POST-CLOSURE GROUNDWATER MONITORING – SEMIANNUAL REPORT - FINAL

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

RACER Trust
Ypsilanti, Michigan

August 2013

O'BRIEN & GERE

15388 | 50137

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

Prepared for RACER Trust
Ypsilanti, Michigan

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

August 28, 2013

Mr. Richard Conforti, P.E.
Environmental Engineer
Michigan Department of Environmental Quality
Office of Waste Management and Radiological Protection
P.O. Box 30241
Lansing, Michigan 48909-7741

RE: Post-Closure Groundwater Monitoring 2013 Semiannual Report
Coldwater Road Landfill, Flint, Michigan
MID 005 356 860

FILE: 15388 /50137/rep

Dear Mr. Conforti:

On behalf of Revitalizing Auto Communities Environmental Response (RACER) Trust, O'Brien & Gere is pleased to present the results of the semiannual groundwater sampling event conducted in June 2013 for the Coldwater Road Landfill site (Figure 1). The groundwater samples were analyzed for total organic carbon (TOC, Method 415.1), total organic halogen (TOX, Method 9020A), specific conductivity (Method 120.1), chloride (Method 300.0), cyanide (CN, Method 335.4), sulfate (Method 300.0), phenols (Method 420.1), volatile organic compounds (VOCs, Method 8260B), dissolved metals (chromium (Cr), copper (Cu), nickel (Ni), zinc (Zn), iron (Fe), manganese (Mn)), and total sodium ((Na), Method 200.8).

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

Gauging and sampling were conducted on June 3, 2013 through June 6, 2013. The results are presented in three separate tables: Table 1 - Depth to Groundwater Levels in Monitoring Wells; Table 2 - Post-Closure Monitoring - Historical Analytical Results (Physical Parameters, TOC, TOX, Metals, Chloride, Cyanide, Phenols and Sulfate); Table 3 - Post-Closure Monitoring - Analytical Results (Volatile Organics). Laboratory analytical reports are included in (Appendix C).

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

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

The drift aquifer static water elevations, which were calculated from depth to water measurements collected on June 3, 2013, were consistent with historical data. Groundwater in the drift aquifer flows in a southerly direction as shown on (Figure 4).

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

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

- Chromium concentrations were not detected above the method detection limits
- Copper concentrations were not detected above method detection limits
- Nickel concentrations were not detected above method detection limits; except in monitoring wells B-9 (6 µg/L), and B-28 (5 µg/L) which was comparable to previous sample results
- Zinc concentrations were not detected above method detection limits in five monitoring wells, and increased in concentration in monitoring wells B-2D (26 µg/L), B-7 (24 µg/L), B-9 (25 µg/L), B-18A (31 µg/L), B-19Ar (25 µg/L), B-20D (11 µg/L, but was not detected in the associated duplicate sample) and B-21D (26 µg/L); however, concentrations remain within historical ranges
- Iron concentrations increased in six monitoring wells, and were comparable to previous sample results in six monitoring wells
- Manganese concentrations were comparable to previous sample results or decreased slightly
- Sodium concentrations were comparable to previous sample results or decreased slightly
- TOC concentrations were comparable to previous sample results
- TOX concentrations were comparable to previous sample results
- pH concentrations were comparable to previous sample results or decreased slightly
- Specific conductivity results were comparable to previous sample results or decreased slightly
- Chloride concentrations were not detected above the method detection limits in five monitoring wells, and were comparable to previous sample results in seven monitoring wells
- Sulfate concentrations were comparable to previous sample results
- Cyanide, phenols and VOCs were not detected above method detection limits in the monitoring wells sampled during the June 2013 sampling event.

A QA/QC review of the field and analytical data indicates that the data is useable for the intended purpose without deviations from quality assurance standards that would require rejection or further qualification of the data. Details of the data verification results for the groundwater monitoring data are included in Appendix D. The duplicate sample results collected from monitoring well B-20D were comparable to the original sample except for zinc, which was detected at 11 ug/L in the original sample, but was not detected (<5 ug/L) in the duplicate sample.

There were no exceedances of the Shewart control limits (SCL) during this sampling event. During this sampling event there were spikes of zinc in monitoring wells B-19Ar (25 µg/L) and B-21D (26 µg/L). There were also spikes of pH in monitoring wells B-19Ar (8.16) and B-27D (8.34). The spikes for zinc and pH were not confirmed spikes (as defined in Section 5.7.2 of the Post-Closure Care Plan, O'Brien & Gere, 2008) and do not suggest there was a release from the landfill. There was also a positive (*i.e.*, increasing concentration) trend for zinc in monitoring well B-9. However, the latest zinc concentration in B-9 is greater than the zinc concentrations in Vaults E and F since 2005, and was even about the same or greater than the recent zinc concentrations in Sumps E and F, which represent leachate concentrations. Furthermore, the copper and nickel concentrations in the landfill leachate tend to be much greater than the zinc concentrations, so a leak from the landfill would more likely promote higher concentrations of copper or nickel than zinc, yet copper was not detected and nickel was only detected at a concentration of 6 µg/L in B-9. Therefore, similar to the aforementioned spikes in zinc and pH, the semiannual groundwater monitoring results do not suggest there was a release from the landfill. The spikes and the positive trend in zinc will continue to be monitored during future sampling events. No other trends or spikes were observed during this monitoring event. The Shewart control charts are included as Appendix E.

The next sampling event (annual event) is currently scheduled for November 2013. If you have any questions, please feel free to contact either of us at (248) 477-5701.

Very truly yours,
O'BRIEN & GERE ENGINEERS, INC.

Scott L. Cormier, PE
Vice President

Very truly yours,
O'BRIEN & GERE ENGINEERS, INC.

Clifford S. Yantz
Technical Associate

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

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

On Behalf of RACER Trust

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

Agent for RACER Trust

July 31, 2013

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Date

cc: file

TABLES

Table 1
RACER Trust - Coldwater Road Landfill Facility
Depth to Ground Water Levels in Monitoring Wells
June 3, 2013

Well	Top Of Casing Elev. (ft) *	Depth To Water (ft)	Static Water Elev. (ft)
B-2D	805.18	54.51	750.67
B-7	815.20	20.63	794.57
B-9	809.16	3.70	805.46
B-18A	812.25	23.98	788.27
B-19A	813.89	6.02	807.87
B-19AR	813.15	39.21	773.94
B-20D	816.61	70.69	745.92
B-21D	822.60	81.45	741.15
B-22D	823.73	85.90	737.83
B-23DR	813.72	82.92	730.80
B-24R	817.37	12.18	805.19
B-27D**	814.36	77.45	736.91
B-28	818.07	5.31	812.76

Notes

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

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

R - Indicates a replacement well location.

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

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

Well ID	Sample Date	Indicator Parameters					Dissolved Metals (µg/L)							Inorganics (mg/L)			
		TOC (mg/L)	TOX (µg/L)	pH	SpC	T	Cr	Cu	Ni	Zn	Fe	Mn	Na	Chloride	Cyanide	Phenols	Sulfate
		MDEQ Residential Drinking Water Criteria					100 (A)	1,000 (A)	100 (A)	2,400							
B-2D	6/21/1995	5.3	<10	9.0	434	15.0	<20	<20	<30	<20	--	--	--	--	--	--	--
	8/31/1995	6.3	130	8.3	479	14.4	<20	<20	<40	<20	--	--	--	--	--	--	--
	2/9/1996	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/19/1996	5.2	<100	7.5	580	12.4	<20	<20	<20	<20	--	--	--	--	--	--	--
	8/21/1996	7.4	<5	7.7	641	13.9	<20	<20	<20	50	--	--	--	--	--	--	--
	11/13/1996	11.0	<5	7.3	769	7.6	<20	<20	<20	30	--	--	--	--	--	--	--
	5/6/1997	26.0	<100	6.3	1500	7.0	10	<10	28	30	--	--	--	--	--	--	--
	11/6/1997	15.0	<100	6.9	660	9.0	<10	<10	39	<10	280	577	--	12	<0.005	<0.020	79
	5/4/1998	29.0	12	6.7	549	12.4	<10	<10	<5	<10	--	--	--	--	--	--	--
	11/5/1998	52.0	18	4.7	498	8.6	<10	<10	<5	10	<10	17	33,600	--	--	--	--
	12/23/1998	--	--	--	--	--	--	--	--	--	--	--	--	13	<0.005	<0.020	40
	4/26/1999	52.0	<100	8.5	523	14.5	<10	<10	<5	<10	--	--	--	--	--	--	--
	11/5/1999	6.4	<100	7.4	405	12.8	<10	<10	<5	40	70	21	35,100	4	<0.005	<0.020	42
	4/26/2000	5.4	<100	8.0	770	17.4	<10	<10	<5	<10	--	--	--	--	--	--	--
	12/8/2000	5.5	<10	6.7	610	9.7	<10	<10	9	<10	40	--	22,900	7	<0.005	<0.020	81
	5/15/2001	5.5	<100	7.8	890	13.2	<10	<10	<5	<10	--	--	--	--	--	--	--
	10/18/2001	4.1	<100	7.4	1830	9.4	<10	<10	<5	<10	230	--	12,900	2	<0.005	<0.020	32
Dup.	10/18/2001	3.6	<100	7.4	1780	7.8	<10	<10	<5	<10	210	--	12,700	1	<0.005	<0.020	32
	5/16/2002	4.0	<100	7.2	1000	11.6	<10	<10	<5	<10	--	--	--	--	--	--	--
	11/7/2002	2.6	<30	7.4	490	9.5	<5	<5	<5	<5	140	8	11,900	2	<0.005	<0.020	32
Dup.	11/7/2002	2.7	<30	--	--	--	<5	<5	<5	<5	140	6	11,200	2	<0.005	<0.020	30
	6/3/2003	4.4	<30	6.9	530	12.9	<5	<5	<5	<5	--	--	--	--	--	--	--
	11/13/2003	2.8	<30	8.0	630	7.7	<5	<5	<5	<5	110	7	--	2	<0.005	<0.010	31
	6/30/2004	4.2	<30	6.3	570	15.8	<5	<5	<5	7	--	--	--	--	--	--	--
	12/10/2004	2.0	<30	6.8	550	10.2	<5	<5	<5	10	760	145	10,700	2	<0.005	<0.010	35
	6/8/2005	2.0	<30	8.0	620	11.5	<5	<5	<5	<5	660	199	10,900	<5	<0.005	<0.010	34
	12/8/2005	3.0	<30	6.9	642	10.2	9	<4	<5	<10	140	120	13,300	--	--	--	--
	6/28/2006	6.3	<30	7.4	671	12.2	<5	<4	<5	8	110	70	15,000	2	<0.005	<0.010	50
Dup.	6/28/2006	5.1	<30	7.4	682	12.2	<5	<4	<5	8	120	70	15,200	3	<0.005	<0.010	50
	11/30/2006	5.1	43.3	7.2	677	8.4	<5	<4	<5	18	--	--	--	--	--	--	--
	6/8/2007	2.4	69.1	6.8	644	14.1	8	2	1	6	110	104	14,800	4	<0.005	<0.010	44
	11/14/2007	5.2	<30	7.1	783	14.9	1	1	4	9	--	--	--	--	--	--	--
	6/25/2008	5.7	<60	6.9	920	18.4	<5	1	5	7	350	32	26,100	10	<0.005	<0.010	98
	11/20/2008	4.5	<30	6.8	806	9.1	<5	<1	<5	<5	--	--	--	--	--	--	--
	6/25/2009	5.6	<30	7.0	924	23.7	<5	203	<5	113	22	77	29,700	10	<0.005	<0.010	104
	11/16/2009	4	<30	7.2	835	10.2	<5	<4	<5	6	--	--	--	--	--	--	--
	6/16/2010	5	<30	7.1	841	13.9	<5	<4	<5	<5	40	83	19,000	7	<0.005	<0.020	75
	11/10/2010	4	<30	7.2	779	11.3	11	<4	<5	<5	--	--	--	--	--	--	--
	6/21/2011	2.9	<30	7.0	742	19.3	9	<4	<5	<5	250	55	16,900	6	<0.005	<0.010	57
Replicate	6/21/2011	--	--	--	--	--	<5	--	--	--	--	--	--	--	--	--	--
	11/15/2011	3	16	7.1	751	11.3	<5	<4	<5	<5	--	--	--	--	--	--	--
	6/27/2012	2.2	16	7.0	714	12.7	<5	<4	<5	<5	<20	25	17,300	<5	<0.005	<0.02	43
	12/6/2012	2.6	<40	7.5	714	10.2	<5	<4	<5	<5	--	--	--	--	--	--	--
	6/6/2013	**1.6**	**<10**	**6.8**	**742**	**12.5**	**<5**	**<4**	**<5**	**26**	**990**	**31**	**24,400**	**<5**	**<0.005**	**<0.02**	**68**

See notes on page 16.

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

Well ID	Sample Date	Indicator Parameters					Dissolved Metals (µg/L)							Inorganics (mg/L)			
		TOC (mg/L)	TOX (µg/L)	pH	SpC	T	Cr	Cu	Ni	Zn	Fe	Mn	Na	Chloride	Cyanide	Phenols	Sulfate
		MDEQ Residential Drinking Water Criteria					100 (A)	1,000 (A)	100 (A)	2,400							
B-7	6/21/1995	8.7	23	7.5	1509	13.8	<20	<20	<30	<20	--	--	--	--	--	--	--
	8/31/1995	--	--	--	--	--	<20	<20	<40	<20	--	--	--	--	--	--	--
	2/9/1996	14.0	120	--	--	--	<20	<20	<40	22	--	--	--	--	--	--	--
	6/19/1996	20.0	<100	6.9	1,508	13.2	<20	<20	<20	20	--	--	--	--	--	--	--
	8/21/1996	55.0	26	7.6	1,567	17.1	<20	<20	<20	60	--	--	--	--	--	--	--
	11/13/1996	27.0	<5	8.0	1,960	7.2	<20	<20	<20	50	--	--	--	--	--	--	--
	5/6/1997	16.0	<100	7.2	780	11.0	<10	10	14	10	--	--	--	--	--	--	--
	11/6/1997	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	5/4/1998	6.0	<5	6.6	1,270	10.7	<10	<10	<5	20	--	--	--	--	--	--	--
	11/5/1998	4.0	<10	4.6	1,240	11.2	<10	<10	8	30	10	424	31,000	--	--	--	--
	12/23/1998	--	--	--	--	--		--	--	--	--	--	--	58	<0.005	<0.020	161
	4/26/1999	3.9	<100	7.5	1,413	14.2	<10	<10	10	<10	--	--	--	--	--	--	--
	11/5/1999	5.1	<100	6.5	1,230	14.2	<10	<10	8	30	260	313	41,800	64	<0.005	<0.020	301
	4/26/2000	4.8	<100	7.6	1,450	10.2	<10	<10	<5	<10	--	--	--	--	--	--	--
Dup.	4/26/2000	5.9	<100	NS	NS	NS	<10	<10	6	10	--	--	--	--	--	--	--
	12/8/2000	4.2	<10	7.1	1,180	9.5	<10	<10	20	10	50	--	58,900	79	<0.005	<0.020	227
	5/16/2001	5.0	<100	7.3	1,330	13.0	<10	<10	7	<10	--	--	--	--	--	--	--
	10/18/2001	5.3	<100	7.2	1,210	12.5	<10	<10	5	<10	330	--	60,800	81	<0.005	NA	205
	5/16/2002	3.9	<100	7.2	1,850	11.9	<10	<10	<5	10	--	--	--	--	--	--	--
	11/7/2002	NR	NR	7.4	1,120	10.3	<5	<5	5	5	250	<5	65,500	NA	NA	NA	NA
	6/4/2003	3.3	<30	6.9	1,460	12.6	<5	<5	<5	<5	--	--	--	--	--	--	--
	11/13/2003	3.9	<30	6.9	1,590	9.6	<5	<5	<5	5	190	<5	--	85	<0.005	<0.010	279
	6/30/2004	4.3	43	7.1	1,353	16.0	<5	<5	9	7	--	--	--	--	--	--	--
	12/9/2004	4.0	<30	5.3	1,290	10.8	<5	<5	7	14	180	74	71,200	78	<0.005	<0.010	251
	6/8/2005	7.0	86	7.4	1,121	10.9	5	<5	9	13	170	31	81,900	80	<0.005	<0.010	254
	12/7/2005	7.5	<30	8.7	1,430	12.2	10	<4	6	20	150	50	85,300	--	--	--	--
	6/29/2006	4.3	<30	7.2	1,470	11.7	5	<4	9	18	190	150	76,900	73	<0.005	<0.010	270
	11/29/2006	4.4	<30	6.9	1,380	15.3	<5	<4	9	11	--	--	--	--	--	--	--
	6/7/2007	3.9	23.7	6.9	1,400	13.4	11	27	5	14	130	42	87,300	72	<0.005	<0.010	208
	11/14/2007	3.5	<30	6.9	1,350	13.4	14	6	16	20	--	--	--	--	--	--	--
	6/25/2008	3.8	72.9	6.9	1,410	20.7	<5	3	6	<5	350	10	94,800	68	<0.005	<0.010	222
	11/17/2008	4.6	20.5	6.8	1,258	5.5	<5	3	5	17	--	--	--	--	--	--	--
	6/24/2009	4.5	<30	6.9	1,184	20.0	<5	3	<5	14	67	36	84,500	40	<0.005	<0.010	154
	11/17/2009	8	25.3	7.3	1,090	10.3	<5	<4	<5	<5	--	--	--	--	--	--	--
	6/17/2010	5	<30	7.0	1,290	16.3	<5	<4	<5	<5	<20	47	86,000	61	<0.005	<0.020	160
	11/8/2010	8	103	7.2	997	13.9	17	<4	<5	<5	--	--	--	--	--	--	--
	6/22/2011	4.3	25	7.3	910	13.7	10	<4	5	6	220	6	55,200	26	<0.005	<0.010	88
Replicate	6/22/2011	--	--	--	--	--	<5	--	--	--	--	--	--	--	--	--	--
	11/16/2011	5	28	7.0	974	12.8	<5	6	8	11	--	--	--	--	--	--	--
	6/27/2012	3.7	97	6.8	1,082	15.0	<5	<4	<5	<5	<20	58	64,900	40	<0.005	<0.02	134
	12/6/2012	7.9	<40	7.1	825	8.7	<5	4	<5	9	--	--	--	--	--	--	--
	6/5/2013	**4.5**	6	**7.2**	**921**	**14.0**	**<5**	**<4**	**<5**	**24**	**30**	**13**	**27,500**	**32**	**<0.005**	**<0.02**	**106**

See notes on page 16.

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

Well ID	Sample Date	Indicator Parameters					Dissolved Metals (µg/L)							Inorganics (mg/L)			
		TOC (mg/L)	TOX (µg/L)	pH	SpC	T	Cr	Cu	Ni	Zn	Fe	Mn	Na	Chloride	Cyanide	Phenols	Sulfate
		MDEQ Residential Drinking Water Criteria					100 (A)	1,000 (A)	100 (A)	2,400							
	6/21/1995	3.5	34	7.7	2,400	14.6	<20	<20	<30	<20	--	--	--	--	--	--	--
	8/31/1995	3.9	<10	7.7	1,829	14.8	37	43	<40	<20	--	--	--	--	--	--	--
	2/9/1996	3.1	<10	7.3	2,860	8.0	<20	<20	<40	<20	--	--	--	--	--	--	--
	6/19/1996	2.1	<100	6.8	2,550	11.5	<20	<20	<20	<20	--	--	--	--	--	--	--
B-9	8/21/1996	2.3	<5	8.0	2,310	16.4	<20	<20	<20	70	--	--	--	--	--	--	--
	11/13/1996	71.0	<5	6.8	3,280	9.2	<20	<20	<20	40	--	--	--	--	--	--	--
	5/6/1997	3.0	<100	6.8	2,600	10.0	<10	<10	51	20	--	--	--	--	--	--	--
	11/6/1997	2.0	<100	6.5	2,800	11.0	<10	<10	183	40	650	741	--	141	<0.005	<0.020	1,178
	5/4/1998	3.0	<5	6.6	2,400	14.5	10	10	18	40	--	--	--	--	--	--	--
	11/5/1998	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--	--	--
	12/23/1998	--	--	--	--	--	--	--	--	--	--	--	--	NS	NS	NS	NS
	4/26/1999	4.0	<100	7.7	1,860	12.2	<10	<10	19	20	--	--	--	--	--	--	--
	11/5/1999	2.5	<100	6.8	2,340	15.4	<10	<10	20	30	610	1280	47,100	128	<0.005	<0.020	1,222
	4/26/2000	5.5	<100	7.6	2,780	9.5	<10	<10	12	30	--	--	--	--	--	--	--
	12/8/2000	5.0	<10	7.6	2,400	7.8	<10	<10	46	<10	50	--	69,500	142	<0.005	<0.020	1,246
	5/16/2001	4.8	<100	7.4	1,070	12.6	<10	<10	7	10	--	--	--	--	--	--	--
	10/17/2001	4.0	<100	7.5	2,130	10.8	<10	<10	8	20	940	--	66,000	122	<0.005	NA	1,150
	5/16/2002	1.9	<100	7.2	2,470	11.6	<10	<10	7	10	--	--	--	--	--	--	--
	11/7/2002	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	6/4/2003	2.2	57	6.8	2,690	10.7	<5	<5	15	13	--	--	--	--	--	--	--
	11/13/2003	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	6/30/2004	3.8	NS	6.9	2,379	12.7	<5	8	19	28	--	--	--	--	--	--	--
	12/9/2004	3.0	<30	5.9	2,480	11.4	<5	<5	11	19	570	248	55,900	149	<0.005	<0.010	1,350
	6/8/2005	4.0	<30	7.1	2,116	10.3	6	6	12	17	480	701	58,300	128	<0.005	<0.010	1,160
	12/7/2005	5.0	<30	8.6	2,830	11.9	11	5	12	40	320	410	58,500	--	--	--	--
	6/29/2006	1.9	<30	6.8	2,820	12.4	6	6	13	19	390	330	63,600	125	<0.005	<0.010	1,150
	11/30/2006	2.7	36.7	7.2	2,830	12.5	<5	6	<5	14	--	--	--	--	--	--	--
	6/5/2007	2.1	<30	6.7	2,770	11.0	12	6	24	21	320	1,900	67,300	112	<0.005	<0.010	1,120
	11/16/2007	2.0	27.4	6.7	3,000	9.4	2	6	24	18	--	--	--	--	--	--	--
	7/2/2008	1.8	36.4	6.4	3,060	19.7	<5	4	13	19	780	812	64,200	133	<0.005	<0.010	1,280
	11/20/2008	2.2	15.9	6.4	3,290	8.1	<5	<1	13	<5	--	--	--	--	--	--	--
Dup.	11/20/2008	2.0	127	6.4	3,280	8.1	<5	<1	13	<5	--	--	--	--	--	--	--
	6/25/2009	1.6	<30	6.7	2,700	19.8	<5	<1	<5	<5	59	173	65,300	107	<0.005	<0.010	1,120
	11/16/2009	3	84.1	6.7	3,030	12.7	<5	<4	16	8	--	--	--	--	--	--	--
	6/15/2010	3	27.5	6.7	3,030	13.0	<5	<4	7	6	460	475	70,700	117	<0.005	<0.020	1,230
	11/11/2010	3	37.5	6.4	2,910	12.9	19	4	7	15	--	--	--	--	--	--	--
	6/22/2011	1.9	<30	6.7	2,600	14.0	17	6	21	12	780	661	63,300	99	<0.005	<0.010	972
Replicate	6/22/2011	--	--	--	--	--	<5	--	--	--	--	--	--	--	--	--	--
	11/16/2011	2	50	7.2	3,060	12.9	<5	<4	7	<5	--	--	--	--	--	--	--
	6/26/2012	2	21	6.5	2,770	14.0	<5	<4	8	<5	60	433	73,700	101	<0.005	<0.02	1,110
	12/5/2012	2.3	19	6.8	3,210	12.0	<5	8	17	23	--	--	--	--	--	--	--
	6/5/2013	**2.1**	**15**	**7.1**	**2,660**	**12.5**	**<5**	**<4**	**6**	**25**	**40**	**173**	**66,400**	**106**	**<0.005**	**<0.02**	**1,150**

See notes on page 16.

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

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

See notes on page 16.

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

Well ID	Sample Date	Indicator Parameters					Dissolved Metals (µg/L)							Inorganics (mg/L)			
		TOC (mg/L)	TOX (µg/L)	pH	SpC	T	Cr	Cu	Ni	Zn	Fe	Mn	Na	Chloride	Cyanide	Phenols	Sulfate
		MDEQ Residential Drinking Water Criteria					100 (A)	1,000 (A)	100 (A)	2,400							
B-18A	6/21/1995	2.7	<10	7.5	1,048	13.3	<20	<20	<30	150	--	--	--	--	--	--	--
	8/31/1995	3.0	<10	7.9	989	13.2	<20	<20	<40	<20	--	--	--	--	--	--	--
	2/9/1996	2.3	<10	7.4	1,021	9.3	<20	<20	<40	<20	--	--	--	--	--	--	--
	6/19/1996	1.4	<100	7.0	944	13.2	<20	<20	<20	<20	--	--	--	--	--	--	--
	8/21/1996	2.4	<5	7.5	1,041	12.8	<20	<20	<20	60	--	--	--	--	--	--	--
	11/13/1996	19.0	<5	7.2	1,331	6.4	<20	<20	<20	70	--	--	--	--	--	--	--
	5/6/1997	2.0	<100	6.5	900	10.0	<10	<10	13	10	--	--	--	--	--	--	--
	11/6/1997	4.0	<100	6.4	1,100	10.0	<10	<10	62	10	380	62	--	12	<0.005	<0.020	130
	5/4/1998	2.0	<5	6.7	862	11.8	<10	<10	<5	20	--	--	--	--	--	--	--
	11/5/1998	1.0	<10	6.0	1,090	11.8	<10	<10	<5	10	240	128	46,000	--	--	--	--
	12/23/1998	--	--	--	--	--	--	--	--	--	--	--	--	10	<0.005	<0.020	133
	4/26/1999	2.1	<100	8.1	921	14.0	<10	<10	<5	20	--	--	--	--	--	--	--
	11/5/1999	4.3	<100	7.1	832	14.0	<10	<10	<5	60	180	155	39,200	8	<0.005	<0.020	130
	4/26/2000	2.4	<100	7.5	980	10.4	<10	<10	<5	30	--	--	--	--	--	--	--
	12/8/2000	2.6	<10	7.0	990	9.9	<10	<10	15	<10	<10	--	34,500	7	<0.005	<0.020	126
Dup.	12/8/2000	2.6	<10	--	--	--	<10	<10	13	<10	40	--	35,100	7	<0.005	<0.020	112
	5/16/2001	2.4	<100	7.9	1,160	12.9	<10	<10	<5	10	--	--	--	--	--	--	--
	10/17/2001	2.2	<100	7.1	1,020	12.2	<10	<10	<5	<10	350	--	35,400	7	<0.005	<0.020	132
	5/16/2002	1.5	<100	7.2	2,080	12.2	<10	<10	<5	10	--	--	--	--	--	--	--
	11/7/2002	1.9	<30	7.2	820	10.1	<5	<5	<5	<5	190	26	40,800	10	<0.005	<0.020	134
	6/4/2003	1.6	<30	6.9	790	13.1	<5	<5	<5	5	--	--	--	--	--	--	--
	11/13/2003	1	<30	7.7	1,180	7.1	<5	<5	<5	<5	160	<5	--	10	<0.005	<0.010	129
Dup.	11/13/2003	--	--	--	--	--	--	--	--	--	--	--	--	11	<0.005	<0.010	130
	6/29/2004	1.2	<30	7.2	863	12.0	<5	<5	7	10	--	--	--	--	--	--	--
	12/9/2004	3	<30	6.2	960	10.5	<5	<5	9	12	900	363	37,900	14	<0.005	<0.010	127
	6/8/2005	2	<30	7.4	819	10.9	<5	<5	6	16	170	80	40,000	11	<0.005	<0.010	120
	12/8/2005	2.6	<30	9.7	1,120	10.1	11	<4	<5	10	390	170	47,000	--	--	--	--
	6/27/2006	1.2	<30	7.1	1,110	13.2	5	4	<5	46	170	50	48,200	13	<0.005	<0.010	125
	11/30/2006	1.4	119	7.2	1,100	11.5	5	<4	<5	9	--	--	--	--	--	--	--
	6/4/2007	1	19.9	7.0	1,070	13.2	9	3	3	14	110	22	51,800	15	<0.005	<0.010	114
	11/14/2007	<1	19	6.9	1,090	13.7	1	2	6	11	--	--	--	--	--	--	--
	6/25/2008	12	34.1	7.1	1,060	20.4	<5	2	<5	11	310	<5	54,800	15	<0.005	<0.010	110
	11/18/2008	<1	<30	6.6	1,088	2.9	<5	<1	<5	<5	--	--	--	--	--	--	--
	6/24/2009	<1	<30	7.3	1,060	26.2	<5	1	<5	15	<20	<5	53,100	16	<0.005	<0.010	111
	11/18/2009	2	<30	6.9	1,070	11.7	<5	<4	<5	45	--	--	--	--	--	--	--
	6/17/2010	1	<30	7.2	1,080	17.5	<5	<4	<5	8	<20	<5	45,500	15	<0.005	<0.020	109
	11/10/2010	2	28	6.9	1,065	9.5	12	<4	<5	<5	--	--	--	--	--	--	--
	6/21/2011	1.2	<30	7.2	1,031	18.8	10	<4	5	12	240	<5	46,100	17	<0.005	<0.010	103
Replicate	6/21/2011	--	--	--	--	--	<5	--	--	--	--	--	--	--	--	--	--
	11/15/2011	1	28	7.0	1,063	12.0	<5	<4	<5	<5	--	--	--	--	--	--	--
	6/27/2012	1.2	<40	7.0	1,057	14.4	<5	<4	<5	<5	30	26	50,000	18	<0.005	<0.02	103
Dup.	6/27/2012	1.2	<40	7.0	1,054	14.4	<5	<4	<5	5	40	27	46,500	18	<0.005	<0.02	101
	12/6/2012	1.5	<40	7.0	1,071	9.3	<5	<4	5	9	--	--	--	--	--	--	--
	6/5/2013	**1.5**	**4.7**	**7.2**	**1,040**	**14.6**	**<5**	**<4**	**<5**	**31**	**20**	**12**	**43,900**	**19**	**<0.005**	**<0.02**	**110**

See notes on page 16.

Table 2
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Post-Closure Monitoring - Historical Analytical Results
Physical Parameters, TOC, TOX, Metals, Chloride, Cyanide, Phenols, and Sulfate

Well ID	Sample Date	Indicator Parameters					Dissolved Metals (µg/L)							Inorganics (mg/L)			
		TOC (mg/L)	TOX (µg/L)	pH	SpC	T	Cr	Cu	Ni	Zn	Fe	Mn	Na	Chloride	Cyanide	Phenols	Sulfate
		MDEQ Residential Drinking Water Criteria					100 (A)	1,000 (A)	100 (A)	2,400							
B-19A	6/21/1995	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--	--	--
	8/31/1995	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--	--	--
	2/9/1996	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--	--	--
	6/19/1996	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--	--	--
	8/21/1996	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--	--	--
	11/13/1996	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--	--	--
	5/6/1997	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--	--	--
	11/6/1997	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	WD	WD	WD	WD
	5/4/1998	3.0	<5	6.8	1,480	10.1	<10	<10	<5	30	--	--	--	--	--	--	--
	11/5/1998	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--	--	--
	12/23/1998	--	--	--	--	--	--	--	--	--	--	--	--	NS	NS	NS	NS
	4/26/1999	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--	--	--
	11/5/1999	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4/26/2000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--	--	--
	12/8/2000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	5/16/2001	4.0	<100	7.1	1,050	11.8	<10	<10	<5	<10	--	--	--	--	--	--	--
	10/17/2001	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	5/16/2002	6.0	<100	7.2	1,740	10.6	<10	<10	<5	10	--	--	--	--	--	--	--
	11/7/2002	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	6/4/2003	5.8	<30	6.9	1,350	12.9	<5	<5	<5	<5	--	--	--	--	--	--	--
	11/13/2003	3.4	<30	7.6	1,620	10.2	<5	<5	<5	<5	20	<5	--	148	<0.005	<0.010	229
	6/29/2004	3.9	<30	7.2	1,316	14.7	<5	<5	<5	8	--	--	--	--	--	--	--
	12/9/2004	5.0	33	6.2	1,340	9.9	<5	<5	<5	9	240	11	111,000	116	<0.005	<0.010	233
Dup.	12/9/2004	5.0	<30	--	--	--	<5	<5	<5	7	170	<5	114,000	116	<0.005	<0.010	233
B-19AR	6/7/2005	3.0	<30	7.1	829	12.2	<5	<5	7	<5	1,320	228	15,700	52	<0.005	<0.010	130
Dup.	12/8/2005	5.5	<30	--	1,390	--	10	<4	<5	20	160	<20	81,400	--	--	--	--
	12/8/2005	5.3	<30	7.1	1,390	12.3	10	<4	<5	<10	150	<20	74,800	--	--	--	--
Re-sample	2/14/2006	--	--	8.0	840	5.9	<5	--	--	--	--	--	--	--	--	--	--
	6/29/2006	2.7	<30	7.6	860	12.0	<5	<4	12	21	240	210	22,400	51	<0.005	<0.010	153
	11/30/2006	6.2	33.7	7.2	1,300	11.4	5	<4	<5	<5	--	--	--	--	--	--	--
	6/7/2007	2	<30	7.0	899	11.4	6	4	4	9	70	21	19,700	58	<0.005	<0.010	136
	11/13/2007	1.5	<30	7.3	1,070	12.1	3	7	26	11	--	--	--	--	--	--	--
	6/25/2008	2.4	38.8	7.1	1,060	17.4	<5	3	<5	16	380	9	18,500	58	<0.005	<0.010	148
	11/18/2008	1.3	<30	7.0	1,052	8.0	<5	1	<5	14	--	--	--	--	--	--	--
	6/24/2009	1.0	<30	7.7	911	17.3	<5	2	<5	<5	36	<5	21,200	60	<0.005	<0.010	147
	11/19/2009	2	<30	7.4	994	10.4	<5	<4	<5	7	--	--	--	--	--	--	--
	6/15/2010	2	<30	7.6	992	16.1	<5	<4	<5	<5	<20	<5	19,800	59	<0.005	<0.020	154
	11/10/2010	2	<30	6.9	1,128	8.7	12	<4	<5	<5	--	--	--	--	--	--	--
	6/22/2011	1.5	<30	7.4	902	17.2	5	<4	5	<5	240	<5	22,400	64	<0.005	<0.010	140
Replicate	6/22/2011	--	--	--	--	--	<5	--	--	--	--	--	--	--	--	--	--
	11/16/2011	2	26	7.1	1,091	8.4	<5	<4	<5	5	--	--	--	--	--	--	--
	6/27/2012	1.5	<40	7.8	1,005	13.3	<5	<4	<5	<5	<20	<5	23,200	62	<0.005	<0.02	145
	12/6/2012	1.8	<40	7.4	1,129	10.2	<5	<4	5	6	--	--	--	--	--	--	--
	6/5/2013	**1.5**	**39**	**8.2**	**777**	**13.0**	**<5**	**<4**	**<5**	**25**	**40**	**<5**	**27,700**	**72**	**<0.005**	**<0.02**	**136**

See notes on page 16.

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

Well ID	Sample Date	Indicator Parameters					Dissolved Metals (µg/L)							Inorganics (mg/L)			
		TOC (mg/L)	TOX (µg/L)	pH	SpC	T	Cr	Cu	Ni	Zn	Fe	Mn	Na	Chloride	Cyanide	Phenols	Sulfate
		MDEQ Residential Drinking Water Criteria					100 (A)	1,000 (A)	100 (A)	2,400							
	6/21/1995	2.8	<10	8.3	771	15.1	<20	<20	<30	<20	--	--	--	--	--	--	--
	8/31/1995	4.7	47	8.1	1,204	14.6	<20	20	<40	<20	--	--	--	--	--	--	--
	2/9/1996	21.0	38	7.1	801	9.1	32	28	54	120	--	--	--	--	--	--	--
	6/19/1996	2.4	<100	7.9	745	11.9	<20	<20	<20	<20	--	--	--	--	--	--	--
B-20D	8/21/1996	3.0	<5	8.0	750	13.1	<20	<20	<20	40	--	--	--	--	--	--	--
	11/13/1996	16.0	<5	7.7	1,075	6.7	<20	<20	<20	40	--	--	--	--	--	--	--
	5/6/1997	3.0	<100	6.8	640	10.0	<10	<10	15	10	--	--	--	--	--	--	--
	11/6/1997	5.0	<100	6.7	700	10.0	<10	20	41	<10	260	35	--	5	<0.005	<0.020	101
	5/4/1998	4.0	<5	6.8	579	12.2	<10	<10	<5	<10	--	--	--	--	--	--	--
	11/5/1998	3.0	11	6.5	667	13.5	<10	<10	<5	10	<10	18	31,000	--	--	--	--
Dup.	11/5/1998	5.0	16	6.5	677	13.6	<10	<10	<5	10	170	8	30,300	--	--	--	--
	12/23/1998	--	--	--	--	--	--	--	--	--	--	--	--	3	<0.005	<0.020	92
Dup.	12/23/1998	--	--	--	--	--	--	--	--	--	--	--	--	3	<0.005	<0.020	89
	4/26/1999	3.2	<100	8.4	506	13.0	<10	<10	<5	10	--	--	--	--	--	--	--
	11/5/1999	5.3	<100	7.5	677	12.5	<10	<10	<5	60	130	60	31,400	33	<0.005	<0.020	105
	4/26/2000	3.2	<100	7.4	760	14.9	<10	<10	<5	<10	--	--	--	--	--	--	--
	12/8/2000	3.2	<10	7.5	780	4.7	<10	<10	15	<10	20	--	19,700	2	<0.005	<0.020	113
	5/15/2001	2.7	<100	7.0	590	13.0	<10	<10	<5	<10	--	--	--	--	--	--	--
	10/18/2001	2.5	<100	7.9	930	10.4	<10	<10	<5	<10	300	--	20,600	2	<0.005	<0.020	105
	5/16/2002	3.2	<100	7.2	780	11.9	<10	<10	<5	10	--	--	--	--	--	--	--
	11/7/2002	1.8	<30	7.6	610	8.7	<5	<5	<5	<5	250	74	20,900	3	<0.005	<0.020	115
	6/3/2003	2.5	<30	7.4	620	12.8	<5	<5	<5	<5	--	--	--	--	--	--	--
	11/13/2003	1.3	<30	8.0	630	7.7	<5	<5	5	<5	200	15	--	5	<0.005	<0.010	127
	6/29/2004	9.4	<30	7.5	666	13.1	<5	<5	11	<5	--	--	--	--	--	--	--
	12/10/2004	2.0	<30	6.6	830	10.8	<5	<5	11	10	2,110	92	16,800	3	<0.005	<0.010	148
	6/7/2005	4.0	<30	7.3	707	11.9	7	<5	5	<5	2,140	66	16,500	<5	<0.005	<0.010	155
	12/8/2005	4.1	<30	4.8	957	11.1	11	<4	26	<10	120	120	20,600	--	--	--	--
	6/28/2006	1.7	<30	7.4	979	12.5	7	<4	<5	5	2,120	60	17,600	2	<0.005	<0.010	169
	11/30/2006	3.4	<30	7.5	980	12.5	6	<4	6	<5	--	--	--	--	--	--	--
	6/8/2007	3.4	30.9	6.7	929	13.4	10	22	19	124	610	160	25,500	4	<0.005	0.074	144
	11/13/2007	2.1	<30	7.2	932	13.5	3	1	13	9	--	--	--	--	--	--	--
	6/25/2008	<1	<60	7.0	946	15.5	<5	2	<5	7	2,400	55	19,500	4	<0.005	<0.010	164
	11/18/2008	1	36.1	6.9	1,006	12.6	<5	4	6	22	--	--	--	--	--	--	--
	6/24/2009	1.1	<30	7.2	1,000	19.4	<5	<1	<5	<5	1,720	56	21,000	3	<0.005	<0.010	180
Dup.	6/24/2009	<1	<30	7.2	1,010	19.4	<5	<1	<5	<5	1,640	56	20,800	3	<0.005	<0.010	183
	11/18/2009	2	<30	7.0	1,030	12.1	<5	<4	<5	5	--	--	--	--	--	--	--
	6/16/2010	2	<30	7.3	1,020	15.1	<5	<4	<5	<5	1,930	49	19,000	2	<0.005	<0.020	177
	11/9/2010	3	<30	7.0	998	11.7	11	<4	<5	<5	--	--	--	--	--	--	--
	6/22/2011	1.6	<30	7.2	967	15.5	9	<4	<5	13	2,550	54	18,600	<5	<0.005	<0.010	164
Replicate	6/22/2011	--	--	--	--	--	<5	--	--	--	--	--	--	--	--	--	--
	11/16/2011	2	50	7.0	1,006	9.8	<5	<4	<5	5	--	--	--	--	--	--	--
Dup.	11/16/2011	2	26	7.0	1,002	9.8	<5	<4	<5	6	--	--	--	--	--	--	--
	6/25/2012	2	15	6.8	1,003	12.8	<5	<4	<5	<5	1,700	53	21,400	<5	<0.005	<0.02	183
	12/6/2012	1.8	<40	7.5	1,008	9.8	<5	<4	<5	7	--	--	--	--	--	--	--
	6/5/2013	**1.7**	**<10**	**7.0**	**1,000**	**11.5**	**<5**	**<4**	**<5**	**11**	**1,840**	**48**	**19,500**	**<5**	**<0.005**	**<0.02**	**201**
Dup.	**6/5/2013**	**1.9**	**<10**	**7.0**	**1,000**	**11.5**	**<5**	**<4**	**<5**	**<5**	**1,780**	**47**	**17,100**	**<5**	**<0.005**	**<0.02**	**200**

See notes on page 16.

