	55	Nov-17	4.5	2.5	-1.18
22	Nov-01	4.5	100	-0.01	56	Jun-18	4.5	6	-1.14
23	Mar-02	4.5	60	-0.49	57	Nov-18	4.5	2.5	-1.18
24	May-02	4.5	20	-0.97	58	May-19	4.5	2.5	-1.18
25	Mar-03	4.5	119	0.21	59	Nov-19	4.5	6	-1.14
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

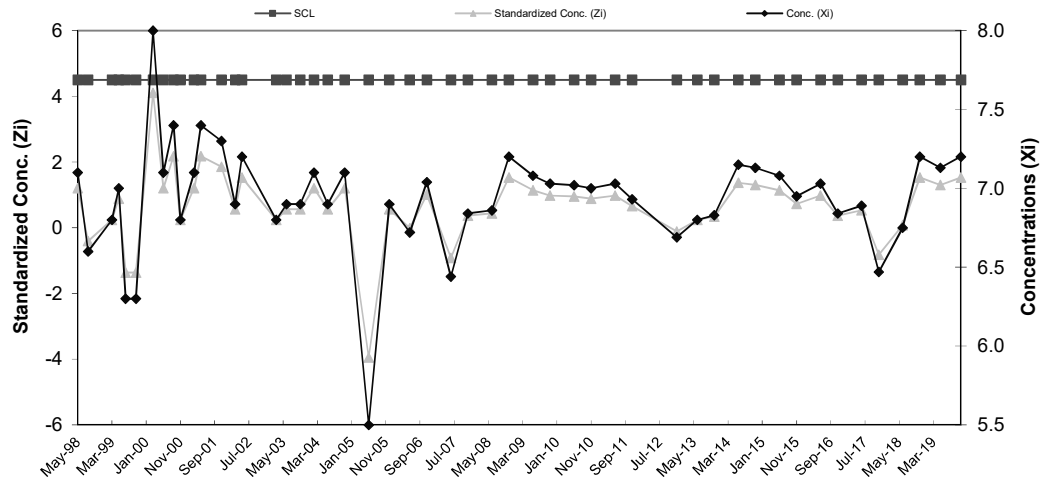


**COLDWATER ROAD LANDFILL FACILITY
RCRA LANDFILL LEAK DETECTION SYSTEM
SHEWART CONTROL CHART
Vault F - pH**

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	6.8	6.73	0.31
2	Aug-95	6.8		
3	Jun-96	6.8		
4	Aug-96	7.1		
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	50	Nov-15	4.5	6.95	0.72
18	Nov-00	4.5	6.80	0.24	51	Jun-16	4.5	7.03	0.98
19	Mar-01	4.5	7.10	1.21	52	Nov-16	4.5	6.84	0.37
20	May-01	4.5	7.40	2.17	53	Jun-17	4.5	6.89	0.53
21	Nov-01	4.5	7.30	1.85	54	Nov-17	4.5	6.47	-0.82
22	Mar-02	4.5	6.90	0.56	55	Jun-18	4.5	6.75	0.08
23	May-02	4.5	7.20	1.53	56	Nov-18	4.5	7.2	1.53
24	Mar-03	4.5	6.80	0.24	57	May-19	4.5	7.13	1.30
25	Jun-03	4.5	6.90	0.56	58	Nov-19	4.5	7.2	1.53
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	1,535.00	218.31
2	Aug-95	1100		
3	Jun-96	1600		
4	Aug-96	1500		
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	49	Nov-15	4.5	1686	0.69
18	Mar-01	4.5	1110	-1.95	50	Jun-16	4.5	1640	0.48
19	May-01	4.5	1470	-0.30	51	Nov-16	4.5	1641	0.49
20	Nov-01	4.5	1110	-1.95	52	Jun-17	4.5	1675	0.64
21	Mar-02	4.5	1290	-1.12	53	Nov-17	4.5	1626	0.42
22	May-02	4.5	1200	-1.53	54	Jun-18	4.5	1685	0.69
23	Mar-03	4.5	1270	-1.21	55	Nov-18	4.5	1637	0.47
24	Jun-03	4.5	1300	-1.08	56	May-19	4.5	1563	0.13
25	Oct-03	4.5	1040	-2.27	57	Nov-19	4.5	1593	0.27
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