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

Well ID	Sample Date	Indicator Parameters					Dissolved Metals (µg/L)							Inorganics (mg/L)			
		TOC (mg/L)	TOX (µg/L)	pH	SpC	T	Cr	Cu	Ni	Zn	Fe	Mn	Na	Chloride	Cyanide	Phenols	Sulfate
		MDEQ Residential Drinking Water Criteria					100 (A)	1,000 (A)	100 (A)	2,400							
B-21D	6/21/1995	4.2	<10	8.3	870	14.5	<20	<20	<30	61	--	--	--	--	--	--	--
	8/31/1995	3.3	19	8.1	684	14.2	<20	21	<40	<20	--	--	--	--	--	--	--
	2/9/1996	4.1	<10	7.7	646	8.6	<20	<20	<40	<20	--	--	--	--	--	--	--
	6/19/1996	5.3	<100	7.6	577	14.1	<20	<20	<20	<20	--	--	--	--	--	--	--
	8/21/1996	2.5	<5	7.9	576	13.8	<20	<20	<20	50	--	--	--	--	--	--	--
	11/13/1996	17.0	<5	7.3	810	8.8	<20	<20	<20	40	--	--	--	--	--	--	--
	5/6/1997	2.0	<100	6.8	530	10.2	<10	<10	8	<10	--	--	--	--	--	--	--
	11/6/1997	3.0	<100	6.7	540	10.0	<10	<10	30	<10	240	27	--	2	<0.005	<0.020	33
	5/4/1998	16.0	<5	6.9	480	11.5	<10	<10	<5	20	--	--	--	--	--	--	--
	11/5/1998	5.0	<10	7.2	565	7.8	<10	<10	<5	10	240	43	26,700	--	--	--	--
	12/23/1998	--	--	--	--	--	--	--	--	--	--	--	--	2	<0.005	<0.020	15
	4/26/1999	11.0	<100	8.2	506	13.0	<10	<10	<5	10	--	--	--	--	--	--	--
	11/5/1999	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4/26/2000	2.5	<100	8.2	660	14.1	<10	<10	<5	<10	--	--	--	--	--	--	--
	12/8/2000	4.2	<10	8.4	680	7.1	<10	<10	11	<10	<10	--	29,600	2	<0.005	<0.020	36
	5/15/2001	1.9	<100	7.9	570	13.0	<10	<10	<5	10	--	--	--	--	--	--	--
Dup	5/15/2001	1.9	<100	8.3	560	13.0	<10	<10	<5	10	--	--	--	--	--	--	--
	10/18/2001	3.4	<100	7.6	570	13.7	<10	<10	<5	<10	200	--	22,200	1	<0.005	<0.020	41
	5/16/2002	6.1	<100	7.2	630	11.7	<10	<10	<5	<10	--	--	--	--	--	--	--
	11/7/2002	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	6/3/2003	5.8	<30	7.3	510	13.0	<5	<5	<5	6	--	--	--	--	--	--	--
	11/13/2003	1.0	<30	7.8	710	8.7	<5	<5	<5	9	100	<5	--	4	<0.005	<0.010	48
	6/30/2004	4.0	<30	6.8	570	14.8	<5	<5	<5	7	--	--	--	--	--	--	--
	12/10/2004	2.0	<30	6.4	600	9.9	<5	<5	<5	7	1,330	44	20,100	2	<0.005	<0.010	50
	6/8/2005	3.0	<30	7.7	560	14.2	<5	<5	12	6	1,350	72	21,000	<5	<0.005	<0.010	44
	12/8/2005	4.4	<30	5.5	741	11.4	8	<4	8	<10	1,070	60	21,500	--	--	--	--
	6/28/2006	1.5	<30	7.4	718	12.8	<5	6	5	13	430	60	23,500	2	<0.005	<0.010	53
	11/30/2006	1.8	49.1	7.6	693	11.5	<5	<4	<5	<5	--	--	--	--	--	--	--
	6/8/2007	1.2	<30	6.3	709	13.2	10	2	5	7	1,200	49	21,500	4	<0.005	<0.010	60
	11/14/2007	<1	<30	7.3	738	14.5	2	1	5	8	--	--	--	--	--	--	--
	6/26/2008	1.8	16.8	7.1	738	16.9	<5	1	<5	<5	1,390	40	22,700	3	<0.005	<0.010	60
	11/19/2008	1.1	<30	6.9	739	11.0	<5	<1	5	<5	--	--	--	--	--	--	--
	6/25/2009	<1	<30	6.7	743	16.1	<5	<1	<5	<5	1,210	34	25,100	3	<0.005	<0.010	64
	11/19/2009	2	41.2	7.2	745	10.2	<5	<4	<5	6	--	--	--	--	--	--	--
Dup	11/19/2009	2	<30	7.2	739	10.2	<5	<4	<5	<5	--	--	--	--	--	--	--
	6/17/2010	2	<30	7.4	736	13.2	<5	<4	<5	<5	980	34	23,700	3	<0.005	<0.020	58
	11/10/2010	1	<30	7.3	739	11.0	11	<4	<5	<5	--	--	--	--	--	--	--
	6/22/2011	1.4	<30	7.4	718	19.5	10	<4	<5	<5	1,540	33	23,300	<5	<0.005	<0.010	61
Replicate	6/22/2011	--	--	--	--	--	7	--	--	--	--	--	--	--	--	--	--
	11/16/2011	1	7.9	7.2	753	10.6	<5	<4	<5	<5	--	--	--	--	--	--	--
	6/26/2012	1.3	<40	7.3	745	19.5	<5	<4	<5	<5	640	42	25,800	<5	<0.005	<0.02	66
	12/6/2012	1.6	<40	7.6	754	9.1	<5	<4	<5	8	--	--	--	--	--	--	--
	6/5/2013	**1.6**	**<10**	**7.2**	**742**	**13.5**	**<5**	**<4**	**<5**	**26**	**990**	**31**	**24,400**	**<5**	**<0.005**	**<0.02**	**68**

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

Well ID	Sample Date	Indicator Parameters					Dissolved Metals (µg/L)							Inorganics (mg/L)			
		TOC (mg/L)	TOX (µg/L)	pH	SpC	T	Cr	Cu	Ni	Zn	Fe	Mn	Na	Chloride	Cyanide	Phenols	Sulfate
		MDEQ Residential Drinking Water Criteria					100 (A)	1,000 (A)	100 (A)	2,400							
B-22D	6/21/1995	2.6	<10	7.7	573	15.5	<20	<20	370	<20	--	--	--	--	--	--	--
	8/31/1995	4.5	47	8.3	739	14.3	<20	<20	<40	47	--	--	--	--	--	--	--
	2/9/1996	6.9	<10	NS	NS	NS	<20	<20	<40	80	--	--	--	--	--	--	--
	6/19/1996	1.8	<100	7.5	600	13.4	<20	<20	<20	20	--	--	--	--	--	--	--
	8/21/1996	1.7	<5	8.1	608	14.2	<20	<20	<20	50	--	--	--	--	--	--	--
	11/13/1996	10.0	<5	7.2	817	7.7	<20	<20	<20	50	--	--	--	--	--	--	--
	5/6/1997	2.0	<100	6.7	550	10.1	<10	<10	<5	<10	--	--	--	--	--	--	--
	11/6/1997	7.0	<100	6.9	550	10.0	<10	<10	29	10	1,360	55	--	2	<0.005	<0.020	32
	5/4/1998	5.0	<5	7.1	501	11.7	<10	<10	<5	<10	--	--	--	--	--	--	--
	11/5/1998	6.0	<10	6.6	559	9.8	<10	<10	<5	10	1,180	47	23,800	--	--	--	--
	12/23/1998	--	--	--	--	--	--	--	--	--	--	--	--	2	<0.005	<0.020	28
	4/26/1999	18.0	<100	8.2	485	13.2	<10	<10	<5	10	--	--	--	--	--	--	--
	11/5/1999	2.6	<100	7.3	474	13.6	<10	<10	<5	20	90	31	27,900	2	<0.005	<0.020	29
	4/26/2000	2.5	<100	8.2	670	14.2	<10	<10	<5	<10	--	--	--	--	--	--	--
	12/8/2000	2.5	<10	7.5	510	5.4	<10	<10	8	<10	<10	--	26,500	2	<0.005	<0.020	31
	5/15/2001	6.7	<100	8.0	690	13.7	<10	<10	6	30	--	--	--	--	--	--	--
	10/18/2001	1.7	<100	7.6	2,610	10.2	<10	<10	<5	<10	200	--	27,800	1	<0.005	<0.020	33
	5/16/2002	3.2	<100	7.1	630	12.1	<10	<10	<5	<10	--	--	--	--	--	--	--
	11/7/2002	1.5	<30	7.4	480	8.8	<5	<5	<5	<5	120	11	25,200	2	<0.005	<0.020	35
	6/3/2003	2.3	<30	6.8	570	13.1	<5	<5	<5	<5	--	--	--	--	--	--	--
	11/14/2003	1.6	<30	8.1	660	9.8	<5	<5	<5	9	6	<5	--	3	<0.005	<0.010	37
	6/30/2004	1.7	<30	6.3	610	15.5	<5	<5	<5	6	--	--	--	--	--	--	--
	12/10/2004	2.0	<30	7.0	600	10.3	<5	<5	<5	6	1,280	37	25,100	2	<0.005	<0.010	42
	6/8/2005	2.0	<30	7.7	531	13.2	6	<5	<5	<5	1,370	38	23,700	<5	<0.005	<0.010	40
	12/8/2005	2.7	<30	5.8	702	11.7	10	<4	46	<10	2,200	250	25,400	--	--	--	--
	6/28/2006	<1	<30	7.5	682	13.0	<5	<4	<5	<5	1,290	30	25,800	2	<0.005	<0.010	42
	11/30/2006	2.2	<30	7.5	684	13.3	<5	<4	<5	7	--	--	--	--	--	--	--
Dup.	11/30/2006	5.3	<30	7.5	676	13.3	<5	<4	<5	<5	--	--	--	--	--	--	--
	6/8/2007	3.8	<30	6.6	680	14.3	7	2	1	5	1,180	32	28,100	3	<0.005	<0.010	46
Dup.	6/8/2007	3.1	21.1	6.6	669	14.3	9	2	1	4	1,210	31	28,400	4	<0.005	<0.010	47
	11/14/2007	1.1	<30	7.3	710	14.2	2	2	3	6	--	--	--	--	--	--	--
	6/26/2008	1.7	22.6	7.1	694	19.3	<5	<1	<5	5	1,100	33	25,900	3	<0.005	<0.010	46
Dup.	6/26/2008	2.6	<30	7.1	710	19.3	<5	<1	<5	7	1,150	34	26,400	3	<0.005	<0.010	46
	11/19/2008	8.9	<30	6.9	699	8.2	<5	<1	8	8	--	--	--	--	--	--	--
	6/25/2009	1.1	<30	6.7	705	16.6	<5	<1	<5	<5	1,340	30	28,500	2	<0.005	<0.010	54
	11/18/2009	2	<30	7.2	710	11.4	<5	<4	<5	<5	--	--	--	--	--	--	--
	6/16/2010	2	<30	7.4	715	15.7	<5	<4	<5	<5	1,100	28	26,000	2	<0.005	<0.020	51
	11/11/2010	2	<30	7.3	704	10.3	11	<4	<5	<5	--	--	--	--	--	--	--
	6/21/2011	1.3	<30	7.4	705	17.0	9	<4	<5	<5	1,460	30	27,300	<5	<0.005	<0.010	50
Replicate	6/21/2011	--	--	--	--	--	<5	--	--	--	--	--	--	--	--	--	--
	11/14/2011	2	76	7.4	714	10.1	<5	<4	<5	12	--	--	--	--	--	--	--
	6/25/2012	2	<40	6.5	714	12.7	<5	<4	<5	8	1,830	42	30,000	<5	<0.005	<0.02	51
	12/6/2012	1.6	<40	7.6	716	10.1	<5	<4	<5	9	--	--	--	--	--	--	--
	6/3/2013	**1.6**	**46**	**6.8**	**701**	**15.6**	**<5**	**<4**	**<5**	**<5**	**1,000**	**27**	**28,100**	**<5**	**<0.005**	**<0.02**	**53**

See notes on page 16.

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

Well ID	Sample Date	Indicator Parameters					Dissolved Metals (µg/L)							Inorganics (mg/L)			
		TOC (mg/L)	TOX (µg/L)	pH	SpC	T	Cr	Cu	Ni	Zn	Fe	Mn	Na	Chloride	Cyanide	Phenols	Sulfate
		MDEQ Residential Drinking Water Criteria					100 (A)	1,000 (A)	100 (A)	2,400							
B-23D	6/21/1995	3.4	<10	7.3	680	15.1	<20	<20	<30	<20	--	--	--	--	--	--	--
	8/31/1995	3.9	96	8.2	845	15.4	<20	<20	<40	<20	--	--	--	--	--	--	--
	2/9/1996	3.8	34	7.5	751	11.3	<20	<20	<40	<20	--	--	--	--	--	--	--
	6/19/1996	2.2	<100	8.3	632	14.2	<20	<20	<20	<20	--	--	--	--	--	--	--
	8/21/1996	1.7	<5	8.9	691	14.6	<20	<20	<20	50	--	--	--	--	--	--	--
	11/13/1996	40.0	<5	7.7	977	7.6	<20	<20	<20	40	--	--	--	--	--	--	--
	5/6/1997	2.0	<100	6.8	610	11.0	<10	<10	9	<10	--	--	--	--	--	--	--
	11/6/1997	3.0	<100	6.0	620	10.0	<10	<10	31	<10	160	15	--	2	<0.005	<0.020	25
	5/4/1998	2.0	<5	6.4	558	12.2	<10	<10	<5	<10	--	--	--	--	--	--	--
	11/5/1998	5.0	<10	6.5	639	9.8	<10	<10	<5	70	<10	<5	29,700	--	--	--	--
	12/23/1998	--	--	--	--	--	--	--	--	--	--	--	--	2	<0.005	<0.020	21
	4/26/1999	3.6	<100	8.1	552	13.3	<10	<10	<5	<10	--	--	--	--	--	--	--
Dup	4/26/1999	3.0	<100	NS	NS	NS	<10	<10	<5	<10	--	--	--	--	--	--	--
	11/5/1999	3.4	<100	7.4	546	13.3	<10	<10	<5	<10	80	14	34,700	3	<0.005	<0.020	26
Dup	11/5/1999	3.1	<100	NS	NS	NS	<10	<10	<5	<10	90	15	33,300	3	<0.005	<0.020	25
	4/26/2000	3.2	<100	7.9	800	13.7	<10	<10	<5	<10	--	--	--	--	--	--	--
	12/8/2000	2.0	<10	7.0	570	7.0	<10	<10	7	<10	60	--	35,400	2	<0.005	<0.020	22
	5/15/2001	3.2	<100	7.9	790	13.1	<10	<10	<5	10	--	--	--	--	--	--	--
	10/17/2001	1.8	<100	7.5	600	11.3	<10	<10	<5	<10	170	--	32,800	2	<0.005	<0.020	23
	5/16/2002	5.4	<100	7.2	1200	11.2	<10	<10	<5	10	--	--	--	--	--	--	--
	11/7/2002	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	6/3/2003	3.9	<30	6.9	640	12.9	<5	<5	<5	<5	--	--	--	--	--	--	--
Dup	6/3/2003	3.7	<30	--	--	--	<5	<5	<5	<5	--	--	--	--	--	--	--
	11/13/2003	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	6/30/2004	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--	--	--	--	--	--
	12/10/2004	2.0	<30	6.7	640.0	11.3	<5	<5	11	10	500	65	30,500	2	<0.005	<0.010	25
B-23DR	6/7/2005	2.0	<30	7.3	594.0	12.2	<5	<5	<5	<5	2,520	49	20,600	25	<0.005	<0.010	60
Dup	6/7/2005	2.0	<30	--	--	--	<5	<5	<5	<5	2,580	48	20,600	25	<0.005	<0.010	59
B-23DR	12/8/2005	3.8	<30	6.2	700.0	6.1	7	<4	<5	<10	370	60	39,200	--	--	--	--
	6/27/2006	1.2	<30	7.1	760.0	13.4	5	<4	<5	5	2,280	50	20,500	26	<0.005	0.010	67
	11/30/2006	2.2	<30	7.6	568.0	11.8	<5	<4	<5	6	--	--	--	--	--	--	--
	6/8/2007	1.1	33.7	6.5	736	13.1	7	1	1	5	1,100	43	23,800	28	<0.005	<0.010	62
	11/16/2007	<1	<30	7.3	780	21.4	2	1	3	8	--	--	--	--	--	--	--
	6/26/2008	2.0	27.2	7.0	753	18.2	<5	1	<5	<5	1,850	44	23,700	22	<0.005	<0.010	54
	11/21/2008	<1	<30	6.7	763	6.0	<5	<1	<5	19	--	--	--	--	--	--	--
	6/25/2009	<1	<30	6.7	776	18.9	<5	<1	<5	<5	1,500	43	23,900	29	<0.005	<0.010	63
	11/18/2009	2	<30	7.2	756	11.9	<5	<4	<5	10	--	--	--	--	--	--	--
B-23DR	6/16/2010	2	<30	7.4	747	18.2	<5	<4	<5	<5	950	35	23,200	20	<0.005	<0.020	45
	11/11/2010	2	21.5	7.3	743	12.8	11	<4	<5	<5	--	--	--	--	--	--	--
Dup	11/11/2010	2	<30	7.3	742	12.8	11	<4	<5	<5	--	--	--	--	--	--	--
	6/21/2011	1.2	<30	7.3	721	18.0	8	<4	<5	<5	1,520	37	22,400	22	<0.005	<0.010	48
Replicate	6/21/2011	--	--	--	--	--	<5	--	--	--	--	--	--	--	--	--	--
	11/15/2011	1	49	7.2	721	13.1	<5	<4	<5	8	--	--	--	--	--	--	--
	6/26/2012	1	<40	6.8	748	12.7	<5	<4	<5	<5	1,810	42	25,100	25	<0.005	<0.02	50
B-23DR	12/5/2012	1.6	<40	6.6	755	9.6	<5	<4	<5	7	--	--	--	--	--	--	--
	6/3/2013	**1.4**	**14**	**7.1**	**720**	**15.4**	**<5**	**<4**	**<5**	**<5**	**980**	**32**	**23,500**	**20**	**<0.005**	**<0.02**	**44**

See notes on page 16.

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

Well ID	Sample Date	Indicator Parameters					Dissolved Metals (µg/L)							Inorganics (mg/L)			
		TOC (mg/L)	TOX (µg/L)	pH	SpC	T	Cr	Cu	Ni	Zn	Fe	Mn	Na	Chloride	Cyanide	Phenols	Sulfate
		MDEQ Residential Drinking Water Criteria					100 (A)	1,000 (A)	100 (A)	2,400							
	6/21/1995	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/31/1995	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/9/1996	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/19/1996	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-24	8/21/1996	5.6	<5	7.8	1,502	12.7	<20	<20	<20	90	--	--	--	--	--	--	--
	11/13/1996	20.0	<5	7.1	2,030	7.8	<20	<20	<20	50	--	--	--	--	--	--	--
	5/6/1997	5.0	<100	6.4	1,700	10.0	<10	<10	31	10	--	--	--	--	--	--	--
	11/6/1997	--	--	--	--	--	--	--	--	--	--	--	--	NS	NS	NS	NS
	5/4/1998	4.0	<5	6.5	1,410	11.6	<10	<10	8	20	--	--	--	--	--	--	--
	11/5/1998	4.0	23	5.5	1,595	10.4	<10	<10	9	20	60	120	27,700	--	--	--	--
	12/23/1998	--	--	--	--	--	--	--	--	--	--	--	--	163	<0.005	<0.020	205
	4/26/1999	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--	--	--
	11/5/1999	NS	NS	7.2	1,152	13.8	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4/26/2000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--	--	--
	12/8/2000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	5/15/2001	NS	NS	6.4	1,450	12.9	NS	NS	NS	NS	NS	NS	NS	--	--	--	--
	10/17/2001	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	5/16/2002	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--	--	--
	11/7/2002	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	6/3/2003	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--	--	--
	11/13/2003	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	6/30/2004	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--	--	--
	12/9/2004	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
B-24R	6/7/2005	8.0	<30	7.3	857	10.6	8	<5	<5	<5	10,600	448	27,100	49	<0.005	<0.010	206
B-24R	12/8/2005	6.6	<30	5.2	1,120	11.9	11	<4	<5	10	3,180	210	28,700	--	--	--	--
	6/28/2006	4.7	<30	7.3	1,080	11.9	6	<4	<5	<5	3,760	210	27,700	48	<0.005	<0.010	182
	11/30/2006	4.8	30	7.3	1,100	11.7	6	<4	<5	<5	--	--	--	--	--	--	--
	6/4/2007	4.5	110	7.2	1,080	11.0	9	2	2	19	2,400	194	27,900	47	<0.005	<0.010	184
	11/13/2007	4.1	30.1	7.1	1,130	14.0	3	1	5	7	--	--	--	--	--	--	--
	6/26/2008	4.3	<30	7.0	1,130	19.0	<5	1	<5	8	3,490	175	39,600	46	<0.005	<0.010	189
	11/18/2008	3.8	<30	6.8	1,125	5.3	<5	<1	<5	<5	--	--	--	--	--	--	--
	6/24/2009	5.2	<30	6.6	1,120	17.4	<5	<1	<5	<5	4,000	155	38,400	48	<0.005	<0.010	201
	11/18/2009	5	86.4	7.1	1,140	12.9	<5	<4	<5	<5	--	--	--	--	--	--	--
	6/16/2010	4	22.7	7.0	1,150	16.3	<5	<4	<5	<5	1,880	222	39,500	46	<0.005	<0.020	196
	11/9/2010	5	26.8	6.9	1,136	13.5	11	<4	<5	<5	--	--	--	--	--	--	--
	6/21/2011	3.7	<30	7.1	1,136	17.5	10	<4	6	<5	1,130	255	51,700	45	<0.005	<0.010	206
Dup.	6/21/2011	3.7	<30	7.1	1,137	17.5	8	<4	6	<5	1,070	255	52,000	45	<0.005	<0.010	206
Replicate	6/21/2011	--	--	--	--	--	<5	--	--	--	--	--	--	--	--	--	--
Dup. Replicate	6/21/2011	--	--	--	--	--	<5	--	--	--	--	--	--	--	--	--	--
	11/16/2011	4	24	7.7	1,141	11.1	<5	<4	<5	<5	--	--	--	--	--	--	--
	6/26/2012	3.5	16	6.8	1,219	13.7	<5	<4	<5	<5	1,200	242	72,000	45	<0.005	<0.02	219
B-24R	12/6/2012	4.2	48	7.0	1,204	10.2	<5	<4	<5	6	--	--	--	--	--	--	--
B-24R	**6/3/2013**	**4**	**4.8**	**7.2**	**1,127**	**11.4**	**<5**	**<4**	**<5**	**<5**	**110**	**130**	**38,600**	**45**	**<0.005**	**<0.02**	**227**

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

Well ID	Sample Date	Indicator Parameters					Dissolved Metals (µg/L)							Inorganics (mg/L)			
		TOC (mg/L)	TOX (µg/L)	pH	SpC	T	Cr	Cu	Ni	Zn	Fe	Mn	Na	Chloride	Cyanide	Phenols	Sulfate
		MDEQ Residential Drinking Water Criteria					100 (A)	1,000 (A)	100 (A)	2,400							
B-27D	12/8/2005	3.7	<30	5	714	4.8	9	<4	6	<10	240	140	34,200	--	--	--	--
	6/27/2006	1.3	<30	7.1	644	13.5	6	<4	7	6	1,050	110	32,300	--	--	--	--
	11/30/2006	<1	<30	7.5	540	11.7	<5	<4	<5	6	--	--	--	--	--	--	--
	6/8/2007	4	25.7	6.6	628	14.6	9	2	3	36	1,520	58	36,300	4	<0.005	<0.010	23
	11/15/2007	1.9	<30	7.3	649	11.6	2	1	5	32	--	--	--	--	--	--	--
	6/26/2008	1.7	<30	7.1	659	16.3	<5	<1	<5	<5	300	59	33,900	2	<0.005	<0.010	23
	11/21/2008	1.3	<30	6.8	667	6.6	<5	<1	<5	<5	--	--	--	--	--	--	--
	6/25/2009	<1	<30	6.8	651	16.5	<5	1	<5	<5	2,030	52	37,200	2	<0.005	<0.010	20
	11/18/2009	2	<30	7.3	653	11.2	<5	<4	<5	<5	--	--	--	--	--	--	--
	6/15/2010	2	<30	7.4	646	15.7	<5	<4	<5	<5	1,250	36	32,200	2	<0.005	<0.020	19
Dup.	6/15/2010	2	31.2	7.4	652	15.7	<5	<4	<5	<5	1,220	35	31,700	2	<0.005	<0.020	20
	11/9/2010	2	<30	7.2	651	13.3	10	<4	<5	<5	--	--	--	--	--	--	--
	6/21/2011	1.5	<30	7.5	640	15.6	9	<4	<5	<5	1,370	29	34,600	<5	<0.005	<0.010	19
Replicate	6/21/2011	--	--	--	--	--	<5	--	--	--	--	--	--	--	--	--	--
	11/15/2011	1	34	7.2	652	12.1	<5	<4	6	8	--	--	--	--	--	--	--
	6/26/2012	1.5	<40	7.2	653	13.0	<5	<4	<5	<5	1,450	28	34,200	<5	<0.005	<0.02	20
	12/5/2012	1.7	<40	6.8	654	11.0	<5	<4	<5	10	--	--	--	--	--	--	--
	6/3/2013	**1.5**	**4.3**	**8.3**	**645**	**12.1**	**<5**	**<4**	**<5**	**<5**	**1,670**	**29**	**32,500**	**<5**	**<0.005**	**<0.02**	**21**

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

Well ID	Sample Date	Indicator Parameters					Dissolved Metals (µg/L)							Inorganics (mg/L)			
		TOC (mg/L)	TOX (µg/L)	pH	SpC	T	Cr	Cu	Ni	Zn	Fe	Mn	Na	Chloride	Cyanide	Phenols	Sulfate
		MDEQ Residential Drinking Water Criteria					100 (A)	1,000 (A)	100 (A)	2,400							
B-28	11/21/2005	--	--	6.2	994	12.3	--	--	--	<5	--	--	--	--	--	--	--
Dup.	11/21/2005	--	--	6.2	--	12.3	--	--	--	7	--	--	--	--	--	--	--
	6/27/2006	3	<30	7.1	828	13.2	5	<4	<5	18	2,380	210	17,000	--	--	--	--
	12/1/2006	2.4	<30	7.5	812	12.3	<5	<4	<5	5	--	--	--	--	--	--	--
Dup.	12/1/2006	3.3	<30	7.5	810	12.3	<5	<4	<5	<5	--	--	--	--	--	--	--
	6/5/2007	2.1	<30	6.8	845	10.6	9	2	3	6	1,690	160	25,100	12	<0.005	<0.010	87
	11/15/2007	2.5	15	6.8	816	9.1	3	2	5	11	--	--	--	--	--	--	--
	6/27/2008	1.8	<30	6.9	840	17.6	<5	1	<5	5	370	84	16,300	10	<0.005	<0.010	88
	11/19/2008	1.1	<30	6.8	804	7.0	<5	<1	<5	<5	--	--	--	--	--	--	--
	6/24/2009	1.1	<30	7.0	822	19.5	<5	<1	<5	<5	204	132	14,600	10	<0.005	<0.010	84
	11/18/2009	2	<30	6.9	814	11.6	<5	<4	<5	20	--	--	--	--	--	--	--
	6/16/2010	2	<30	7.0	841	17.6	<5	<4	<5	<5	790	173	19,100	12	<0.005	<0.020	78
	11/10/2010	3	<30	7.1	813	13.3	18	<4	<5	<5	--	--	--	--	--	--	--
	6/21/2011	1.5	<30	7.2	837	14.1	9	<4	5	<5	1,380	130	23,400	12	<0.005	<0.010	80
Replicate	6/21/2011	--	--	--	--	--	<5	--	--	--	--	--	--	--	--	--	--
	11/15/2011	2	160	7.2	823	12.5	<5	<4	<5	<5	--	--	--	--	--	--	--
	6/26/2012	2	<40	6.5	849	13.0	<5	<4	<5	<5	1,960	84	29,800	12	<0.005	<0.02	80
Dup.	12/6/2012	1.6	<40	7.3	823	11.4	<5	<4	<5	<5	--	--	--	--	--	--	--
	12/6/2012	1.7	<40	7.3	823	11.4	<5	<4	<5	<5	--	--	--	--	--	--	--
	6/3/2013	**1.5**	**10**	**6.9**	**834**	**13.1**	**<5**	**<4**	**5**	**<5**	**1,310**	**111**	**26,000**	**12**	**<0.005**	**<0.02**	**87**

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

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

See notes on page 16.

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

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

See notes on page 16.

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

Well ID	Sample Date	Indicator Parameters					Dissolved Metals (µg/L)							Inorganics (mg/L)			
		TOC (mg/L)	TOX (µg/L)	pH	SpC	T	Cr	Cu	Ni	Zn	Fe	Mn	Na	Chloride	Cyanide	Phenols	Sulfate
		MDEQ Residential Drinking Water Criteria					100 (A)	1,000 (A)	100 (A)	2,400							
Equipment Blank	12/10/2004	<1	<30	--	--	--	<5	<5	<5	11	<20	13	810	<2	<0.005	<0.010	<2
	6/8/2005	<1	<30	--	--	--	<5	<5	<5	<5	<20	<5	120	<5	<0.005	<0.010	<5
	12/8/2005	<1	<30	--	5	--	<5	<4	<5	<10	<100	<20	<1000	--	--	--	--
	6/28/2006	<1	<30	--	12	--	<5	<4	<5	<5	<100	<20	<1000	<1	<0.005	<0.010	<1
	12/1/2006	<1	<30	--	26	--	<5	<4	<5	<5	--	--	--	--	--	--	--
	6/8/2007	<1	26	--	13	--	<5	1	1	13	<20	11	340	<2	<0.005	<0.010	<2
	11/15/2007	<1	<30	--	4	--	<5	1	1	9	--	--	--	--	--	--	--
	6/26/2008	<1	<30	--	3	--	<5	1	<5	<5	100	7	420	<2	<0.005	<0.010	<2
	11/19/2008	<1	<30	--	6	--	<5	1	<5	<5	--	--	--	--	--	--	--
	6/25/2009	<1	<30	--	24	--	<5	<1	<5	<5	110	<5	200	<2	<0.005	<0.010	<2
	11/19/2009	0.7	<30	--	5	--	<5	<4	<5	<5	--	--	--	--	--	--	--
	6/17/2010	0.4	<30	--	4	--	<5	<4	<5	<5	<20	<5	<200	<2	<0.005	<0.020	<2
	11/11/2010	1	<30	--	1.2	--	<5	<4	<5	<5	--	--	--	--	--	--	--
	6/22/2011	0.88	<30	--	3	--	<5	<4	<5	<5	<20	<5	460	<2	<0.005	<0.010	<2
	11/16/2011	<1	4.9	--	1,330	--	<5	<4	<5	<5	--	--	--	--	--	--	--
	6/27/2012	<1	<20	--	3	--	<5	<4	<5	13	50	<5	6350	<2	<0.005	<0.02	<2
	12/6/2012	<1	<40	--	17.0	--	<5	<4	<5	<5	--	--	--	--	--	--	--
	6/6/2013	**<1**	**<10**	**--**	**1,370**	**--**	**<5**	**<4**	**<5**	**<5**	**<20**	**<5**	**<500**	**<2**	**<0.005**	**<0.02**	**<2**

Notes

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

Exceeds MDEQ Residential Drinking Water Criteria

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

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

Sample Tag	B-2D	B-7	B-9	B-18A	B-19AR	B-20D	B-20D Dup	B-21D	B-22D
Sample Date	6/6/2013	6/5/2013	6/5/2013	6/5/2013	6/5/2013	6/5/2013	6/5/2013	6/5/2013	6/3/2012
Diethyl ether	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acetone	<50	<50	<50	<50	<50	<50	<50	<50	<50
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon Disulfide	<5	<5	<5	<5	<5	<5	<5	<5	<5
tert-Methyl butyl ether (MTBE)	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acrylonitrile	<2	<2	<2	<2	<2	<2	<2	<2	<2
2-Butanone	<25	<25	<25	<25	<25	<25	<25	<25	<25
Dichlorodifluoromethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloromethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloroethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
trans-1,2-Dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrahydrofuran	<90	<90	<90	<90	<90	<90	<90	<90	<90
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-Trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
4-Methyl-2-pentanone	<50	<50	<50	<50	<50	<50	<50	<50	<50
2-Hexanone	<50	<50	<50	<50	<50	<50	<50	<50	<50
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Benzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
cis-1,3-Dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,4-Dichloro-2-butene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromochloromethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1,2-Tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
p,m-Xylene	<2	<2	<2	<2	<2	<2	<2	<2	<2
o-Xylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Isopropylbenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,3-Dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trimethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Hexachloroethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dibromo-3-chloropropane	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2,4-Trichlorobenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2,3-Trichlorobenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Napthalene	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-Methylnapthalene	<5	<5	<5	<5	<5	<5	<5	<5	<5

Notes: EPA Method 8260 used for analysis.
Dup- Duplicate analysis
Analysis in µg/L

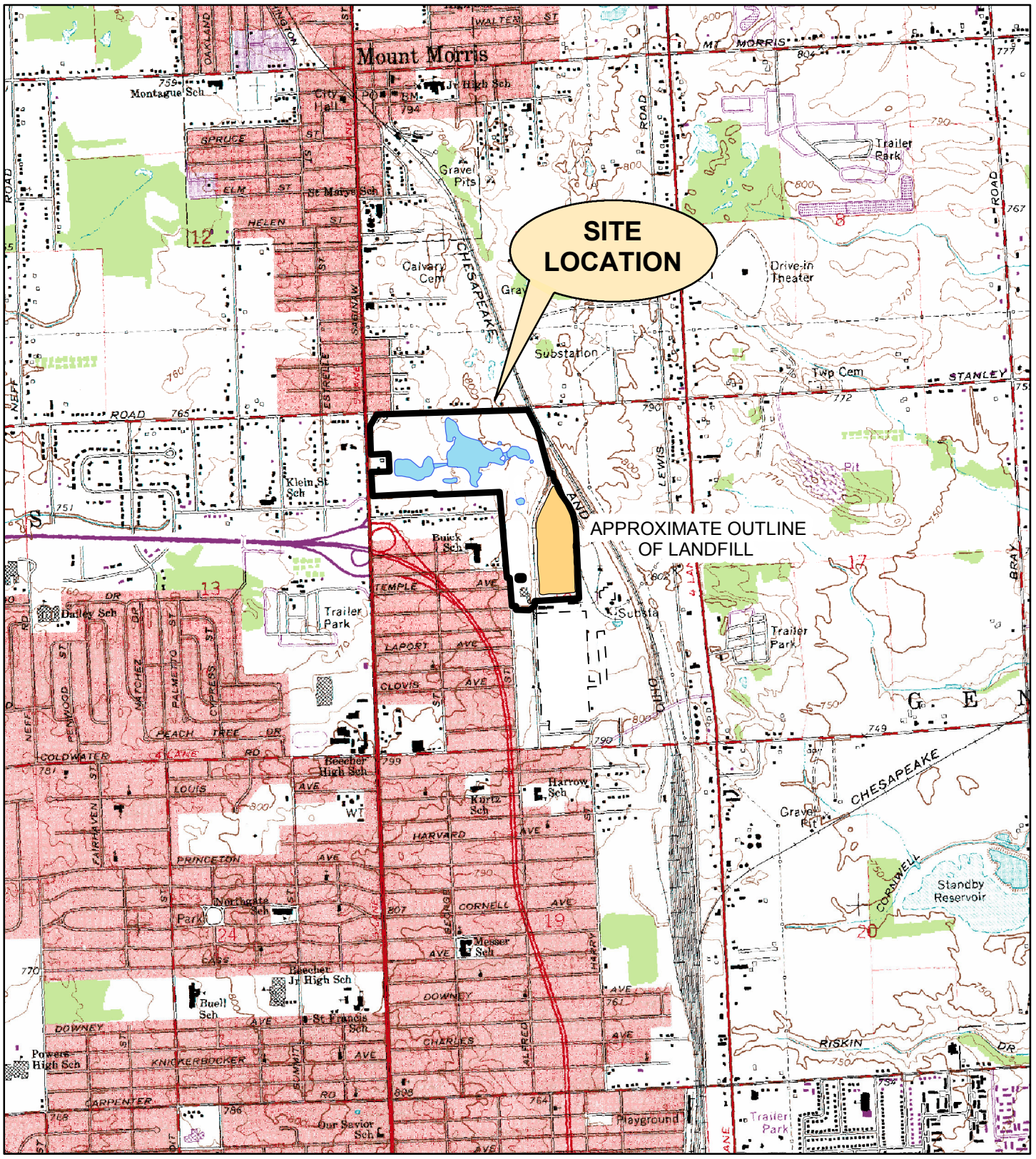
Table 3
RACER Trust - Coldwater Road Landfill Facility
Post-Closure Monitoring - Analytical Results
Volatile Organics (VOC's)

Sample Tag	B-23DR	B-24R	B-27D	B-28	TB-1	TB-2	EB-1
Sample Date	6/3/2013	6/5/2013	6/3/2013	6/3/2013	6/3/2013	6/6/2013	6/6/2013
Diethyl ether	<10	<10	<10	<10	<10	<10	<10
Acetone	<50	<50	<50	<50	<50	<50	<50
Methyl iodide	<1	<1	<1	<1	<1	<1	<1
Carbon Disulfide	<5	<5	<5	<5	<5	<5	<5
tert-Methyl butyl ether (MTBE)	<5	<5	<5	<5	<5	<5	<5
Acrylonitrile	<2	<2	<2	<2	<2	<2	<2
2-Butanone	<25	<25	<25	<25	<25	<25	<25
Dichlorodifluoromethane	<5	<5	<5	<5	<5	<5	<5
Chloromethane	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<5	<5	<5	<5	<5	<5	<5
Chloroethane	<5	<5	<5	<5	<5	<5	<5
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5	<5	<5
trans-1,2-Dichloroethene	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	<1	<1	<1	<1	<1	<1	<1
Tetrahydrofuran	<90	<90	<90	<90	<90	<90	<90
Chloroform	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1
1,1,1-Trichloroethane	<1	<1	<1	<1	<1	<1	<1
4-Methyl-2-pentanone	<50	<50	<50	<50	<50	<50	<50
2-Hexanone	<50	<50	<50	<50	<50	<50	<50
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1
Benzene	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<5	<5	<5	<5	<5	<5	<5
cis-1,3-Dichloropropene	<1	<1	<1	<1	<1	<1	<1
Toluene	<1	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	<1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	<1	<1	<1	<1	<1	<1	<1
trans-1,4-Dichloro-2-butene	<1	<1	<1	<1	<1	<1	<1
Dibromochloromethane	<5	<5	<5	<5	<5	<5	<5
1,2-Dibromoethane	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1
1,1,1,2-Tetrachloroethane	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1
p,m-Xylene	<2	<2	<2	<2	<2	<2	<2
o-Xylene	<1	<1	<1	<1	<1	<1	<1
Styrene	<1	<1	<1	<1	<1	<1	<1
Isopropylbenzene	<5	<5	<5	<5	<5	<5	<5
Bromoform	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	<1	<1	<1	<1	<1	<1	<1
Bromobenzene	<1	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	<5	<5	<5	<5	<5	<5	<5
1,3-Dichlorobenzene	<1	<1	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trimethylbenzene	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	<1	<1	<1	<1	<1	<1	<1
Hexachloroethane	<5	<5	<5	<5	<5	<5	<5
1,2-Dibromo-3-chloropropane	<5	<5	<5	<5	<5	<5	<5
1,2,4-Trichlorobenzene	<5	<5	<5	<5	<5	<5	<5
1,2,3-Trichlorobenzene	<5	<5	<5	<5	<5	<5	<5
Napthalene	<5	<5	<5	<5	<5	<5	<5
2-Methylnapthalene	<5	<5	<5	<5	<5	<5	<5

Notes: EPA Method 8260 used for analysis.
Dup- Duplicate analysis
Analysis in µg/L

FIGURES

FIGURE 1



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PLOT DATE: 6/24/2013 KBS

JUNE 2013
15388/50137/001

RACER TRUST
COLDWATER ROAD LANDFILL FACILITY
FLINT, MICHIGAN

SITE LOCATION MAP

N

0 0.8
Miles

O'BRIEN & GERE ENGINEERS, INC.

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PLOT DATE: 7-8-2013 KBS

FIGURE 2

N

LEGEND

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

STANLEY ROAD

DIRT ROAD / TRAIL

RAILROAD

WETLANDS

B-2D

B-19AR

B-19A

KLEIN STREET

~ LANDFILL ~

B-20D

B-24r

B-18A

DRAINAGE SWALE

B-21D

DRAINAGE CULVERT (TYP)

B-7

CONTROL BUILDING

B-9

B-27D

B-28

B-22D

B-23Dr

B-14

B-30

B-29

FENCE

ABANDONED RAILROAD

I-475

MORRIS HILLS

CONCRETE / GRAVEL ROAD

MAP USES DATA FROM THE MICHIGAN CENTER FOR GEOGRAPHIC INFORMATION

RACER TRUST
COLDWATER ROAD
LANDFILL FACILITY
FLINT, MICHIGAN

SITE LAYOUT

0 150 300 450 600
Feet

O'BRIEN & GERE ENGINEERS, INC.

JULY 2013
15388/50137/002

I:\078\PROJECTS\15388 RACER TRUST\T50137\DOCS\REPORTS\SAIFIGURES\003.MXD

PLOT DATE: 7/8/2013 KBS

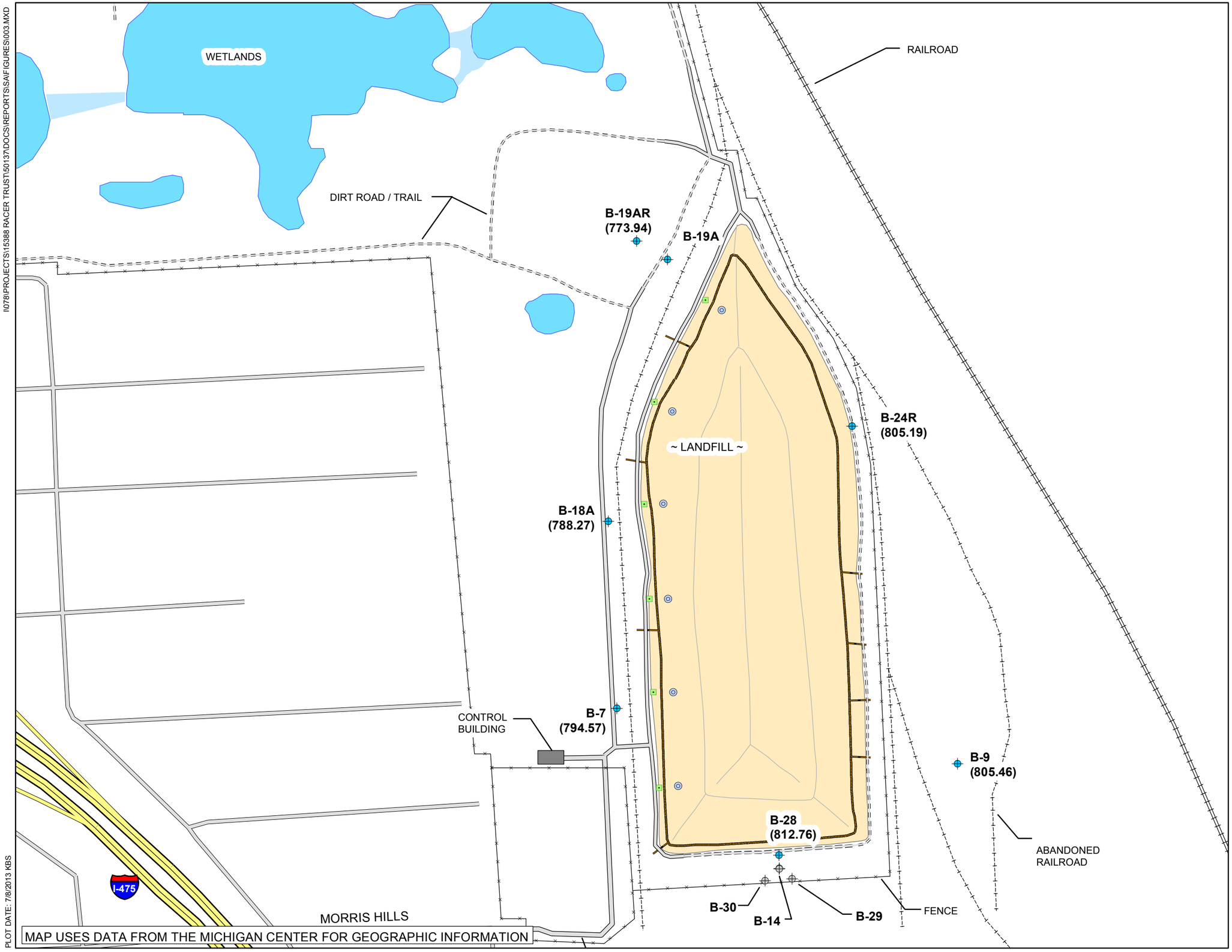

FIGURE 3

N

LEGEND

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

RACER TRUST
COLDWATER ROAD
LANDFILL FACILITY
FLINT, MICHIGAN

SHALLOW GROUNDWATER ELEVATION MAP JUNE 3, 2013

0 65 130 260 390 520
Feet

JULY 2013
15388/50137-003

O'BRIEN & GERE ENGINEERS, INC.

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PLOT DATE: 7/8/2013-KBS

FIGURE 4

LEGEND

- ⊕ MONITORING WELL
- (748.45) GROUNDWATER ELEVATION
- 740 GROUNDWATER POTENTIOMETRIC SURFACE ELEVATION

WETLANDS

DIRT ROAD / TRAIL

RAILROAD

B-2D (750.67)

750

749

748

747

B-20D (745.92)

746

745

744

~ LANDFILL ~

743

742

B-21D (741.15)

741

740

739

738

B-22D (737.83)

737

B-23DR (730.80)

B-27D (736.91)

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

ABANDONED RAILROAD

FENCE

CONTROL BUILDING

CONCRETE / GRAVEL ROAD

I-475

MORRIS HILLS

MAP USES DATA FROM THE MICHIGAN CENTER FOR GEOGRAPHIC INFORMATION

RACER TRUST
COLDWATER ROAD
LANDFILL FACILITY
FLINT, MICHIGAN

DRIFT AQUIFER GROUNDWATER POTENTIOMETRIC SURFACE MAP JUNE 3, 2013

0 75 150 300 450 600

Feet

JULY 2013
15388/50137-004

O'BRIEN & GERE ENGINEERS, INC.

APPENDIX A

Sampling Procedures

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

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List of Forms *(Following Text)*

Ground Water Sampling Log

Introduction

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

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

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

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

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

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

GM Procedures Referenced

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

Procedural Guidelines

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

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

Preparatory Requirements

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Sampling Techniques

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

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

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

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

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

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

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

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

Equipment/Materials

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

2. Flow-through cell for multimeter.

3. Field filtration units (if required).

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

5. Water level probe.

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

7. Post-Closure Care Plan.

8. Health and Safety Plan.

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

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

Field Notes

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

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

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

Ground water/Decontamination Fluid Disposal

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

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

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

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

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

References

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

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

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

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

ASTM D4448 - Standard Guide for Sampling Ground water Wells.

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

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

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

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

APPENDIX B

Groundwater Sampling Logs

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

Date	10/3/13	Weather	SUNNY 55°F
Site Name	Coldwater Road Landfill	Well #	B-27D
Location	Flint, MI	Evacuation Method	submersible pump
Project No.	50137	Sampling Method	Low-flow
Personnel	KBS / TJK		

Well Information:

Depth of Well *	89 ft.	Water Volume /ft. for:	
Depth to Water *	77.65 ft.	X	2" Diameter Well = 0.163 X LWC
Length of Water Column	ft.		4" Diameter Well = 0.653 X LWC
Volume of Water in Well	gal.(s)		6" Diameter Well = 1.469 X LWC

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

Did well go dry? NO

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

Instrument Calibration:

	Calibrated within Range
pH	yes
ORP	yes
Conductivity	yes
DO	yes

Water parameters:

Time	Pumping Rate (ml/min.)	Drawdown (ft) 0.3 feet or less	Temperature (Celsius) ±3 percent	Conductivity (mS/cm) ±0.005 (mS/cm)	Dissolved Oxygen (mg/L) ±10 percent	pH ±0.1 pH units	ORP (mV) ±10 millivolts	Turbidity (NTUs) ±10 percent
10:05	initial 75 ml/min	initial 78.22	initial 12.68	initial .616	initial 2.82	initial 8.25	initial -104.5	initial 264
10:10		78.12	12.51	.610	1.09	8.23	-113.6	283
10:15		78.0	12.49	.610	0.55	8.25	-115.0	302
10:20		77.98	12.53	.612	0.50	8.29	-114.9	319
10:25		77.98	12.66	.616	0.46	8.31	-113.6	325
10:30		77.96	12.63	.619	0.42	8.33	-103.8	236
10:35		77.94	12.69	.621	0.39	8.34	-98.8	222
10:40		77.94	12.77	.622	0.40	8.35	-99.2	178
10:45		77.94	12.77	.623	0.42	8.35	-97.0	150
10:50	↓	78.1	12.33	.626	0.45	8.35	-102.9	91

over =>

Water Sample:

Time Collected: 1110

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

Samples collected:

Analyses	# Bottles	Bottle Size/Type	Preservative	Field Filtered
VOCs	3	40 ml Glass	HCL	
Dissolved Metals - Cu, Cr, Ni, Zn, Fe, Mn, Na	1	125 ml Plastic	HNO_3	yes
Cyanide	1	125 ml Plastic	NAOH	
Phenols	1	125 ml Plastic	H_2SO_4	
TOC	2	40 ml Glass	H_2SO_4	
TOX	1	1L ~~125 ml Plastic~~ Amber	H_2SO_4	
Sulfate, Chlorides, SpC	1	1L ~~500 ml Plastic~~	None	
Notes: Ni	1	125 ml Plastic	HNO_3	

B-27D

Time	Pumping rate	Drawdown	Temp	conductivity	D.O.	pH	ORP	Turb
10:55		78.23	12.11	.625	0.30	8.33	-102.5	76
11:00		78.34	12.05	.623	0.36	8.33	-101.8	56
11:05		78.31	12.04	0.624	0.34	8.34	-107.7	59
11:10		78.31	12.14	0.627	0.31	8.34	-104.4	55

Sample time 1110

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

Date	6/3/13	Weather	SUNNY 55°F
Site Name	Coldwater Road Landfill	Well #	B-23Dr
Location	Flint, MI	Evacuation Method	submersible pump
Project No.	50137	Sampling Method	Low-flow
Personnel	KBS/TJK		

Well Information:

Depth of Well *	107 ft.	Water Volume /ft. for:	
Depth to Water *	38.92 ft.	X	2" Diameter Well = 0.163 X LWC
Length of Water Column	ft.		4" Diameter Well = 0.653 X LWC
Volume of Water in Well	gal.(s)		6" Diameter Well = 1.469 X LWC

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

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

Instrument Calibration:

	Calibrated within Range
pH	yes
ORP	yes
Conductivity	yes
DO	yes

Water parameters:

Time	Pumping Rate (ml/min.)	Drawdown (ft) 0.3 feet or less	Temperature (Celsius) ±3 percent	Conductivity (mS/cm) ±0.005 (mS/cm)	Dissolved Oxygen (mg/L) ±10 percent	pH ±0.1 pH units	ORP (mV) ±10 millivolts	Turbidity (NTUs) ±10 percent
1255 initial	100 initial	82.92 initial	16.13 initial	0.744 initial	6.61 initial	7.05 initial	-48.9 initial	60 initial
1300			14.96	0.735	5.93	7.05	-81.3	70
1305			15.80	0.739	3.50	7.05	-97.3	89
1310			13.61	0.756	2.23	7.05	-105.1	
1315			13.38	0.751	1.33	7.03	-104.9	86
1320			13.87	0.750	0.69	7.03	-108.6	83
1325			14.18	0.748	0.60	7.03	-109.4	81
1330			14.23	0.746	0.63	7.06	-110.1	75
1335			14.33	0.742	0.73	7.01	-101.4	69
1340	↓	↓	14.52	0.740	0.85	7.02	-102.0	63
								over =7

Water Sample:
Time Collected: 1410

Physical Appearance at Start		Physical Appearance at Sampling	
Color	Cloudy	Color	slightly cloudy
Odor	None	Odor	None
Turbidity (> 100 NTU)		Turbidity (> 100 NTU)	Low
Sheen/Free Product	None	Sheen/Free Product	None

Samples collected:

Analyses	# Bottles	Bottle Size/Type	Preservative	Field Filtered
VOCs	3	40 ml Glass	HCL	
Dissolved Metals - Cu, Cr, Ni, Zn, Fe, Mn, Na	1	125 ml Plastic	HNO_3	yes
Cyanide	1	125 ml Plastic	NAOH	
Phenols	1	125 ml Plastic	H_2SO_4	
TOC	2	40 ml Glass	H_2SO_4	
TOX	1	1L ~~Amber 125 ml Plastic~~	H_2SO_4	
Sulfate, Chlorides, SpC	1	1L ~~500 ml~~ Plasitc	None	
Notes: Na	1	125 mL plastic	HNO_3	

B-23Dr

Time	Pumping rate	Drawdown	Temperature	Cond	DO	pH	ORP	Turb
1345	100	82.92	14.57	0.735	1.06	7.04	-103.0	56
1350	↓	↓	14.86	0.732	1.14	7.06	-105.2	50
1355			14.87	0.731	1.30	7.06	-103.6	47
1400			15.15	0.726	1.38	7.06	-104.5	40
1405			15.69	0.725	1.41	7.05	-102.5	37
1410			15.40	0.728	1.54	7.06	-102.8	35

sample time 1410

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

Date	6/3/13	Weather	Sunny 60°F
Site Name	Coldwater Road Landfill	Well #	B-22D
Location	Flint, MI	Evacuation Method	submersible pump
Project No.	50137	Sampling Method	Low-flow
Personnel	KBS/TJK		

Well Information:

Depth of Well *	97.24 ft.	Water Volume /ft. for:	
Depth to Water *	85.60 ft.	X	2" Diameter Well = 0.163 X LWC
Length of Water Column	ft.		4" Diameter Well = 0.653 X LWC
Volume of Water in Well	gal.(s)		6" Diameter Well = 1.469 X LWC

Volume removed before sampling: 1½ gal.(s)
Did well go dry? No

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

Instrument Calibration:

	Calibrated within Range
pH	Yes
ORP	Yes
Conductivity	Yes
DO	Yes

Water parameters:

Time	Pumping Rate (ml/min.)	Drawdown (ft) 0.3 feet or less	Temperature (Celsius) ±3 percent	Conductivity (mS/cm) ±0.005 (mS/cm)	Dissolved Oxygen (mg/L) ±10 percent	pH ±0.1 pH units	ORP (mV) ±10 millivolts	Turbidity (NTUs) ±10 percent
1500	initial 100	initial 85.60	initial 16.19	initial 0.713	initial 8.63	initial 7.07	initial -85.8	initial 144
1505		85.71	15.54	0.703	3.78	4.96	-87.0	156
1510		85.89	15.70	0.702	1.87	6.89	-80.9	132
1515		86.10	16.62	0.701	0.95	6.87	-88.0	103
1520		86.10	15.92	0.701	0.71	6.820	-93.7	97
1525		86.10	15.71	0.700	0.63	6.86	-94.3	42
1530		86.10	15.48	0.699	0.55	6.83	-95.1	38
1535		86.10	15.20	0.698	0.46	6.80	-93.7	35
1540		86.10	15.11	0.699	0.40	6.81	-96.5	28
1545		86.10	15.39	0.697	0.38	6.80	-96.7	25
1550	↓	86.10	15.62	0.696	0.36	6.81	-95.2	25

Water Sample:
Time Collected: 1550

Physical Appearance at Start		Physical Appearance at Sampling	
Color	Slightly cloudy	Color	clear
Odor	NONE	Odor	NONE
Turbidity (> 100 NTU)	HIGH	Turbidity (> 100 NTU)	LOW
Sheen/Free Product	NONE	Sheen/Free Product	NONE

Samples collected:

Analyses	# Bottles	Bottle Size/Type	Preservative	Field Filtered
VOCs	~~3~~ 3	40 ml Glass	HCL	
Dissolved Metals - Cu, Cr, Ni, Zn, Fe, Mn, Na	1	125 ml Plastic	HNO_3	yes
Cyanide	1	125 ml Plastic	NAOH	
Phenols	1	125 ml Plastic	H_2SO_4	
TOC	2	40 ml Glass	H_2SO_4	
TOX	1	1L Amber ~~125 ml Plastic~~	H_2SO_4	
Sulfate, Chlorides, SpC	1	1L ~~500 ml~~ Plasitc	None	

Notes:

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

Date	6/3/13	Weather	Sunny 60°F
Site Name	Coldwater Road Landfill	Well #	B-28
Location	Flint, MI	Evacuation Method	peristaltic pump
Project No.	50137	Sampling Method	Low-flow
Personnel	KBS/TJK		

Well Information:

Depth of Well *	31.5 ft.	Water Volume /ft. for:
Depth to Water *	5.31 ft.	X 2" Diameter Well = 0.163 X LWC
Length of Water Column	ft.	4" Diameter Well = 0.653 X LWC
Volume of Water in Well	gal.(s)	6" Diameter Well = 1.469 X LWC

Volume removed before sampling: 1 gal.(s)

Did well go dry? No

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

Instrument Calibration:

	Calibrated within Range
pH	Yes
ORP	Yes
Conductivity	Yes
DO	Yes

Water parameters:

Time	Pumping Rate (ml/min.)	Drawdown (ft) 0.3 feet or less	Temperature (Celsius) ±3 percent	Conductivity (mS/cm) ±0.005 (mS/cm)	Dissolved Oxygen (mg/L) ±10 percent	pH ±0.1 pH units	ORP (mV) ±10 millivolts	Turbidity (NTUs) ±10 percent
1640 initial	>100 initial	5.89 initial	14.38 initial	0.846 initial	3.97 initial	6.99 initial	-82.4 initial	8 initial
1645	↓	6.48	14.62	0.832	0.53	6.93	-77.8	3
1650		6.70	14.13	0.831	0.16	6.91	-84.5	4
1655		6.90	14.00	0.833	0.14	6.92	-88.8	5
1700		7.31	13.46	0.827	0.11	6.90	-86.9	5
1705		7.82	13.15	0.828	0.09	6.89	-85.7	2
1710	↓	8.40	13.10	0.828	0.08	6.88	-85.2	1

Water Sample:

Time Collected: 1710

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

Samples collected:

Analyses	# Bottles	Bottle Size/Type	Preservative	Field Filtered
VOCs	~~2~~ 3	40 ml Glass	HCL	
Dissolved Metals - Cu, Cr, Ni, Zn, Fe, Mn, Na	1	125 ml Plastic	HNO_3	yes
Cyanide	1	125 ml Plastic	NAOH	
Phenols	1	125 ml Plastic	H_2SO_4	
TOC	2	40 ml Glass	H_2SO_4	
TOX	1	1L Amber ~~125 ml Plastic~~	H_2SO_4	
Sulfate, Chlorides, SpC	1	1L ~~500 ml~~ Plasitc	None	
Notes: Na	1	125 ml Plastic	HNO_3	

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

Date	6/5/13	Weather	Partly Sunny 65°F
Site Name	Coldwater Road Landfill	Well #	B-20D
Location	Flint, MI	Evacuation Method	submersible pump
Project No.	50137	Sampling Method	Low-flow
Personnel	KBG/TJK		

Well Information:

Depth of Well *	84.97	ft.
Depth to Water *	70.11	ft.
Length of Water Column		ft.
Volume of Water in Well		gal.(s)

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

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

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

Instrument Calibration: Calibrated within Range

pH	yes
ORP	yes
Conductivity	yes
DO	yes

Water parameters:

Time	Pumping Rate (ml/min.)	Drawdown (ft) 0.3 feet or less	Temperature (Celsius) ±3 percent	Conductivity (mS/cm) ±0.005 (mS/cm)	Dissolved Oxygen (mg/L) ±10 percent	pH ±0.1 pH units	ORP (mV) ±10 millivolts	Turbidity (NTUs) ±10 percent
8:50 initial	100 initial	70.11 initial	11.21 initial	.993 initial	8.16 initial	6.79 initial	253.0 initial	24
8:55			10.96	.953	2.41	6.87	-20	42
9:00		70.11	11.06	.951	1.61	6.92	-40.4	45
9:05			11.46	.946	1.38	6.96	-37.8	49
9:10		70.11	11.70	.946	1.22	6.99	-36.9	56
9:15			11.44	.950	1.09	6.99	-39.9	64
9:20		70.11	11.11	.949	1.19	6.97	-43.1	58
9:25			11.20	.940	1.05	6.95	-41.0	52
9:30		70.11	11.58	.939	0.75	7.00	-42.0	48
9:35			11.60	.941	0.70	7.01	-46.9	48
9:40	↓	70.11	11.51	.938	0.68	7.00	-47.6	48

Water Sample:
Time Collected: 9:45

Physical Appearance at Start		Physical Appearance at Sampling	
Color	cloudy	Color	slightly cloudy
Odor	None	Odor	None
Turbidity (> 100 NTU)	Low	Turbidity (> 100 NTU)	Low
Sheen/Free Product	None	Sheen/Free Product	None

Samples collected:

Analyses	# Bottles	Bottle Size/Type	Preservative	Field Filtered
VOCs	2 3	40 ml Glass	HCL	
Dissolved Metals - Cu, Cr, Ni, Zn, Fe, Mn, Na	1	125 ml Plastic	HNO_3	yes
Cyanide	1	125 ml Plastic	NAOH	
Phenols	1	125 ml ~~Plastic~~ ? Amber	H_2SO_4	
TOC	2	40 ml Glass	H_2SO_4	
TOX	1	1 L ~~125 ml Plastic~~ Glass;	H_2SO_4	
Sulfate, Chlorides, SpC	1	1 L ~~500 ml~~ Plasitc	None	

Notes: N 2 — 1 — 125 ml

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

Date	6/5/13	Weather	Partly Cloudy 65°F
Site Name	Coldwater Road Landfill	Well #	B-24r
Location	Flint, MI	Evacuation Method	peristaltic pump
Project No.	50137	Sampling Method	Low-flow
Personnel	KBS/TJK		

Well Information:

			Water Volume /ft. for:
Depth of Well *	29.5	ft.	
Depth to Water *	12.39	ft.	X 2" Diameter Well = 0.163 X LWC
Length of Water Column		ft.	4" Diameter Well = 0.653 X LWC
Volume of Water in Well		gal.(s)	6" Diameter Well = 1.469 X LWC

Volume removed before sampling: 1½ gal.(s)
Did well go dry? NO

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

Instrument Calibration: Calibrated within Range

pH	Yes
ORP	Yes
Conductivity	Yes
DO	Yes

Water parameters:

Time	Pumping Rate (ml/min.)	Drawdown (ft) 0.3 feet or less	Temperature (Celsius) ±3 percent	Conductivity (mS/cm) ±0.005 (mS/cm)	Dissolved Oxygen (mg/L) ±10 percent	pH ±0.1 pH units	ORP (mV) ±10 millivolts	Turbidity (NTUs) ±10 percent
915	initial <100	initial 12.85	initial 11.60	initial 1.265	initial 5.52	initial	initial 216.6	initial 34
920		13.50	11.00	1.157	0.44		96.1	35
925		13.65	10.93	1.139	0.33	7.02	252.4	33
930		13.95	11.17	1.120	0.27	7.06	239.6	33
935		14.49	11.42	1.112	0.28	7.15	203.9	31
940		14.64	11.42	1.104	0.19	7.15	180.0	24
945		14.79	11.37	1.105	0.21	7.16	162.1	24
950		14.95	11.37	1.103	0.19	7.16	149.7	19
955		15.09	11.30	1.105	0.23	7.18	144.5	16
1000		15.16	11.40	1.103	0.21	7.19	140.8	14

Water Sample:
Time Collected: 1000

Physical Appearance at Start		Physical Appearance at Sampling	
Color	clear / slight rust color	Color	clear
Odor	NONE	Odor	NONE
Turbidity (> 100 NTU)	Low	Turbidity (> 100 NTU)	low
Sheen/Free Product	NONE	Sheen/Free Product	NONE

Samples collected:

Analyses	# Bottles	Bottle Size/Type	Preservative	Field Filtered
VOCs	~~2~~ 3	40 ml Glass	HCL	
Dissolved Metals - Cu, Cr, Ni, Zn, Fe, Mn, Na	1	125 ml Plastic	HNO_3	yes
Cyanide	1	125 ml Plastic	NAOH	
Phenols	1	125 ml Plastic	H_2SO_4	
TOC	2	40 ml Glass	H_2SO_4	
TOX	1	1L ~~125 ml Plastic~~	H_2SO_4	
Sulfate, Chlorides, SpC	1	1L ~~500 ml~~ Plasitc	None	
Notes: Na	1	125 ml Plastic	HNO3	

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

Date	6/5/13	Weather	cloudy 70 60°F
Site Name	Coldwater Road Landfill	Well #	B-7
Location	Flint, MI	Evacuation Method	peristaltic pump
Project No.	50137	Sampling Method	Low-flow
Personnel	KBS / TJK		

Well Information:

			Water Volume /ft. for:
Depth of Well *	31.59	ft.	
Depth to Water *	21.52	ft.	X 2" Diameter Well = 0.163 X LWC
Length of Water Column		ft.	4" Diameter Well = 0.653 X LWC
Volume of Water in Well		gal.(s)	6" Diameter Well = 1.469 X LWC

Volume removed before sampling: 1 gal.(s)

Did well go dry? NO

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

Instrument Calibration:

	Calibrated within Range
pH	yes
ORP	yes
Conductivity	yes
DO	yes

Water parameters:

Time	Pumping Rate (ml/min.)	Drawdown (ft) 0.3 feet or less	Temperature (Celsius) ±3 percent	Conductivity (mS/cm) ±0.005 (mS/cm)	Dissolved Oxygen (mg/L) ±10 percent	pH ±0.1 pH units	ORP (mV) ±10 millivolts	Turbidity (NTUs) ±10 percent
1120 initial	400 initial	20.19 initial	15.64 initial	0.787 initial	7.71 initial	7.21 initial	49.0 initial	133 initial
1125	↓	22.74	15.55	0.741	6.02	7.24	0.4	65
1130		23.04	15.26	0.714	6.08	7.24	-1.4	42
1135		23.59	14.61	0.700	6.83	7.25	-1.8	27
1140		23.85	14.54	0.695	6.67	7.25	-0.2	24
1145		24.35	14.06	0.690	6.4	7.24	-0.7	18
1150		24.85	14.22	0.689	6.4	7.24	-0.5	16
1155	↓	25.25	13.98	0.687	6.4	7.24	-1.0	14

Water Sample:
Time Collected: 1155

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

Samples collected:

Analyses	# Bottles	Bottle Size/Type	Preservative	Field Filtered
VOCs	3	40 ml Glass	HCL	
Dissolved Metals - Cu, Cr, Ni, Zn, Fe, Mn, Na	1	125 ml Plastic	HNO_3	yes
Cyanide	1	125 ml Plastic	NAOH	
Phenols	1	125 ml Plastic	H_2SO_4	
TOC	2	40 ml Glass	H_2SO_4	
TOX	1	1L ~~125 ml~~ Plastic Amber	H_2SO_4	
Sulfate, Chlorides, SpC	1	1L ~~500 ml~~ Plasitc	None	
Notes: Na	1	125 ml plastic	HNO3	

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

Date	6/5/13	Weather	cloudy 68°F
Site Name	Coldwater Road Landfill	Well #	B-9
Location	Flint, MI	Evacuation Method	peristaltic pump
Project No.	50137	Sampling Method	Low-flow
Personnel	KBS / DK		

Well Information:

Depth of Well *	25.35 ft.	Water Volume /ft. for:	
Depth to Water *	3.70 ft.	X	2" Diameter Well = 0.163 X LWC
Length of Water Column	ft.		4" Diameter Well = 0.653 X LWC
Volume of Water in Well	gal.(s)		6" Diameter Well = 1.469 X LWC

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

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

Instrument Calibration:

	Calibrated within Range
pH	yes
ORP	Yes
Conductivity	yes
DO	Yes

Water parameters:

Time	Pumping Rate (ml/min.)	Drawdown (ft) 0.3 feet or less	Temperature (Celsius) ±3 percent	Conductivity (mS/cm) ±0.005 (mS/cm)	Dissolved Oxygen (mg/L) ±10 percent	pH ±0.1 pH units	ORP (mV) ±10 millivolts	Turbidity (NTUs) ±10 percent
1320 initial	<100	4.65	13.66	2.803	2.82	7.08	24.0	21
1325		4.94	12.86	2.690	0.67	7.10	1.5	11
1330		5.45	12.62	2.650	0.45	7.08	-8.7	5
1335		6.13	12.73	2.636	0.32	7.07	-9.2	3
1340		6.59	13.10	2.633	0.32	7.07	-12.2	2
1345		7.10	12.70	2.638	0.38	7.07	-12.9	2
1350	↓	7.69	12.50	2.635	0.30	7.07	-15.2	2

Water Sample:
Time Collected: 1350

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

Samples collected:

Analyses	# Bottles	Bottle Size/Type	Preservative	Field Filtered
VOCs	3	40 ml Glass	HCL	
Dissolved Metals - Cu, Cr, Ni, Zn, Fe, Mn, Na	1	125 ml Plastic	HNO_3	yes
Cyanide	1	125 ml Plastic	NAOH	
Phenols	1	125 ml Plastic	H_2SO_4	
TOC	2	40 ml Glass	H_2SO_4	
TOX	1	1L ~~125 ml Plastic~~ AMBER	H_2SO_4	
Sulfate, Chlorides, SpC	1	1L ~~900 ml Plastic~~	None	

Notes: Na — 1 — 125 ml plastic — $1+NO_3$

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

Date	6/5/13	Weather	mid 70's Partly Cloudy
Site Name	Coldwater Road Landfill	Well #	B-21D
Location	Flint, MI	Evacuation Method	submersible pump
Project No.	50137	Sampling Method	Low-flow
Personnel	KBS / TJC		

Well Information:

Depth of Well *	97.44 ft.	Water Volume /ft. for:	
Depth to Water *	81.91 ft.	X	2" Diameter Well = 0.163 X LWC
Length of Water Column	ft.		4" Diameter Well = 0.653 X LWC
Volume of Water in Well	gal.(s)		6" Diameter Well = 1.469 X LWC

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

Did well go dry? NO

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

Instrument Calibration: Calibrated within Range

pH	yes
ORP	yes
Conductivity	yes
DO	yes

Water parameters:

Time	Pumping Rate (ml/min.)	Drawdown (ft) 0.3 feet or less	Temperature (Celsius) ±3 percent	Conductivity (mS/cm) ±0.005 (mS/cm)	Dissolved Oxygen (mg/L) ±10 percent	pH ±0.1 pH units	ORP (mV) ±10 millivolts	Turbidity (NTUs) ±10 percent
13:05	initial 100	initial 82.26	initial 13.65	initial .631	initial 5.89	initial 7.00	initial -35.1	initial 74
13:10			13.69	.630	2.10	7.16	-43.5	79
13:15			12.74	.632	1.35	7.15	-48.2	82
13:20		82.26	12.61	.638	1.09	7.14	-52.4	82
13:25			13.14	.647	0.76	7.15	-54.7	84
13:30			13.41	.648	0.69	7.16	-57.0	81
13:35		82.26	13.13	.665	0.63	7.15	-59.6	97
13:40			13.45	.671	0.61	7.16	-60.5	120
13:45		82.26	13.65	.681	0.59	7.14	-61.7	102
13:50			13.07	.691	0.64	7.16	-62.8	109
13:55	↓	82.26	12.66	.691	0.63	7.13	-63.0	120

over =>

Water Sample:

Time Collected: 14:50

Physical Appearance at Start		Physical Appearance at Sampling	
Color	cloudy	Color	slightly cloudy
Odor	none	Odor	None
Turbidity (> 100 NTU)	High	Turbidity (> 100 NTU)	Low
Sheen/Free Product	None	Sheen/Free Product	None

Samples collected:

Analyses	# Bottles	Bottle Size/Type	Preservative	Field Filtered
VOCs	3	40 ml Glass	HCL	
Dissolved Metals - Cu, Cr, Ni, Zn, Fe, Mn, Na	1	125 ml Plastic	HNO_3	yes
Cyanide	1	125 ml Plastic	NAOH	
Phenols	1	125 ml ~~Plastic~~ Amber	H_2SO_4	
TOC	2	40 ml Glass	H_2SO_4	
TOX	1	~~125 ml Plastic~~ 1 L Amber	H_2SO_4	
Sulfate, Chlorides, SpC	1	~~500 ml Plastic~~ 1 L plastic	None	

Notes: Na (125 mL HNO_3

B-21D

Time	Pumping Rate	Drawdown	Temp	Conductivity	D.O.	pH	ORP	Turb
14:00	100	82.26	12.78	0.692	0.53	7.12	-64.6	105
14:05		82.30	12.86	0.691	0.49	7.13	-66.7	94
14:10		82.32	13.06	0.691	0.45	7.15	-66.3	90
14:15		82.28	13.03	0.692	0.44	7.15	-63.5	82
14:20		82.28	13.19	0.694	0.41	7.16	-60.7	68
14:25		82.28	13.33	0.698	0.41	7.15	-59.9	62
14:30		82.28	13.37	0.700	0.41	7.16	-63.3	58
14:35		82.28	13.43	0.702	0.40	7.16	-62.8	49
14:40		82.28	13.41	0.703	0.40	7.16	-62.5	48
14:45		82.28	13.45	0.704	0.39	7.16	-62.8	48

Sample time 1450

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

Date	6/5/13	Weather	cloudy 67°F
Site Name	Coldwater Road Landfill	Well #	B-18A
Location	Flint, MI	Evacuation Method	peristaltic pump
Project No.	50137	Sampling Method	Low-flow
Personnel	KBS / TJK		

Well Information:

Depth of Well *	43.4 ft.	Water Volume /ft. for:	
Depth to Water *	23.91 ft.	X	2" Diameter Well = 0.163 X LWC
Length of Water Column	ft.		4" Diameter Well = 0.653 X LWC
Volume of Water in Well	gal.(s)		6" Diameter Well = 1.469 X LWC

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

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

Instrument Calibration: Calibrated within Range

pH	Yes
ORP	Yes
Conductivity	Yes
DO	Yes

Water parameters:

Time	Pumping Rate (ml/min.)	Drawdown (ft) 0.3 feet or less	Temperature (Celsius) ±3 percent	Conductivity (mS/cm) ±0.005 (mS/cm)	Dissolved Oxygen (mg/L) ±10 percent	pH ±0.1 pH units	ORP (mV) ±10 millivolts	Turbidity (NTUs) ±10 percent
1505 initial	100 initial	24.93 initial	15.03 initial	1.105 initial	8.04 initial	7.22 initial	119.9 initial	7 initial
1510		24.94	14.22	1.055	2.49	7.23	47.9	2
1515		25.49	13.77	1.032	2.12	7.20	37.5	2
1520		25.85	14.41	1.028	1.94	7.20	41.9	1
1525		26.03	14.71	1.026	1.91	7.19	42.8	1
1530		26.31	14.47	1.030	1.93	7.18	38.1	1
1535	↓	26.57	14.61	1.025	1.90	7.17	34.6	2

Water Sample:
Time Collected: 1535

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

Samples collected:

Analyses	# Bottles	Bottle Size/Type	Preservative	Field Filtered
VOCs	2 3	40 ml Glass	HCL	
Dissolved Metals - Cu, Cr, Ni, Zn, Fe, Mn, Na	1	125 ml Plastic	HNO_3	yes
Cyanide	1	125 ml Plastic	NAOH	
Phenols	1	125 ml Plastic	H_2SO_4	
TOC	2	40 ml Glass	H_2SO_4	
TOX	1	1L ~~125 ml Plastic~~ Amber	H_2SO_4	
Sulfate, Chlorides, SpC	1	1L ~~500 ml~~ Plasitc	None	
Notes: Na	1	125 ml plastic	HNO_3	

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

Date	6/5/13	Weather	70's Partly Cloudy
Site Name	Coldwater Road Landfill	Well #	B-19Ar
Location	Flint, MI	Evacuation Method	submersible pump
Project No.	50137	Sampling Method	Low-flow
Personnel	KBS / TJK		

Well Information:

Depth of Well *	46.6 ft.	Water Volume /ft. for:
Depth to Water *	38.53 ft.	X 2" Diameter Well = 0.163 X LWC
Length of Water Column	ft.	4" Diameter Well = 0.653 X LWC
Volume of Water in Well	gal.(s)	6" Diameter Well = 1.469 X LWC

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

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

Instrument Calibration:

	Calibrated within Range
pH	yes
ORP	yes
Conductivity	yes
DO	yes

Water parameters:

Time	Pumping Rate (ml/min.)	Drawdown (ft) 0.3 feet or less	Temperature (Celsius) ±3 percent	Conductivity (mS/cm) ±0.005 (mS/cm)	Dissolved Oxygen (mg/L) ±10 percent	pH ±0.1 pH units	ORP (mV) ±10 millivolts	Turbidity (NTUs) ±10 percent
16:00 initial	100 initial	41.85 initial	12.93 initial	.663 initial	5.64 initial	8.35 initial	163.0 initial	27
16:05	↓	41.85	13.09	.661	4.60	8.29	151.8	25
16:10		41.92	13.42	.659	4.34	8.30	143.2	24
16:15		42.0	12.97	.657	4.53	8.27	130.2	11
16:20		42.0	12.51	.651	4.55	8.19	128.5	8
16:25		42.0	12.90	.650	4.49	8.19	121.3	10
16:30		42.0	12.98	.653	4.44	8.16	116.3	10
16:35	↓	42.0	12.99	.652	4.39	8.16	115.8	9

Water Sample:
Time Collected: 16:40

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

Samples collected:

Analyses	# Bottles	Bottle Size/Type	Preservative	Field Filtered
VOCs	3 ✓	40 ml Glass	HCL	
Dissolved Metals - Cu, Cr, Ni, Zn, Fe, Mn, Na	1	125 ml Plastic	HNO_3	yes
Cyanide	1 ✓	125 ml ~~Plastic~~	NAOH	
Phenols	1 ✓	125 ml ~~Plastic~~ Amber	H_2SO_4	
TOC	2 ✓	40 ml Glass	H_2SO_4	
TOX	1	~~125 ml Plastic~~ 1L Amber	H_2SO_4	
Sulfate, Chlorides, SpC	1	~~500 ml Plastic~~ 1L Plastic	None	

Notes: Na — 1 ✓ — 125mL — HNO3

Pumped for 10 min prior to collecting Readings, While fixing flow cell

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

Date	6/6/13	Weather	Mostly cloudy 65°F
Site Name	Coldwater Road Landfill	Well #	B-2D
Location	Flint, MI	Evacuation Method	submersible pump
Project No.	50137	Sampling Method	Low-flow
Personnel	KBS/TJK		

Well Information:

			Water Volume /ft. for:
Depth of Well *	72.97 ft.	X	2" Diameter Well = 0.163 X LWC
Depth to Water *	54.33 ft.		4" Diameter Well = 0.653 X LWC
Length of Water Column	ft.		6" Diameter Well = 1.469 X LWC
Volume of Water in Well	gal.(s)		

Volume removed before sampling: 1½ gal.(s)
Did well go dry? No

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

Instrument Calibration:

	Calibrated within Range
pH	Yes
ORP	Yes
Conductivity	Yes
DO	Yes

Water parameters:

Time	Pumping Rate (ml/min.)	Drawdown (ft) 0.3 feet or less	Temperature (Celsius) ±3 percent	Conductivity (mS/cm) ±0.005 (mS/cm)	Dissolved Oxygen (mg/L) ±10 percent	pH ±0.1 pH units	ORP (mV) ±10 millivolts	Turbidity (NTUs) ±10 percent
925 initial	100 initial	54.33 initial	12.35 initial	0.781 initial	10.50 initial	6.56 initial	248.1 initial	4 initial
930			11.70	0.813	8.31	6.52	255.1	5
935		54.33	11.44	0.807	6.08	6.61	232.3	10
940			11.57	0.787	5.19	6.67	238.2	9
945		54.33	12.00	0.771	4.64	6.71	226.1	9
950			12.08	0.765	4.39	6.73	214.1	7
955		54.33	12.19	0.763	4.41	6.74	210.2	5
1000			12.33	0.759	4.22	6.78	209.8	5
1005	↓	54.33	12.50	0.758	4.07	6.78	207.3	4

Water Sample:
Time Collected: 1005

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

Samples collected:

Analyses	# Bottles	Bottle Size/Type	Preservative	Field Filtered
VOCs	3	40 ml Glass	HCL	
Dissolved Metals - Cu, Cr, Ni, Zn, Fe, Mn, Na	1	125 ml Plastic	HNO_3	yes
Cyanide	1	125 ml Plastic	NAOH	
Phenols	1	125 ml Plastic	H_2SO_4	
TOC	2	40 ml Glass	H_2SO_4	
TOX	1	1L ~~125 ml Plastic~~ Amber	H_2SO_4	
Sulfate, Chlorides, SpC	1	1L ~~500 ml Plasitc~~	None	
Notes: Na	1	125 ml plastic	HNO_3	

APPENDIX C

Analytical Results

Analytical Laboratory Report

Report ID: S56685.01(01)
Generated on 06/14/2013

Report to

Attention: Clifford Yantz
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Report Summary

Lab Sample ID(s): S56685.01-S56685.05
Project: RACER Coldwater Rd Landfill Semi-Annual #50137
Collected Date: 06/03/2013
Submitted Date/Time: 06/04/2013 13:30
Sampled by: Kevin Schneider
P.O. #: 11311200

Report Notes

Results relate only to items tested as received by the laboratory.
Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
'Not detected' indicates that parameter was not found at a level equal to or greater than the reporting limit (RL).
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.

Laboratory Certifications:
Michigan DNRE (#9956), DOD/ISO 17025 (#69699), WBENC (#2005110032), Ohio EPA (#CL0002), IN Drinking Water (#C-MI-07), NELAC NY (#11814)
Some analytes reported may not be certified. Full certification lists are available upon request.

Violetta F. Murshak
Laboratory Director

Analytical Laboratory Report

Sample Summary (5 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S56685.01	B-27D	Groundwater	06/03/2013 11:10
S56685.02	B-23Dr	Groundwater	06/03/2013 14:10
S56685.03	B-22D	Groundwater	06/03/2013 15:50
S56685.04	B-28	Groundwater	06/03/2013 17:10
S56685.05	TB-1	Quality Control	06/03/2013 00:01

Analytical Laboratory Report

Lab Sample ID: S56685.01
Sample Tag: B-27D
Collected Date/Time: 06/03/2013 11:10
Matrix: Groundwater
COC Reference: 74405

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	1L Plastic	None	Yes	5.2	IR
2	40ml Glass	H2SO4	Yes	5.2	IR
2	125ml Plastic	HNO3	Yes	5.2	IR
1	125ml Amber	H2SO4	Yes	5.2	IR
1	1L Amber	H2SO4	Yes	5.2	IR
3	40ml Glass	HCL	Yes	5.2	IR
1	125ml Plastic	NaOH	Yes	5.2	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
Metal Digestion	Completed			3015A	06/13/13 15:00	PER		
Metal Digestion	Completed			3015A	06/13/13 09:00	PER		
pH check for VOCs	<2	STD Units		N/A	06/07/13 10:00	WAT		
Inorganics								
Chloride	Not detected	mg/L	5	E300.0	06/07/13 08:38	JDP	16887-00-6	
Conductivity	645	umhos/cm		120.1	06/06/13 13:10	JKB		
Cyanide	Not detected	mg/L	0.005	335.4/4500-CN-E	06/10/13 12:24	JDP	57-12-5	
Phenols	Not detected	mg/L	0.02	420.1	06/11/13 16:08	JKB		
Sulfate	21	mg/L	10	E300.0	06/07/13 07:02	JDP	14808-79-8	
TOC	1.5	mg/L	1	SM 5310C	06/10/13 14:34	JKB		
Metals								
Chromium, Dissolved	Not detected	mg/L	0.005	E200.8	06/13/13 16:51	PER	7440-47-3	
Copper, Dissolved	Not detected	mg/L	0.004	E200.8	06/13/13 16:51	PER	7440-50-8	
Iron, Dissolved	1.67	mg/L	0.02	E200.8	06/13/13 16:51	PER	7439-89-6	
Manganese, Dissolved	0.029	mg/L	0.005	E200.8	06/13/13 16:51	PER	7439-96-5	
Nickel, Dissolved	Not detected	mg/L	0.005	E200.8	06/13/13 16:51	PER	7440-02-0	
Sodium	32.5	mg/L	1.0	E200.8	06/13/13 15:02	PER	7440-23-5	
Zinc, Dissolved	Not detected	mg/L	0.005	E200.8	06/13/13 16:51	PER	7440-66-6	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	06/07/13 17:02	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	06/07/13 17:02	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	06/07/13 17:02	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	06/07/13 17:02	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	06/07/13 17:02	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	06/07/13 17:02	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	06/07/13 17:02	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	06/07/13 17:02	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	06/07/13 17:02	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	06/07/13 17:02	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	06/07/13 17:02	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	06/07/13 17:02	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	06/07/13 17:02	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	06/07/13 17:02	WAT	75-35-4	

Lab Sample ID: S56685.01 (continued)
Sample Tag: B-27D

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Methylene chloride	Not detected	ug/L	5	SW8260B	06/07/13 17:02	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	06/07/13 17:02	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	06/07/13 17:02	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	06/07/13 17:02	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	06/07/13 17:02	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	06/07/13 17:02	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	06/07/13 17:02	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	06/07/13 17:02	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	06/07/13 17:02	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	06/07/13 17:02	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	06/07/13 17:02	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	06/07/13 17:02	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	06/07/13 17:02	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	06/07/13 17:02	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	06/07/13 17:02	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	06/07/13 17:02	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	06/07/13 17:02	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	06/07/13 17:02	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	06/07/13 17:02	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	06/07/13 17:02	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	06/07/13 17:02	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	06/07/13 17:02	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	06/07/13 17:02	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	06/07/13 17:02	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	06/07/13 17:02	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	06/07/13 17:02	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	06/07/13 17:02	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	06/07/13 17:02	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	06/07/13 17:02	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	06/07/13 17:02	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	06/07/13 17:02	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	06/07/13 17:02	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	06/07/13 17:02	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	06/07/13 17:02	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	06/07/13 17:02	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	06/07/13 17:02	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	06/07/13 17:02	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	06/07/13 17:02	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	06/07/13 17:02	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	06/07/13 17:02	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	06/07/13 17:02	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	06/07/13 17:02	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	06/07/13 17:02	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	06/07/13 17:02	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	06/07/13 17:02	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	06/07/13 17:02	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	06/07/13 17:02	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	06/07/13 17:02	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	06/07/13 17:02	WAT	96-12-8	

Lab Sample ID: S56685.01 (continued)
Sample Tag: B-27D

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	06/07/13 17:02	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	06/07/13 17:02	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	06/07/13 17:02	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	06/07/13 17:02	WAT	91-57-6	
Organics								
TOX	4.3	ug/L	10.0	9020A	06/12/13 09:45	Tes		O1

O-Analysis performed by outside laboratory. See attached report. 1-*Result is leass than the RLbut greater than or equal to the MDL and the concentration is an appozimate value

Analytical Laboratory Report

Lab Sample ID: S56685.02
Sample Tag: B-23Dr
Collected Date/Time: 06/03/2013 14:10
Matrix: Groundwater
COC Reference: 74405

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	1L Plastic	None	Yes	5.2	IR
2	40ml Glass	H2SO4	Yes	5.2	IR
2	125ml Plastic	HNO3	Yes	5.2	IR
1	125ml Amber	H2SO4	Yes	5.2	IR
1	1L Amber	H2SO4	Yes	5.2	IR
3	40ml Glass	HCL	Yes	5.2	IR
1	125ml Plastic	NaOH	Yes	5.2	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
Metal Digestion	Completed			3015A	06/13/13 15:00	PER		
Metal Digestion	Completed			3015A	06/13/13 09:00	PER		
pH check for VOCs	<2	STD Units		N/A	06/07/13 10:00	WAT		
Inorganics								
Chloride	20	mg/L	10	E300.0	06/07/13 07:14	JDP	16887-00-6	
Conductivity	720	umhos/cm		120.1	06/06/13 13:14	JKB		
Cyanide	Not detected	mg/L	0.005	335.4/4500-CN-E	06/10/13 12:26	JDP	57-12-5	
Phenols	Not detected	mg/L	0.02	420.1	06/11/13 16:12	JKB		
Sulfate	44	mg/L	10	E300.0	06/07/13 07:14	JDP	14808-79-8	
TOC	1.4	mg/L	1	SM 5310C	06/10/13 15:13	JKB		
Metals								
Chromium, Dissolved	Not detected	mg/L	0.005	E200.8	06/13/13 16:56	PER	7440-47-3	
Copper, Dissolved	Not detected	mg/L	0.004	E200.8	06/13/13 16:56	PER	7440-50-8	
Iron, Dissolved	0.98	mg/L	0.02	E200.8	06/13/13 16:56	PER	7439-89-6	
Manganese, Dissolved	0.032	mg/L	0.005	E200.8	06/13/13 16:56	PER	7439-96-5	
Nickel, Dissolved	Not detected	mg/L	0.005	E200.8	06/13/13 16:56	PER	7440-02-0	
Sodium	23.5	mg/L	1.0	E200.8	06/13/13 15:03	PER	7440-23-5	
Zinc, Dissolved	Not detected	mg/L	0.005	E200.8	06/13/13 16:56	PER	7440-66-6	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	06/07/13 17:22	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	06/07/13 17:22	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	06/07/13 17:22	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	06/07/13 17:22	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	06/07/13 17:22	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	06/07/13 17:22	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	06/07/13 17:22	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	06/07/13 17:22	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	06/07/13 17:22	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	06/07/13 17:22	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	06/07/13 17:22	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	06/07/13 17:22	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	06/07/13 17:22	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	06/07/13 17:22	WAT	75-35-4	

Lab Sample ID: S56685.02 (continued)
Sample Tag: B-23Dr

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Methylene chloride	Not detected	ug/L	5	SW8260B	06/07/13 17:22	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	06/07/13 17:22	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	06/07/13 17:22	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	06/07/13 17:22	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	06/07/13 17:22	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	06/07/13 17:22	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	06/07/13 17:22	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	06/07/13 17:22	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	06/07/13 17:22	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	06/07/13 17:22	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	06/07/13 17:22	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	06/07/13 17:22	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	06/07/13 17:22	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	06/07/13 17:22	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	06/07/13 17:22	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	06/07/13 17:22	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	06/07/13 17:22	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	06/07/13 17:22	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	06/07/13 17:22	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	06/07/13 17:22	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	06/07/13 17:22	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	06/07/13 17:22	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	06/07/13 17:22	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	06/07/13 17:22	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	06/07/13 17:22	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	06/07/13 17:22	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	06/07/13 17:22	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	06/07/13 17:22	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	06/07/13 17:22	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	06/07/13 17:22	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	06/07/13 17:22	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	06/07/13 17:22	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	06/07/13 17:22	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	06/07/13 17:22	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	06/07/13 17:22	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	06/07/13 17:22	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	06/07/13 17:22	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	06/07/13 17:22	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	06/07/13 17:22	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	06/07/13 17:22	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	06/07/13 17:22	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	06/07/13 17:22	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	06/07/13 17:22	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	06/07/13 17:22	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	06/07/13 17:22	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	06/07/13 17:22	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	06/07/13 17:22	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	06/07/13 17:22	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	06/07/13 17:22	WAT	96-12-8	

Lab Sample ID: S56685.02 (continued)
Sample Tag: B-23Dr

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	06/07/13 17:22	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	06/07/13 17:22	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	06/07/13 17:22	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	06/07/13 17:22	WAT	91-57-6	
Organics								
TOX	14	ug/L	10.0	9020A	06/12/13 09:45	Tes		O

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

Analytical Laboratory Report

Lab Sample ID: S56685.03
Sample Tag: B-22D
Collected Date/Time: 06/03/2013 15:50
Matrix: Groundwater
COC Reference: 74405

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	1L Plastic	None	Yes	5.2	IR
2	40ml Glass	H2SO4	Yes	5.2	IR
2	125ml Plastic	HNO3	Yes	5.2	IR
1	125ml Amber	H2SO4	Yes	5.2	IR
1	1L Amber	H2SO4	Yes	5.2	IR
3	40ml Glass	HCL	Yes	5.2	IR
1	125ml Plastic	NaOH	Yes	5.2	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
Metal Digestion	Completed			3015A	06/13/13 15:00	PER		
Metal Digestion	Completed			3015A	06/13/13 09:00	PER		
pH check for VOCs	<2	STD Units		N/A	06/07/13 10:00	WAT		
Inorganics								
Chloride	Not detected	mg/L	5	E300.0	06/07/13 09:24	JDP	16887-00-6	
Conductivity	701	umhos/cm		120.1	06/06/13 13:16	JKB		
Cyanide	Not detected	mg/L	0.005	335.4/4500-CN-E	06/10/13 12:28	JDP	57-12-5	
Phenols	Not detected	mg/L	0.02	420.1	06/11/13 16:16	JKB		
Sulfate	53	mg/L	10	E300.0	06/07/13 07:25	JDP	14808-79-8	
TOC	1.6	mg/L	1	SM 5310C	06/10/13 15:32	JKB		
Metals								
Chromium, Dissolved	Not detected	mg/L	0.005	E200.8	06/13/13 16:57	PER	7440-47-3	
Copper, Dissolved	Not detected	mg/L	0.004	E200.8	06/13/13 16:57	PER	7440-50-8	
Iron, Dissolved	1.00	mg/L	0.02	E200.8	06/13/13 16:57	PER	7439-89-6	
Manganese, Dissolved	0.027	mg/L	0.005	E200.8	06/13/13 16:57	PER	7439-96-5	
Nickel, Dissolved	Not detected	mg/L	0.005	E200.8	06/13/13 16:57	PER	7440-02-0	
Sodium	28.1	mg/L	1.0	E200.8	06/13/13 15:04	PER	7440-23-5	
Zinc, Dissolved	Not detected	mg/L	0.005	E200.8	06/13/13 16:57	PER	7440-66-6	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	06/07/13 17:43	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	06/07/13 17:43	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	06/07/13 17:43	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	06/07/13 17:43	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	06/07/13 17:43	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	06/07/13 17:43	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	06/07/13 17:43	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	06/07/13 17:43	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	06/07/13 17:43	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	06/07/13 17:43	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	06/07/13 17:43	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	06/07/13 17:43	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	06/07/13 17:43	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	06/07/13 17:43	WAT	75-35-4	

Lab Sample ID: S56685.03 (continued)
Sample Tag: B-22D

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Methylene chloride	Not detected	ug/L	5	SW8260B	06/07/13 17:43	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	06/07/13 17:43	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	06/07/13 17:43	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	06/07/13 17:43	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	06/07/13 17:43	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	06/07/13 17:43	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	06/07/13 17:43	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	06/07/13 17:43	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	06/07/13 17:43	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	06/07/13 17:43	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	06/07/13 17:43	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	06/07/13 17:43	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	06/07/13 17:43	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	06/07/13 17:43	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	06/07/13 17:43	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	06/07/13 17:43	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	06/07/13 17:43	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	06/07/13 17:43	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	06/07/13 17:43	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	06/07/13 17:43	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	06/07/13 17:43	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	06/07/13 17:43	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	06/07/13 17:43	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	06/07/13 17:43	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	06/07/13 17:43	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	06/07/13 17:43	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	06/07/13 17:43	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	06/07/13 17:43	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	06/07/13 17:43	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	06/07/13 17:43	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	06/07/13 17:43	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	06/07/13 17:43	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	06/07/13 17:43	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	06/07/13 17:43	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	06/07/13 17:43	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	06/07/13 17:43	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	06/07/13 17:43	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	06/07/13 17:43	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	06/07/13 17:43	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	06/07/13 17:43	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	06/07/13 17:43	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	06/07/13 17:43	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	06/07/13 17:43	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	06/07/13 17:43	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	06/07/13 17:43	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	06/07/13 17:43	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	06/07/13 17:43	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	06/07/13 17:43	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	06/07/13 17:43	WAT	96-12-8	

Lab Sample ID: S56685.03 (continued)
Sample Tag: B-22D

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	06/07/13 17:43	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	06/07/13 17:43	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	06/07/13 17:43	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	06/07/13 17:43	WAT	91-57-6	
Organics								
TOX	46	ug/L	30.0	9020A	06/12/13 09:45	Tes		O

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

Analytical Laboratory Report

Lab Sample ID: S56685.04
Sample Tag: B-28
Collected Date/Time: 06/03/2013 17:10
Matrix: Groundwater
COC Reference: 74405

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	1L Plastic	None	Yes	5.2	IR
2	40ml Glass	H2SO4	Yes	5.2	IR
2	125ml Plastic	HNO3	Yes	5.2	IR
1	125ml Amber	H2SO4	Yes	5.2	IR
1	1L Amber	H2SO4	Yes	5.2	IR
3	40ml Glass	HCL	Yes	5.2	IR
1	125ml Plastic	NaOH	Yes	5.2	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
Metal Digestion	Completed			3015A	06/13/13 15:00	PER		
Metal Digestion	Completed			3015A	06/13/13 09:00	PER		
pH check for VOCs	<2	STD Units		N/A	06/07/13 10:00	WAT		
Inorganics								
Chloride	12	mg/L	5	E300.0	06/07/13 09:35	JDP	16887-00-6	
Conductivity	834	umhos/cm		120.1	06/06/13 13:18	JKB		
Cyanide	Not detected	mg/L	0.005	335.4/4500-CN-E	06/10/13 12:30	JDP	57-12-5	
Phenols	Not detected	mg/L	0.02	420.1	06/11/13 16:18	JKB		
Sulfate	87	mg/L	10	E300.0	06/07/13 07:37	JDP	14808-79-8	
TOC	1.5	mg/L	1	SM 5310C	06/10/13 15:52	JKB		
Metals								
Chromium, Dissolved	Not detected	mg/L	0.005	E200.8	06/13/13 16:59	PER	7440-47-3	
Copper, Dissolved	Not detected	mg/L	0.004	E200.8	06/13/13 16:59	PER	7440-50-8	
Iron, Dissolved	1.31	mg/L	0.02	E200.8	06/13/13 16:59	PER	7439-89-6	
Manganese, Dissolved	0.111	mg/L	0.005	E200.8	06/13/13 16:59	PER	7439-96-5	
Nickel, Dissolved	0.005	mg/L	0.005	E200.8	06/13/13 16:59	PER	7440-02-0	
Sodium	26.0	mg/L	1.0	E200.8	06/13/13 15:06	PER	7440-23-5	
Zinc, Dissolved	Not detected	mg/L	0.005	E200.8	06/13/13 16:59	PER	7440-66-6	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	06/07/13 18:04	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	06/07/13 18:04	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	06/07/13 18:04	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	06/07/13 18:04	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	06/07/13 18:04	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	06/07/13 18:04	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	06/07/13 18:04	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	06/07/13 18:04	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	06/07/13 18:04	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	06/07/13 18:04	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	06/07/13 18:04	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	06/07/13 18:04	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	06/07/13 18:04	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	06/07/13 18:04	WAT	75-35-4	

Lab Sample ID: S56685.04 (continued)
Sample Tag: B-28

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Methylene chloride	Not detected	ug/L	5	SW8260B	06/07/13 18:04	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	06/07/13 18:04	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	06/07/13 18:04	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	06/07/13 18:04	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	06/07/13 18:04	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	06/07/13 18:04	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	06/07/13 18:04	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	06/07/13 18:04	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	06/07/13 18:04	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	06/07/13 18:04	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	06/07/13 18:04	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	06/07/13 18:04	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	06/07/13 18:04	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	06/07/13 18:04	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	06/07/13 18:04	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	06/07/13 18:04	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	06/07/13 18:04	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	06/07/13 18:04	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	06/07/13 18:04	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	06/07/13 18:04	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	06/07/13 18:04	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	06/07/13 18:04	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	06/07/13 18:04	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	06/07/13 18:04	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	06/07/13 18:04	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	06/07/13 18:04	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	06/07/13 18:04	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	06/07/13 18:04	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	06/07/13 18:04	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	06/07/13 18:04	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	06/07/13 18:04	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	06/07/13 18:04	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	06/07/13 18:04	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	06/07/13 18:04	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	06/07/13 18:04	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	06/07/13 18:04	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	06/07/13 18:04	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	06/07/13 18:04	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	06/07/13 18:04	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	06/07/13 18:04	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	06/07/13 18:04	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	06/07/13 18:04	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	06/07/13 18:04	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	06/07/13 18:04	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	06/07/13 18:04	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	06/07/13 18:04	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	06/07/13 18:04	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	06/07/13 18:04	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	06/07/13 18:04	WAT	96-12-8	

Lab Sample ID: S56685.04 (continued)
Sample Tag: B-28

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	06/07/13 18:04	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	06/07/13 18:04	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	06/07/13 18:04	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	06/07/13 18:04	WAT	91-57-6	
Organics								
TOX	10	ug/L	30.0	9020A	06/12/13 09:45	Tes		O

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

Analytical Laboratory Report

Lab Sample ID: S56685.05
Sample Tag: TB-1
Collected Date/Time: 06/03/2013 00:01
Matrix: Quality Control
COC Reference: 74405

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	5.2	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
pH check for VOCs	<2	STD Units		N/A	06/07/13 10:00	WAT		
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	06/11/13 15:06	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	06/11/13 15:06	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	06/11/13 15:06	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	06/11/13 15:06	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	06/11/13 15:06	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	06/11/13 15:06	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	06/11/13 15:06	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	06/11/13 15:06	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	06/11/13 15:06	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	06/11/13 15:06	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	06/11/13 15:06	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	06/11/13 15:06	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	06/11/13 15:06	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	06/11/13 15:06	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	06/11/13 15:06	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	06/11/13 15:06	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	06/11/13 15:06	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	06/11/13 15:06	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	06/11/13 15:06	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	06/11/13 15:06	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	06/11/13 15:06	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	06/11/13 15:06	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	06/11/13 15:06	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	06/11/13 15:06	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	06/11/13 15:06	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	06/11/13 15:06	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	06/11/13 15:06	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	06/11/13 15:06	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	06/11/13 15:06	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	06/11/13 15:06	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	06/11/13 15:06	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	06/11/13 15:06	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	06/11/13 15:06	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	06/11/13 15:06	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	06/11/13 15:06	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	06/11/13 15:06	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	06/11/13 15:06	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	06/11/13 15:06	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	06/11/13 15:06	WAT	106-93-4	

Lab Sample ID: S56685.05 (continued)
Sample Tag: TB-1

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Chlorobenzene	Not detected	ug/L	1	SW8260B	06/11/13 15:06	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	06/11/13 15:06	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	06/11/13 15:06	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	06/11/13 15:06	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	06/11/13 15:06	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	06/11/13 15:06	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	06/11/13 15:06	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	06/11/13 15:06	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	06/11/13 15:06	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	06/11/13 15:06	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	06/11/13 15:06	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	06/11/13 15:06	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	06/11/13 15:06	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	06/11/13 15:06	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	06/11/13 15:06	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	06/11/13 15:06	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	06/11/13 15:06	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	06/11/13 15:06	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	06/11/13 15:06	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	06/11/13 15:06	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	06/11/13 15:06	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	06/11/13 15:06	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	06/11/13 15:06	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	06/11/13 15:06	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	06/11/13 15:06	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	06/11/13 15:06	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	06/11/13 15:06	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	06/11/13 15:06	WAT	91-57-6	

Merit Laboratories, Inc.

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

C.O.C. PAGE # 1 OF 1

74405

CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: Cliff Yantz
COMPANY: O'Brien & Gere
ADDRESS: 37000 Grand River Ave ste 260
CITY: Farmington Hills STATE: MI ZIP CODE: 48335
PHONE NO.: 248-477-5701 FAX NO.:
P.O. NO.: 11311200
E-MAIL ADDRESS: clifford.yantz@obg.com QUOTE NO.:

INVOICE TO

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

PROJECT NO./NAME: RACER Coldwater Rd Landfill #50137 Semi Annual
SAMPLER(S) - PLEASE PRINT/SIGN NAME: Kevin Schneider

TURNAROUND TIME REQUIRED: ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS [X] STANDARD ☐ OTHER

DELIVERABLES REQUIRED: [X] STD ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER

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

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

Certifications: ☐ OHIO VAP ☐ Drinking Water ☐ DoD ☐ NPDES

Project Locations: ☐ Detroit ☐ New York ☐ Other

MERIT LAB NO. (FOR LAB USE ONLY)	YEAR DATE	YEAR TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives: NONE	HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER	VOCs	TOC	TOX	Phenols	Cyanide	Sulfate	Chlorides	Specific conductivity	Dissolved metals	Sodium	Special Instructions
56685.01	6/3/13	1110	B-27D	GW	11	1	3	2	4	1			X	X	X	X	X	X	X	X	X	X	Dissolved Metals Are Cu, Cr, Ni, Zn, Fe, Mn
.02		1410	B-23Dr	GW	11	1	3	2	4	1			X	X	X	X	X	X	X	X	X	X	
.03		1550	B-22D	GW	11	1	3	2	4	1			X	X	X	X	X	X	X	X	X	X	
.04		1710	B-28	GW	11	1	3	2	4	1			X	X	X	X	X	X	X	X	X	X	
.05		—	TB-1	QC	3		3						X	KB	S								Trip Blank

RELINQUISHED BY: SIGNATURE/ORGANIZATION	[X] Sampler OBrien & Gere	DATE 6/4/13	TIME 1045	
RECEIVED BY: SIGNATURE/ORGANIZATION	Mer	DATE 6-4-13	TIME 1045	
RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE	TIME	
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE	TIME	

RELINQUISHED BY: SIGNATURE/ORGANIZATION	Mer	DATE 6-4-13	TIME	
RECEIVED BY: SIGNATURE/ORGANIZATION	Tabatha Faust	DATE 6-4-13	TIME 1330	
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS	NOTES:	TEMP. ON ARRIVAL 5.2
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS		

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

Rev. 5.18.12

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 240-25315-1
Client Project/Site: 56685

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

Attn: Mr. Andy Ball

Denise D Heckler

Authorized for release by:
6/14/2013 2:17:05 PM

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

Table of Contents

Client: Merit Laboratories
Project/Site: 56685

TestAmerica Job ID: 240-25315-1

Qualifiers

General Chemistry

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Merit Laboratories
Project/Site: 56685

TestAmerica Job ID: 240-25315-1

Job ID: 240-25315-1

Laboratory: TestAmerica Canton

Narrative

Job Narrative
240-25315-1

Comments
No additional comments.

Receipt
The samples were received on 6/6/2013 10:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice.
The temperature of the cooler at receipt was 1.3º C.

General Chemistry
No analytical or quality issues were noted.

Method Summary

Client: Merit Laboratories
Project/Site: 56685

TestAmerica Job ID: 240-25315-1

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

Protocol References:

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

Laboratory References:

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

Sample Summary

Client: Merit Laboratories
Project/Site: 56685

TestAmerica Job ID: 240-25315-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-25315-1	56685.01	Water	06/03/13 11:10	06/06/13 10:15
240-25315-2	56685.02	Water	06/03/13 14:10	06/06/13 10:15
240-25315-3	56685.03	Water	06/03/13 15:50	06/06/13 10:15
240-25315-4	56685.04	Water	06/03/13 17:10	06/06/13 10:15

Detection Summary

Client: Merit Laboratories
Project/Site: 56685

TestAmerica Job ID: 240-25315-1

Client Sample ID: 56685.01 — Lab Sample ID: 240-25315-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Halogens, Total Organic	0.0043	J	0.010	0.0035	mg/L	1		9020B	Total/NA

Client Sample ID: 56685.02 — Lab Sample ID: 240-25315-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Halogens, Total Organic	0.014		0.010	0.0035	mg/L	1		9020B	Total/NA

Client Sample ID: 56685.03 — Lab Sample ID: 240-25315-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Halogens, Total Organic	0.046		0.010	0.0035	mg/L	1		9020B	Total/NA

Client Sample ID: 56685.04 — Lab Sample ID: 240-25315-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Halogens, Total Organic	0.010		0.010	0.0035	mg/L	1		9020B	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Merit Laboratories
Project/Site: 56685

TestAmerica Job ID: 240-25315-1

Client Sample ID: 56685.01
Date Collected: 06/03/13 11:10
Date Received: 06/06/13 10:15

Lab Sample ID: 240-25315-1
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Halogens, Total Organic	0.0043	J	0.010	0.0035	mg/L		06/12/13 09:45	06/12/13 09:45	1

Client: Merit Laboratories
Project/Site: 56685

TestAmerica Job ID: 240-25315-1

Client Sample ID: 56685.02
Date Collected: 06/03/13 14:10
Date Received: 06/06/13 10:15

Lab Sample ID: 240-25315-2
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Halogens, Total Organic	0.014		0.010	0.0035	mg/L		06/12/13 09:45	06/12/13 09:45	1

Client: Merit Laboratories
Project/Site: 56685

TestAmerica Job ID: 240-25315-1

Client Sample ID: 56685.03
Date Collected: 06/03/13 15:50
Date Received: 06/06/13 10:15

Lab Sample ID: 240-25315-3
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Halogens, Total Organic	0.046		0.010	0.0035	mg/L		06/12/13 09:45	06/12/13 09:45	1

Client: Merit Laboratories
Project/Site: 56685

TestAmerica Job ID: 240-25315-1

Client Sample ID: 56685.04
Date Collected: 06/03/13 17:10
Date Received: 06/06/13 10:15

Lab Sample ID: 240-25315-4
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Halogens, Total Organic	0.010		0.010	0.0035	mg/L		06/12/13 09:45	06/12/13 09:45	1

Client: Merit Laboratories
Project/Site: 56685

TestAmerica Job ID: 240-25315-1

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

Lab Sample ID: MB 680-280319/1-A
Matrix: Water
Analysis Batch: 280341

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 280319

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Halogens, Total Organic	0.010	U	0.010	0.0035	mg/L		06/12/13 09:45	06/12/13 09:45	1

Lab Sample ID: LCS 680-280319/2-A
Matrix: Water
Analysis Batch: 280341

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 280319

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
TOX Result 1	0.0982	0.0900		mg/L		92	60 - 140
TOX Result 2	0.0982	0.0900		mg/L		92	60 - 140

QC Association Summary

Client: Merit Laboratories
Project/Site: 56685

TestAmerica Job ID: 240-25315-1

General Chemistry

Prep Batch: 280319

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-25315-1	56685.01	Total/NA	Water	Carbon Trap	
240-25315-2	56685.02	Total/NA	Water	Carbon Trap	
240-25315-3	56685.03	Total/NA	Water	Carbon Trap	
240-25315-4	56685.04	Total/NA	Water	Carbon Trap	
LCS 680-280319/2-A	Lab Control Sample	Total/NA	Water	Carbon Trap	
MB 680-280319/1-A	Method Blank	Total/NA	Water	Carbon Trap	

Analysis Batch: 280341

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-25315-1	56685.01	Total/NA	Water	9020B	280319
240-25315-2	56685.02	Total/NA	Water	9020B	280319
240-25315-3	56685.03	Total/NA	Water	9020B	280319
240-25315-4	56685.04	Total/NA	Water	9020B	280319
LCS 680-280319/2-A	Lab Control Sample	Total/NA	Water	9020B	280319
MB 680-280319/1-A	Method Blank	Total/NA	Water	9020B	280319

Lab Chronicle

Client: Merit Laboratories
Project/Site: 56685

TestAmerica Job ID: 240-25315-1

Client Sample ID: 56685.01

Lab Sample ID: 240-25315-1

Date Collected: 06/03/13 11:10

Matrix: Water

Date Received: 06/06/13 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9020B		1	280341	06/12/13 09:45	CMB	TAL SAV
Total/NA	Prep	Carbon Trap			280319	06/12/13 09:45	CMB	TAL SAV

Client Sample ID: 56685.02

Lab Sample ID: 240-25315-2

Date Collected: 06/03/13 14:10

Matrix: Water

Date Received: 06/06/13 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9020B		1	280341	06/12/13 09:45	CMB	TAL SAV
Total/NA	Prep	Carbon Trap			280319	06/12/13 09:45	CMB	TAL SAV

Client Sample ID: 56685.03

Lab Sample ID: 240-25315-3

Date Collected: 06/03/13 15:50

Matrix: Water

Date Received: 06/06/13 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9020B		1	280341	06/12/13 09:45	CMB	TAL SAV
Total/NA	Prep	Carbon Trap			280319	06/12/13 09:45	CMB	TAL SAV

Client Sample ID: 56685.04

Lab Sample ID: 240-25315-4

Date Collected: 06/03/13 17:10

Matrix: Water

Date Received: 06/06/13 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9020B		1	280341	06/12/13 09:45	CMB	TAL SAV
Total/NA	Prep	Carbon Trap			280319	06/12/13 09:45	CMB	TAL SAV

Laboratory References:

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

Certification Summary

Client: Merit Laboratories
Project/Site: 56685

TestAmerica Job ID: 240-25315-1

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-13
Connecticut	State Program	1	PH-0590	12-31-13
Florida	NELAP	4	E87225	06-30-13
Georgia	State Program	4	N/A	06-30-13
Illinois	NELAP	5	200004	07-31-13
Kansas	NELAP	7	E-10336	01-31-14
Kentucky	State Program	4	58	06-30-13
L-A-B	DoD ELAP		L2315	07-28-13
Minnesota	NELAP	5	039-999-348	12-31-13
Nevada	State Program	9	OH-000482008A	07-31-13
New Jersey	NELAP	2	OH001	06-30-13
New York	NELAP	2	10975	04-01-14
Ohio VAP	State Program	5	CL0024	01-19-14
Pennsylvania	NELAP	3	68-00340	08-31-13
Texas	NELAP	6		08-03-13
USDA	Federal		P330-11-00328	08-26-14
Virginia	NELAP	3	460175	09-14-13
Washington	State Program	10	C971	01-12-14
West Virginia DEP	State Program	3	210	12-31-13
Wisconsin	State Program	5	999518190	08-31-13

Laboratory: TestAmerica Savannah

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	DoD ELAP		399.01	07-31-13
Alabama	State Program	4	41450	06-30-13
Alaska (UST)	State Program	10	UST-104	06-19-13
Arkansas DEQ	State Program	6	88-0692	02-01-13 *
California	NELAP	9	3217CA	07-31-13
Colorado	State Program	8	N/A	12-31-13
Connecticut	State Program	1	PH-0161	03-31-15
Florida	NELAP	4	E87052	06-30-13
GA Dept. of Agriculture	State Program	4	N/A	12-31-13
Georgia	State Program	4	N/A	06-30-13
Georgia	State Program	4	803	06-30-13
Hawaii	State Program	9	N/A	06-30-13
Illinois	NELAP	5	200022	11-30-13
Indiana	State Program	5	N/A	06-30-13
Iowa	State Program	7	353	07-01-13 *
Kentucky	State Program	4	90084	12-31-12 *
Kentucky (UST)	State Program	4	18	03-31-13 *
Louisiana	NELAP	6	30690	06-30-13
Louisiana	NELAP	6	LA100015	12-31-13
Maine	State Program	1	GA00006	08-16-14
Maryland	State Program	3	250	12-31-13
Massachusetts	State Program	1	M-GA006	06-30-13
Michigan	State Program	5	9925	06-30-13
Mississippi	State Program	4	N/A	06-30-13
Montana	State Program	8	CERT0081	01-01-14

* Expired certification is currently pending renewal and is considered valid.

Certification Summary

Client: Merit Laboratories
Project/Site: 56685

TestAmerica Job ID: 240-25315-1

Laboratory: TestAmerica Savannah (Continued)

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Nebraska	State Program	7	TestAmerica-Savannah	06-30-13 *
New Jersey	NELAP	2	GA769	06-30-13
New Mexico	State Program	6	N/A	06-30-13
New York	NELAP	2	10842	04-01-14
North Carolina DENR	State Program	4	269	12-31-13
North Carolina DHHS	State Program	4	13701	07-31-13
Oklahoma	State Program	6	9984	08-31-13
Pennsylvania	NELAP	3	68-00474	06-30-13 *
Puerto Rico	State Program	2	GA00006	01-01-14
South Carolina	State Program	4	98001	06-30-13
Tennessee	State Program	4	TN02961	06-30-13
Texas	NELAP	6	T104704185-08-TX	11-30-13
USDA	Federal		SAV 3-04	04-07-14
Virginia	NELAP	3	460161	06-14-13 *
Washington	State Program	10	C1794	06-10-13 *
West Virginia	State Program	3	9950C	12-31-13
West Virginia DEP	State Program	3	94	06-30-13
Wisconsin	State Program	5	999819810	08-31-13
Wyoming	State Program	8	8TMS-Q	06-30-13

* Expired certification is currently pending renewal and is considered valid.

Merit Laboratories, Inc.

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

C.O.C. PAGE # _____ OF _____

74206

CHAIN OF CUSTODY RECORD

REPORT TO

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

INVOICE TO

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

PROJECT NO./NAME: 556685
SAMPLER(S) - PLEASE PRINT/SIGN NAME:

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

DELIVERABLES REQUIRED ☒ STD ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER _____

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

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

Certifications
☐ OHIO VAP ☐ Drinking Water
☐ DoD ☐ NPDES

Project Locations
☐ Detroit ☐ New York
☐ Other _____

Special Instructions

MERIT LAB NO. (FOR LAB USE ONLY)	YEAR DATE	YEAR TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives: NONE	HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER	TOX
	6/3/13	1116	56685.01	GW	1				X				X
		1416	56685.02										
		1550	56685.03										
		1710	56685.04										

*Sub'd to TestAmerica

240-25315 Chain of Custody

RELINQUISHED BY: SIGNATURE/ORGANIZATION: Tabitha Faust	☐ Sampler	DATE: 6/5/13	TIME: 1545	RELINQUISHED BY: SIGNATURE/ORGANIZATION:	DATE:	TIME:
RECEIVED BY: SIGNATURE/ORGANIZATION: UPS 1Z 4664 7701 5920 6211		DATE:	TIME:	RECEIVED BY: SIGNATURE/ORGANIZATION:	DATE: 6-6-13	TIME: 1015
RELINQUISHED BY: SIGNATURE/ORGANIZATION:		DATE:	TIME:	SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS
RECEIVED BY: SIGNATURE/ORGANIZATION:		DATE:	TIME:	SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS

NOTES: TEMP. ON ARRIVAL _____

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAM[illegible] ACCEPTANCE POLICY ON REVERSE SIDE

Rev. 5.18.12

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6/14/2013

TestAmerica Canton Sample Receipt Form/Narrative **Login # : 25315**
Canton Facility

Client Merit Site Name _____ Cooler unpacked by:

Cooler Received on 6.6.13 Opened on 6.6.13

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

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____

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

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# 1 (CF –0 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C

IR GUN# 4G (CF +1 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C ☐ See Multiple Cooler Form

IR GUN# 5G (CF +1 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C

IR GUN# 8 (CF +1 °C) Observed Cooler Temp. 0.3 °C Corrected Cooler Temp. 1.3 °C

2.	Were custody seals on the outside of the cooler(s)? If Yes Quantity_____	Yes (No)
	-Were custody seals on the outside of the cooler(s) signed & dated?	Yes No (NA)
	-Were custody seals on the bottle(s)?	Yes (No)
3.	Shippers' packing slip attached to the cooler(s)?	(Yes) No
4.	Did custody papers accompany the sample(s)?	(Yes) No
5.	Were the custody papers relinquished & signed in the appropriate place?	(Yes) No
6.	Did all bottles arrive in good condition (Unbroken)?	(Yes) No
7.	Could all bottle labels be reconciled with the COC?	(Yes) No
8.	Were correct bottle(s) used for the test(s) indicated?	(Yes) No
9.	Sufficient quantity received to perform indicated analyses?	(Yes) No
10.	Were sample(s) at the correct pH upon receipt?	(Yes) No NA pH Strip Lot# HC379740
11.	Were VOAs on the COC?	Yes (No)
12.	Were air bubbles >6 mm in any VOA vials?	Yes No (NA)
13.	Was a trip blank present in the cooler(s)?	Yes (No)

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

Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by:

15. SAMPLE CONDITION

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

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

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

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container pH	Preservative Added (mls)	Lot #
56685.01	240-25315-A-1	Amber Glass 1 liter - Sulfuric Acid	<2	_____	_____
56685.02	240-25315-A-2	Amber Glass 1 liter - Sulfuric Acid	<2	_____	_____
56685.03	240-25315-A-3	Amber Glass 1 liter - Sulfuric Acid	<2	_____	_____
56685.04	240-25315-A-4	Amber Glass 1 liter - Sulfuric Acid	<2	_____	_____

Login Sample Receipt Checklist

Client: Merit Laboratories

Job Number: 240-25315-1

Login Number: 25315
List Number: 1
Creator: Barnett, Eddie T

List Source: TestAmerica Savannah
List Creation: 06/07/13 11:44 AM

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

Analytical Laboratory Report

Report ID: S56768.01(01)
Generated on 06/25/2013

Report to

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

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

Report produced by

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

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

Contacts for report questions:
Tabitha Faust (tfaust@meritlabs.com)
Barbara Ball (bball@meritlabs.com)

Report Summary

Lab Sample ID(s): S56768.01-S56768.11
Project: RACER Coldwater Rd Landfill Semi-Annual #50137
Collected Date: 06/05/2013 - 06/06/2013
Submitted Date/Time: 06/06/2013 16:15
Sampled by: Kevin Schneider
P.O. #: 11311200

Report Notes

Results relate only to items tested as received by the laboratory.
Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
'Not detected' indicates that parameter was not found at a level equal to or greater than the reporting limit (RL).
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.

Laboratory Certifications:
Michigan DNRE (#9956), DOD/ISO 17025 (#69699), WBENC (#2005110032), Ohio EPA (#CL0002), IN Drinking Water (#C-MI-07), NELAC NY (#11814)
Some analytes reported may not be certified. Full certification lists are available upon request.

Violetta F. Murshak
Laboratory Director

Sample Summary (11 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S56768.01	DUP-1	Groundwater	06/05/2013 00:01
S56768.02	B-20D	Groundwater	06/05/2013 09:45
S56768.03	B-24r	Groundwater	06/05/2013 10:00
S56768.04	B-7	Groundwater	06/05/2013 11:55
S56768.05	B-9	Groundwater	06/05/2013 13:50
S56768.06	B-21D	Groundwater	06/05/2013 14:50
S56768.07	B-18A	Groundwater	06/05/2013 15:35
S56768.08	B-19Ar	Groundwater	06/05/2013 16:40
S56768.09	B-2D	Groundwater	06/06/2013 10:05
S56768.10	EB-1	Quality Control	06/06/2013 10:50
S56768.11	TB-2	Quality Control	06/06/2013 00:01

Analytical Laboratory Report

Lab Sample ID: S56768.01
Sample Tag: DUP-1
Collected Date/Time: 06/05/2013 00:01
Matrix: Groundwater
COC Reference: 74404

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	1L Plastic	None	Yes	5.0	IR
2	40ml Glass	H2SO4	Yes	5.0	IR
2	125ml Plastic	HNO3	Yes	5.0	IR
1	125ml Amber	H2SO4	Yes	5.0	IR
1	1L Amber	H2SO4	Yes	5.0	IR
3	40ml Glass	HCL	Yes	5.0	IR
1	125ml Plastic	NaOH	Yes	5.0	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
Metal Digestion	Completed			3015A	06/24/13 13:00	JRH		
Metal Digestion	Completed			3015A	06/21/13 10:00	PER		
pH check for VOCs	<2	STD Units		N/A	06/13/13 10:40	WAT		
Inorganics								
Chloride	Not detected	mg/L	5	E300.0	06/12/13 10:35	JDP	16887-00-6	
Conductivity	1,000	umhos/cm		120.1	06/11/13 10:10	JKB		
Cyanide	Not detected	mg/L	0.005	335.4/4500-CN-E	06/12/13 11:08	JDP	57-12-5	
Phenols	Not detected	mg/L	0.02	420.1	06/18/13 16:08	JKB		
Sulfate	200	mg/L	10	E300.0	06/12/13 10:35	JDP	14808-79-8	
TOC	1.9	mg/L	1	SM 5310C	06/10/13 16:12	JKB		
Metals								
Chromium, Dissolved	Not detected	mg/L	0.005	E200.8	06/24/13 16:46	JRH	7440-47-3	
Copper, Dissolved	Not detected	mg/L	0.004	E200.8	06/25/13 11:59	JRH	7440-50-8	
Iron, Dissolved	1.78	mg/L	0.02	E200.8	06/24/13 16:46	JRH	7439-89-6	
Manganese, Dissolved	0.047	mg/L	0.005	E200.8	06/24/13 16:46	JRH	7439-96-5	
Nickel, Dissolved	Not detected	mg/L	0.005	E200.8	06/24/13 16:46	JRH	7440-02-0	
Sodium	17.1	mg/L	0.50	E200.8	06/21/13 14:28	PER	7440-23-5	
Zinc, Dissolved	Not detected	mg/L	0.005	E200.8	06/24/13 16:46	JRH	7440-66-6	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	06/13/13 00:48	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	06/13/13 00:48	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	06/13/13 00:48	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	06/13/13 00:48	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	06/13/13 00:48	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	06/13/13 00:48	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	06/13/13 00:48	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	06/13/13 00:48	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	06/13/13 00:48	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	06/13/13 00:48	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	06/13/13 00:48	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	06/13/13 00:48	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	06/13/13 00:48	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	06/13/13 00:48	WAT	75-35-4	

Lab Sample ID: S56768.01 (continued)
Sample Tag: DUP-1

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Methylene chloride	Not detected	ug/L	5	SW8260B	06/13/13 00:48	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	06/13/13 00:48	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	06/13/13 00:48	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	06/13/13 00:48	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	06/13/13 00:48	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	06/13/13 00:48	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	06/13/13 00:48	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	06/13/13 00:48	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	06/13/13 00:48	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	06/13/13 00:48	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	06/13/13 00:48	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	06/13/13 00:48	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	06/13/13 00:48	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	06/13/13 00:48	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	06/13/13 00:48	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	06/13/13 00:48	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	06/13/13 00:48	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	06/13/13 00:48	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	06/13/13 00:48	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	06/13/13 00:48	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	06/13/13 00:48	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	06/13/13 00:48	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	06/13/13 00:48	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	06/13/13 00:48	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	06/13/13 00:48	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	06/13/13 00:48	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	06/13/13 00:48	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 00:48	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	06/13/13 00:48	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	06/13/13 00:48	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	06/13/13 00:48	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	06/13/13 00:48	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	06/13/13 00:48	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	06/13/13 00:48	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	06/13/13 00:48	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 00:48	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	06/13/13 00:48	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 00:48	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 00:48	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 00:48	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 00:48	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	06/13/13 00:48	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	06/13/13 00:48	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	06/13/13 00:48	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	06/13/13 00:48	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 00:48	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 00:48	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	06/13/13 00:48	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	06/13/13 00:48	WAT	96-12-8	

Lab Sample ID: S56768.01 (continued)
Sample Tag: DUP-1

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	06/13/13 00:48	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	06/13/13 00:48	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	06/13/13 00:48	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	06/13/13 00:48	WAT	91-57-6	
Organics								
TOX	Not detected	ug/L	10	9020A	06/17/13 08:35	Tes		O

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

Analytical Laboratory Report

Lab Sample ID: S56768.02
Sample Tag: B-20D
Collected Date/Time: 06/05/2013 09:45
Matrix: Groundwater
COC Reference: 74404

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	1L Plastic	None	Yes	5.0	IR
2	40ml Glass	H2SO4	Yes	5.0	IR
2	125ml Plastic	HNO3	Yes	5.0	IR
1	125ml Amber	H2SO4	Yes	5.0	IR
1	1L Amber	H2SO4	Yes	5.0	IR
3	40ml Glass	HCL	Yes	5.0	IR
1	125ml Plastic	NaOH	Yes	5.0	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
Metal Digestion	Completed			3015A	06/24/13 13:00	JRH		
Metal Digestion	Completed			3015A	06/21/13 10:00	PER		
pH check for VOCs	<2	STD Units		N/A	06/13/13 10:40	WAT		
Inorganics								
Chloride	Not detected	mg/L	5	E300.0	06/12/13 10:48	JDP	16887-00-6	
Conductivity	1,000	umhos/cm		120.1	06/11/13 10:14	JKB		
Cyanide	Not detected	mg/L	0.005	335.4/4500-CN-E	06/12/13 11:16	JDP	57-12-5	
Phenols	Not detected	mg/L	0.02	420.1	06/18/13 16:12	JKB		
Sulfate	201	mg/L	10	E300.0	06/12/13 10:48	JDP	14808-79-8	
TOC	1.7	mg/L	1	SM 5310C	06/10/13 16:31	JKB		
Metals								
Chromium, Dissolved	Not detected	mg/L	0.005	E200.8	06/24/13 16:48	JRH	7440-47-3	
Copper, Dissolved	Not detected	mg/L	0.004	E200.8	06/25/13 12:01	JRH	7440-50-8	
Iron, Dissolved	1.84	mg/L	0.02	E200.8	06/24/13 16:48	JRH	7439-89-6	
Manganese, Dissolved	0.048	mg/L	0.005	E200.8	06/24/13 16:48	JRH	7439-96-5	
Nickel, Dissolved	Not detected	mg/L	0.005	E200.8	06/24/13 16:48	JRH	7440-02-0	
Sodium	19.5	mg/L	0.50	E200.8	06/21/13 14:29	PER	7440-23-5	
Zinc, Dissolved	0.011	mg/L	0.005	E200.8	06/24/13 16:48	JRH	7440-66-6	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	06/13/13 01:08	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	06/13/13 01:08	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	06/13/13 01:08	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	06/13/13 01:08	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	06/13/13 01:08	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	06/13/13 01:08	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	06/13/13 01:08	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	06/13/13 01:08	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	06/13/13 01:08	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	06/13/13 01:08	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	06/13/13 01:08	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	06/13/13 01:08	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	06/13/13 01:08	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	06/13/13 01:08	WAT	75-35-4	

Lab Sample ID: S56768.02 (continued)
Sample Tag: B-20D

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Methylene chloride	Not detected	ug/L	5	SW8260B	06/13/13 01:08	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	06/13/13 01:08	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	06/13/13 01:08	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	06/13/13 01:08	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	06/13/13 01:08	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	06/13/13 01:08	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	06/13/13 01:08	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	06/13/13 01:08	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	06/13/13 01:08	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	06/13/13 01:08	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	06/13/13 01:08	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	06/13/13 01:08	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	06/13/13 01:08	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	06/13/13 01:08	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	06/13/13 01:08	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	06/13/13 01:08	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	06/13/13 01:08	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	06/13/13 01:08	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	06/13/13 01:08	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	06/13/13 01:08	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	06/13/13 01:08	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	06/13/13 01:08	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	06/13/13 01:08	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	06/13/13 01:08	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	06/13/13 01:08	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	06/13/13 01:08	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	06/13/13 01:08	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 01:08	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	06/13/13 01:08	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	06/13/13 01:08	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	06/13/13 01:08	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	06/13/13 01:08	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	06/13/13 01:08	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	06/13/13 01:08	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	06/13/13 01:08	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 01:08	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	06/13/13 01:08	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 01:08	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 01:08	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 01:08	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 01:08	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	06/13/13 01:08	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	06/13/13 01:08	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	06/13/13 01:08	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	06/13/13 01:08	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 01:08	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 01:08	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	06/13/13 01:08	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	06/13/13 01:08	WAT	96-12-8	

Lab Sample ID: S56768.02 (continued)
Sample Tag: B-20D

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	06/13/13 01:08	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	06/13/13 01:08	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	06/13/13 01:08	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	06/13/13 01:08	WAT	91-57-6	
Organics								
TOX	Not detected	ug/L	10	9020A	06/17/13 08:35	Tes		O

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

Analytical Laboratory Report

Lab Sample ID: S56768.03
Sample Tag: B-24r
Collected Date/Time: 06/05/2013 10:00
Matrix: Groundwater
COC Reference: 74404

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	1L Plastic	None	Yes	5.0	IR
2	40ml Glass	H2SO4	Yes	5.0	IR
2	125ml Plastic	HNO3	Yes	5.0	IR
1	125ml Amber	H2SO4	Yes	5.0	IR
1	1L Amber	H2SO4	Yes	5.0	IR
3	40ml Glass	HCL	Yes	5.0	IR
1	125ml Plastic	NaOH	Yes	5.0	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
Metal Digestion	Completed			3015A	06/24/13 13:00	JRH		
Metal Digestion	Completed			3015A	06/21/13 10:00	PER		
pH check for VOCs	<2	STD Units		N/A	06/13/13 10:40	WAT		
Inorganics								
Chloride	45	mg/L	10	E300.0	06/12/13 11:00	JDP	16887-00-6	
Conductivity	1,127	umhos/cm		120.1	06/11/13 10:16	JKB		
Cyanide	Not detected	mg/L	0.005	335.4/4500-CN-E	06/12/13 11:18	JDP	57-12-5	
Phenols	Not detected	mg/L	0.02	420.1	06/18/13 16:16	JKB		
Sulfate	227	mg/L	10	E300.0	06/12/13 11:00	JDP	14808-79-8	
TOC	4.0	mg/L	1	SM 5310C	06/10/13 16:51	JKB		
Metals								
Chromium, Dissolved	Not detected	mg/L	0.005	E200.8	06/24/13 16:51	JRH	7440-47-3	
Copper, Dissolved	Not detected	mg/L	0.004	E200.8	06/25/13 12:04	JRH	7440-50-8	
Iron, Dissolved	0.11	mg/L	0.02	E200.8	06/24/13 16:51	JRH	7439-89-6	
Manganese, Dissolved	0.130	mg/L	0.005	E200.8	06/24/13 16:51	JRH	7439-96-5	
Nickel, Dissolved	Not detected	mg/L	0.005	E200.8	06/24/13 16:51	JRH	7440-02-0	
Sodium	38.6	mg/L	0.50	E200.8	06/21/13 14:34	PER	7440-23-5	
Zinc, Dissolved	Not detected	mg/L	0.005	E200.8	06/24/13 16:51	JRH	7440-66-6	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	06/13/13 01:29	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	06/13/13 01:29	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	06/13/13 01:29	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	06/13/13 01:29	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	06/13/13 01:29	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	06/13/13 01:29	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	06/13/13 01:29	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	06/13/13 01:29	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	06/13/13 01:29	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	06/13/13 01:29	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	06/13/13 01:29	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	06/13/13 01:29	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	06/13/13 01:29	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	06/13/13 01:29	WAT	75-35-4	

Lab Sample ID: S56768.03 (continued)
Sample Tag: B-24r

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Methylene chloride	Not detected	ug/L	5	SW8260B	06/13/13 01:29	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	06/13/13 01:29	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	06/13/13 01:29	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	06/13/13 01:29	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	06/13/13 01:29	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	06/13/13 01:29	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	06/13/13 01:29	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	06/13/13 01:29	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	06/13/13 01:29	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	06/13/13 01:29	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	06/13/13 01:29	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	06/13/13 01:29	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	06/13/13 01:29	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	06/13/13 01:29	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	06/13/13 01:29	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	06/13/13 01:29	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	06/13/13 01:29	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	06/13/13 01:29	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	06/13/13 01:29	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	06/13/13 01:29	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	06/13/13 01:29	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	06/13/13 01:29	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	06/13/13 01:29	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	06/13/13 01:29	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	06/13/13 01:29	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	06/13/13 01:29	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	06/13/13 01:29	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 01:29	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	06/13/13 01:29	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	06/13/13 01:29	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	06/13/13 01:29	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	06/13/13 01:29	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	06/13/13 01:29	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	06/13/13 01:29	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	06/13/13 01:29	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 01:29	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	06/13/13 01:29	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 01:29	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 01:29	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 01:29	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 01:29	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	06/13/13 01:29	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	06/13/13 01:29	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	06/13/13 01:29	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	06/13/13 01:29	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 01:29	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 01:29	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	06/13/13 01:29	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	06/13/13 01:29	WAT	96-12-8	

Lab Sample ID: S56768.03 (continued)
Sample Tag: B-24r

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	06/13/13 01:29	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	06/13/13 01:29	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	06/13/13 01:29	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	06/13/13 01:29	WAT	91-57-6	
Organics								
TOX	4.8	ug/L	10	9020A	06/17/13 08:35	Tes		O1

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

Analytical Laboratory Report

Lab Sample ID: S56768.04
Sample Tag: B-7
Collected Date/Time: 06/05/2013 11:55
Matrix: Groundwater
COC Reference: 74404

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	1L Plastic	None	Yes	5.0	IR
2	40ml Glass	H2SO4	Yes	5.0	IR
2	125ml Plastic	HNO3	Yes	5.0	IR
1	125ml Amber	H2SO4	Yes	5.0	IR
1	1L Amber	H2SO4	Yes	5.0	IR
3	40ml Glass	HCL	Yes	5.0	IR
1	125ml Plastic	NaOH	Yes	5.0	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
Metal Digestion	Completed			3015A	06/24/13 13:00	JRH		
Metal Digestion	Completed			3015A	06/21/13 10:00	PER		
pH check for VOCs	<2	STD Units		N/A	06/13/13 10:40	WAT		
Inorganics								
Chloride	32	mg/L	10	E300.0	06/12/13 11:13	JDP	16887-00-6	
Conductivity	921	umhos/cm		120.1	06/11/13 10:18	JKB		
Cyanide	Not detected	mg/L	0.005	335.4/4500-CN-E	06/12/13 11:20	JDP	57-12-5	
Phenols	Not detected	mg/L	0.02	420.1	06/18/13 16:18	JKB		
Sulfate	106	mg/L	10	E300.0	06/12/13 11:13	JDP	14808-79-8	
TOC	4.5	mg/L	1	SM 5310C	06/10/13 17:11	JKB		
Metals								
Chromium, Dissolved	Not detected	mg/L	0.005	E200.8	06/24/13 16:53	JRH	7440-47-3	
Copper, Dissolved	Not detected	mg/L	0.004	E200.8	06/25/13 12:06	JRH	7440-50-8	
Iron, Dissolved	0.03	mg/L	0.02	E200.8	06/24/13 16:53	JRH	7439-89-6	
Manganese, Dissolved	0.013	mg/L	0.005	E200.8	06/24/13 16:53	JRH	7439-96-5	
Nickel, Dissolved	Not detected	mg/L	0.005	E200.8	06/24/13 16:53	JRH	7440-02-0	
Sodium	27.5	mg/L	0.50	E200.8	06/21/13 14:35	PER	7440-23-5	
Zinc, Dissolved	0.024	mg/L	0.005	E200.8	06/24/13 16:53	JRH	7440-66-6	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	06/13/13 01:49	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	06/13/13 01:49	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	06/13/13 01:49	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	06/13/13 01:49	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	06/13/13 01:49	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	06/13/13 01:49	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	06/13/13 01:49	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	06/13/13 01:49	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	06/13/13 01:49	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	06/13/13 01:49	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	06/13/13 01:49	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	06/13/13 01:49	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	06/13/13 01:49	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	06/13/13 01:49	WAT	75-35-4	

Lab Sample ID: S56768.04 (continued)
Sample Tag: B-7

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Methylene chloride	Not detected	ug/L	5	SW8260B	06/13/13 01:49	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	06/13/13 01:49	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	06/13/13 01:49	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	06/13/13 01:49	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	06/13/13 01:49	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	06/13/13 01:49	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	06/13/13 01:49	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	06/13/13 01:49	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	06/13/13 01:49	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	06/13/13 01:49	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	06/13/13 01:49	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	06/13/13 01:49	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	06/13/13 01:49	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	06/13/13 01:49	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	06/13/13 01:49	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	06/13/13 01:49	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	06/13/13 01:49	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	06/13/13 01:49	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	06/13/13 01:49	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	06/13/13 01:49	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	06/13/13 01:49	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	06/13/13 01:49	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	06/13/13 01:49	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	06/13/13 01:49	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	06/13/13 01:49	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	06/13/13 01:49	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	06/13/13 01:49	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 01:49	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	06/13/13 01:49	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	06/13/13 01:49	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	06/13/13 01:49	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	06/13/13 01:49	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	06/13/13 01:49	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	06/13/13 01:49	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	06/13/13 01:49	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 01:49	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	06/13/13 01:49	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 01:49	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 01:49	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 01:49	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 01:49	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	06/13/13 01:49	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	06/13/13 01:49	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	06/13/13 01:49	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	06/13/13 01:49	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 01:49	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 01:49	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	06/13/13 01:49	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	06/13/13 01:49	WAT	96-12-8	

Lab Sample ID: S56768.04 (continued)
Sample Tag: B-7

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	06/13/13 01:49	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	06/13/13 01:49	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	06/13/13 01:49	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	06/13/13 01:49	WAT	91-57-6	
Organics								
TOX	6.0	ug/L	10	9020A	06/17/13 08:35	Tes		O1

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

Analytical Laboratory Report

Lab Sample ID: S56768.05
Sample Tag: B-9
Collected Date/Time: 06/05/2013 13:50
Matrix: Groundwater
COC Reference: 74404

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	1L Plastic	None	Yes	5.0	IR
2	40ml Glass	H2SO4	Yes	5.0	IR
2	125ml Plastic	HNO3	Yes	5.0	IR
1	125ml Amber	H2SO4	Yes	5.0	IR
1	1L Amber	H2SO4	Yes	5.0	IR
3	40ml Glass	HCL	Yes	5.0	IR
1	125ml Plastic	NaOH	Yes	5.0	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
Metal Digestion	Completed			3015A	06/24/13 13:00	JRH		
Metal Digestion	Completed			3015A	06/21/13 10:00	PER		
pH check for VOCs	<2	STD Units		N/A	06/13/13 10:40	WAT		
Inorganics								
Chloride	106	mg/L	10	E300.0	06/12/13 11:26	JDP	16887-00-6	
Conductivity	2,660	umhos/cm		120.1	06/11/13 10:20	JKB		
Cyanide	Not detected	mg/L	0.005	335.4/4500-CN-E	06/12/13 11:22	JDP	57-12-5	
Phenols	Not detected	mg/L	0.02	420.1	06/18/13 16:20	JKB		
Sulfate	1,150	mg/L	50	E300.0	06/12/13 13:34	JDP	14808-79-8	
TOC	2.1	mg/L	1	SM 5310C	06/10/13 17:30	JKB		
Metals								
Chromium, Dissolved	Not detected	mg/L	0.005	E200.8	06/24/13 16:56	JRH	7440-47-3	
Copper, Dissolved	Not detected	mg/L	0.004	E200.8	06/25/13 12:09	JRH	7440-50-8	
Iron, Dissolved	0.04	mg/L	0.02	E200.8	06/24/13 16:56	JRH	7439-89-6	
Manganese, Dissolved	0.173	mg/L	0.005	E200.8	06/24/13 16:56	JRH	7439-96-5	
Nickel, Dissolved	0.006	mg/L	0.005	E200.8	06/24/13 16:56	JRH	7440-02-0	
Sodium	66.4	mg/L	0.50	E200.8	06/21/13 14:37	PER	7440-23-5	
Zinc, Dissolved	0.025	mg/L	0.005	E200.8	06/24/13 16:56	JRH	7440-66-6	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	06/13/13 02:10	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	06/13/13 02:10	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	06/13/13 02:10	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	06/13/13 02:10	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	06/13/13 02:10	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	06/13/13 02:10	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	06/13/13 02:10	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	06/13/13 02:10	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	06/13/13 02:10	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	06/13/13 02:10	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	06/13/13 02:10	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	06/13/13 02:10	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	06/13/13 02:10	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	06/13/13 02:10	WAT	75-35-4	

Lab Sample ID: S56768.05 (continued)
Sample Tag: B-9

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Methylene chloride	Not detected	ug/L	5	SW8260B	06/13/13 02:10	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	06/13/13 02:10	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	06/13/13 02:10	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	06/13/13 02:10	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	06/13/13 02:10	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	06/13/13 02:10	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	06/13/13 02:10	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	06/13/13 02:10	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	06/13/13 02:10	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	06/13/13 02:10	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	06/13/13 02:10	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	06/13/13 02:10	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	06/13/13 02:10	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	06/13/13 02:10	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	06/13/13 02:10	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	06/13/13 02:10	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	06/13/13 02:10	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	06/13/13 02:10	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	06/13/13 02:10	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	06/13/13 02:10	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	06/13/13 02:10	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	06/13/13 02:10	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	06/13/13 02:10	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	06/13/13 02:10	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	06/13/13 02:10	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	06/13/13 02:10	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	06/13/13 02:10	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 02:10	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	06/13/13 02:10	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	06/13/13 02:10	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	06/13/13 02:10	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	06/13/13 02:10	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	06/13/13 02:10	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	06/13/13 02:10	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	06/13/13 02:10	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 02:10	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	06/13/13 02:10	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 02:10	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 02:10	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 02:10	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 02:10	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	06/13/13 02:10	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	06/13/13 02:10	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	06/13/13 02:10	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	06/13/13 02:10	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 02:10	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 02:10	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	06/13/13 02:10	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	06/13/13 02:10	WAT	96-12-8	

Lab Sample ID: S56768.05 (continued)
Sample Tag: B-9

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	06/13/13 02:10	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	06/13/13 02:10	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	06/13/13 02:10	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	06/13/13 02:10	WAT	91-57-6	
Organics								
TOX	15.0	ug/L	10	9020A	06/17/13 08:35	Tes		O

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

Analytical Laboratory Report

Lab Sample ID: S56768.06
Sample Tag: B-21D
Collected Date/Time: 06/05/2013 14:50
Matrix: Groundwater
COC Reference: 74404

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	1L Plastic	None	Yes	5.0	IR
2	40ml Glass	H2SO4	Yes	5.0	IR
2	125ml Plastic	HNO3	Yes	5.0	IR
1	125ml Amber	H2SO4	Yes	5.0	IR
1	1L Amber	H2SO4	Yes	5.0	IR
3	40ml Glass	HCL	Yes	5.0	IR
1	125ml Plastic	NaOH	Yes	5.0	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
Metal Digestion	Completed			3015A	06/24/13 13:00	JRH		
Metal Digestion	Completed			3015A	06/21/13 10:00	PER		
pH check for VOCs	<2	STD Units		N/A	06/13/13 10:40	WAT		
Inorganics								
Chloride	Not detected	mg/L	5	E300.0	06/12/13 13:47	JDP	16887-00-6	
Conductivity	742	umhos/cm		120.1	06/11/13 10:22	JKB		
Cyanide	Not detected	mg/L	0.005	335.4/4500-CN-E	06/12/13 11:24	JDP	57-12-5	
Phenols	Not detected	mg/L	0.02	420.1	06/18/13 16:22	JKB		
Sulfate	68	mg/L	10	E300.0	06/12/13 11:39	JDP	14808-79-8	
TOC	1.6	mg/L	1	SM 5310C	06/10/13 17:50	JKB		
Metals								
Chromium, Dissolved	Not detected	mg/L	0.005	E200.8	06/24/13 16:58	JRH	7440-47-3	
Copper, Dissolved	Not detected	mg/L	0.004	E200.8	06/25/13 12:11	JRH	7440-50-8	
Iron, Dissolved	0.99	mg/L	0.02	E200.8	06/24/13 16:58	JRH	7439-89-6	
Manganese, Dissolved	0.031	mg/L	0.005	E200.8	06/24/13 16:58	JRH	7439-96-5	
Nickel, Dissolved	Not detected	mg/L	0.005	E200.8	06/24/13 16:58	JRH	7440-02-0	
Sodium	24.4	mg/L	0.50	E200.8	06/21/13 14:38	PER	7440-23-5	
Zinc, Dissolved	0.026	mg/L	0.005	E200.8	06/24/13 16:58	JRH	7440-66-6	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	06/13/13 02:30	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	06/13/13 02:30	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	06/13/13 02:30	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	06/13/13 02:30	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	06/13/13 02:30	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	06/13/13 02:30	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	06/13/13 02:30	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	06/13/13 02:30	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	06/13/13 02:30	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	06/13/13 02:30	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	06/13/13 02:30	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	06/13/13 02:30	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	06/13/13 02:30	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	06/13/13 02:30	WAT	75-35-4	

Lab Sample ID: S56768.06 (continued)
Sample Tag: B-21D

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Methylene chloride	Not detected	ug/L	5	SW8260B	06/13/13 02:30	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	06/13/13 02:30	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	06/13/13 02:30	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	06/13/13 02:30	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	06/13/13 02:30	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	06/13/13 02:30	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	06/13/13 02:30	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	06/13/13 02:30	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	06/13/13 02:30	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	06/13/13 02:30	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	06/13/13 02:30	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	06/13/13 02:30	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	06/13/13 02:30	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	06/13/13 02:30	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	06/13/13 02:30	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	06/13/13 02:30	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	06/13/13 02:30	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	06/13/13 02:30	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	06/13/13 02:30	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	06/13/13 02:30	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	06/13/13 02:30	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	06/13/13 02:30	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	06/13/13 02:30	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	06/13/13 02:30	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	06/13/13 02:30	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	06/13/13 02:30	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	06/13/13 02:30	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 02:30	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	06/13/13 02:30	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	06/13/13 02:30	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	06/13/13 02:30	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	06/13/13 02:30	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	06/13/13 02:30	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	06/13/13 02:30	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	06/13/13 02:30	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 02:30	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	06/13/13 02:30	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 02:30	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 02:30	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 02:30	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 02:30	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	06/13/13 02:30	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	06/13/13 02:30	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	06/13/13 02:30	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	06/13/13 02:30	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 02:30	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 02:30	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	06/13/13 02:30	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	06/13/13 02:30	WAT	96-12-8	

Lab Sample ID: S56768.06 (continued)
Sample Tag: B-21D

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	06/13/13 02:30	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	06/13/13 02:30	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	06/13/13 02:30	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	06/13/13 02:30	WAT	91-57-6	
Organics								
TOX	Not detected	ug/L	10	9020A	06/17/13 08:35	Tes		O

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

Analytical Laboratory Report

Lab Sample ID: S56768.07
Sample Tag: B-18A
Collected Date/Time: 06/05/2013 15:35
Matrix: Groundwater
COC Reference: 74404

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	1L Plastic	None	Yes	5.0	IR
2	40ml Glass	H2SO4	Yes	5.0	IR
2	125ml Plastic	HNO3	Yes	5.0	IR
1	125ml Amber	H2SO4	Yes	5.0	IR
1	1L Amber	H2SO4	Yes	5.0	IR
3	40ml Glass	HCL	Yes	5.0	IR
1	125ml Plastic	NaOH	Yes	5.0	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
Metal Digestion	Completed			3015A	06/24/13 13:00	JRH		
Metal Digestion	Completed			3015A	06/21/13 10:00	PER		
pH check for VOCs	<2	STD Units		N/A	06/13/13 10:40	WAT		
Inorganics								
Chloride	19	mg/L	10	E300.0	06/12/13 11:52	JDP	16887-00-6	
Conductivity	1,040	umhos/cm		120.1	06/11/13 10:24	JKB		
Cyanide	Not detected	mg/L	0.005	335.4/4500-CN-E	06/12/13 11:26	JDP	57-12-5	
Phenols	Not detected	mg/L	0.02	420.1	06/18/13 16:24	JKB		
Sulfate	110	mg/L	10	E300.0	06/12/13 11:52	JDP	14808-79-8	
TOC	1.5	mg/L	1	SM 5310C	06/10/13 18:31	JKB		
Metals								
Chromium, Dissolved	Not detected	mg/L	0.005	E200.8	06/24/13 17:00	JRH	7440-47-3	
Copper, Dissolved	Not detected	mg/L	0.004	E200.8	06/25/13 12:14	JRH	7440-50-8	
Iron, Dissolved	0.02	mg/L	0.02	E200.8	06/24/13 17:00	JRH	7439-89-6	
Manganese, Dissolved	0.012	mg/L	0.005	E200.8	06/24/13 17:00	JRH	7439-96-5	
Nickel, Dissolved	Not detected	mg/L	0.005	E200.8	06/24/13 17:00	JRH	7440-02-0	
Sodium	43.9	mg/L	0.50	E200.8	06/21/13 14:39	PER	7440-23-5	
Zinc, Dissolved	0.031	mg/L	0.005	E200.8	06/24/13 17:00	JRH	7440-66-6	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	06/13/13 02:51	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	06/13/13 02:51	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	06/13/13 02:51	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	06/13/13 02:51	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	06/13/13 02:51	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	06/13/13 02:51	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	06/13/13 02:51	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	06/13/13 02:51	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	06/13/13 02:51	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	06/13/13 02:51	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	06/13/13 02:51	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	06/13/13 02:51	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	06/13/13 02:51	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	06/13/13 02:51	WAT	75-35-4	

Lab Sample ID: S56768.07 (continued)
Sample Tag: B-18A

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Methylene chloride	Not detected	ug/L	5	SW8260B	06/13/13 02:51	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	06/13/13 02:51	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	06/13/13 02:51	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	06/13/13 02:51	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	06/13/13 02:51	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	06/13/13 02:51	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	06/13/13 02:51	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	06/13/13 02:51	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	06/13/13 02:51	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	06/13/13 02:51	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	06/13/13 02:51	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	06/13/13 02:51	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	06/13/13 02:51	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	06/13/13 02:51	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	06/13/13 02:51	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	06/13/13 02:51	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	06/13/13 02:51	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	06/13/13 02:51	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	06/13/13 02:51	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	06/13/13 02:51	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	06/13/13 02:51	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	06/13/13 02:51	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	06/13/13 02:51	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	06/13/13 02:51	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	06/13/13 02:51	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	06/13/13 02:51	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	06/13/13 02:51	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 02:51	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	06/13/13 02:51	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	06/13/13 02:51	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	06/13/13 02:51	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	06/13/13 02:51	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	06/13/13 02:51	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	06/13/13 02:51	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	06/13/13 02:51	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 02:51	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	06/13/13 02:51	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 02:51	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 02:51	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 02:51	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 02:51	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	06/13/13 02:51	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	06/13/13 02:51	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	06/13/13 02:51	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	06/13/13 02:51	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 02:51	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 02:51	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	06/13/13 02:51	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	06/13/13 02:51	WAT	96-12-8	

Lab Sample ID: S56768.07 (continued)
Sample Tag: B-18A

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	06/13/13 02:51	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	06/13/13 02:51	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	06/13/13 02:51	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	06/13/13 02:51	WAT	91-57-6	
Organics								
TOX	4.7	ug/L	10	9020A	06/17/13 08:35	Tes		O1

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

Analytical Laboratory Report

Lab Sample ID: S56768.08
Sample Tag: B-19Ar
Collected Date/Time: 06/05/2013 16:40
Matrix: Groundwater
COC Reference: 74404

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	1L Plastic	None	Yes	5.0	IR
2	40ml Glass	H2SO4	Yes	5.0	IR
2	125ml Plastic	HNO3	Yes	5.0	IR
1	125ml Amber	H2SO4	Yes	5.0	IR
1	1L Amber	H2SO4	Yes	5.0	IR
3	40ml Glass	HCL	Yes	5.0	IR
1	125ml Plastic	NaOH	Yes	5.0	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
Metal Digestion	Completed			3015A	06/24/13 13:00	JRH		
Metal Digestion	Completed			3015A	06/21/13 10:00	PER		
pH check for VOCs	<2	STD Units		N/A	06/13/13 10:40	WAT		
Inorganics								
Chloride	72	mg/L	10	E300.0	06/12/13 12:04	JDP	16887-00-6	
Conductivity	777	umhos/cm		120.1	06/11/13 10:26	JKB		
Cyanide	Not detected	mg/L	0.005	335.4/4500-CN-E	06/12/13 11:28	JDP	57-12-5	
Phenols	Not detected	mg/L	0.02	420.1	06/18/13 16:26	JKB		
Sulfate	136	mg/L	10	E300.0	06/12/13 12:04	JDP	14808-79-8	
TOC	1.5	mg/L	1	SM 5310C	06/10/13 18:51	JKB		
Metals								
Chromium, Dissolved	Not detected	mg/L	0.005	E200.8	06/24/13 17:03	JRH	7440-47-3	
Copper, Dissolved	Not detected	mg/L	0.004	E200.8	06/25/13 12:16	JRH	7440-50-8	
Iron, Dissolved	0.04	mg/L	0.02	E200.8	06/24/13 17:03	JRH	7439-89-6	
Manganese, Dissolved	Not detected	mg/L	0.005	E200.8	06/24/13 17:03	JRH	7439-96-5	
Nickel, Dissolved	Not detected	mg/L	0.005	E200.8	06/24/13 17:03	JRH	7440-02-0	
Sodium	27.7	mg/L	0.50	E200.8	06/21/13 14:41	PER	7440-23-5	
Zinc, Dissolved	0.025	mg/L	0.005	E200.8	06/24/13 17:03	JRH	7440-66-6	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	06/13/13 03:11	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	06/13/13 03:11	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	06/13/13 03:11	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	06/13/13 03:11	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	06/13/13 03:11	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	06/13/13 03:11	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	06/13/13 03:11	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	06/13/13 03:11	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	06/13/13 03:11	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	06/13/13 03:11	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	06/13/13 03:11	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	06/13/13 03:11	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	06/13/13 03:11	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	06/13/13 03:11	WAT	75-35-4	

Lab Sample ID: S56768.08 (continued)
Sample Tag: B-19Ar

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Methylene chloride	Not detected	ug/L	5	SW8260B	06/13/13 03:11	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	06/13/13 03:11	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	06/13/13 03:11	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	06/13/13 03:11	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	06/13/13 03:11	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	06/13/13 03:11	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	06/13/13 03:11	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	06/13/13 03:11	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	06/13/13 03:11	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	06/13/13 03:11	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	06/13/13 03:11	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	06/13/13 03:11	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	06/13/13 03:11	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	06/13/13 03:11	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	06/13/13 03:11	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	06/13/13 03:11	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	06/13/13 03:11	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	06/13/13 03:11	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	06/13/13 03:11	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	06/13/13 03:11	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	06/13/13 03:11	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	06/13/13 03:11	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	06/13/13 03:11	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	06/13/13 03:11	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	06/13/13 03:11	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	06/13/13 03:11	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	06/13/13 03:11	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 03:11	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	06/13/13 03:11	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	06/13/13 03:11	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	06/13/13 03:11	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	06/13/13 03:11	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	06/13/13 03:11	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	06/13/13 03:11	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	06/13/13 03:11	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 03:11	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	06/13/13 03:11	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 03:11	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 03:11	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 03:11	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 03:11	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	06/13/13 03:11	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	06/13/13 03:11	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	06/13/13 03:11	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	06/13/13 03:11	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 03:11	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 03:11	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	06/13/13 03:11	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	06/13/13 03:11	WAT	96-12-8	

Lab Sample ID: S56768.08 (continued)
Sample Tag: B-19Ar

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	06/13/13 03:11	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	06/13/13 03:11	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	06/13/13 03:11	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	06/13/13 03:11	WAT	91-57-6	
Organics								
TOX	39	ug/L	10	9020A	06/17/13 08:35	Tes		O

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

Analytical Laboratory Report

Lab Sample ID: S56768.09
Sample Tag: B-2D
Collected Date/Time: 06/06/2013 10:05
Matrix: Groundwater
COC Reference: 74404

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	1L Plastic	None	Yes	5.0	IR
2	40ml Glass	H2SO4	Yes	5.0	IR
2	125ml Plastic	HNO3	Yes	5.0	IR
1	125ml Amber	H2SO4	Yes	5.0	IR
1	1L Amber	H2SO4	Yes	5.0	IR
3	40ml Glass	HCL	Yes	5.0	IR
1	125ml Plastic	NaOH	Yes	5.0	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
Metal Digestion	Completed			3015A	06/24/13 13:00	JRH		
Metal Digestion	Completed			3015A	06/21/13 10:00	PER		
pH check for VOCs	<2	STD Units		N/A	06/13/13 10:40	WAT		
Inorganics								
Chloride	6	mg/L	5	E300.0	06/12/13 14:00	JDP	16887-00-6	
Conductivity	756	umhos/cm		120.1	06/11/13 10:28	JKB		
Cyanide	Not detected	mg/L	0.005	335.4/4500-CN-E	06/12/13 11:30	JDP	57-12-5	
Phenols	Not detected	mg/L	0.02	420.1	06/18/13 16:28	JKB		
Sulfate	60	mg/L	10	E300.0	06/12/13 12:17	JDP	14808-79-8	
TOC	2.9	mg/L	1	SM 5310C	06/10/13 19:11	JKB		
Metals								
Chromium, Dissolved	Not detected	mg/L	0.005	E200.8	06/24/13 17:05	JRH	7440-47-3	
Copper, Dissolved	Not detected	mg/L	0.004	E200.8	06/25/13 12:18	JRH	7440-50-8	
Iron, Dissolved	Not detected	mg/L	0.02	E200.8	06/24/13 17:05	JRH	7439-89-6	
Manganese, Dissolved	0.005	mg/L	0.005	E200.8	06/24/13 17:05	JRH	7439-96-5	
Nickel, Dissolved	Not detected	mg/L	0.005	E200.8	06/24/13 17:05	JRH	7440-02-0	
Sodium	17.1	mg/L	0.50	E200.8	06/21/13 14:42	PER	7440-23-5	
Zinc, Dissolved	0.022	mg/L	0.005	E200.8	06/24/13 17:05	JRH	7440-66-6	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	06/13/13 03:32	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	06/13/13 03:32	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	06/13/13 03:32	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	06/13/13 03:32	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	06/13/13 03:32	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	06/13/13 03:32	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	06/13/13 03:32	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	06/13/13 03:32	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	06/13/13 03:32	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	06/13/13 03:32	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	06/13/13 03:32	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	06/13/13 03:32	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	06/13/13 03:32	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	06/13/13 03:32	WAT	75-35-4	

Lab Sample ID: S56768.09 (continued)
Sample Tag: B-2D

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Methylene chloride	Not detected	ug/L	5	SW8260B	06/13/13 03:32	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	06/13/13 03:32	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	06/13/13 03:32	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	06/13/13 03:32	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	06/13/13 03:32	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	06/13/13 03:32	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	06/13/13 03:32	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	06/13/13 03:32	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	06/13/13 03:32	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	06/13/13 03:32	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	06/13/13 03:32	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	06/13/13 03:32	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	06/13/13 03:32	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	06/13/13 03:32	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	06/13/13 03:32	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	06/13/13 03:32	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	06/13/13 03:32	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	06/13/13 03:32	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	06/13/13 03:32	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	06/13/13 03:32	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	06/13/13 03:32	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	06/13/13 03:32	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	06/13/13 03:32	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	06/13/13 03:32	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	06/13/13 03:32	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	06/13/13 03:32	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	06/13/13 03:32	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 03:32	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	06/13/13 03:32	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	06/13/13 03:32	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	06/13/13 03:32	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	06/13/13 03:32	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	06/13/13 03:32	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	06/13/13 03:32	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	06/13/13 03:32	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 03:32	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	06/13/13 03:32	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 03:32	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 03:32	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 03:32	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 03:32	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	06/13/13 03:32	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	06/13/13 03:32	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	06/13/13 03:32	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	06/13/13 03:32	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 03:32	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 03:32	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	06/13/13 03:32	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	06/13/13 03:32	WAT	96-12-8	

Lab Sample ID: S56768.09 (continued)
Sample Tag: B-2D

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	06/13/13 03:32	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	06/13/13 03:32	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	06/13/13 03:32	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	06/13/13 03:32	WAT	91-57-6	
Organics								
TOX	Not detected	ug/L	10	9020A	06/17/13 08:35	Tes		O

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

Analytical Laboratory Report

Lab Sample ID: S56768.10
Sample Tag: EB-1
Collected Date/Time: 06/06/2013 10:50
Matrix: Quality Control
COC Reference: 74404

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	1L Plastic	None	Yes	5.0	IR
2	40ml Glass	H2SO4	Yes	5.0	IR
1	125ml Plastic	HNO3	Yes	5.0	IR
1	125ml Amber	H2SO4	Yes	5.0	IR
1	1L Amber	H2SO4	Yes	5.0	IR
3	40ml Glass	HCL	Yes	5.0	IR
1	125ml Plastic	NaOH	Yes	5.0	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
Metal Digestion	Completed			3015A	06/21/13 10:00	PER		
pH check for VOCs	<2	STD Units		N/A	06/13/13 10:40	WAT		
Inorganics								
Chloride	Not detected	mg/L	2	E300.0	06/12/13 12:30	JDP	16887-00-6	
Conductivity	1,370	umhos/cm		120.1	06/11/13 10:30	JKB		
Cyanide	Not detected	mg/L	0.005	335.4/4500-CN-E	06/12/13 11:32	JDP	57-12-5	
Phenols	Not detected	mg/L	0.02	420.1	06/18/13 16:30	JKB		
Sulfate	Not detected	mg/L	2	E300.0	06/12/13 12:30	JDP	14808-79-8	
TOC	Not detected	mg/L	1	SM 5310C	06/10/13 19:30	JKB		
Metals								
Chromium	Not detected	mg/L	0.005	E200.8	06/24/13 16:41	JRH	7440-47-3	
Copper	Not detected	mg/L	0.004	E200.8	06/25/13 11:54	JRH	7440-50-8	
Iron	Not detected	mg/L	0.02	E200.8	06/24/13 16:41	JRH	7439-89-6	
Manganese	Not detected	mg/L	0.005	E200.8	06/24/13 16:41	JRH	7439-96-5	
Nickel	Not detected	mg/L	0.005	E200.8	06/24/13 16:41	JRH	7440-02-0	
Sodium	Not detected	mg/L	0.50	E200.8	06/21/13 14:27	PER	7440-23-5	
Zinc	Not detected	mg/L	0.005	E200.8	06/24/13 16:41	JRH	7440-66-6	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	06/13/13 03:52	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	06/13/13 03:52	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	06/13/13 03:52	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	06/13/13 03:52	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	06/13/13 03:52	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	06/13/13 03:52	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	06/13/13 03:52	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	06/13/13 03:52	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	06/13/13 03:52	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	06/13/13 03:52	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	06/13/13 03:52	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	06/13/13 03:52	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	06/13/13 03:52	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	06/13/13 03:52	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	06/13/13 03:52	WAT	75-09-2	

Lab Sample ID: S56768.10 (continued)
Sample Tag: EB-1

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	06/13/13 03:52	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	06/13/13 03:52	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	06/13/13 03:52	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	06/13/13 03:52	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	06/13/13 03:52	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	06/13/13 03:52	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	06/13/13 03:52	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	06/13/13 03:52	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	06/13/13 03:52	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	06/13/13 03:52	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	06/13/13 03:52	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	06/13/13 03:52	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	06/13/13 03:52	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	06/13/13 03:52	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	06/13/13 03:52	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	06/13/13 03:52	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	06/13/13 03:52	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	06/13/13 03:52	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	06/13/13 03:52	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	06/13/13 03:52	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	06/13/13 03:52	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	06/13/13 03:52	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	06/13/13 03:52	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	06/13/13 03:52	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	06/13/13 03:52	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	06/13/13 03:52	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 03:52	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	06/13/13 03:52	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	06/13/13 03:52	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	06/13/13 03:52	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	06/13/13 03:52	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	06/13/13 03:52	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	06/13/13 03:52	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	06/13/13 03:52	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 03:52	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	06/13/13 03:52	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 03:52	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 03:52	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 03:52	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 03:52	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	06/13/13 03:52	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	06/13/13 03:52	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	06/13/13 03:52	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	06/13/13 03:52	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 03:52	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 03:52	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	06/13/13 03:52	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	06/13/13 03:52	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	06/13/13 03:52	WAT	120-82-1	

Lab Sample ID: S56768.10 (continued)
Sample Tag: EB-1

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	06/13/13 03:52	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	06/13/13 03:52	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	06/13/13 03:52	WAT	91-57-6	
Organics								
TOX	Not detected	ug/L	10	9020A	06/17/13 08:35	Tes		O

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

Lab Sample ID: S56768.11
Sample Tag: TB-2
Collected Date/Time: 06/06/2013 00:01
Matrix: Quality Control
COC Reference: 74404

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	5.0	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
pH check for VOCs	<2	STD Units		N/A	06/13/13 10:40	WAT		
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	06/13/13 04:13	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	06/13/13 04:13	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	06/13/13 04:13	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	06/13/13 04:13	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	06/13/13 04:13	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	06/13/13 04:13	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	06/13/13 04:13	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	06/13/13 04:13	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	06/13/13 04:13	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	06/13/13 04:13	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	06/13/13 04:13	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	06/13/13 04:13	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	06/13/13 04:13	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	06/13/13 04:13	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	06/13/13 04:13	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	06/13/13 04:13	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	06/13/13 04:13	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	06/13/13 04:13	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	06/13/13 04:13	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	06/13/13 04:13	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	06/13/13 04:13	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	06/13/13 04:13	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	06/13/13 04:13	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	06/13/13 04:13	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	06/13/13 04:13	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	06/13/13 04:13	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	06/13/13 04:13	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	06/13/13 04:13	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	06/13/13 04:13	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	06/13/13 04:13	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	06/13/13 04:13	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	06/13/13 04:13	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	06/13/13 04:13	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	06/13/13 04:13	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	06/13/13 04:13	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	06/13/13 04:13	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	06/13/13 04:13	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	06/13/13 04:13	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	06/13/13 04:13	WAT	106-93-4	

Lab Sample ID: S56768.11 (continued)
Sample Tag: TB-2

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Chlorobenzene	Not detected	ug/L	1	SW8260B	06/13/13 04:13	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	06/13/13 04:13	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 04:13	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	06/13/13 04:13	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	06/13/13 04:13	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	06/13/13 04:13	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	06/13/13 04:13	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	06/13/13 04:13	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	06/13/13 04:13	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	06/13/13 04:13	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 04:13	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	06/13/13 04:13	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 04:13	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 04:13	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 04:13	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 04:13	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	06/13/13 04:13	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	06/13/13 04:13	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	06/13/13 04:13	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	06/13/13 04:13	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 04:13	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	06/13/13 04:13	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	06/13/13 04:13	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	06/13/13 04:13	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	06/13/13 04:13	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	06/13/13 04:13	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	06/13/13 04:13	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	06/13/13 04:13	WAT	91-57-6	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 240-25543-1
Client Project/Site: 56768

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

Attn: Mr. Andy Ball

Authorized for release by:
6/21/2013 8:48:07 AM
Nathan Pietras, Project Manager II
(330)966-8296
nathan.pietras@testamericainc.com

Designee for

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

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Definitions/Glossary

Client: Merit Laboratories
Project/Site: 56768

TestAmerica Job ID: 240-25543-1

Qualifiers

General Chemistry

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 240-25543-1

Laboratory: TestAmerica Canton

Narrative

Job Narrative
240-25543-1

Comments
No additional comments.

Receipt
The samples were received on 6/11/2013 10:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.4° C.

General Chemistry
Method(s) 9020B: Breakthrough exceeded 10% for the following sample(s): (440-48811-1), 56768.03 (240-25543-3), 56768.05 (240-25543-5). Re-analysis was performed with concurring results. The data have been reported.

Method(s) 9020B: Breakthrough exceeded 10% for the following sample(s):56768.07 (240-25543-7), 56768.08 (240-25543-8), 56768.09 (240-25543-9). Re-analysis was performed with concurring results. The data have been reported.

No other analytical or quality issues were noted.

Method Summary

Client: Merit Laboratories
Project/Site: 56768

TestAmerica Job ID: 240-25543-1

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

Protocol References:

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

Laboratory References:

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

Sample Summary

Client: Merit Laboratories
Project/Site: 56768

TestAmerica Job ID: 240-25543-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-25543-1	56768.01	Water	06/05/13 00:00	06/11/13 10:15
240-25543-2	56768.02	Water	06/05/13 09:45	06/11/13 10:15
240-25543-3	56768.03	Water	06/05/13 10:00	06/11/13 10:15
240-25543-4	56768.04	Water	06/05/13 11:55	06/11/13 10:15
240-25543-5	56768.05	Water	06/05/13 13:50	06/11/13 10:15
240-25543-6	56768.06	Water	06/05/13 14:50	06/11/13 10:15
240-25543-7	56768.07	Water	06/05/13 15:35	06/11/13 10:15
240-25543-8	56768.08	Water	06/05/13 16:40	06/11/13 10:15
240-25543-9	56768.09	Water	06/06/13 10:05	06/11/13 10:15
240-25543-10	56768.10	Water	06/06/13 10:50	06/11/13 10:15

Detection Summary

Client: Merit Laboratories
Project/Site: 56768

TestAmerica Job ID: 240-25543-1

Client Sample ID: 56768.01 — Lab Sample ID: 240-25543-1

No Detections.

Client Sample ID: 56768.02 — Lab Sample ID: 240-25543-2

No Detections.

Client Sample ID: 56768.03 — Lab Sample ID: 240-25543-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Halogens, Total Organic	0.0048	J	0.010	0.0035	mg/L	1		9020B	Total/NA

Client Sample ID: 56768.04 — Lab Sample ID: 240-25543-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Halogens, Total Organic	0.0060	J	0.010	0.0035	mg/L	1		9020B	Total/NA

Client Sample ID: 56768.05 — Lab Sample ID: 240-25543-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Halogens, Total Organic	0.015		0.010	0.0035	mg/L	1		9020B	Total/NA

Client Sample ID: 56768.06 — Lab Sample ID: 240-25543-6

No Detections.

Client Sample ID: 56768.07 — Lab Sample ID: 240-25543-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Halogens, Total Organic	0.0047	J	0.010	0.0035	mg/L	1		9020B	Total/NA

Client Sample ID: 56768.08 — Lab Sample ID: 240-25543-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Halogens, Total Organic	0.039		0.010	0.0035	mg/L	1		9020B	Total/NA

Client Sample ID: 56768.09 — Lab Sample ID: 240-25543-9

No Detections.

Client Sample ID: 56768.10 — Lab Sample ID: 240-25543-10

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Merit Laboratories
Project/Site: 56768

TestAmerica Job ID: 240-25543-1

Client Sample ID: 56768.01
Date Collected: 06/05/13 00:00
Date Received: 06/11/13 10:15

Lab Sample ID: 240-25543-1
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Halogens, Total Organic	0.010	U	0.010	0.0035	mg/L		06/17/13 08:35	06/17/13 08:35	1

Client: Merit Laboratories
Project/Site: 56768

TestAmerica Job ID: 240-25543-1

Client Sample ID: 56768.02
Date Collected: 06/05/13 09:45
Date Received: 06/11/13 10:15

Lab Sample ID: 240-25543-2
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Halogens, Total Organic	0.010	U	0.010	0.0035	mg/L		06/17/13 08:35	06/17/13 08:35	1

Client: Merit Laboratories
Project/Site: 56768

TestAmerica Job ID: 240-25543-1

Client Sample ID: 56768.03
Date Collected: 06/05/13 10:00
Date Received: 06/11/13 10:15

Lab Sample ID: 240-25543-3
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Halogens, Total Organic	0.0048	J	0.010	0.0035	mg/L		06/17/13 08:35	06/17/13 08:35	1

Client: Merit Laboratories
Project/Site: 56768

TestAmerica Job ID: 240-25543-1

Client Sample ID: 56768.04
Date Collected: 06/05/13 11:55
Date Received: 06/11/13 10:15

Lab Sample ID: 240-25543-4
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Halogens, Total Organic	0.0060	J	0.010	0.0035	mg/L		06/17/13 08:35	06/17/13 08:35	1

Client: Merit Laboratories
Project/Site: 56768

TestAmerica Job ID: 240-25543-1

Client Sample ID: 56768.05
Date Collected: 06/05/13 13:50
Date Received: 06/11/13 10:15

Lab Sample ID: 240-25543-5
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Halogens, Total Organic	0.015		0.010	0.0035	mg/L		06/17/13 08:35	06/17/13 08:35	1

Client: Merit Laboratories
Project/Site: 56768

TestAmerica Job ID: 240-25543-1

Client Sample ID: 56768.06
Date Collected: 06/05/13 14:50
Date Received: 06/11/13 10:15

Lab Sample ID: 240-25543-6
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Halogens, Total Organic	0.010	U	0.010	0.0035	mg/L		06/17/13 08:35	06/17/13 08:35	1

Client: Merit Laboratories
Project/Site: 56768

TestAmerica Job ID: 240-25543-1

Client Sample ID: 56768.07
Date Collected: 06/05/13 15:35
Date Received: 06/11/13 10:15

Lab Sample ID: 240-25543-7
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Halogens, Total Organic	0.0047	J	0.010	0.0035	mg/L		06/19/13 08:24	06/19/13 08:24	1

Client: Merit Laboratories
Project/Site: 56768

TestAmerica Job ID: 240-25543-1

Client Sample ID: 56768.08
Date Collected: 06/05/13 16:40
Date Received: 06/11/13 10:15

Lab Sample ID: 240-25543-8
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Halogens, Total Organic	0.039		0.010	0.0035	mg/L		06/19/13 08:24	06/19/13 08:24	1

Client: Merit Laboratories
Project/Site: 56768

TestAmerica Job ID: 240-25543-1

Client Sample ID: 56768.09
Date Collected: 06/06/13 10:05
Date Received: 06/11/13 10:15

Lab Sample ID: 240-25543-9
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Halogens, Total Organic	0.010	U	0.010	0.0035	mg/L		06/19/13 08:24	06/19/13 08:24	1

Client: Merit Laboratories
Project/Site: 56768

TestAmerica Job ID: 240-25543-1

Client Sample ID: 56768.10
Date Collected: 06/06/13 10:50
Date Received: 06/11/13 10:15

Lab Sample ID: 240-25543-10
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Halogens, Total Organic	0.010	U	0.010	0.0035	mg/L		06/19/13 08:24	06/19/13 08:24	1

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

Lab Sample ID: MB 680-280805/1-A
Matrix: Water
Analysis Batch: 280807

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 280805

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Halogens, Total Organic	0.010	U	0.010	0.0035	mg/L		06/17/13 08:35	06/17/13 08:35	1

Lab Sample ID: LCS 680-280805/2-A
Matrix: Water
Analysis Batch: 280807

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 280805

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
TOX Result 1	0.0982	0.0869		mg/L		89	60 - 140
TOX Result 2	0.0982	0.0869		mg/L		89	60 - 140

Lab Sample ID: MB 680-281281/1-A
Matrix: Water
Analysis Batch: 281327

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 281281

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Halogens, Total Organic	0.010	U	0.010	0.0035	mg/L		06/19/13 08:24	06/19/13 08:24	1

Lab Sample ID: LCS 680-281281/2-A
Matrix: Water
Analysis Batch: 281327

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 281281

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
TOX Result 1	0.0982	0.100		mg/L		102	60 - 140
TOX Result 2	0.0982	0.100		mg/L		102	60 - 140

Lab Sample ID: 240-25543-7 MS
Matrix: Water
Analysis Batch: 281327

Client Sample ID: 56768.07
Prep Type: Total/NA
Prep Batch: 281281

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
TOX Result 1	0.0041		0.0982	0.107		mg/L		104	60 - 140
TOX Result 2	0.0053		0.0982	0.107		mg/L		103	60 - 140

Lab Sample ID: 240-25543-7 MSD
Matrix: Water
Analysis Batch: 281327

Client Sample ID: 56768.07
Prep Type: Total/NA
Prep Batch: 281281

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
TOX Result 1	0.0041		0.0982	0.104		mg/L		102	60 - 140	2	40
TOX Result 2	0.0053		0.0982	0.104		mg/L		101	60 - 140	2	40

General Chemistry

Prep Batch: 280805

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-25543-1	56768.01	Total/NA	Water	Carbon Trap	
240-25543-2	56768.02	Total/NA	Water	Carbon Trap	
240-25543-3	56768.03	Total/NA	Water	Carbon Trap	
240-25543-4	56768.04	Total/NA	Water	Carbon Trap	
240-25543-5	56768.05	Total/NA	Water	Carbon Trap	
240-25543-6	56768.06	Total/NA	Water	Carbon Trap	
LCS 680-280805/2-A	Lab Control Sample	Total/NA	Water	Carbon Trap	
MB 680-280805/1-A	Method Blank	Total/NA	Water	Carbon Trap	

Analysis Batch: 280807

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-25543-1	56768.01	Total/NA	Water	9020B	280805
240-25543-2	56768.02	Total/NA	Water	9020B	280805
240-25543-3	56768.03	Total/NA	Water	9020B	280805
240-25543-4	56768.04	Total/NA	Water	9020B	280805
240-25543-5	56768.05	Total/NA	Water	9020B	280805
240-25543-6	56768.06	Total/NA	Water	9020B	280805
LCS 680-280805/2-A	Lab Control Sample	Total/NA	Water	9020B	280805
MB 680-280805/1-A	Method Blank	Total/NA	Water	9020B	280805

Prep Batch: 281281

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-25543-7	56768.07	Total/NA	Water	Carbon Trap	
240-25543-7 MS	56768.07	Total/NA	Water	Carbon Trap	
240-25543-7 MSD	56768.07	Total/NA	Water	Carbon Trap	
240-25543-8	56768.08	Total/NA	Water	Carbon Trap	
240-25543-9	56768.09	Total/NA	Water	Carbon Trap	
240-25543-10	56768.10	Total/NA	Water	Carbon Trap	
LCS 680-281281/2-A	Lab Control Sample	Total/NA	Water	Carbon Trap	
MB 680-281281/1-A	Method Blank	Total/NA	Water	Carbon Trap	

Analysis Batch: 281327

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-25543-7	56768.07	Total/NA	Water	9020B	281281
240-25543-7 MS	56768.07	Total/NA	Water	9020B	281281
240-25543-7 MSD	56768.07	Total/NA	Water	9020B	281281
240-25543-8	56768.08	Total/NA	Water	9020B	281281
240-25543-9	56768.09	Total/NA	Water	9020B	281281
240-25543-10	56768.10	Total/NA	Water	9020B	281281
LCS 680-281281/2-A	Lab Control Sample	Total/NA	Water	9020B	281281
MB 680-281281/1-A	Method Blank	Total/NA	Water	9020B	281281

Lab Chronicle

Client: Merit Laboratories
Project/Site: 56768

TestAmerica Job ID: 240-25543-1

Client Sample ID: 56768.01

Lab Sample ID: 240-25543-1

Date Collected: 06/05/13 00:00

Matrix: Water

Date Received: 06/11/13 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9020B		1	280807	06/17/13 08:35	DL	TAL SAV
Total/NA	Prep	Carbon Trap			280805	06/17/13 08:35	DL	TAL SAV

Client Sample ID: 56768.02

Lab Sample ID: 240-25543-2

Date Collected: 06/05/13 09:45

Matrix: Water

Date Received: 06/11/13 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9020B		1	280807	06/17/13 08:35	DL	TAL SAV
Total/NA	Prep	Carbon Trap			280805	06/17/13 08:35	DL	TAL SAV

Client Sample ID: 56768.03

Lab Sample ID: 240-25543-3

Date Collected: 06/05/13 10:00

Matrix: Water

Date Received: 06/11/13 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9020B		1	280807	06/17/13 08:35	DL	TAL SAV
Total/NA	Prep	Carbon Trap			280805	06/17/13 08:35	DL	TAL SAV

Client Sample ID: 56768.04

Lab Sample ID: 240-25543-4

Date Collected: 06/05/13 11:55

Matrix: Water

Date Received: 06/11/13 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9020B		1	280807	06/17/13 08:35	DL	TAL SAV
Total/NA	Prep	Carbon Trap			280805	06/17/13 08:35	DL	TAL SAV

Client Sample ID: 56768.05

Lab Sample ID: 240-25543-5

Date Collected: 06/05/13 13:50

Matrix: Water

Date Received: 06/11/13 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9020B		1	280807	06/17/13 08:35	DL	TAL SAV
Total/NA	Prep	Carbon Trap			280805	06/17/13 08:35	DL	TAL SAV

Client Sample ID: 56768.06

Lab Sample ID: 240-25543-6

Date Collected: 06/05/13 14:50

Matrix: Water

Date Received: 06/11/13 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9020B		1	280807	06/17/13 08:35	DL	TAL SAV
Total/NA	Prep	Carbon Trap			280805	06/17/13 08:35	DL	TAL SAV

Lab Chronicle

Client: Merit Laboratories
Project/Site: 56768

TestAmerica Job ID: 240-25543-1

Client Sample ID: 56768.07

Lab Sample ID: 240-25543-7

Date Collected: 06/05/13 15:35
Matrix: Water
Date Received: 06/11/13 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9020B		1	281327	06/19/13 08:24	DL	TAL SAV
Total/NA	Prep	Carbon Trap			281281	06/19/13 08:24	DL	TAL SAV

Client Sample ID: 56768.08

Lab Sample ID: 240-25543-8

Date Collected: 06/05/13 16:40
Matrix: Water
Date Received: 06/11/13 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9020B		1	281327	06/19/13 08:24	DL	TAL SAV
Total/NA	Prep	Carbon Trap			281281	06/19/13 08:24	DL	TAL SAV

Client Sample ID: 56768.09

Lab Sample ID: 240-25543-9

Date Collected: 06/06/13 10:05
Matrix: Water
Date Received: 06/11/13 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9020B		1	281327	06/19/13 08:24	DL	TAL SAV
Total/NA	Prep	Carbon Trap			281281	06/19/13 08:24	DL	TAL SAV

Client Sample ID: 56768.10

Lab Sample ID: 240-25543-10

Date Collected: 06/06/13 10:50
Matrix: Water
Date Received: 06/11/13 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9020B		1	281327	06/19/13 08:24	DL	TAL SAV
Total/NA	Prep	Carbon Trap			281281	06/19/13 08:24	DL	TAL SAV

Laboratory References:

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

Certification Summary

Client: Merit Laboratories
Project/Site: 56768

TestAmerica Job ID: 240-25543-1

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-13
Connecticut	State Program	1	PH-0590	12-31-13
Florida	NELAP	4	E87225	06-30-13
Georgia	State Program	4	N/A	06-30-13
Illinois	NELAP	5	200004	07-31-13
Kansas	NELAP	7	E-10336	01-31-14
Kentucky	State Program	4	58	06-30-13
L-A-B	DoD ELAP		L2315	07-28-13
Minnesota	NELAP	5	039-999-348	12-31-13
Nevada	State Program	9	OH-000482008A	07-31-13
New Jersey	NELAP	2	OH001	06-30-13
New York	NELAP	2	10975	04-01-14
Ohio VAP	State Program	5	CL0024	01-19-14
Pennsylvania	NELAP	3	68-00340	08-31-13
Texas	NELAP	6		08-03-13
USDA	Federal		P330-11-00328	08-26-14
Virginia	NELAP	3	460175	09-14-13
Washington	State Program	10	C971	01-12-14
West Virginia DEP	State Program	3	210	12-31-13
Wisconsin	State Program	5	999518190	08-31-13

Laboratory: TestAmerica Savannah

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	DoD ELAP		399.01	07-31-13
Alabama	State Program	4	41450	06-30-13
Arkansas DEQ	State Program	6	88-0692	02-01-13 *
California	NELAP	9	3217CA	07-31-13
Colorado	State Program	8	N/A	12-31-13
Connecticut	State Program	1	PH-0161	03-31-15
Florida	NELAP	4	E87052	06-30-13
GA Dept. of Agriculture	State Program	4	N/A	12-31-13
Georgia	State Program	4	N/A	06-30-13
Georgia	State Program	4	803	06-30-13
Hawaii	State Program	9	N/A	06-30-13
Illinois	NELAP	5	200022	11-30-13
Indiana	State Program	5	N/A	06-30-13
Iowa	State Program	7	353	07-01-13 *
Kentucky	State Program	4	90084	12-31-12 *
Kentucky (UST)	State Program	4	18	03-31-13 *
Louisiana	NELAP	6	30690	06-30-13
Louisiana	NELAP	6	LA100015	12-31-13
Maine	State Program	1	GA00006	08-16-14
Maryland	State Program	3	250	12-31-13
Massachusetts	State Program	1	M-GA006	06-30-13
Michigan	State Program	5	9925	06-30-13
Mississippi	State Program	4	N/A	06-30-13
Montana	State Program	8	CERT0081	01-01-14
Nebraska	State Program	7	TestAmerica-Savannah	06-30-13 *

* Expired certification is currently pending renewal and is considered valid.

Certification Summary

Client: Merit Laboratories
Project/Site: 56768

TestAmerica Job ID: 240-25543-1

Laboratory: TestAmerica Savannah (Continued)

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Jersey	NELAP	2	GA769	06-30-13
New Mexico	State Program	6	N/A	06-30-13
New York	NELAP	2	10842	04-01-14
North Carolina DENR	State Program	4	269	12-31-13
North Carolina DHHS	State Program	4	13701	07-31-13
Oklahoma	State Program	6	9984	08-31-13
Pennsylvania	NELAP	3	68-00474	06-30-13 *
Puerto Rico	State Program	2	GA00006	01-01-14
South Carolina	State Program	4	98001	06-30-13
Tennessee	State Program	4	TN02961	06-30-13
Texas	NELAP	6	T104704185-08-TX	11-30-13
USDA	Federal		SAV 3-04	04-07-14
Virginia	NELAP	3	460161	06-14-13 *
Washington	State Program	10	C1794	06-10-14
West Virginia	State Program	3	9950C	12-31-13
West Virginia DEP	State Program	3	94	06-30-13
Wisconsin	State Program	5	999819810	08-31-13
Wyoming	State Program	8	8TMS-Q	06-30-13

* Expired certification is currently pending renewal and is considered valid.

Merit Laboratories, Inc.

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

C.O.C. PAGE # _____ OF _____

74209

CHAIN OF CUSTODY RECORD

REPORT TO

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

INVOICE TO

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

PROJECT NO./NAME: 556768
SAMPLER(S) - PLEASE PRINT/SIGN NAME:

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

DELIVERABLES REQUIRED ☒ STD ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER _____

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

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

Certifications
☐ OHIO VAP ☐ Drinking Water
☐ DoD ☐ NPDES

Project Locations
☐ Detroit ☐ New York
☐ Other _____

Special Instructions

MERIT LAB NO. (FOR LAB USE ONLY)	YEAR DATE	TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives: NONE	HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER	TOX
	6/5/13	–	56768.01	GW	1				X				X
		945	56768.02										
		1000	56768.03										
		1155	56768.04										
		1350	56768.05										
		1450	56768.06										
		1535	56768.07										
		1640	56768.08										
	6/6/13	1005	56768.09										
		1050	56768.10										

*Sub'd to Test America

240-25543 Chain of Custody

Page 24 of 27

RELINQUISHED BY: SIGNATURE/ORGANIZATION	Tabitha Faust ☐ Sampler	DATE 6/6/13	TIME 1600
RECEIVED BY: SIGNATURE/ORGANIZATION	UPS 1Z 466477 01 6083 2347	DATE	TIME
RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE	TIME
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE	TIME

RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE	TIME
RECEIVED BY: SIGNATURE/ORGANIZATION	Andrea Green	DATE 6/7/13	TIME 1015

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

NOTES: TEMP. ON ARRIVAL _____

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

Rev. 5.18.12

TestAmerica Canton Sample Receipt Form/Narrative **Login # : 25543**
Canton Facility

Client Merit Labs Site Name

Cooler Received on 6-11-13 Opened on 6-11-13

Cooler unpacked by:

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

TestAmerica Cooler # Foam Box Client Cooler Box Other

Packing material used: Bubble Wrap Foam Plastic Bag None Other

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# 1	(CF -1 °C)	Observed Cooler Temp. °C	Corrected Cooler Temp. °C	
IR GUN# 4G	(CF 0 °C)	Observed Cooler Temp. 2.4 °C	Corrected Cooler Temp. 2.4 °C	☐ See Multiple Cooler Form
IR GUN# 5G	(CF +1 °C)	Observed Cooler Temp. °C	Corrected Cooler Temp. °C	
~~IR GUN# 8~~	~~(CF -2 °C)~~	~~Observed Cooler Temp.~~ °C	~~Corrected Cooler Temp.~~ °C	out of service

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity Yes No
   -Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA
   -Were custody seals on the bottle(s)? Yes No
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Did all bottles arrive in good condition (Unbroken)? Yes No
7. Could all bottle labels be reconciled with the COC? Yes No
8. Were correct bottle(s) used for the test(s) indicated? Yes No
9. ~~Sufficient quantity received to perform indicated analyses?~~ Yes No
10. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# **HC379740**
11. Were VOAs on the COC? Yes No
12. Were air bubbles >6 mm in any VOA vials? Yes No NA
13. Was a trip blank present in the cooler(s)? Yes No

Contacted PM Date by via Verbal Voice Mail Other
Concerning

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

15. SAMPLE CONDITION

Sample(s) were received after the recommended holding time had expired.
Sample(s) were received in a broken container.
Sample(s) were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) were further preserved in the laboratory.
Time preserved: Preservative(s) added/Lot number(s):

Login Container Summary Report

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container pH	Preservative Added (mls)	Lot #
56768.01	240-25543-A-1	Amber Glass 1 liter - Sulfuric Acid	<2		
56768.01	240-25543-B-1	Amber Glass 1 liter - Sulfuric Acid	<2		
56768.02	240-25543-A-2	Amber Glass 1 liter - Sulfuric Acid	<2		
56768.02	240-25543-B-2	Amber Glass 1 liter - Sulfuric Acid	<2		
56768.03	240-25543-A-3	Amber Glass 1 liter - Sulfuric Acid	<2		
56768.03	240-25543-B-3	Amber Glass 1 liter - Sulfuric Acid	<2		
56768.04	240-25543-A-4	Amber Glass 1 liter - Sulfuric Acid	<2		
56768.04	240-25543-B-4	Amber Glass 1 liter - Sulfuric Acid	<2		
56768.05	240-25543-A-5	Amber Glass 1 liter - Sulfuric Acid	<2		
56768.05	240-25543-B-5	Amber Glass 1 liter - Sulfuric Acid	<2		
56768.06	240-25543-A-6	Amber Glass 1 liter - Sulfuric Acid	<2		
56768.06	240-25543-B-6	Amber Glass 1 liter - Sulfuric Acid	<2		
56768.07	240-25543-A-7	Amber Glass 1 liter - Sulfuric Acid	<2		
56768.07	240-25543-B-7	Amber Glass 1 liter - Sulfuric Acid	<2		
56768.08	240-25543-A-8	Amber Glass 1 liter - Sulfuric Acid	<2		
56768.08	240-25543-B-8	Amber Glass 1 liter - Sulfuric Acid	<2		
56768.09	240-25543-A-9	Amber Glass 1 liter - Sulfuric Acid	<2		
56768.09	240-25543-B-9	Amber Glass 1 liter - Sulfuric Acid	<2		
56768.10	240-25543-A-10	Amber Glass 1 liter - Sulfuric Acid	<2		
56768.10	240-25543-B-10	Amber Glass 1 liter - Sulfuric Acid	<2		

Login Sample Receipt Checklist

Client: Merit Laboratories

Job Number: 240-25543-1

Login Number: 25543
List Number: 1
Creator: Barnett, Eddie T

List Source: TestAmerica Savannah
List Creation: 06/12/13 12:06 PM

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

Merit Laboratories, Inc.

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

C.O.C. PAGE # 1 OF 1

74404

CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: Cliff Yantz
COMPANY: O'Brien & Gere
ADDRESS: 37000 Grand River Ste 260
CITY: Farmington Hills STATE: MI ZIP CODE: 48335
PHONE NO.: 248-477-5701 FAX NO.: 248-477-5962 P.O. NO.: 1131280
E-MAIL ADDRESS: Clifford.Yantz@OBG.com QUOTE NO.:

INVOICE TO

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

PROJECT NO./NAME: RACER - Coldwater Rd Landfill Semi-Annual # 50137
SAMPLER(S) - PLEASE PRINT/SIGN NAME: Kevin Schneider

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

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

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

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

Certifications: ☐ OHIO VAP ☐ Drinking Water ☐ DoD ☐ NPDES

Project Locations: ☐ Detroit ☐ New York ☐ Other Flint, MI

MERIT LAB NO. (FOR LAB USE ONLY)	YEAR DATE	YEAR TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives: NONE	HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER	VOCs	TOC	TOX	Phenols	Cyanide	Sulfate	Chlorides	Specific Conductivity	Dissolved Metals	Sodium	Special Instructions
56768.01	6/5/13	—	DUP-1	GW	11	1	3	2	4	1			X	X	X	X	X	X	X	X	X	X	* Dissolved Metals
.02		945	B-20D	GW	11	1	3	2	4	1			X	X	X	X	X	X	X	X	X	X	Cu, Cr, Ni, Zn, Fe, Mn
.03		1000	B-24R	GW	11	1	3	2	4	1			X	X	X	X	X	X	X	X	X	X	* Equipment Blank was NOT field Filtered
.04		1155	B-7	GW	11	1	3	2	4	1			X	X	X	X	X	X	X	X	X	X	
.05		1350	B-9	GW	11	1	3	2	4	1			X	X	X	X	X	X	X	X	X	X	
.06		1450	B-21D	GW	11	1	3	2	4	1			X	X	X	X	X	X	X	X	X	X	
.07		1535	B-18A	GW	11	1	3	2	4	1			X	X	X	X	X	X	X	X	X	X	
.08		1640	B-19AR	GW	11	1	3	2	4	1			X	X	X	X	X	X	X	X	X	X	
.09	6/6/13	1005	B-2D	GW	11	1	3	2	4	1			X	X	X	X	X	X	X	X	X	X	
.10		1050	EB-1	QC	10	1	3	1	4	1			X	X	X	X	X	X	X	X	X	X	Equipment Blank
.11		—	TB-2	QC	3		3						X										Trip Blank

RELINQUISHED BY: SIGNATURE/ORGANIZATION	☒ Sampler OBG	DATE 6/6/13	TIME 1045
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE 6-6-13	TIME 1245
RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE	TIME
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE	TIME

RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE 6/6/13	TIME 1615
RECEIVED BY: SIGNATURE/ORGANIZATION	Tallada Faust	DATE 6-6-13	TIME 1615

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

NOTES: TEMP. ON ARRIVAL 5.0

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

Rev. 5.18.12

APPENDIX D

Groundwater Sampling Program QA/QC Summary

APPENDIX D
QUALITY ASSURANCE/QUALITY CONTROL SUMMARY

Data verification was independently performed by O'Brien & Gere Engineers, Inc. to assess the groundwater monitoring data quality for samples collected during the 2013 semiannual groundwater sampling event conducted in June 2013. Data verification was utilized to confirm the quality of the field and laboratory (Merit Laboratories, Inc. (Merit) of East Lansing, Michigan) data. The data verification included review of: (1) laboratory documentation, (2) chain-of-custody (COC) documentation, (3) target analyte results, (4) laboratory data qualifiers, if any, (5) laboratory reporting (quantitation) limits, (6) laboratory blank analysis, and (6) quality control samples, including: trip blanks (for volatile organic compounds [VOCs], when collected), duplicate samples and equipment blanks.

The results of the data verification indicated the following:

- Laboratory documentation was complete.
- Chain-of-custody (COC) documentation was complete.
- Target analyte results were reported in accordance with the project requirements.
- Laboratory blank analysis did not indicate evidence of artifacts from the sampling or analytical process (above reporting limit [RL]).
- Laboratory quantitation (or reporting) limits (RLs) were within the project required limits for undiluted samples.
- No elevated RLs were reported due to matrix interference or sample dilution, except for the RL for sulfate for the sample from B-9 (50 mg/L), which was elevated due to a 50 times dilution (typical is 10 times dilution) due to elevated sulfate in this sample (which is normal for this sample).
- Breakthrough exceeded 10% for the following TOX samples: B-2D, B-9D, B-18A, B-19Ar, and B-24r. Re-analysis was performed in accordance with United States Environmental Protection Agency (USEPA) Method 9020B with concurring results. Furthermore, the method blank results were non-detects and laboratory control sample (LCS) results were within percent recover limits (between 60 and 140 percent); therefore, the data was reported in accordance with USEPA Method 9020B.
- The relative percent difference (RPD) for the duplicate sample results for B-20D and Dup-1 (B-20D) were within acceptable limits, except for zinc, which was detected at 11 ug/L in the original sample, but was not detected (<5 ug/L) in the duplicate sample.
- The primary and secondary constituents of concern (COCs) were not detected in equipment blank EB-1; therefore, cross-contamination during sampling is not evident.

Furthermore, the instrument utilized for measurement of field parameters calibrated within range (deviation from standard of less than 3 percent) for pH, oxidation reduction potential (ORP), specific conductivity (conductivity) and dissolved oxygen (DO); therefore, operated within manufacturers specifications during sample collection.

The data verification indicates that the overall usability of the groundwater monitoring data is acceptable for the intended use without further qualification or rejection of the data.

APPENDIX E

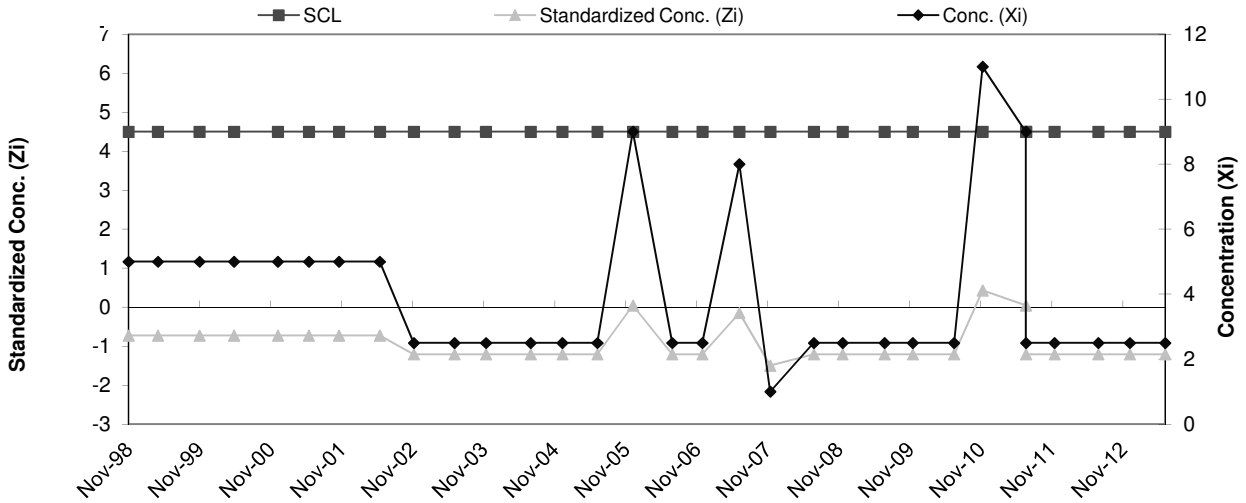
Monitoring Well Control Charts

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

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

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Nov-98	4.5	5	-0.73	36	Nov-11	4.50	2.50	-1.21
10	Apr-99	4.5	5	-0.73	37	Jun-12	4.50	2.50	-1.21
11	Nov-99	4.5	5	-0.73	38	Dec-12	4.50	2.50	-1.21
12	Apr-00	4.5	5	-0.73	39	Jun-13	4.50	2.50	-1.21
13	Dec-00	4.5	5	-0.73					
14	May-01	4.5	5	-0.73					
15	Oct-01	4.5	5	-0.73					
16	May-02	4.5	5	-0.73					
17	Nov-02	4.5	2.5	-1.21					
18	Jun-03	4.5	2.5	-1.21					
19	Nov-03	4.5	2.5	-1.21					
20	Jun-04	4.5	2.5	-1.21					
21	Dec-04	4.5	2.5	-1.21					
22	Jun-05	4.5	2.5	-1.21					
23	Dec-05	4.5	9	0.04					
24	Jun-06	4.5	2.5	-1.21					
25	Nov-06	4.5	2.5	-1.21					
26	Jun-07	4.5	8	-0.15					
27	Nov-07	4.5	1	-1.50					
28	Jun-08	4.5	2.5	-1.21					
29	Nov-08	4.5	2.5	-1.21					
30	Jun-09	4.5	2.5	-1.21					
31	Nov-09	4.5	2.5	-1.21					
32	Jun-10	4.5	2.5	-1.21					
33	Nov-10	4.5	11	0.43					
34	Jun-11	4.5	9	0.04					
35	Jun-11	4.5	2.5	-1.21					

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

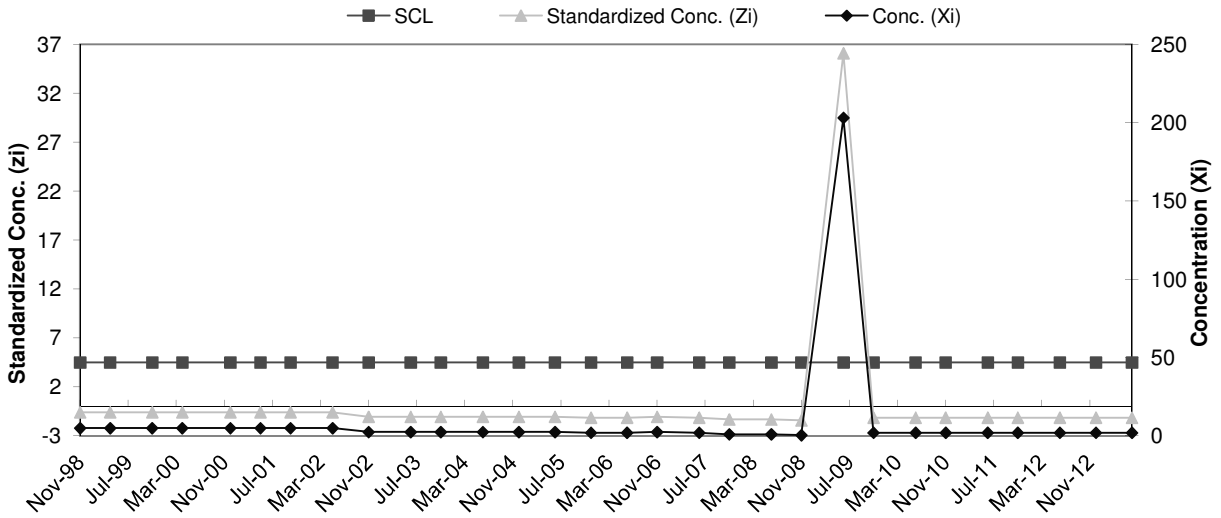


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-2d Cu

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

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Nov-98	4.5	5	-0.58	35	Nov-11	4.5	2	-1.14
10	Apr-99	4.5	5	-0.58	36	Jun-12	4.5	2	-1.14
11	Nov-99	4.5	5	-0.58	37	Dec-12	4.5	2	-1.14
12	Apr-00	4.5	5	-0.58	38	Jun-13	4.5	2	-1.14
13	Dec-00	4.5	5	-0.58					
14	May-01	4.5	5	-0.58					
15	Oct-01	4.5	5	-0.58					
16	May-02	4.5	5	-0.58					
17	Nov-02	4.5	2.5	-1.04					
18	Jun-03	4.5	2.5	-1.04					
19	Nov-03	4.5	2.5	-1.04					
20	Jun-04	4.5	2.5	-1.04					
21	Dec-04	4.5	2.5	-1.04					
22	Jun-05	4.5	2.5	-1.04					
23	Dec-05	4.5	2	-1.14					
24	Jun-06	4.5	2	-1.14					
25	Nov-06	4.5	2.5	-1.04					
26	Jun-07	4.5	2	-1.14					
27	Nov-07	4.5	1	-1.32					
28	Jun-08	4.5	1	-1.32					
29	Nov-08	4.5	0.5	-1.41					
30	Jun-09	4.5	203	36.09					
31	Nov-09	4.5	2	-1.14					
32	Jun-10	4.5	2	-1.14					
33	Nov-10	4.5	2	-1.14					
34	Jun-11	4.5	2	-1.14					

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

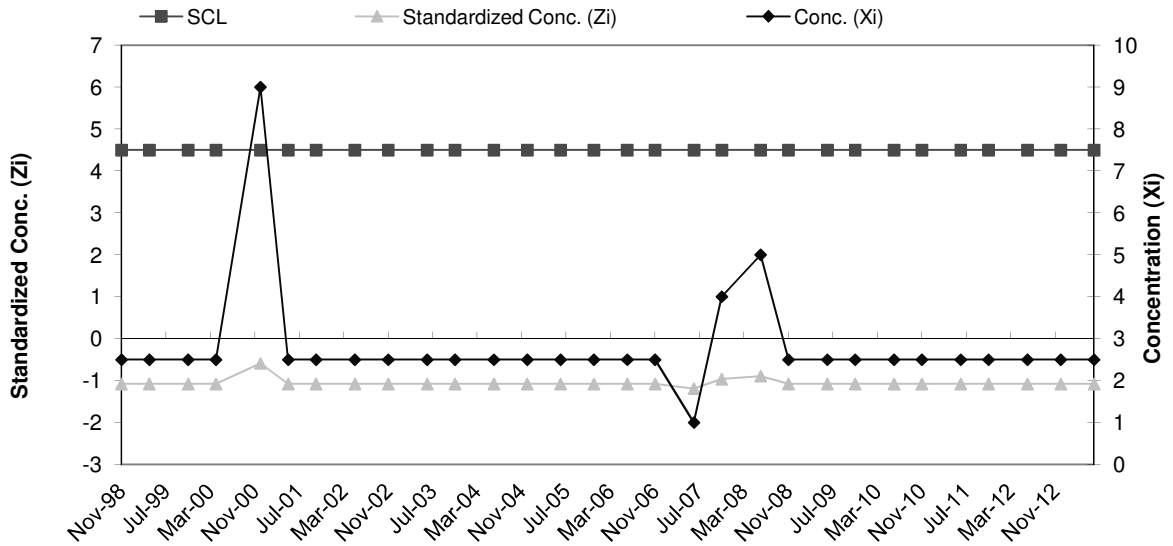


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-2d Ni

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

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Nov-98	4.5	2.5	-1.08	35	Nov-11	4.5	2.5	-1.08
10	Apr-99	4.5	2.5	-1.08	36	Jun-12	4.5	2.5	-1.08
11	Nov-99	4.5	2.5	-1.08	37	Dec-12	4.5	2.5	-1.08
12	Apr-00	4.5	2.5	-1.08	38	Jun-13	4.5	2.5	-1.08
13	Dec-00	4.5	9	-0.59					
14	May-01	4.5	2.5	-1.08					
15	Oct-01	4.5	2.5	-1.08					
16	May-02	4.5	2.5	-1.08					
17	Nov-02	4.5	2.5	-1.08					
18	Jun-03	4.5	2.5	-1.08					
19	Nov-03	4.5	2.5	-1.08					
20	Jun-04	4.5	2.5	-1.08					
21	Dec-04	4.5	2.5	-1.08					
22	Jun-05	4.5	2.5	-1.08					
23	Dec-05	4.5	2.5	-1.08					
24	Jun-06	4.5	2.5	-1.08					
25	Nov-06	4.5	2.5	-1.08					
26	Jun-07	4.5	1	-1.19					
27	Nov-07	4.5	4	-0.97					
28	Jun-08	4.5	5	-0.89					
29	Nov-08	4.5	2.5	-1.08					
30	Jun-09	4.5	2.5	-1.08					
31	Nov-09	4.5	2.5	-1.08					
32	Jun-10	4.5	2.5	-1.08					
33	Nov-10	4.5	2.5	-1.08					
34	Jun-11	4.5	2.5	-1.08					

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

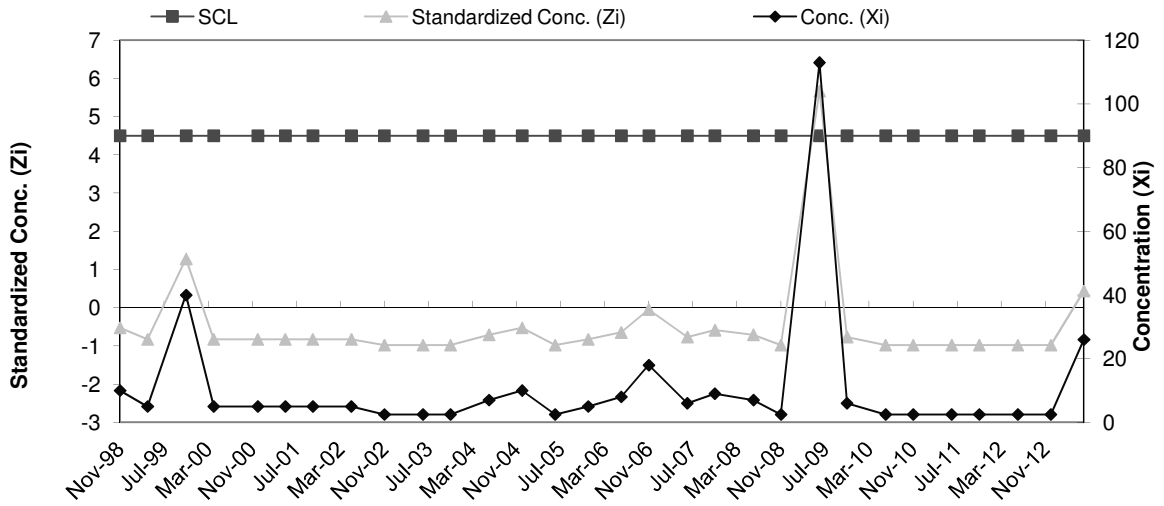


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-2d Zn

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

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Nov-98	4.5	10	-0.53	35	Nov-11	4.5	2.5	-0.98
10	Apr-99	4.5	5	-0.83	36	Jun-12	4.5	2.5	-0.98
11	Nov-99	4.5	40	1.28	37	Dec-12	4.5	2.5	-0.98
12	Apr-00	4.5	5	-0.83	38	Jun-13	4.5	26	0.44
13	Dec-00	4.5	5	-0.83					
14	May-01	4.5	5	-0.83					
15	Oct-01	4.5	5	-0.83					
16	May-02	4.5	5	-0.83					
17	Nov-02	4.5	2.5	-0.98					
18	Jun-03	4.5	2.5	-0.98					
19	Nov-03	4.5	2.5	-0.98					
20	Jun-04	4.5	7	-0.71					
21	Dec-04	4.5	10	-0.53					
22	Jun-05	4.5	2.5	-0.98					
23	Dec-05	4.5	5	-0.83					
24	Jun-06	4.5	8	-0.65					
25	Nov-06	4.5	18	-0.05					
26	Jun-07	4.5	6	-0.77					
27	Nov-07	4.5	9	-0.59					
28	Jun-08	4.5	7	-0.71					
29	Nov-08	4.5	2.5	-0.98					
30	Jun-09	4.5	113	5.67					
31	Nov-09	4.5	6	-0.77					
32	Jun-10	4.5	2.5	-0.98					
33	Nov-10	4.5	2.5	-0.98					
34	Jun-11	4.5	2.5	-0.98					

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

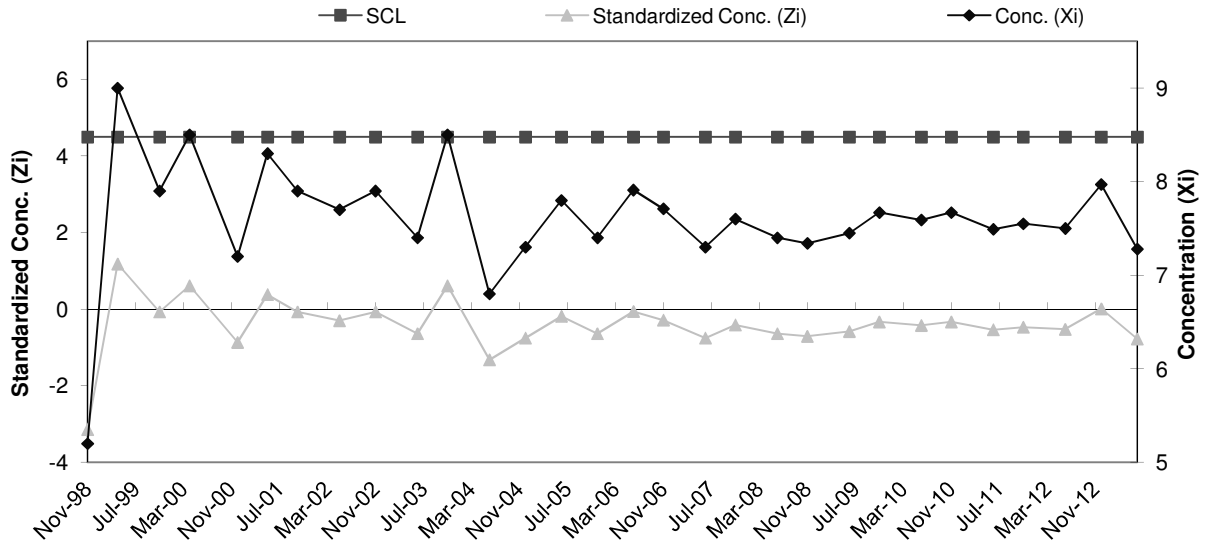


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-2d pH

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

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Nov-98	4.5	4.7	-3.15	35	Nov-11	4.5	7.1	-0.47
10	Apr-99	4.5	8.5	1.18	36	Jun-12	4.5	7.0	-0.53
11	Nov-99	4.5	7.4	-0.07	37	Dec-12	4.5	7.5	0.01
12	Apr-00	4.5	8.0	0.61	38	Jun-13	4.5	6.8	-0.78
13	Dec-00	4.5	6.7	-0.87					
14	May-01	4.5	7.8	0.38					
15	Oct-01	4.5	7.4	-0.07					
16	May-02	4.5	7.2	-0.30					
17	Nov-02	4.5	7.4	-0.07					
18	Jun-03	4.5	6.9	-0.64					
19	Nov-03	4.5	8.0	0.61					
20	Jun-04	4.5	6.3	-1.32					
21	Dec-04	4.5	6.8	-0.75					
22	Jun-05	4.5	7.3	-0.19					
23	Dec-05	4.5	6.9	-0.64					
24	Jun-06	4.5	7.4	-0.06					
25	Nov-06	4.5	7.2	-0.29					
26	Jun-07	4.5	6.8	-0.75					
27	Nov-07	4.5	7.1	-0.41					
28	Jun-08	4.5	6.9	-0.64					
29	Nov-08	4.5	6.8	-0.71					
30	Jun-09	4.5	7.0	-0.58					
31	Nov-09	4.5	7.2	-0.33					
32	Jun-10	4.5	7.1	-0.42					
33	Nov-10	4.5	7.2	-0.33					
34	Jun-11	4.5	7.0	-0.54					

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

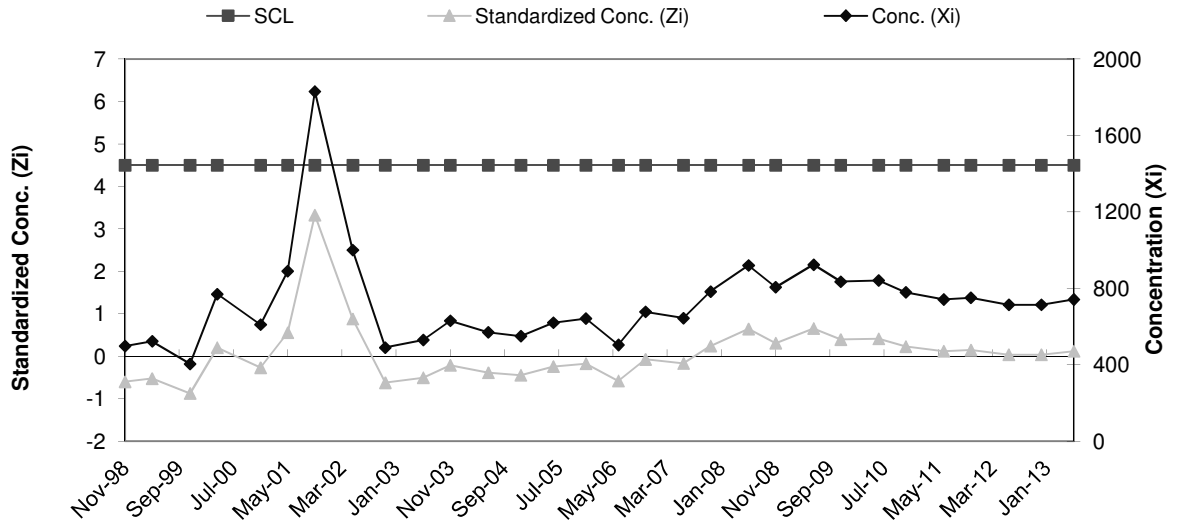


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-2d SpC

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

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Nov-98	4.5	498.0	-0.60	35	Nov-11	4.5	751.0	0.15
10	Apr-99	4.5	523.0	-0.53	36	Jun-12	4.5	714.0	0.04
11	Nov-99	4.5	405.0	-0.87	37	Dec-12	4.5	714.0	0.04
12	Apr-00	4.5	770.0	0.20	38	Jun-13	4.5	742.0	0.12
13	Dec-00	4.5	610.0	-0.27					
14	May-01	4.5	890.0	0.56					
15	Oct-01	4.5	1830.0	3.32					
16	May-02	4.5	1000.0	0.88					
17	Nov-02	4.5	490.0	-0.62					
18	Jun-03	4.5	530.0	-0.51					
19	Nov-03	4.5	630.0	-0.21					
20	Jun-04	4.5	570.0	-0.39					
21	Dec-04	4.5	550.0	-0.45					
22	Jun-05	4.5	620.0	-0.24					
23	Dec-05	4.5	642.0	-0.18					
24	Jun-06	4.5	504.1	-0.58					
25	Nov-06	4.5	677.0	-0.07					
26	Jun-07	4.5	644.0	-0.17					
27	Nov-07	4.5	783.0	0.24					
28	Jun-08	4.5	920.0	0.64					
29	Nov-08	4.5	806.0	0.31					
30	Jun-09	4.5	924.0	0.66					
31	Nov-09	4.5	835.0	0.39					
32	Jun-10	4.5	841.0	0.41					
33	Nov-10	4.5	779.0	0.23					
34	Jun-11	4.5	742.0	0.12					

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

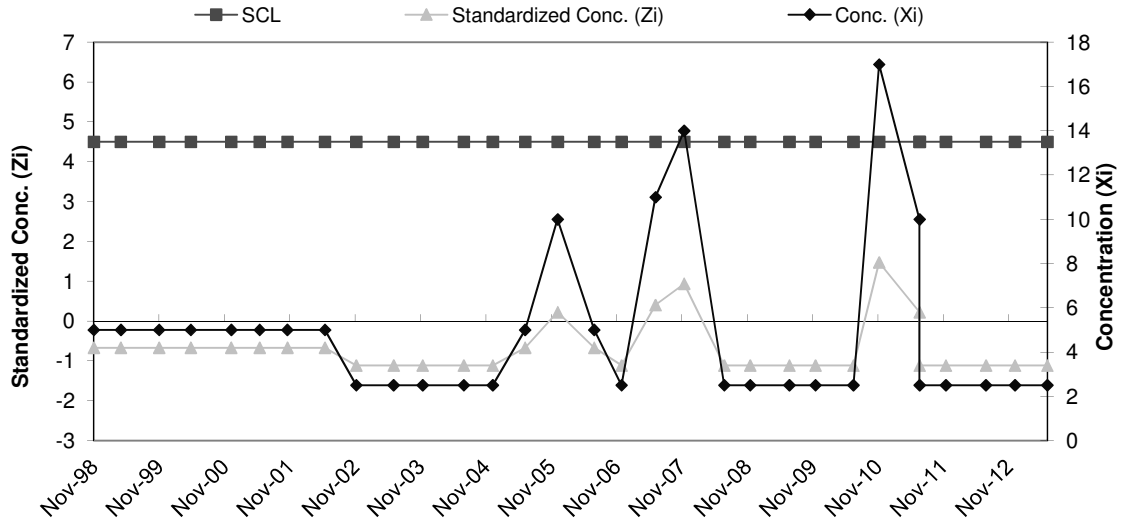


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-7 Cr

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

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Nov-98	4.5	5	-0.67	36	Nov-11	4.5	2.5	-1.12
10	Apr-99	4.5	5	-0.67	37	Jun-12	4.5	2.5	-1.12
11	Nov-99	4.5	5	-0.67	38	Dec-12	4.5	2.5	-1.12
12	Apr-00	4.5	5	-0.67	39	Jun-13	4.5	2.5	-1.12
13	Dec-00	4.5	5	-0.67					
14	May-01	4.5	5	-0.67					
15	Oct-01	4.5	5	-0.67					
16	May-02	4.5	5	-0.67					
17	Nov-02	4.5	2.5	-1.12					
18	Jun-03	4.5	2.5	-1.12					
19	Nov-03	4.5	2.5	-1.12					
20	Jun-04	4.5	2.5	-1.12					
21	Dec-04	4.5	2.5	-1.12					
22	Jun-05	4.5	5	-0.67					
23	Dec-05	4.5	10	0.22					
24	Jun-06	4.5	5	-0.67					
25	Nov-06	4.5	2.5	-1.12					
26	Jun-07	4.5	11	0.40					
27	Nov-07	4.5	14	0.94					
28	Jun-08	4.5	2.5	-1.12					
29	Nov-08	4.5	2.5	-1.12					
30	Jun-09	4.5	2.5	-1.12					
31	Nov-09	4.5	2.5	-1.12					
32	Jun-10	4.5	2.5	-1.12					
33	Nov-10	4.5	17	1.47					
34	Jun-11	4.5	10	0.22					
35	Jun-11	4.5	2.5	-1.12					

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

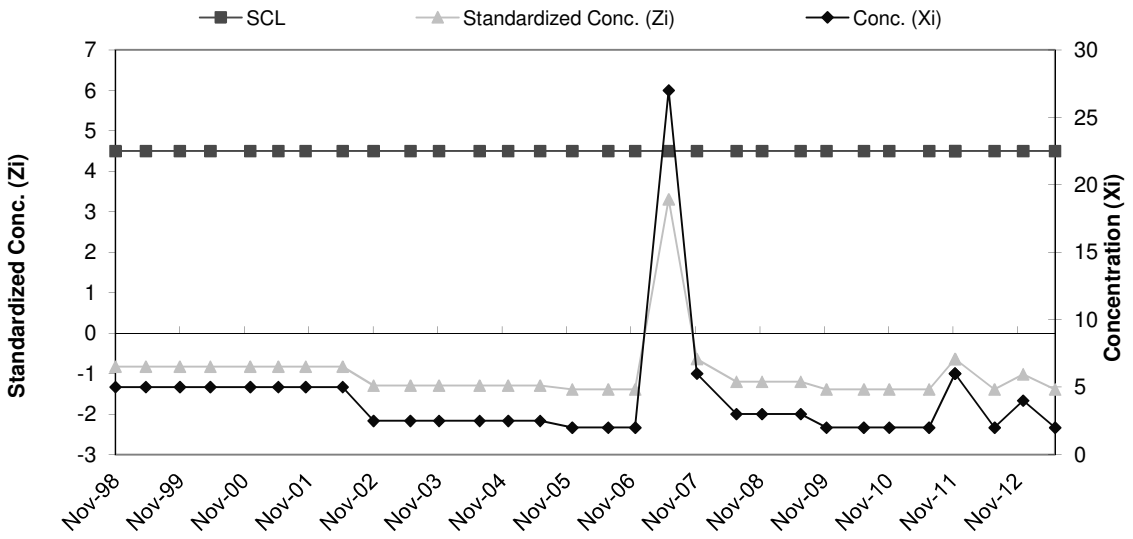


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-7 Cu

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

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Nov-98	4.5	5	-0.83	35	Nov-11	4.5	6	-0.64
10	Apr-99	4.5	5	-0.83	36	Jun-12	4.5	2	-1.39
11	Nov-99	4.5	5	-0.83	37	Dec-12	4.5	4	-1.02
12	Apr-00	4.5	5	-0.83	38	Jun-13	4.5	2	-1.39
13	Dec-00	4.5	5	-0.83					
14	May-01	4.5	5	-0.83					
15	Oct-01	4.5	5	-0.83					
16	May-02	4.5	5	-0.83					
17	Nov-02	4.5	2.5	-1.30					
18	Jun-03	4.5	2.5	-1.30					
19	Nov-03	4.5	2.5	-1.30					
20	Jun-04	4.5	2.5	-1.30					
21	Dec-04	4.5	2.5	-1.30					
22	Jun-05	4.5	2.5	-1.30					
23	Dec-05	4.5	2	-1.39					
24	Jun-06	4.5	2	-1.39					
25	Nov-06	4.5	2	-1.39					
26	Jun-07	4.5	27	3.31					
27	Nov-07	4.5	6	-0.64					
28	Jun-08	4.5	3	-1.20					
29	Nov-08	4.5	3	-1.20					
30	Jun-09	4.5	3	-1.20					
31	Nov-09	4.5	2	-1.39					
32	Jun-10	4.5	2	-1.39					
33	Nov-10	4.5	2	-1.39					
34	Jun-11	4.5	2	-1.39					
35	Nov-11	4.5	6	-0.64					

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

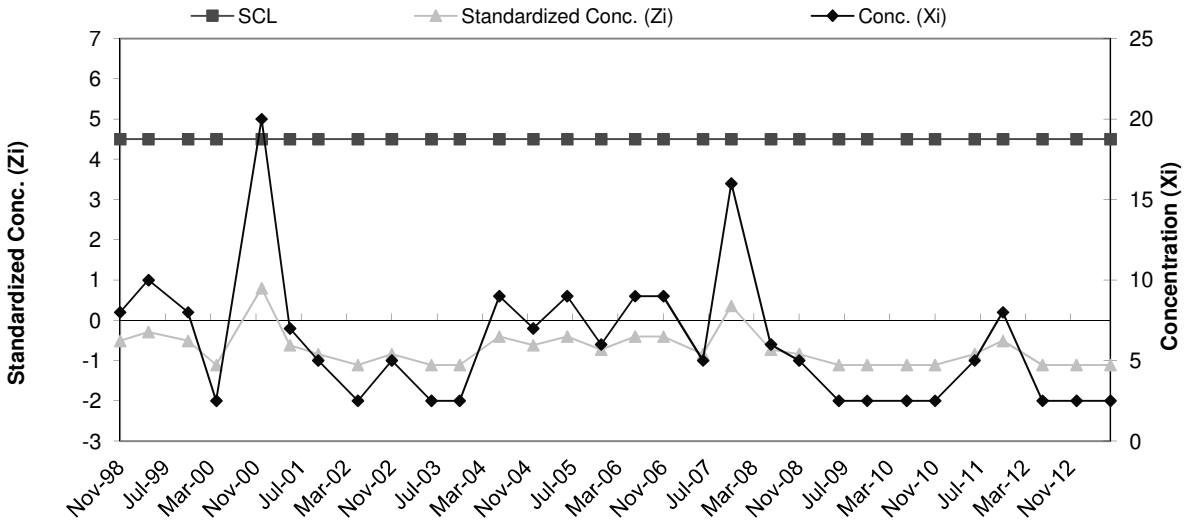


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-7 Ni

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

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Nov-98	4.5	8	-0.51	35	Nov-11	4.5	8	-0.51
10	Apr-99	4.5	10	-0.29	36	Jun-12	4.5	2.5	-1.11
11	Nov-99	4.5	8	-0.51	37	Dec-12	4.5	2.5	-1.11
12	Apr-00	4.5	2.5	-1.11	38	Jun-13	4.5	2.5	-1.11
13	Dec-00	4.5	20	0.79					
14	May-01	4.5	7	-0.62					
15	Oct-01	4.5	5	-0.84					
16	May-02	4.5	2.5	-1.11					
17	Nov-02	4.5	5	-0.84					
18	Jun-03	4.5	2.5	-1.11					
19	Nov-03	4.5	2.5	-1.11					
20	Jun-04	4.5	9	-0.40					
21	Dec-04	4.5	7	-0.62					
22	Jun-05	4.5	9	-0.40					
23	Dec-05	4.5	6	-0.73					
24	Jun-06	4.5	9	-0.40					
25	Nov-06	4.5	9	-0.40					
26	Jun-07	4.5	5	-0.84					
27	Nov-07	4.5	16	0.36					
28	Jun-08	4.5	6	-0.73					
29	Nov-08	4.5	5	-0.84					
30	Jun-09	4.5	2.5	-1.11					
31	Nov-09	4.5	2.5	-1.11					
32	Jun-10	4.5	2.5	-1.11					
33	Nov-10	4.5	2.5	-1.11					
34	Jun-11	4.5	5	-0.84					

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

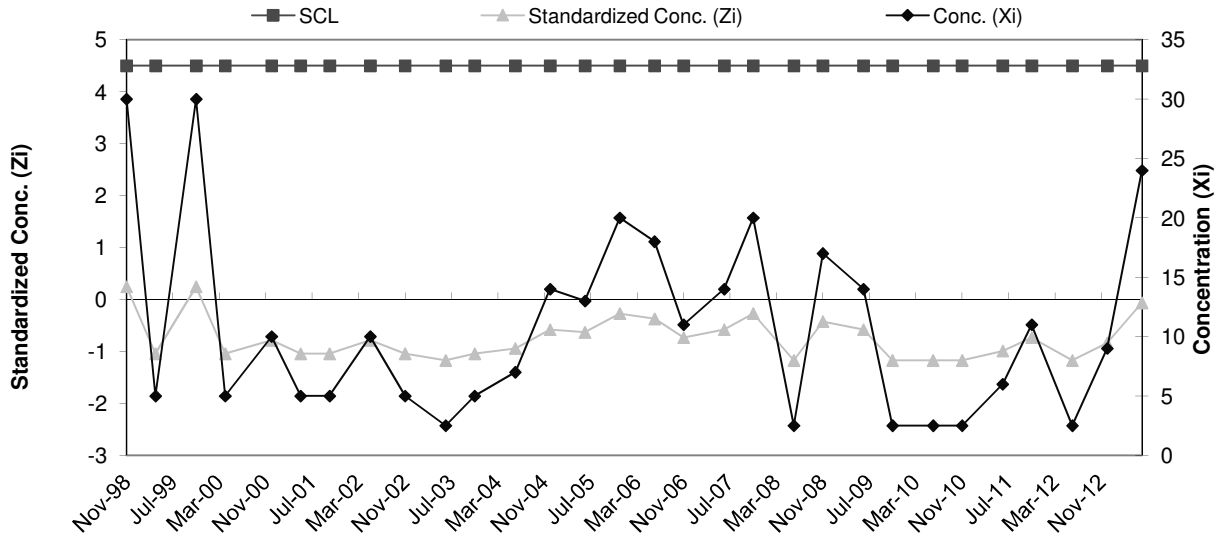


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-7 Zn

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

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Nov-98	4.5	30	0.24	35	Nov-11	4.5	11	-0.73
10	Apr-99	4.5	5	-1.04	36	Jun-12	4.5	2.5	-1.17
11	Nov-99	4.5	30	0.24	37	Dec-12	4.5	9	-0.84
12	Apr-00	4.5	5	-1.04	38	Jun-13	4.5	24	-0.06
13	Dec-00	4.5	10	-0.79					
14	May-01	4.5	5	-1.04					
15	Oct-01	4.5	5	-1.04					
16	May-02	4.5	10	-0.79					
17	Nov-02	4.5	5	-1.04					
18	Jun-03	4.5	2.5	-1.17					
19	Nov-03	4.5	5	-1.04					
20	Jun-04	4.5	7	-0.94					
21	Dec-04	4.5	14	-0.58					
22	Jun-05	4.5	13	-0.63					
23	Dec-05	4.5	20	-0.27					
24	Jun-06	4.5	18	-0.37					
25	Nov-06	4.5	11	-0.73					
26	Jun-07	4.5	14	-0.58					
27	Nov-07	4.5	20	-0.27					
28	Jun-08	4.5	2.5	-1.17					
29	Nov-08	4.5	17	-0.43					
30	Jun-09	4.5	14	-0.58					
31	Nov-09	4.5	2.5	-1.17					
32	Jun-10	4.5	2.5	-1.17					
33	Nov-10	4.5	2.5	-1.17					
34	Jun-11	4.5	6	-0.99					

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

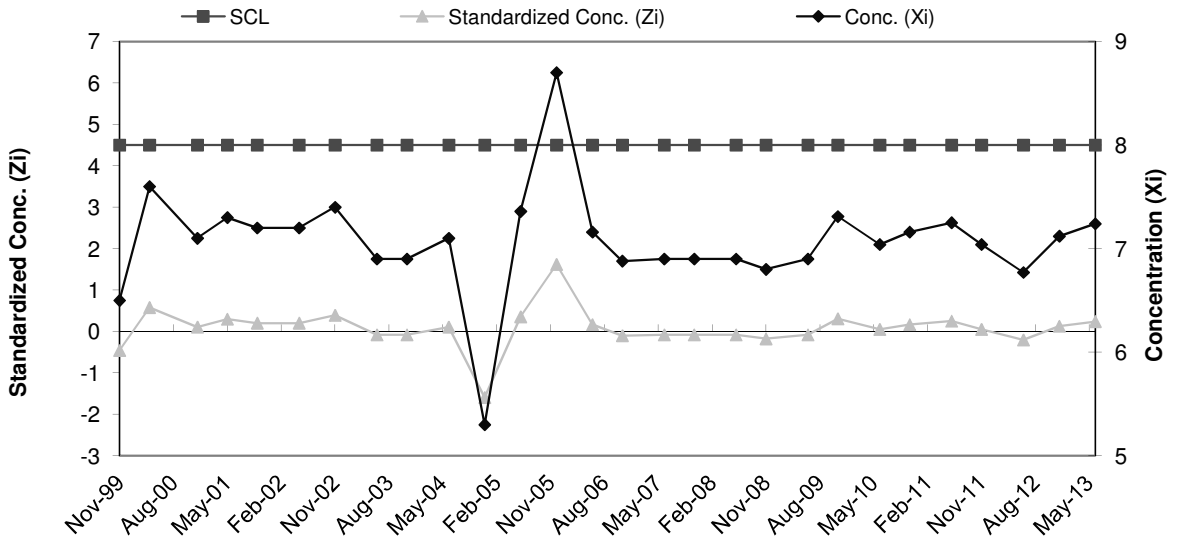


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-7 pH

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

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Nov-99	4.5	6.5	-0.46	33	Nov-11	4.5	7.0	0.05
10	Apr-00	4.5	7.6	0.58	34	Jun-12	4.5	6.8	-0.21
11	Dec-00	4.5	7.1	0.11	35	Dec-12	4.5	7.1	0.13
12	May-01	4.5	7.3	0.30	36	Jun-13	4.5	7.2	0.24
13	Oct-01	4.5	7.2	0.20					
14	May-02	4.5	7.2	0.20					
15	Nov-02	4.5	7.4	0.39					
16	Jun-03	4.5	6.9	-0.08					
17	Nov-03	4.5	6.9	-0.08					
18	Jun-04	4.5	7.1	0.11					
19	Dec-04	4.5	5.3	-1.60					
20	Jun-05	4.5	7.4	0.35					
21	Dec-05	4.5	8.7	1.62					
22	Jun-06	4.5	7.2	0.16					
23	Nov-06	4.5	6.9	-0.10					
24	Jun-07	4.5	6.9	-0.08					
25	Nov-07	4.5	6.9	-0.08					
26	Jun-08	4.5	6.9	-0.08					
27	Nov-08	4.5	6.8	-0.18					
28	Jun-09	4.5	6.9	-0.08					
29	Nov-09	4.5	7.3	0.30					
30	Jun-10	4.5	7.0	0.05					
31	Nov-10	4.5	7.2	0.16					
32	Jun-11	4.5	7.3	0.25					

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

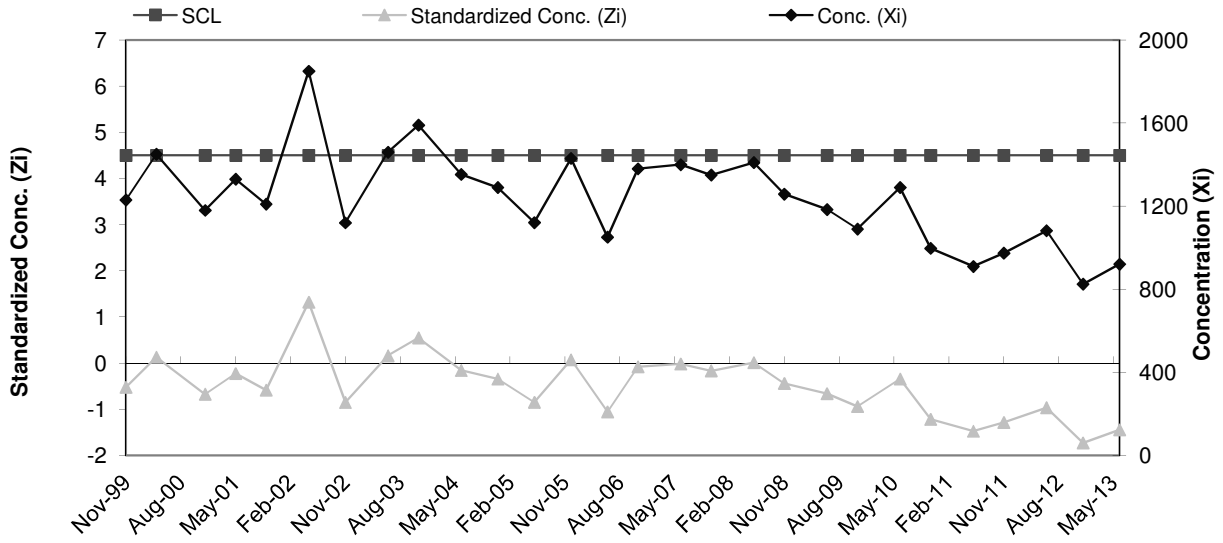


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-7 SpC

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

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Nov-99	4.5	1230.0	-0.52	33	Nov-11	4.5	974.0	-1.28
10	Apr-00	4.5	1450.0	0.13	34	Jun-12	4.5	1082.0	-0.96
11	Dec-00	4.5	1180.0	-0.67	35	Dec-12	4.5	825.0	-1.73
12	May-01	4.5	1330.0	-0.23	36	Jun-13	4.5	921.0	-1.44
13	Oct-01	4.5	1210.0	-0.58					
14	May-02	4.5	1850.0	1.32					
15	Nov-02	4.5	1120.0	-0.85					
16	Jun-03	4.5	1460.0	0.16					
17	Nov-03	4.5	1590.0	0.55					
18	Jun-04	4.5	1353.0	-0.16					
19	Dec-04	4.5	1290.0	-0.34					
20	Jun-05	4.5	1121.0	-0.85					
21	Dec-05	4.5	1430.0	0.07					
22	Jun-06	4.5	1051.0	-1.06					
23	Nov-06	4.5	1380.0	-0.08					
24	Jun-07	4.5	1400.0	-0.02					
25	Nov-07	4.5	1350.0	-0.17					
26	Jun-08	4.5	1410.0	0.01					
27	Nov-08	4.5	1258.0	-0.44					
28	Jun-09	4.5	1184.0	-0.66					
29	Nov-09	4.5	1090.0	-0.94					
30	Jun-10	4.5	1290.0	-0.34					
31	Nov-10	4.5	997.0	-1.22					
32	Jun-11	4.5	910.0	-1.47					

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

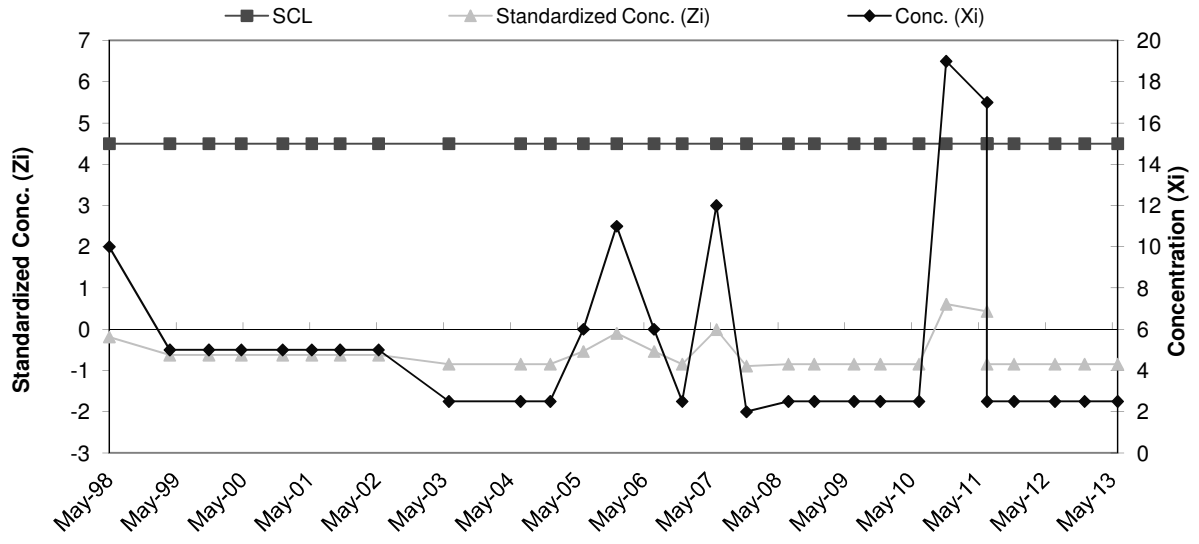


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-9 Cr

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

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-98	4.5	10	-0.19	34	Nov-11	4.5	2.5	-0.85
10	Apr-99	4.5	5	-0.63	35	Jun-12	4.5	2.5	-0.85
11	Nov-99	4.5	5	-0.63	36	Dec-12	4.5	2.5	-0.85
12	Apr-00	4.5	5	-0.63	37	Jun-13	4.5	2.5	-0.85
13	Dec-00	4.5	5	-0.63					
14	May-01	4.5	5	-0.63					
15	Oct-01	4.5	5	-0.63					
16	May-02	4.5	5	-0.63					
17	Jun-03	4.5	2.5	-0.85					
18	Jun-04	4.5	2.5	-0.85					
19	Dec-04	4.5	2.5	-0.85					
20	Jun-05	4.5	6	-0.54					
21	Dec-05	4.5	11	-0.10					
22	Jun-06	4.5	6	-0.54					
23	Nov-06	4.5	2.5	-0.85					
24	Jun-07	4.5	12	-0.01					
25	Nov-07	4.5	2	-0.89					
26	Jul-08	4.5	2.5	-0.85					
27	Nov-08	4.5	2.5	-0.85					
28	Jun-09	4.5	2.5	-0.85					
29	Nov-09	4.5	2.5	-0.85					
30	Jun-10	4.5	2.5	-0.85					
31	Nov-10	4.5	19	0.61					
32	Jun-11	4.5	17	0.43					
33	Jun-11	4.5	2.5	-0.85					

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

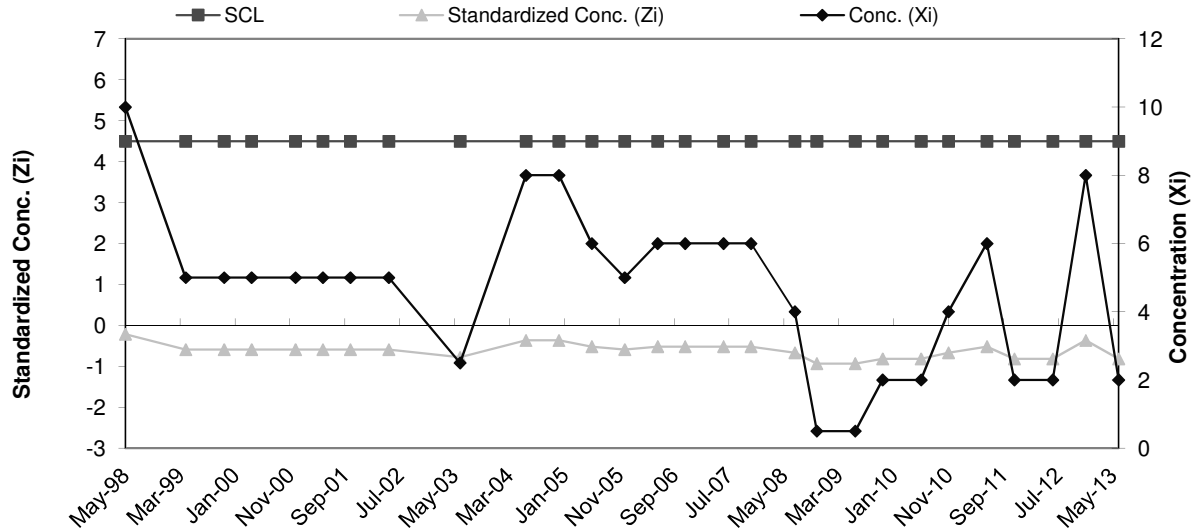


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-9 Cu

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

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-98	4.5	10	-0.22	33	Nov-11	4.5	2	-0.82
10	Apr-99	4.5	5	-0.59	34	Jun-12	4.5	2	-0.82
11	Nov-99	4.5	5	-0.59	35	Dec-12	4.5	8	-0.37
12	Apr-00	4.5	5	-0.59	36	Jun-13	4.5	2	-0.82
13	Dec-00	4.5	5	-0.59					
14	May-01	4.5	5	-0.59					
15	Oct-01	4.5	5	-0.59					
16	May-02	4.5	5	-0.59					
17	Jun-03	4.5	2.5	-0.78					
18	Jun-04	4.5	8	-0.37					
19	Dec-04	4.5	8	-0.37					
20	Jun-05	4.5	6	-0.52					
21	Dec-05	4.5	5	-0.59					
22	Jun-06	4.5	6	-0.52					
23	Nov-06	4.5	6	-0.52					
24	Jun-07	4.5	6	-0.52					
25	Nov-07	4.5	6	-0.52					
26	Jul-08	4.5	4	-0.67					
27	Nov-08	4.5	0.5	-0.93					
28	Jun-09	4.5	0.5	-0.93					
29	Nov-09	4.5	2	-0.82					
30	Jun-10	4.5	2	-0.82					
31	Nov-10	4.5	4	-0.67					
32	Jun-11	4.5	6	-0.52					

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

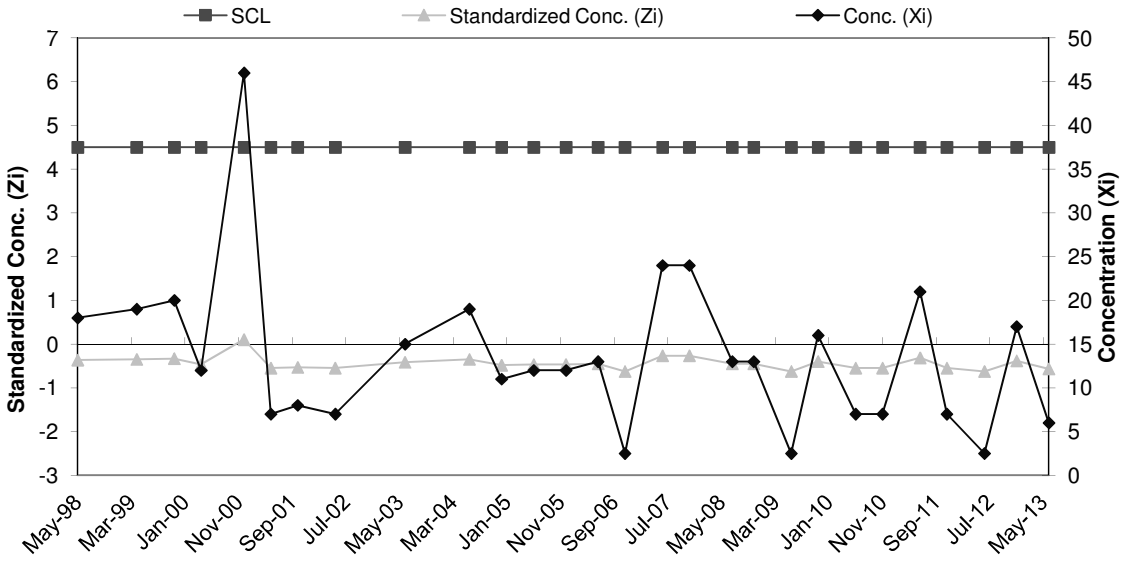


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-9 Ni

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

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-98	4.5	18	-0.36	33	Nov-11	4.5	7	-0.55
10	Apr-99	4.5	19	-0.35	34	Jun-12	4.5	2.5	-0.62
11	Nov-99	4.5	20	-0.33	35	Dec-12	4.5	17	-0.38
12	Apr-00	4.5	12	-0.46	36	Jun-13	4.5	6	-0.57
13	Dec-00	4.5	46	0.10					
14	May-01	4.5	7	-0.55					
15	Oct-01	4.5	8	-0.53					
16	May-02	4.5	7	-0.55					
17	Jun-03	4.5	15	-0.41					
18	Jun-04	4.5	19	-0.35					
19	Dec-04	4.5	11	-0.48					
20	Jun-05	4.5	12	-0.46					
21	Dec-05	4.5	12	-0.46					
22	Jun-06	4.5	13	-0.45					
23	Nov-06	4.5	2.5	-0.62					
24	Jun-07	4.5	24	-0.26					
25	Nov-07	4.5	24	-0.26					
26	Jul-08	4.5	13	-0.45					
27	Nov-08	4.5	13	-0.45					
28	Jun-09	4.5	2.5	-0.62					
29	Nov-09	4.5	16	-0.40					
30	Jun-10	4.5	7	-0.55					
31	Nov-10	4.5	7	-0.55					
32	Jun-11	4.5	21	-0.31					

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

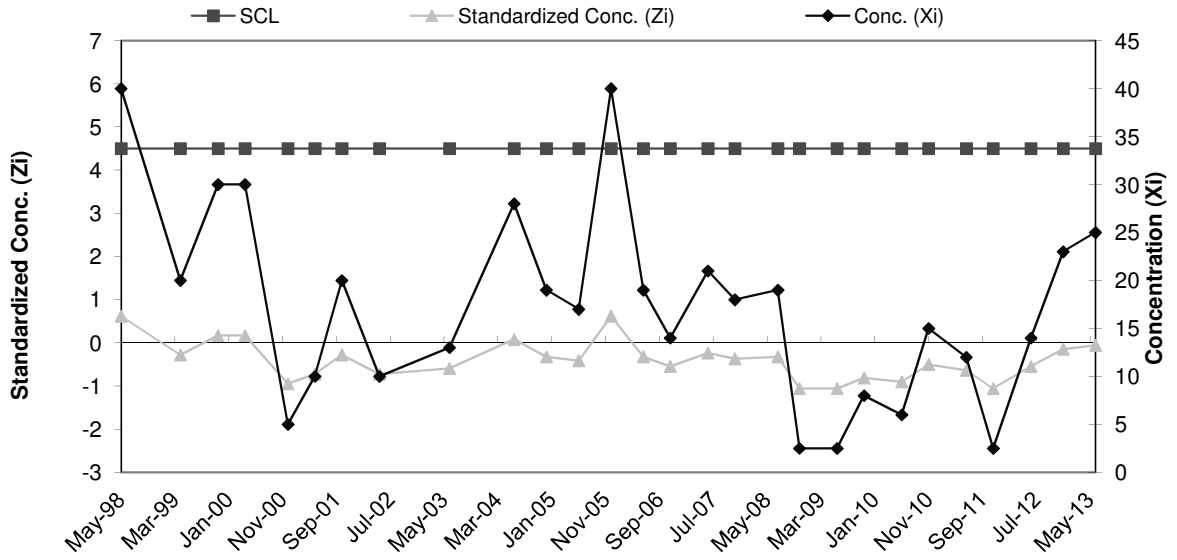


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-9 Zn

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

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-98	4.5	40	0.62	33	Nov-11	4.5	2.5	-1.06
10	Apr-99	4.5	20	-0.28	34	Jun-12	4.5	14	-0.55
11	Nov-99	4.5	30	0.17	35	Dec-12	4.5	23	-0.14
12	Apr-00	4.5	30	0.17	36	Jun-13	4.5	25	-0.06
13	Dec-00	4.5	5	-0.95					
14	May-01	4.5	10	-0.73					
15	Oct-01	4.5	20	-0.28					
16	May-02	4.5	10	-0.73					
17	Jun-03	4.5	13	-0.59					
18	Jun-04	4.5	28	0.08					
19	Dec-04	4.5	19	-0.32					
20	Jun-05	4.5	17	-0.41					
21	Dec-05	4.5	40	0.62					
22	Jun-06	4.5	19	-0.32					
23	Nov-06	4.5	14	-0.55					
24	Jun-07	4.5	21	-0.23					
25	Nov-07	4.5	18	-0.37					
26	Jul-08	4.5	19	-0.32					
27	Nov-08	4.5	2.5	-1.06					
28	Jun-09	4.5	2.5	-1.06					
29	Nov-09	4.5	8	-0.82					
30	Jun-10	4.5	6	-0.90					
31	Nov-10	4.5	15	-0.50					
32	Jun-11	4.5	12	-0.64					

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

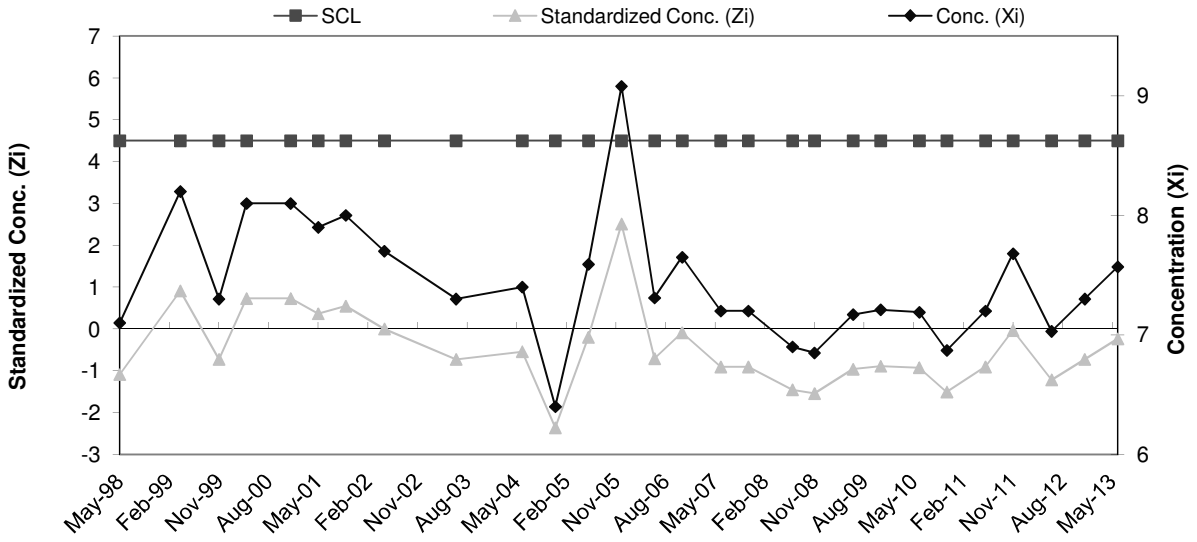


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-9 pH

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

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-98	4.5	6.6	-1.09	33	Nov-11	4.5	7.2	-0.04
10	Apr-99	4.5	7.7	0.91	34	Jun-12	4.5	6.5	-1.22
11	Nov-99	4.5	6.8	-0.73	35	Dec-12	4.5	6.8	-0.73
12	Apr-00	4.5	7.6	0.73	36	Jun-13	4.5	7.1	-0.24
13	Dec-00	4.5	7.6	0.73					
14	May-01	4.5	7.4	0.36					
15	Oct-01	4.5	7.5	0.55					
16	May-02	4.5	7.2	0.00					
17	Jun-03	4.5	6.8	-0.73					
18	Jun-04	4.5	6.9	-0.55					
19	Dec-04	4.5	5.9	-2.36					
20	Jun-05	4.5	7.1	-0.20					
21	Dec-05	4.5	8.6	2.51					
22	Jun-06	4.5	6.8	-0.71					
23	Nov-06	4.5	7.2	-0.09					
24	Jun-07	4.5	6.7	-0.91					
25	Nov-07	4.5	6.7	-0.91					
26	Jul-08	4.5	6.4	-1.45					
27	Nov-08	4.5	6.4	-1.54					
28	Jun-09	4.5	6.7	-0.96					
29	Nov-09	4.5	6.7	-0.89					
30	Jun-10	4.5	6.7	-0.93					
31	Nov-10	4.5	6.4	-1.51					
32	Jun-11	4.5	6.7	-0.91					

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

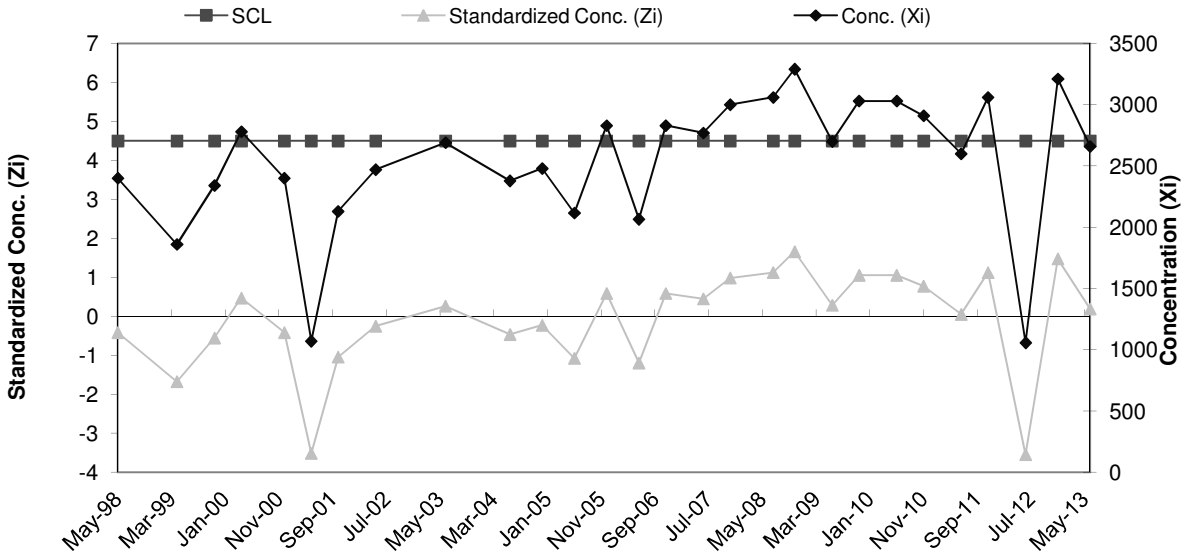


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-9 SpC

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

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-98	4.5	2400	-0.42	33	Nov-11	4.5	3060	1.12
10	Apr-99	4.5	1860	-1.68	34	Jun-12	4.5	1057	-3.55
11	Nov-99	4.5	2340	-0.56	35	Dec-12	4.5	3210	1.47
12	Apr-00	4.5	2780	0.47	36	Jun-13	4.5	2660	0.19
13	Dec-00	4.5	2400	-0.42					
14	May-01	4.5	1070	-3.52					
15	Oct-01	4.5	2130	-1.05					
16	May-02	4.5	2470	-0.25					
17	Jun-03	4.5	2690	0.26					
18	Jun-04	4.5	2379	-0.47					
19	Dec-04	4.5	2480	-0.23					
20	Jun-05	4.5	2116	-1.08					
21	Dec-05	4.5	2830	0.59					
22	Jun-06	4.5	2065	-1.20					
23	Nov-06	4.5	2830	0.59					
24	Jun-07	4.5	2770	0.45					
25	Nov-07	4.5	3000	0.98					
26	Jul-08	4.5	3060	1.12					
27	Nov-08	4.5	3290	1.66					
28	Jun-09	4.5	2700	0.28					
29	Nov-09	4.5	3030	1.05					
30	Jun-10	4.5	3030	1.05					
31	Nov-10	4.5	2910	0.77					
32	Jun-11	4.5	2600	0.05					

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

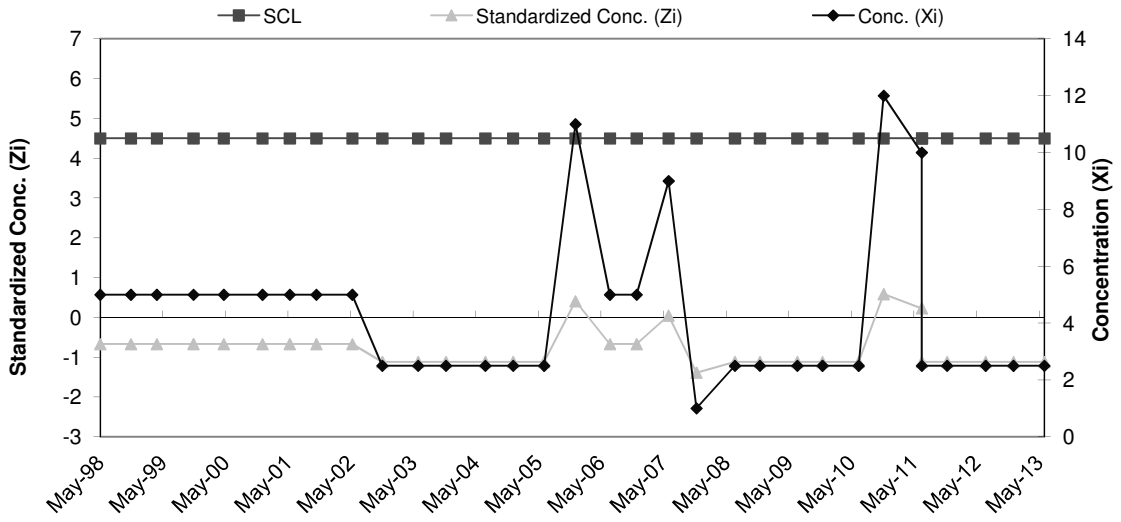


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-18a Cr

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

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-98	4.5	5	-0.67	37	Nov-11	4.5	2.5	-1.12
10	Nov-98	4.5	5	-0.67	38	Jun-12	4.5	2.5	-1.12
11	Apr-99	4.5	5	-0.67	39	Dec-12	4.5	2.5	-1.12
12	Nov-99	4.5	5	-0.67	40	Jun-13	4.5	2.5	-1.12
13	Apr-00	4.5	5	-0.67					
14	Dec-00	4.5	5	-0.67					
15	May-01	4.5	5	-0.67					
16	Oct-01	4.5	5	-0.67					
17	May-02	4.5	5	-0.67					
18	Nov-02	4.5	2.5	-1.12					
19	Jun-03	4.5	2.5	-1.12					
20	Nov-03	4.5	2.5	-1.12					
21	Jun-04	4.5	2.5	-1.12					
22	Dec-04	4.5	2.5	-1.12					
23	Jun-05	4.5	2.5	-1.12					
24	Dec-05	4.5	11	0.41					
25	Jun-06	4.5	5	-0.67					
26	Nov-06	4.5	5	-0.67					
27	Jun-07	4.5	9	0.05					
28	Nov-07	4.5	1	-1.39					
29	Jun-08	4.5	2.5	-1.12					
30	Nov-08	4.5	2.5	-1.12					
31	Jun-09	4.5	2.5	-1.12					
32	Nov-09	4.5	2.5	-1.12					
33	Jun-10	4.5	2.5	-1.12					
34	Nov-10	4.5	12	0.59					
35	Jun-11	4.5	10	0.23					
36	Jun-11	4.5	2.5	-1.12					

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

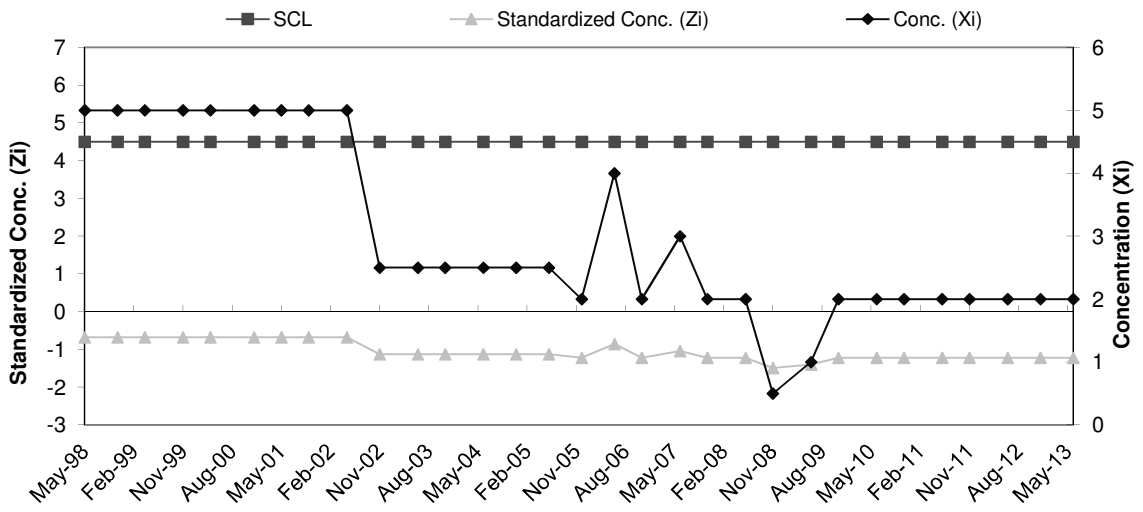


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-18a Cu

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

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-98	4.5	5	-0.68	36	Nov-11	4.5	2	-1.22
10	Nov-98	4.5	5	-0.68	37	Jun-12	4.5	2	-1.22
11	Apr-99	4.5	5	-0.68	38	Dec-12	4.5	2	-1.22
12	Nov-99	4.5	5	-0.68	39	Jun-13	4.5	2	-1.22
13	Apr-00	4.5	5	-0.68					
14	Dec-00	4.5	5	-0.68					
15	May-01	4.5	5	-0.68					
16	Oct-01	4.5	5	-0.68					
17	May-02	4.5	5	-0.68					
18	Nov-02	4.5	2.5	-1.13					
19	Jun-03	4.5	2.5	-1.13					
20	Nov-03	4.5	2.5	-1.13					
21	Jun-04	4.5	2.5	-1.13					
22	Dec-04	4.5	2.5	-1.13					
23	Jun-05	4.5	2.5	-1.13					
24	Dec-05	4.5	2	-1.22					
25	Jun-06	4.5	4	-0.86					
26	Nov-06	4.5	2	-1.22					
27	Jun-07	4.5	3	-1.04					
28	Nov-07	4.5	2	-1.22					
29	Jun-08	4.5	2	-1.22					
30	Nov-08	4.5	0.5	-1.49					
31	Jun-09	4.5	1	-1.40					
32	Nov-09	4.5	2	-1.22					
33	Jun-10	4.5	2	-1.22					
34	Nov-10	4.5	2	-1.22					
35	Jun-11	4.5	2	-1.22					

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

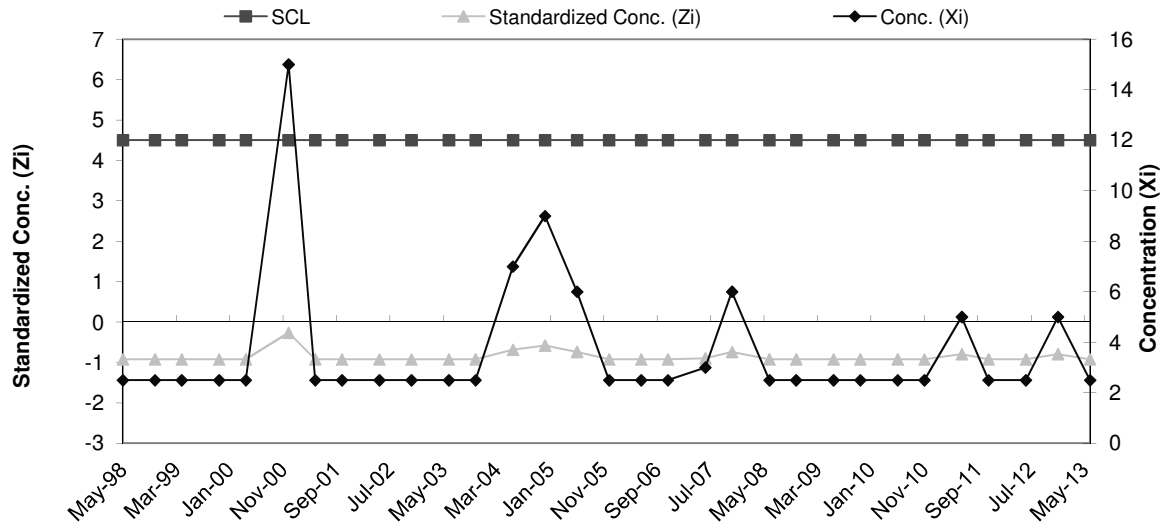


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-18a Ni

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

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-98	4.5	2.5	-0.92	36	Nov-11	4.5	2.5	-0.92
10	Nov-98	4.5	2.5	-0.92	37	Jun-12	4.5	2.5	-0.92
11	Apr-99	4.5	2.5	-0.92	38	Dec-12	4.5	5	-0.79
12	Nov-99	4.5	2.5	-0.92	39	Jun-13	4.5	2.5	-0.92
13	Apr-00	4.5	2.5	-0.92					
14	Dec-00	4.5	15	-0.26					
15	May-01	4.5	2.5	-0.92					
16	Oct-01	4.5	2.5	-0.92					
17	May-02	4.5	2.5	-0.92					
18	Nov-02	4.5	2.5	-0.92					
19	Jun-03	4.5	2.5	-0.92					
20	Nov-03	4.5	2.5	-0.92					
21	Jun-04	4.5	7	-0.69					
22	Dec-04	4.5	9	-0.58					
23	Jun-05	4.5	6	-0.74					
24	Dec-05	4.5	2.5	-0.92					
25	Jun-06	4.5	2.5	-0.92					
26	Nov-06	4.5	2.5	-0.92					
27	Jun-07	4.5	3	-0.90					
28	Nov-07	4.5	6	-0.74					
29	Jun-08	4.5	2.5	-0.92					
30	Nov-08	4.5	2.5	-0.92					
31	Jun-09	4.5	2.5	-0.92					
32	Nov-09	4.5	2.5	-0.92					
33	Jun-10	4.5	2.5	-0.92					
34	Nov-10	4.5	2.5	-0.92					
35	Jun-11	4.5	5	-0.79					

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

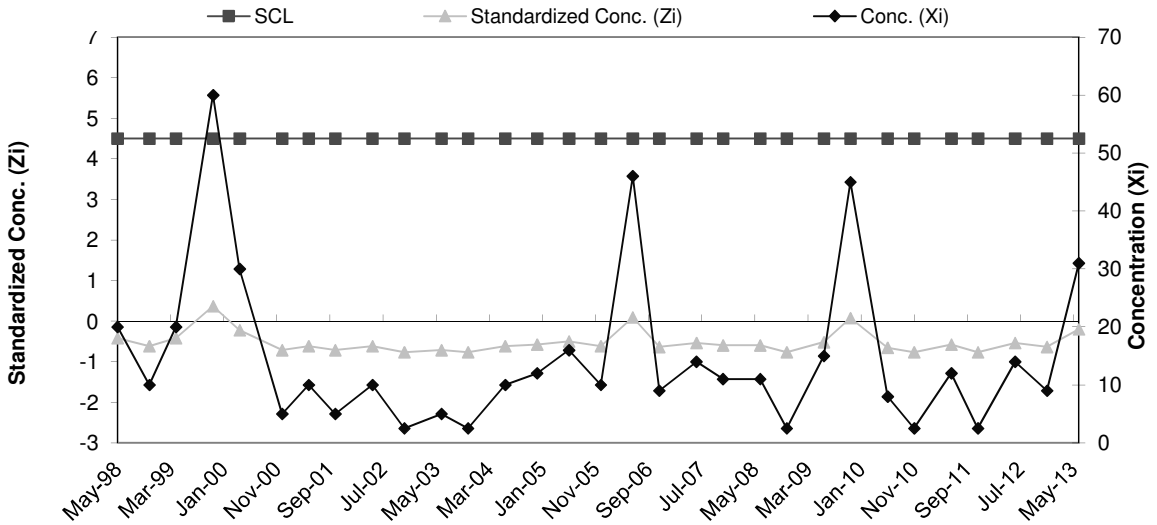


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-18a Zn

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

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-98	4.5	20	-0.42	36	Nov-11	4.5	2.5	-0.76
10	Nov-98	4.5	10	-0.62	37	Jun-12	4.5	14	-0.54
11	Apr-99	4.5	20	-0.42	38	Dec-12	4.5	9	-0.64
12	Nov-99	4.5	60	0.37	39	Jun-13	4.5	31	-0.20
13	Apr-00	4.5	30	-0.22					
14	Dec-00	4.5	5	-0.72					
15	May-01	4.5	10	-0.62					
16	Oct-01	4.5	5	-0.72					
17	May-02	4.5	10	-0.62					
18	Nov-02	4.5	2.5	-0.76					
19	Jun-03	4.5	5	-0.72					
20	Nov-03	4.5	2.5	-0.76					
21	Jun-04	4.5	10	-0.62					
22	Dec-04	4.5	12	-0.58					
23	Jun-05	4.5	16	-0.50					
24	Dec-05	4.5	10	-0.62					
25	Jun-06	4.5	46	0.09					
26	Nov-06	4.5	9	-0.64					
27	Jun-07	4.5	14	-0.54					
28	Nov-07	4.5	11	-0.60					
29	Jun-08	4.5	11	-0.60					
30	Nov-08	4.5	2.5	-0.76					
31	Jun-09	4.5	15	-0.52					
32	Nov-09	4.5	45	0.07					
33	Jun-10	4.5	8	-0.66					
34	Nov-10	4.5	2.5	-0.76					
35	Jun-11	4.5	12	-0.58					

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

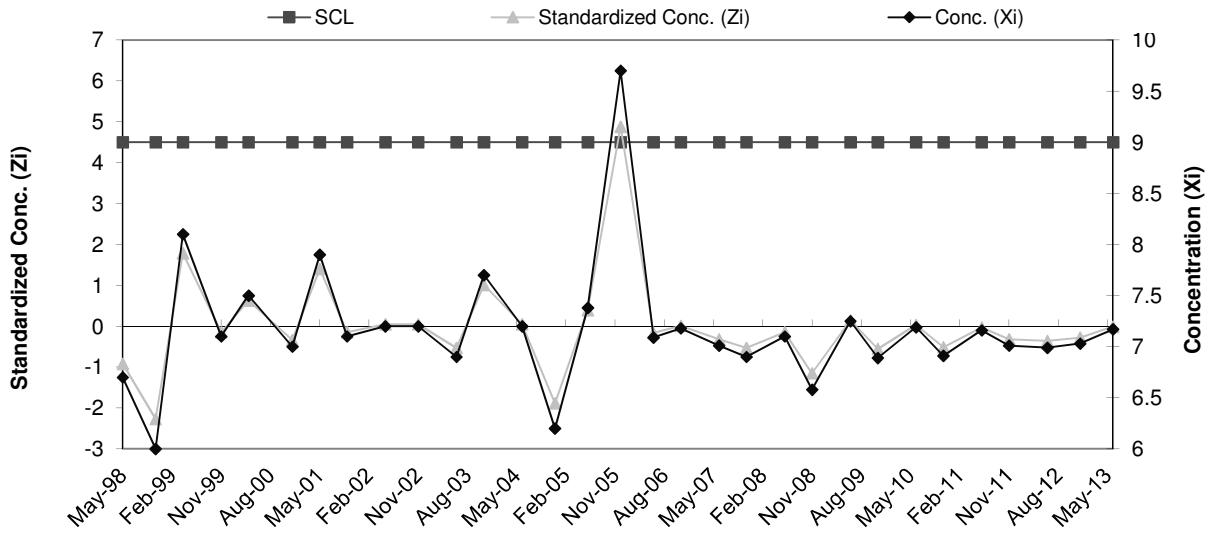


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-18a pH

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

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-98	4.5	6.7	-0.92	36	Nov-11	4.5	7.0	-0.32
10	Nov-98	4.5	6.0	-2.27	37	Jun-12	4.5	7.0	-0.36
11	Apr-99	4.5	8.1	1.79	38	Dec-12	4.5	7.0	-0.28
12	Nov-99	4.5	7.1	-0.14	39	Jun-13	4.5	7.2	-0.01
13	Apr-00	4.5	7.5	0.63					
14	Dec-00	4.5	7.0	-0.34					
15	May-01	4.5	7.9	1.40					
16	Oct-01	4.5	7.1	-0.14					
17	May-02	4.5	7.2	0.05					
18	Nov-02	4.5	7.2	0.05					
19	Jun-03	4.5	6.9	-0.53					
20	Nov-03	4.5	7.7	1.01					
21	Jun-04	4.5	7.2	0.05					
22	Dec-04	4.5	6.2	-1.88					
23	Jun-05	4.5	7.4	0.40					
24	Dec-05	4.5	9.7	4.88					
25	Jun-06	4.5	7.1	-0.16					
26	Nov-06	4.5	7.2	0.01					
27	Jun-07	4.5	7.0	-0.32					
28	Nov-07	4.5	6.9	-0.53					
29	Jun-08	4.5	7.1	-0.14					
30	Nov-08	4.5	6.6	-1.15					
31	Jun-09	4.5	7.3	0.14					
32	Nov-09	4.5	6.9	-0.55					
33	Jun-10	4.5	7.2	0.03					
34	Nov-10	4.5	6.9	-0.51					
35	Jun-11	4.5	7.2	-0.03					

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

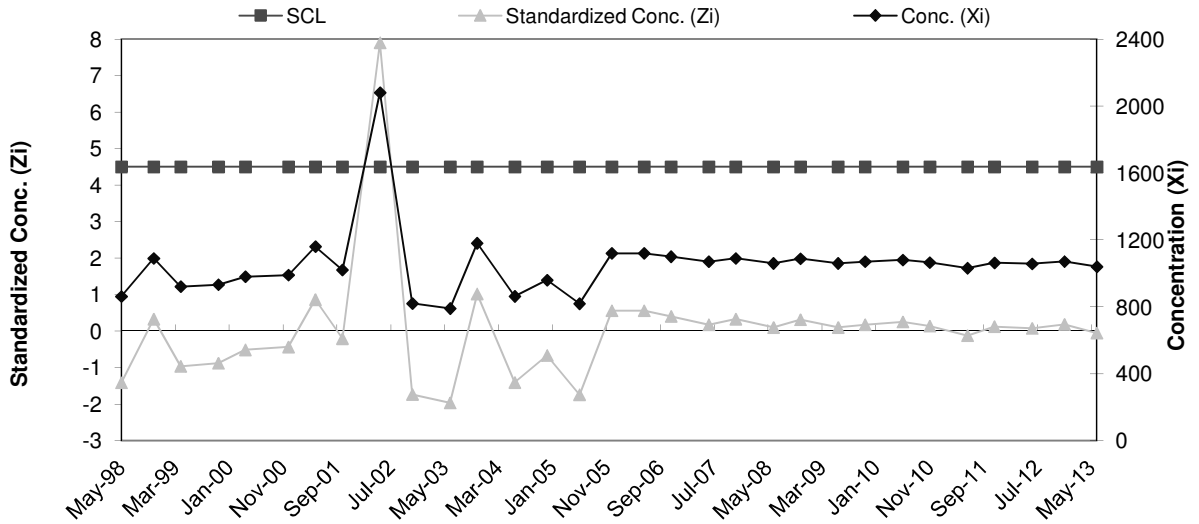


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-18a SpC

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

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-98	4.5	862	-1.41	36	Nov-11	4.5	1063	0.12
10	Nov-98	4.5	1090.0	0.33	37	Jun-12	4.5	1057	0.08
11	Apr-99	4.5	921	-0.96	38	Dec-12	4.5	1071	0.19
12	Nov-99	4.5	932	-0.88	39	Jun-13	4.5	1040	-0.05
13	Apr-00	4.5	980	-0.51					
14	Dec-00	4.5	990.0	-0.43					
15	May-01	4.5	1160	0.87					
16	Oct-01	4.5	1020	-0.20					
17	May-02	4.5	2080	7.90					
18	Nov-02	4.5	820	-1.73					
19	Jun-03	4.5	790	-1.96					
20	Nov-03	4.5	1180	1.02					
21	Jun-04	4.5	863	-1.40					
22	Dec-04	4.5	960	-0.66					
23	Jun-05	4.5	819	-1.74					
24	Dec-05	4.5	1120	0.56					
25	Jun-06	4.5	1120	0.56					
26	Nov-06	4.5	1100	0.41					
27	Jun-07	4.5	1070	0.18					
28	Nov-07	4.5	1090	0.33					
29	Jun-08	4.5	1060	0.10					
30	Nov-08	4.5	1088	0.32					
31	Jun-09	4.5	1060	0.10					
32	Nov-09	4.5	1070	0.18					
33	Jun-10	4.5	1080	0.25					
34	Nov-10	4.5	1065	0.14					
35	Jun-11	4.5	1031	-0.12					

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

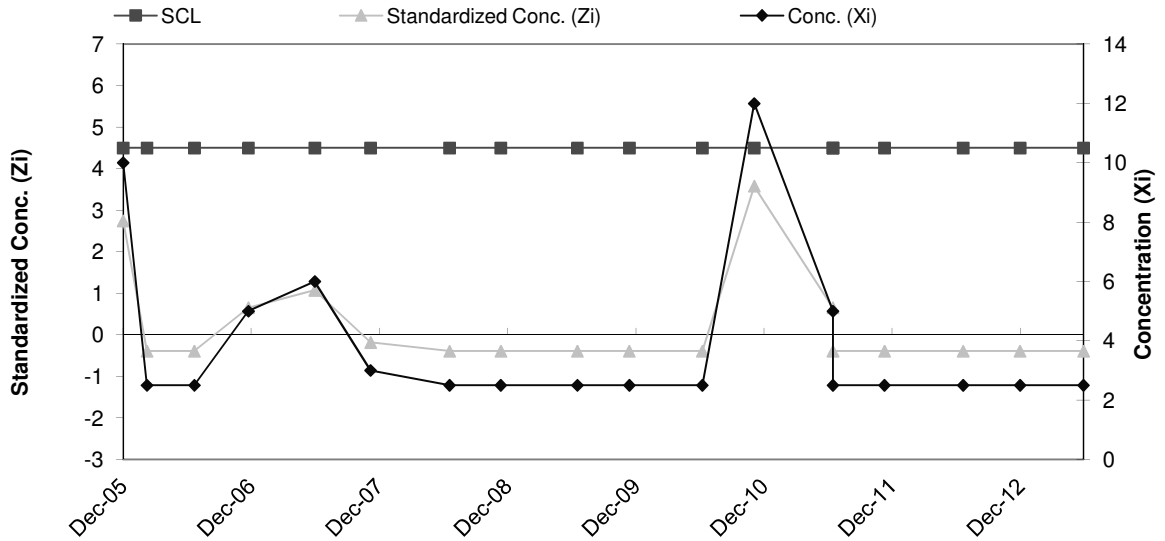


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-19a Cr

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

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

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

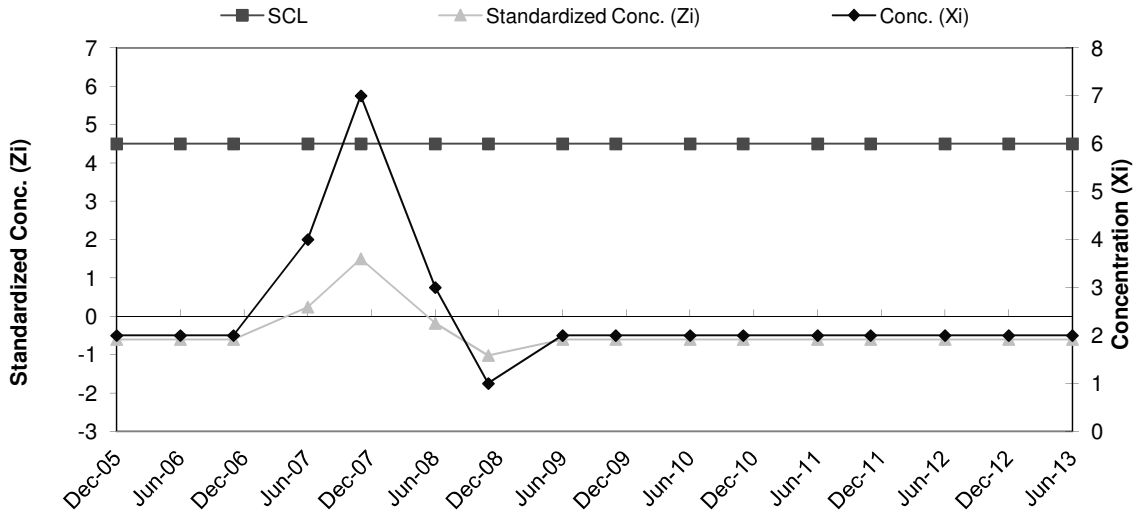


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-19a Cu

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

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

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

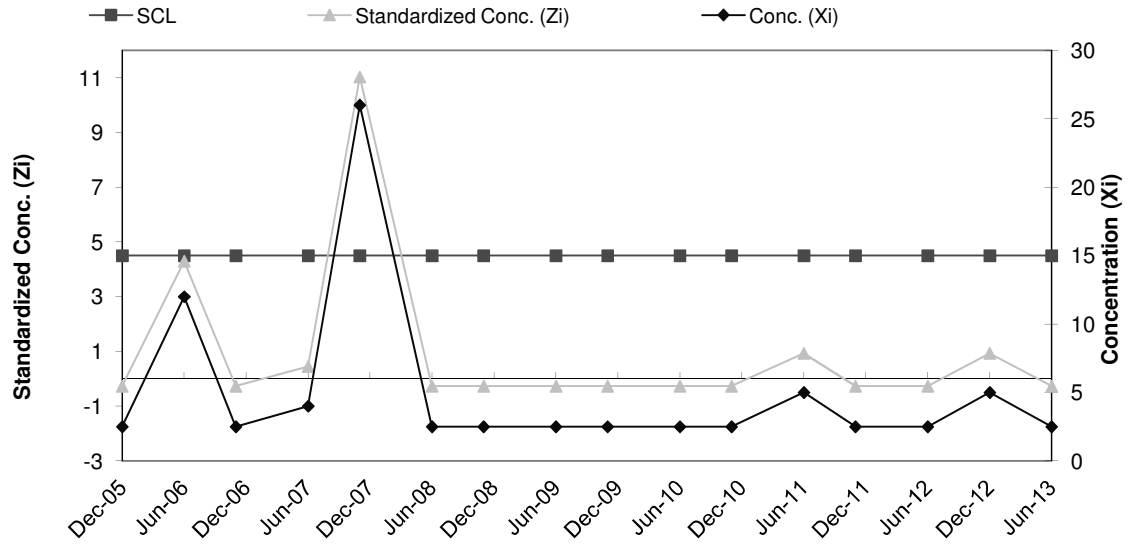


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-19a Ni

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

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

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

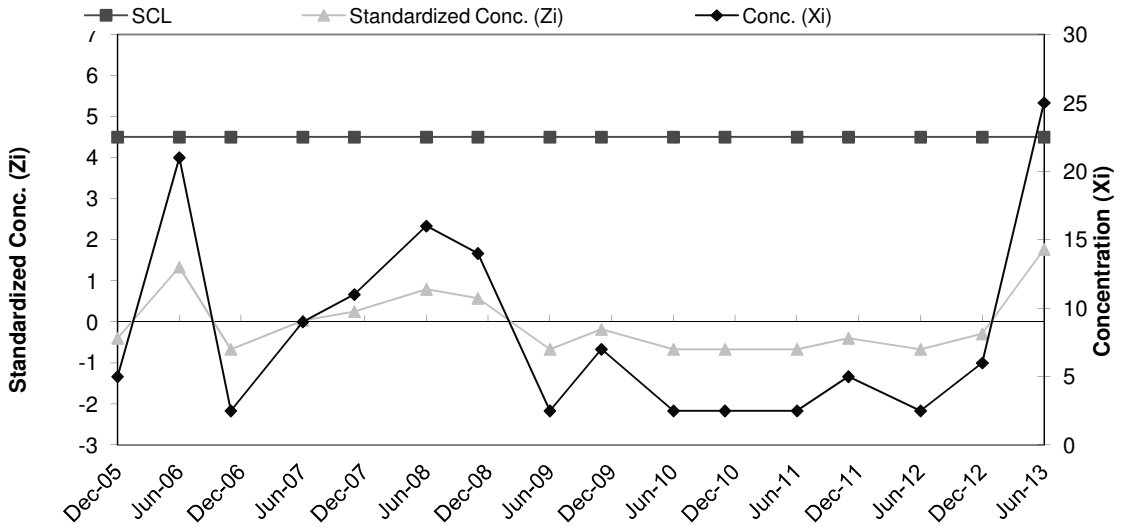


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-19a Zn

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

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Dec-05	4.5	5	-0.40
10	Jun-06	4.5	21	1.33
11	Nov-06	4.5	2.5	-0.67
12	Jun-07	4.5	9	0.03
13	Nov-07	4.5	11	0.25
14	Jun-08	4.5	16	0.79
15	Nov-08	4.5	14	0.57
16	Jun-09	4.5	2.5	-0.67
17	Nov-09	4.5	7	-0.18
18	Jun-10	4.5	2.5	-0.67
19	Nov-10	4.5	2.5	-0.67
20	Jun-11	4.5	2.5	-0.67
21	Nov-11	4.5	5	-0.40
22	Jun-12	4.5	2.5	-0.67
23	Dec-12	4.5	6	-0.29
24	Jun-13	4.5	25	1.77

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

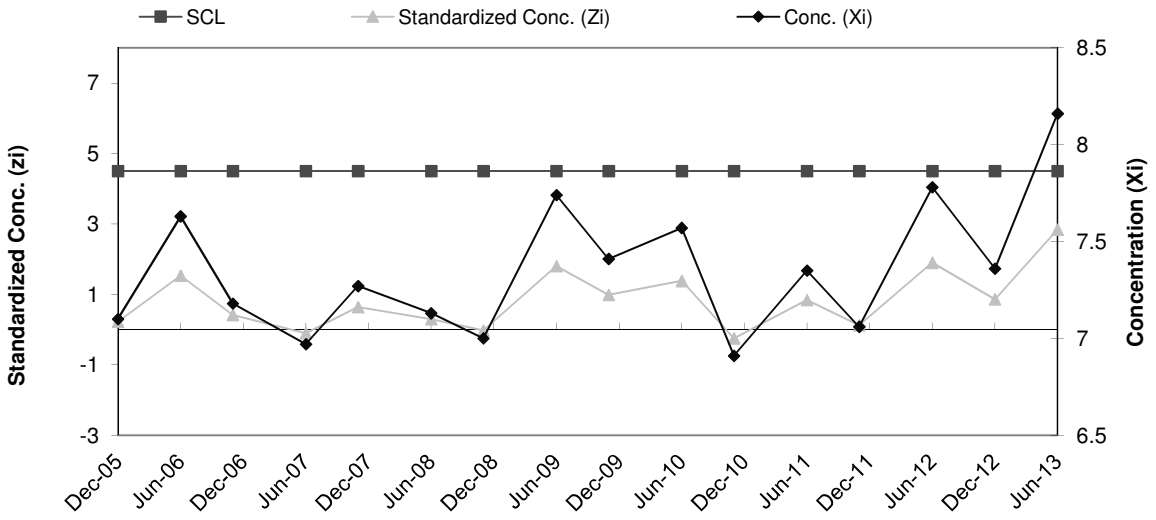


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-19a pH

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

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Dec-05	4.5	7.1	0.22
10	Jun-06	4.5	7.6	1.53
11	Nov-06	4.5	7.2	0.42
12	Jun-07	4.5	7.0	-0.10
13	Nov-07	4.5	7.3	0.64
14	Jun-08	4.5	7.1	0.29
15	Nov-08	4.5	7.0	-0.03
16	Jun-09	4.5	7.7	1.80
17	Nov-09	4.5	7.4	0.99
18	Jun-10	4.5	7.6	1.38
19	Nov-10	4.5	6.9	-0.25
20	Jun-11	4.5	7.4	0.84
21	Nov-11	4.5	7.1	0.12
22	Jun-12	4.5	7.8	1.90
23	Dec-12	4.5	7.4	0.86
24	Jun-13	4.5	8.2	2.84

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

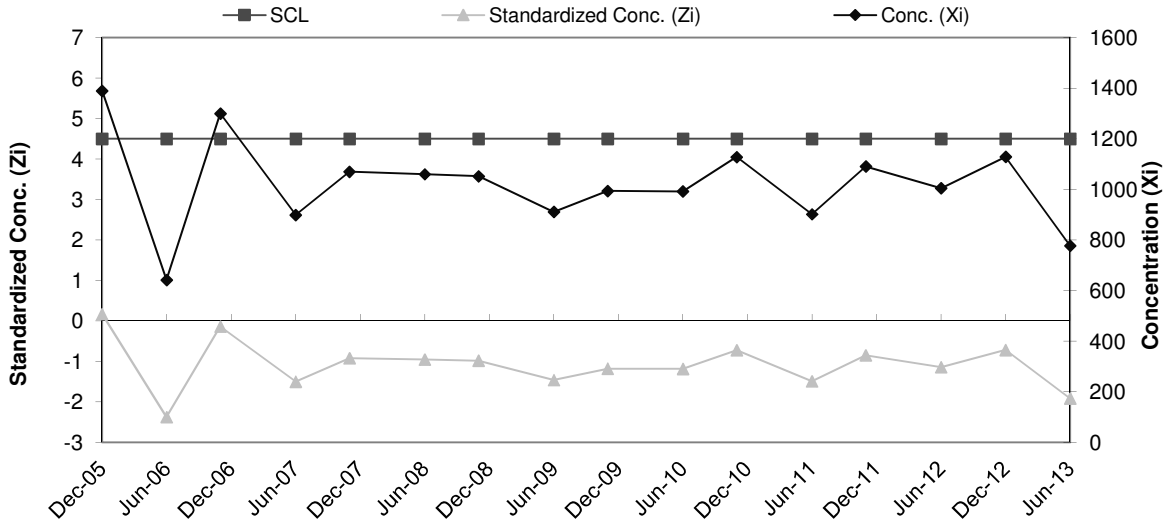


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-19a SpC

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

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Dec-05	4.5	1390	0.17
10	Jun-06	4.5	642	-2.38
11	Nov-06	4.5	1300	-0.14
12	Jun-07	4.5	899	-1.50
13	Nov-07	4.5	1070	-0.92
14	Jun-08	4.5	1060	-0.96
15	Nov-08	4.5	1052	-0.98
16	Jun-09	4.5	911	-1.46
17	Nov-09	4.5	994	-1.18
18	Jun-10	4.5	992	-1.19
19	Nov-10	4.5	1128	-0.72
20	Jun-11	4.5	902	-1.49
21	Nov-11	4.5	1091	-0.85
22	Jun-12	4.5	1005	-1.14
23	Dec-12	4.5	1129	-0.72
24	Jun-13	4.5	777	-1.92

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

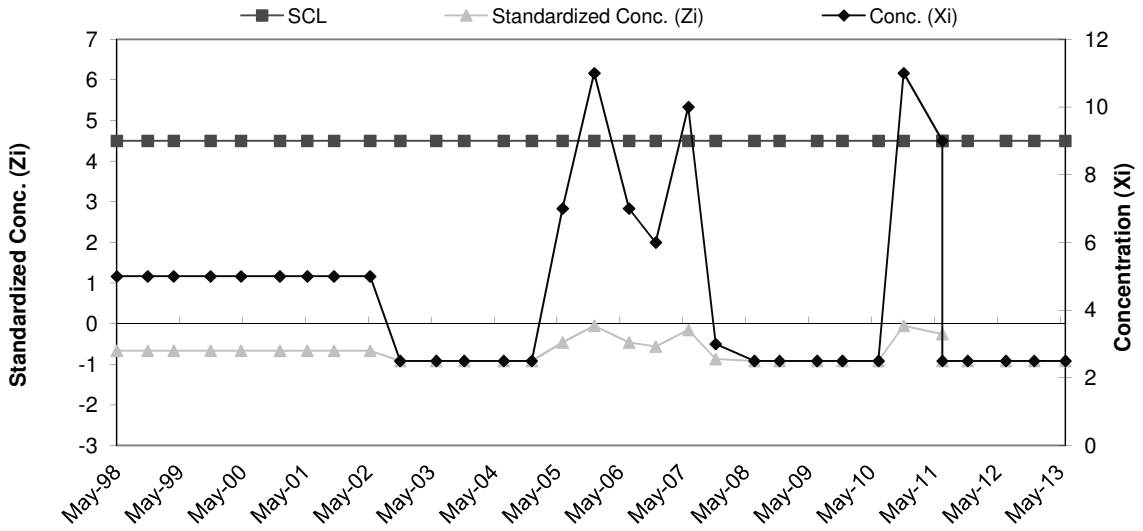


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-20d Cr

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

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-98	4.5	5	-0.66	37	Nov-11	4.5	2.5	-0.92
10	Nov-98	4.5	5	-0.66	38	Jun-12	4.5	2.5	-0.92
11	Apr-99	4.5	5	-0.66	39	Dec-12	4.5	2.5	-0.92
12	Nov-99	4.5	5	-0.66	40	Jun-13	4.5	2.5	-0.92
13	Apr-00	4.5	5	-0.66					
14	Dec-00	4.5	5	-0.66					
15	May-01	4.5	5	-0.66					
16	Oct-01	4.5	5	-0.66					
17	May-02	4.5	5	-0.66					
18	Nov-02	4.5	2.5	-0.92					
19	Jun-03	4.5	2.5	-0.92					
20	Nov-03	4.5	2.5	-0.92					
21	Jun-04	4.5	2.5	-0.92					
22	Dec-04	4.5	2.5	-0.92					
23	Jun-05	4.5	7	-0.46					
24	Dec-05	4.5	11	-0.05					
25	Jun-06	4.5	7	-0.46					
26	Nov-06	4.5	6	-0.56					
27	Jun-07	4.5	10	-0.15					
28	Nov-07	4.5	3	-0.87					
29	Jun-08	4.5	2.5	-0.92					
30	Nov-08	4.5	2.5	-0.92					
31	Jun-09	4.5	2.5	-0.92					
32	Nov-09	4.5	2.5	-0.92					
33	Jun-10	4.5	2.5	-0.92					
34	Nov-10	4.5	11	-0.05					
35	Jun-11	4.5	9	-0.26					
36	Jun-11	4.5	2.5	-0.92					

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

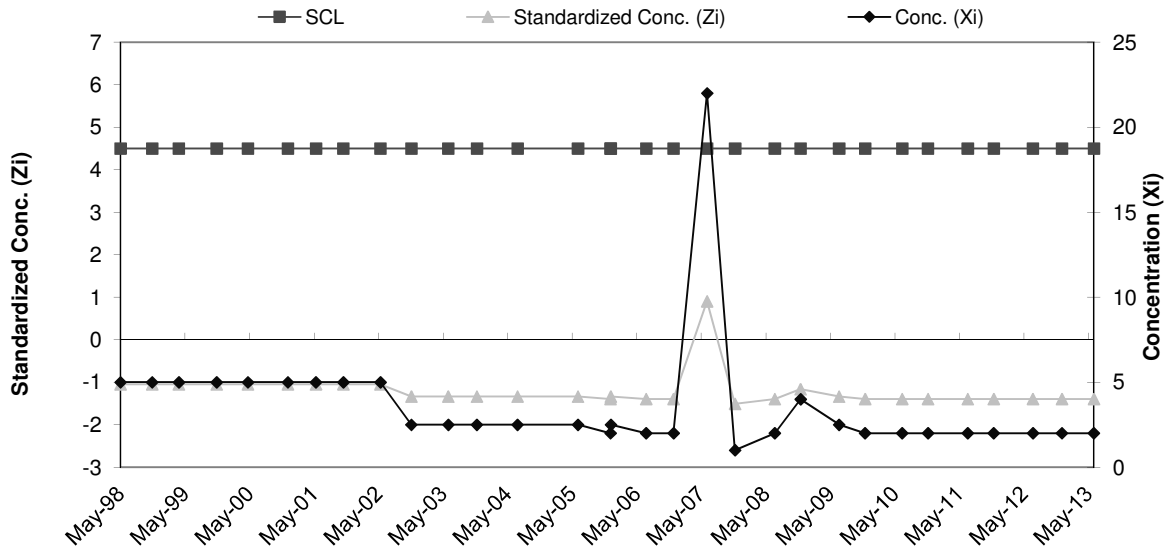


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-20d Cu

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

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-98	4.5	5	-1.05	36	Nov-11	4.5	2	-1.39
10	Nov-98	4.5	5	-1.05	37	Jun-12	4.5	2	-1.39
11	Apr-99	4.5	5	-1.05	38	Dec-12	4.5	2	-1.39
12	Nov-99	4.5	5	-1.05	39	Jun-13	4.5	2	-1.39
13	Apr-00	4.5	5	-1.05					
14	Dec-00	4.5	5	-1.05					
15	May-01	4.5	5	-1.05					
16	Oct-01	4.5	5	-1.05					
17	May-02	4.5	5	-1.05					
18	Nov-02	4.5	2.5	-1.34					
19	Jun-03	4.5	2.5	-1.34					
20	Nov-03	4.5	2.5	-1.34					
21	Jun-04	4.5	2.5	-1.34					
22	Dec-05	4.5	2.5	-1.34					
23	Jun-05	4.5	2.5	-1.34					
24	Dec-05	4.5	2	-1.39					
25	Jun-06	4.5	2	-1.39					
26	Nov-06	4.5	2	-1.39					
27	Jun-07	4.5	22	0.90					
28	Nov-07	4.5	1	-1.51					
29	Jun-08	4.5	2	-1.39					
30	Nov-08	4.5	4	-1.16					
31	Jun-09	4.5	2.5	-1.34					
32	Nov-09	4.5	2	-1.39					
33	Jun-10	4.5	2	-1.39					
34	Nov-10	4.5	2	-1.39					
35	Jun-11	4.5	2	-1.39					

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

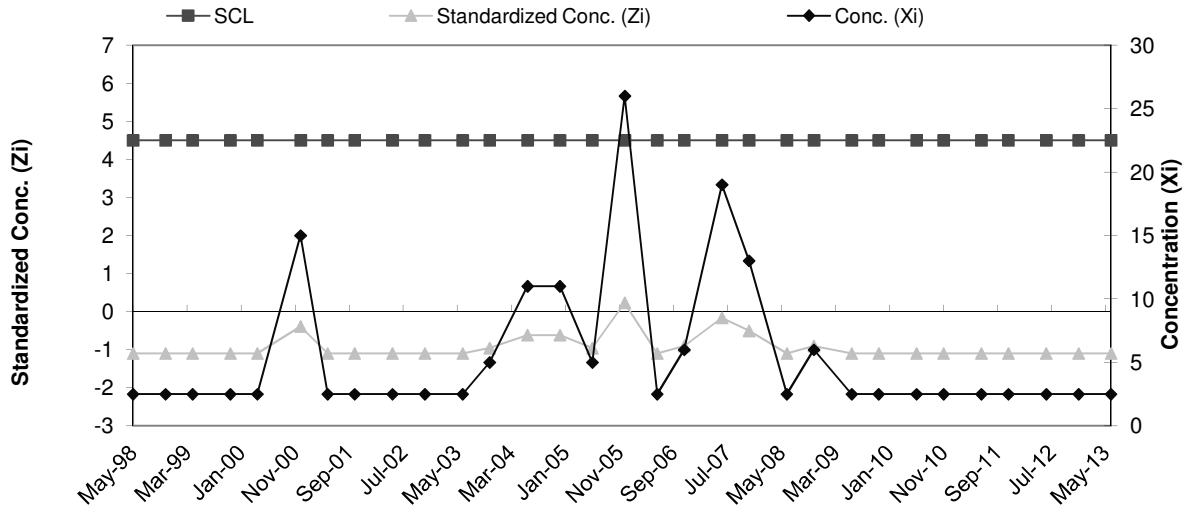


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-20d Ni

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

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-98	4.5	2.5	-1.10	36	Nov-11	4.5	2.5	-1.10
10	Nov-98	4.5	2.5	-1.10	37	Jun-12	4.5	2.5	-1.10
11	Apr-99	4.5	2.5	-1.10	38	Dec-12	4.5	2.5	-1.10
12	Nov-99	4.5	2.5	-1.10	39	Jun-13	4.5	2.5	-1.10
13	Apr-00	4.5	2.5	-1.10					
14	Dec-00	4.5	15	-0.39					
15	May-01	4.5	2.5	-1.10					
16	Oct-01	4.5	2.5	-1.10					
17	May-02	4.5	2.5	-1.10					
18	Nov-02	4.5	2.5	-1.10					
19	Jun-03	4.5	2.5	-1.10					
20	Nov-03	4.5	5	-0.96					
21	Jun-04	4.5	11	-0.62					
22	Dec-04	4.5	11	-0.62					
23	Jun-05	4.5	5	-0.96					
24	Dec-05	4.5	26	0.23					
25	Jun-06	4.5	2.5	-1.10					
26	Nov-06	4.5	6	-0.90					
27	Jun-07	4.5	19	-0.16					
28	Nov-07	4.5	13	-0.50					
29	Jun-08	4.5	2.5	-1.10					
30	Nov-08	4.5	6	-0.90					
31	Jun-09	4.5	2.5	-1.10					
32	Nov-09	4.5	2.5	-1.10					
33	Jun-10	4.5	2.5	-1.10					
34	Nov-10	4.5	2.5	-1.10					
35	Jun-11	4.5	2.5	-1.10					

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

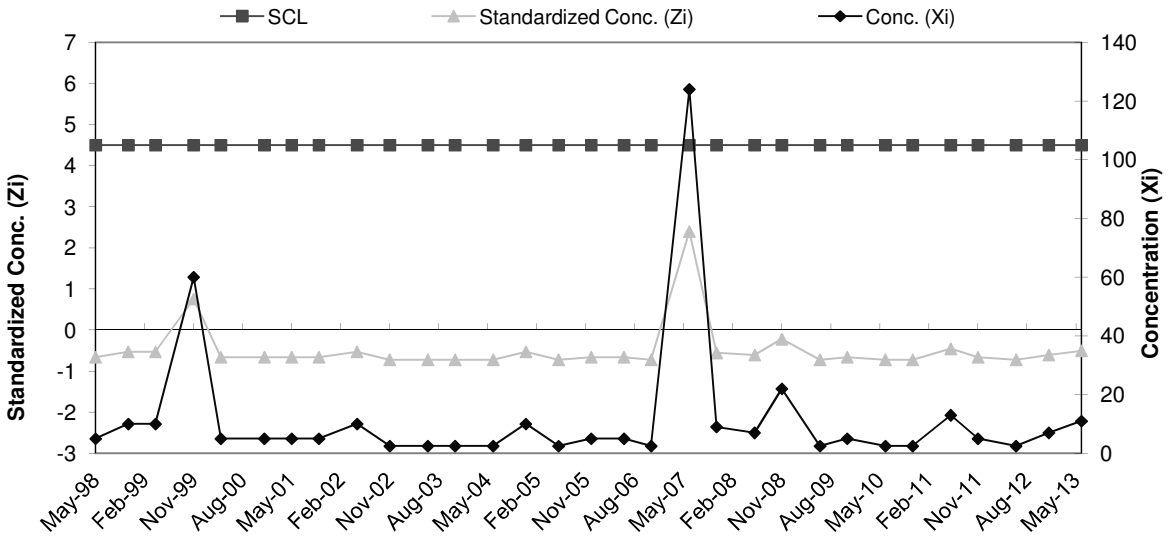


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-20d Zn

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

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-98	4.5	5	-0.66	36	Nov-11	4.5	5	-0.66
10	Nov-98	4.5	10	-0.53	37	Jun-12	4.5	2.5	-0.72
11	Apr-99	4.5	10	-0.53	38	Dec-12	4.5	7	-0.61
12	Nov-99	4.5	60	0.75	39	Jun-13	4.5	11	-0.51
13	Apr-00	4.5	5	-0.66					
14	Dec-00	4.5	5	-0.66					
15	May-01	4.5	5	-0.66					
16	Oct-01	4.5	5	-0.66					
17	May-02	4.5	10	-0.53					
18	Nov-02	4.5	2.5	-0.72					
19	Jun-03	4.5	2.5	-0.72					
20	Nov-03	4.5	2.5	-0.72					
21	Jun-04	4.5	2.5	-0.72					
22	Dec-04	4.5	10	-0.53					
23	Jun-05	4.5	2.5	-0.72					
24	Dec-05	4.5	5	-0.66					
25	Jun-06	4.5	5	-0.66					
26	Nov-06	4.5	2.5	-0.72					
27	Jun-07	4.5	124	2.40					
28	Nov-07	4.5	9	-0.56					
29	Jun-08	4.5	7	-0.61					
30	Nov-08	4.5	22	-0.22					
31	Jun-09	4.5	2.5	-0.72					
32	Nov-09	4.5	5	-0.66					
33	Jun-10	4.5	2.5	-0.72					
34	Nov-10	4.5	2.5	-0.72					
35	Jun-11	4.5	13	-0.45					

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

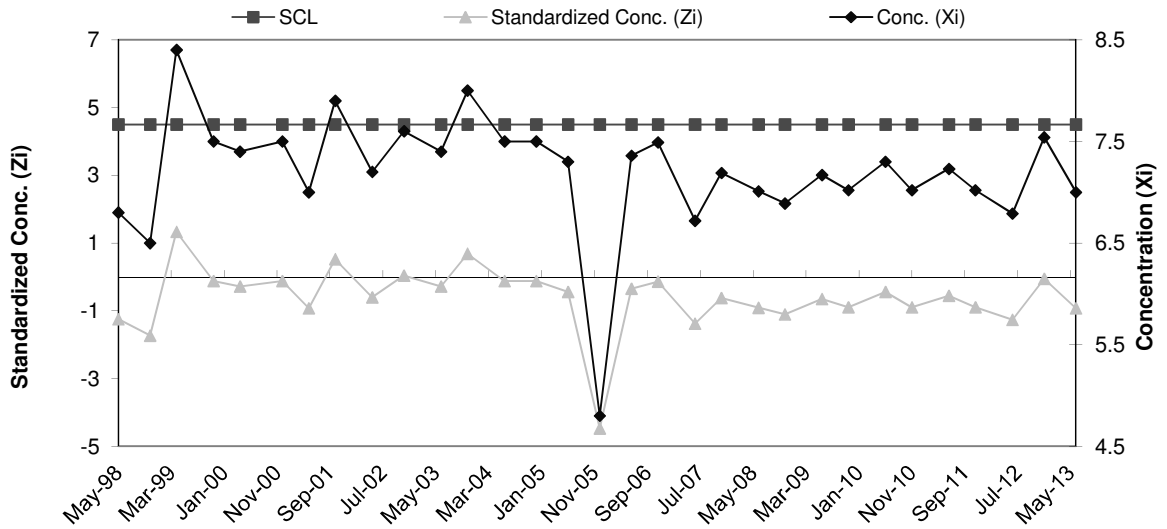


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-20d pH

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

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-98	4.5	6.8	-1.25	36	Nov-11	4.5	7.0	-0.89
10	Nov-98	4.5	6.5	-1.73	37	Jun-12	4.5	6.8	-1.27
11	Apr-99	4.5	8.4	1.33	38	Dec-12	4.5	7.5	-0.06
12	Nov-99	4.5	7.5	-0.12	39	Jun-13	4.5	7.0	-0.93
13	Apr-00	4.5	7.4	-0.28					
14	Dec-00	4.5	7.5	-0.12					
15	May-01	4.5	7.0	-0.93					
16	Oct-01	4.5	7.9	0.52					
17	May-02	4.5	7.2	-0.60					
18	Nov-02	4.5	7.6	0.04					
19	Jun-03	4.5	7.4	-0.28					
20	Nov-03	4.5	8.0	0.68					
21	Jun-04	4.5	7.5	-0.12					
22	Dec-04	4.5	7.5	-0.12					
23	Jun-05	4.5	7.3	-0.44					
24	Dec-05	4.5	4.8	-4.47					
25	Jun-06	4.5	7.4	-0.35					
26	Nov-06	4.5	7.5	-0.14					
27	Jun-07	4.5	6.7	-1.38					
28	Nov-07	4.5	7.2	-0.62					
29	Jun-08	4.5	7.0	-0.91					
30	Nov-08	4.5	6.9	-1.10					
31	Jun-09	4.5	7.2	-0.65					
32	Nov-09	4.5	7.0	-0.89					
33	Jun-10	4.5	7.3	-0.44					
34	Nov-10	4.5	7.0	-0.89					
35	Jun-11	4.5	7.2	-0.56					

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

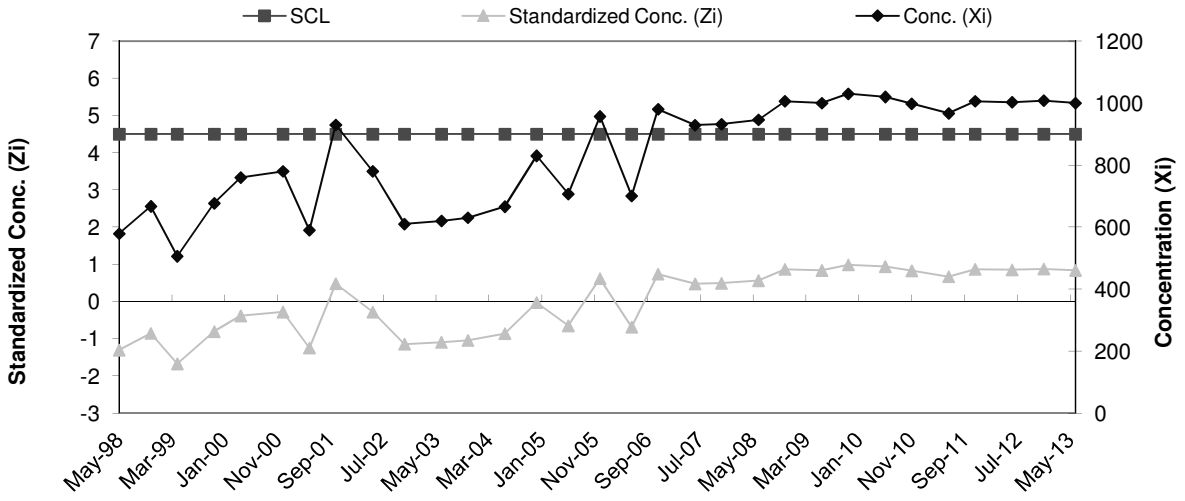


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-20d SpC

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

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-98	4.5	579	-1.31	36	Nov-11	4.5	1006	0.87
10	Nov-98	4.5	667	-0.86	37	Jun-12	4.5	1003	0.85
11	Apr-99	4.5	506	-1.68	38	Dec-12	4.5	1008	0.88
12	Nov-99	4.5	677	-0.81	39	Jun-13	4.5	1000	0.84
13	Apr-00	4.5	760	-0.39					
14	Dec-00	4.5	780	-0.28					
15	May-01	4.5	590	-1.25					
16	Oct-01	4.5	930	0.48					
17	May-02	4.5	780	-0.28					
18	Nov-02	4.5	610	-1.15					
19	Jun-03	4.5	620	-1.10					
20	Nov-03	4.5	630	-1.05					
21	Jun-04	4.5	666	-0.86					
22	Dec-04	4.5	830	-0.03					
23	Jun-05	4.5	707	-0.65					
24	Dec-05	4.5	957	0.62					
25	Jun-06	4.5	701	-0.69					
26	Nov-06	4.5	980	0.73					
27	Jun-07	4.5	929	0.47					
28	Nov-07	4.5	932	0.49					
29	Jun-08	4.5	946	0.56					
30	Nov-08	4.5	1006	0.87					
31	Jun-09	4.5	1000	0.84					
32	Nov-09	4.5	1030	0.99					
33	Jun-10	4.5	1020	0.94					
34	Nov-10	4.5	998	0.83					
35	Jun-11	4.5	967	0.67					

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

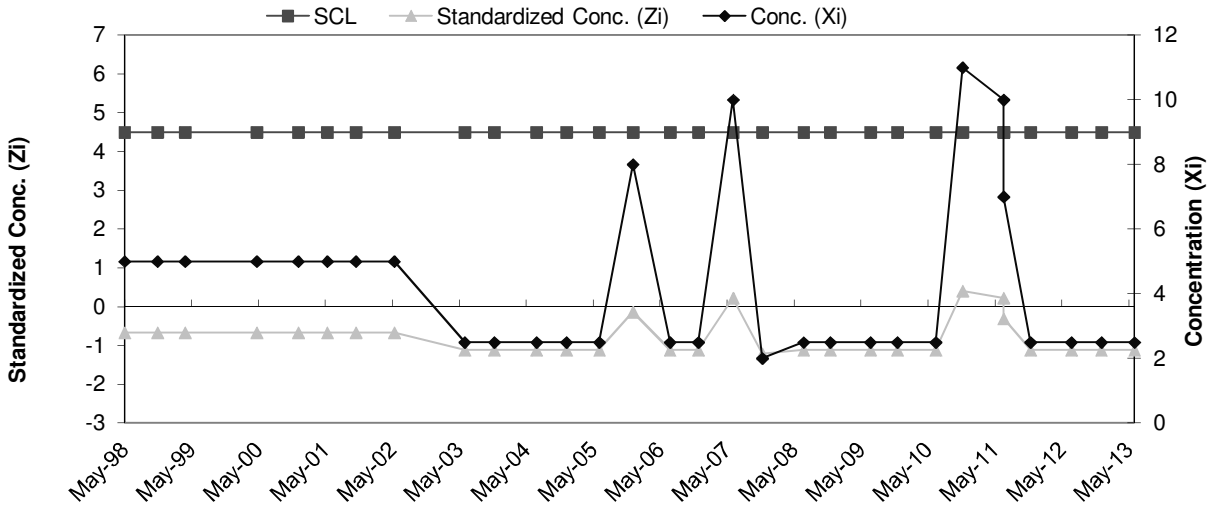


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-21d Cr

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

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-98	4.5	5	-0.67	36	Nov-11	4.5	2.5	-1.12
10	Nov-98	4.5	5	-0.67	37	Jun-12	4.5	2.5	-1.12
11	Apr-99	4.5	5	-0.67	38	Dec-12	4.5	2.5	-1.12
12	Apr-00	4.5	5	-0.67	39	Jun-13	4.5	2.5	-1.12
13	Dec-00	4.5	5	-0.67					
14	May-01	4.5	5	-0.67					
15	Oct-01	4.5	5	-0.67					
16	May-02	4.5	5	-0.67					
18	Jun-03	4.5	2.5	-1.12					
19	Nov-03	4.5	2.5	-1.12					
20	Jun-04	4.5	2.5	-1.12					
21	Dec-04	4.5	2.5	-1.12					
22	Jun-05	4.5	2.5	-1.12					
23	Dec-05	4.5	8	-0.13					
24	Jun-06	4.5	2.5	-1.12					
25	Nov-06	4.5	2.5	-1.12					
26	Jun-07	4.5	10	0.23					
27	Nov-07	4.5	2	-1.21					
28	Jun-08	4.5	2.5	-1.12					
29	Nov-08	4.5	2.5	-1.12					
30	Jun-09	4.5	2.5	-1.12					
31	Nov-09	4.5	2.5	-1.12					
32	Jun-10	4.5	2.5	-1.12					
33	Nov-10	4.5	11	0.41					
34	Jun-11	4.5	10	0.23					
35	Jun-11	4.5	7	-0.31					

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

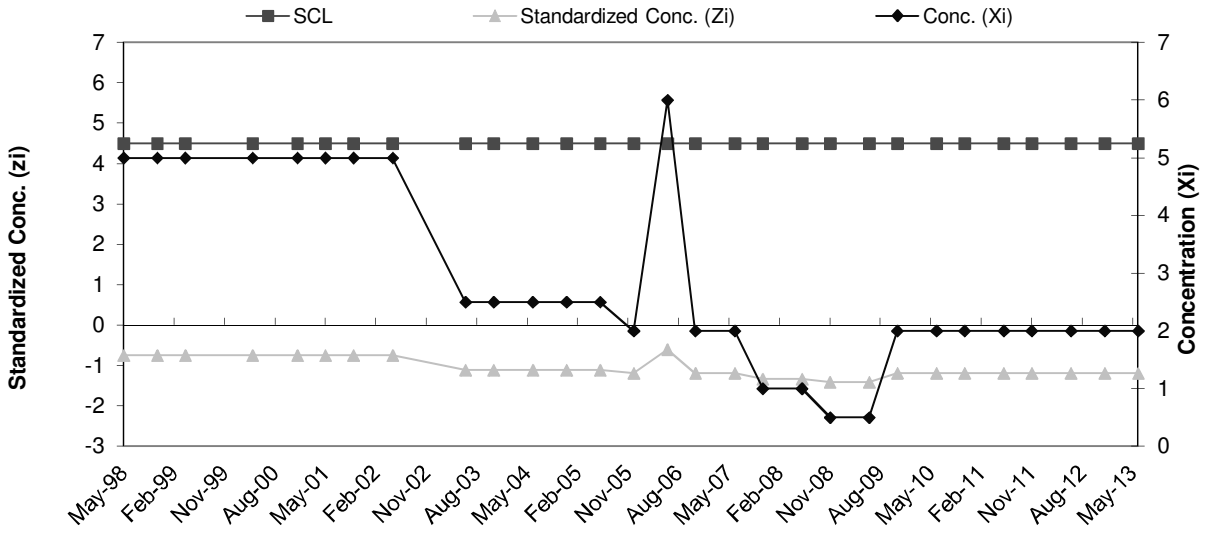


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-21d Cu

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

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-98	4.5	5	-0.75	35	Nov-11	4.5	2	-1.19
10	Nov-98	4.5	5	-0.75	36	Jun-12	4.5	2	-1.19
11	Apr-99	4.5	5	-0.75	37	Dec-12	4.5	2	-1.19
12	Apr-00	4.5	5	-0.75	38	Jun-13	4.5	2	-1.19
13	Dec-00	4.5	5	-0.75					
14	May-01	4.5	5	-0.75					
15	Oct-01	4.5	5	-0.75					
16	May-02	4.5	5	-0.75					
18	Jun-03	4.5	2.5	-1.12					
19	Nov-03	4.5	2.5	-1.12					
20	Jun-04	4.5	2.5	-1.12					
21	Dec-04	4.5	2.5	-1.12					
22	Jun-05	4.5	2.5	-1.12					
23	Dec-05	4.5	2	-1.19					
24	Jun-06	4.5	6	-0.60					
25	Nov-06	4.5	2	-1.19					
26	Jun-07	4.5	2	-1.19					
27	Nov-07	4.5	1	-1.34					
28	Jun-08	4.5	1	-1.34					
29	Nov-08	4.5	0.5	-1.41					
30	Jun-09	4.5	0.5	-1.41					
31	Nov-09	4.5	2	-1.19					
32	Jun-10	4.5	2	-1.19					
33	Nov-10	4.5	2	-1.19					
34	Jun-11	4.5	2	-1.19					

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

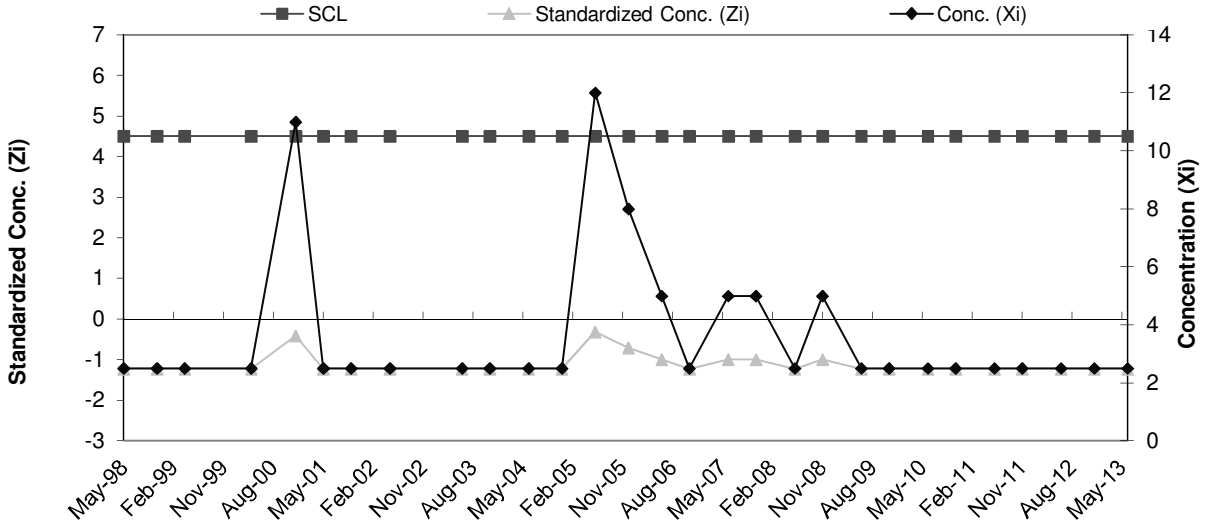


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-21d Ni

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

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-98	4.5	2.5	-1.23	35	Nov-11	4.5	2.5	-1.23
10	Nov-98	4.5	2.5	-1.23	36	Jun-12	4.5	2.5	-1.23
11	Apr-99	4.5	2.5	-1.23	37	Dec-12	4.5	2.5	-1.23
12	Apr-00	4.5	2.5	-1.23	38	Jun-13	4.5	2.5	-1.23
13	Dec-00	4.5	11	-0.42					
14	May-01	4.5	2.5	-1.23					
15	Oct-01	4.5	2.5	-1.23					
16	May-02	4.5	2.5	-1.23					
18	Jun-03	4.5	2.5	-1.23					
19	Nov-03	4.5	2.5	-1.23					
20	Jun-04	4.5	2.5	-1.23					
20	Dec-04	4.5	2.5	-1.23					
21	Jun-05	4.5	12	-0.32					
22	Dec-05	4.5	8	-0.71					
23	Jun-06	4.5	5	-0.99					
24	Nov-06	4.5	2.5	-1.23					
25	Jun-07	4.5	5	-0.99					
26	Nov-07	4.5	5	-0.99					
27	Jun-08	4.5	2.5	-1.23					
28	Nov-08	4.5	5	-0.99					
30	Jun-09	4.5	2.5	-1.23					
31	Nov-09	4.5	2.5	-1.23					
32	Jun-10	4.5	2.5	-1.23					
33	Nov-10	4.5	2.5	-1.23					
34	Jun-11	4.5	2.5	-1.23					

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

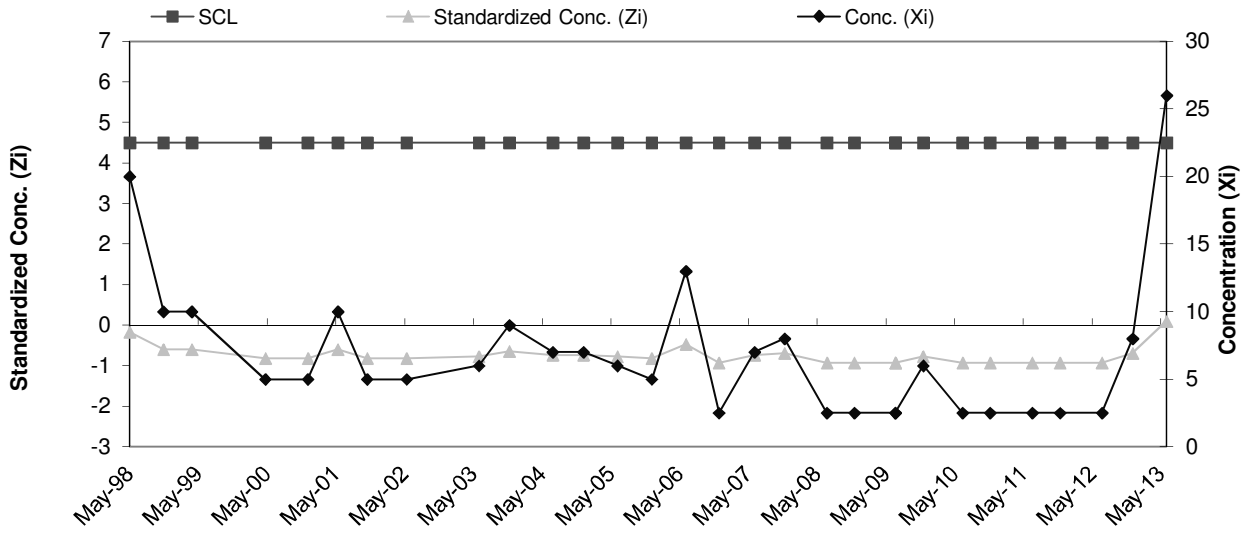


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-21d Zn

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

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-98	4.5	20	-0.17	36	Nov-11	4.5	2.5	-0.93
10	Nov-98	4.5	10	-0.60	37	Jun-12	4.5	2.5	-0.93
11	Apr-99	4.5	10	-0.60	38	Dec-12	4.5	8	-0.69
12	Apr-00	4.5	5	-0.82	39	Jun-13	4.5	26	0.09
13	Dec-00	4.5	5	-0.82					
14	May-01	4.5	10	-0.60					
15	Oct-01	4.5	5	-0.82					
16	May-02	4.5	5	-0.82					
18	Jun-03	4.5	6	-0.78					
19	Nov-03	4.5	9	-0.65					
20	Jun-04	4.5	7	-0.73					
21	Dec-04	4.5	7	-0.73					
22	Jun-05	4.5	6	-0.78					
23	Dec-05	4.5	5	-0.82					
24	Jun-06	4.5	13	-0.47					
25	Nov-06	4.5	2.5	-0.93					
26	Jun-07	4.5	7	-0.73					
27	Nov-07	4.5	8	-0.69					
28	Jun-08	4.5	2.5	-0.93					
29	Nov-08	4.5	2.5	-0.93					
30	Jun-09	4.5	2.5	-0.93					
31	Jun-09	4.5	2.5	-0.93					
32	Nov-09	4.5	6	-0.78					
33	Jun-10	4.5	2.5	-0.93					
34	Nov-10	4.5	2.5	-0.93					
35	Jun-11	4.5	2.5	-0.93					

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

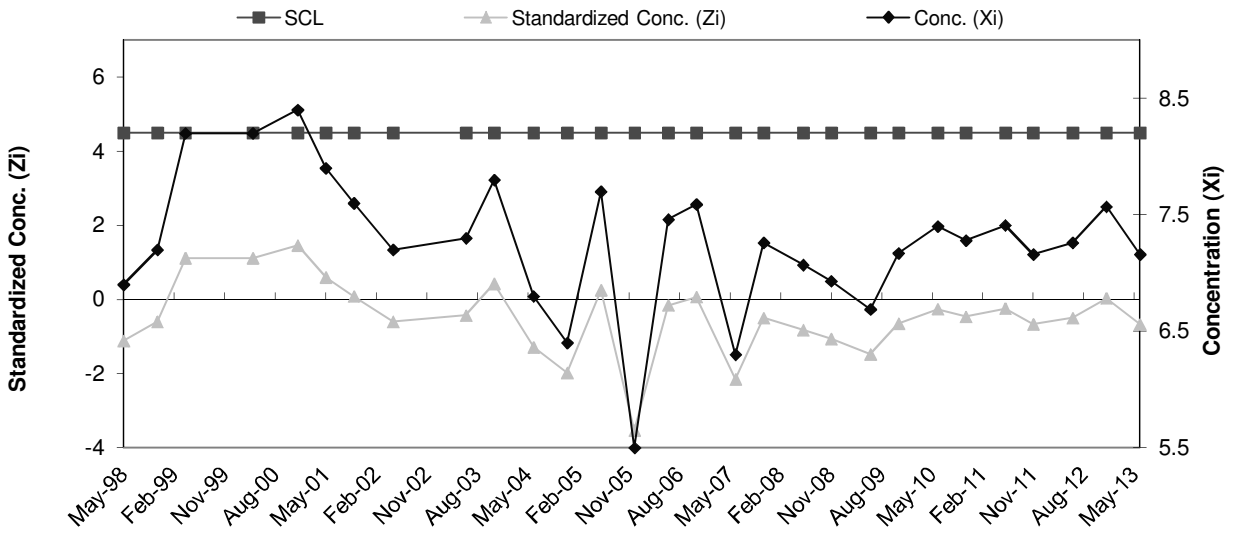


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-21d pH

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

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-98	4.5	6.9	-1.12	35	Nov-11	4.5	7.2	-0.67
10	Nov-98	4.5	7.2	-0.60	36	Jun-12	4.5	7.3	-0.50
11	Apr-99	4.5	8.2	1.12	37	Dec-12	4.5	7.6	0.03
12	Apr-00	4.5	8.2	1.12	38	Jun-13	4.5	7.2	-0.67
13	Dec-00	4.5	8.4	1.46					
14	May-01	4.5	7.9	0.60					
15	Oct-01	4.5	7.6	0.09					
16	May-02	4.5	7.2	-0.60					
18	Jun-03	4.5	7.3	-0.43					
19	Nov-03	4.5	7.8	0.43					
20	Jun-04	4.5	6.8	-1.29					
21	Dec-04	4.5	6.4	-1.98					
22	Jun-05	4.5	7.7	0.26					
23	Dec-05	4.5	5.5	-3.53					
24	Jun-06	4.5	7.5	-0.16					
25	Nov-06	4.5	7.6	0.07					
26	Jun-07	4.5	6.3	-2.15					
27	Nov-07	4.5	7.3	-0.50					
28	Jun-08	4.5	7.1	-0.83					
29	Nov-08	4.5	6.9	-1.07					
30	Jun-09	4.5	6.7	-1.48					
31	Nov-09	4.5	7.2	-0.65					
32	Jun-10	4.5	7.4	-0.26					
33	Nov-10	4.5	7.3	-0.47					
34	Jun-11	4.5	7.4	-0.24					

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

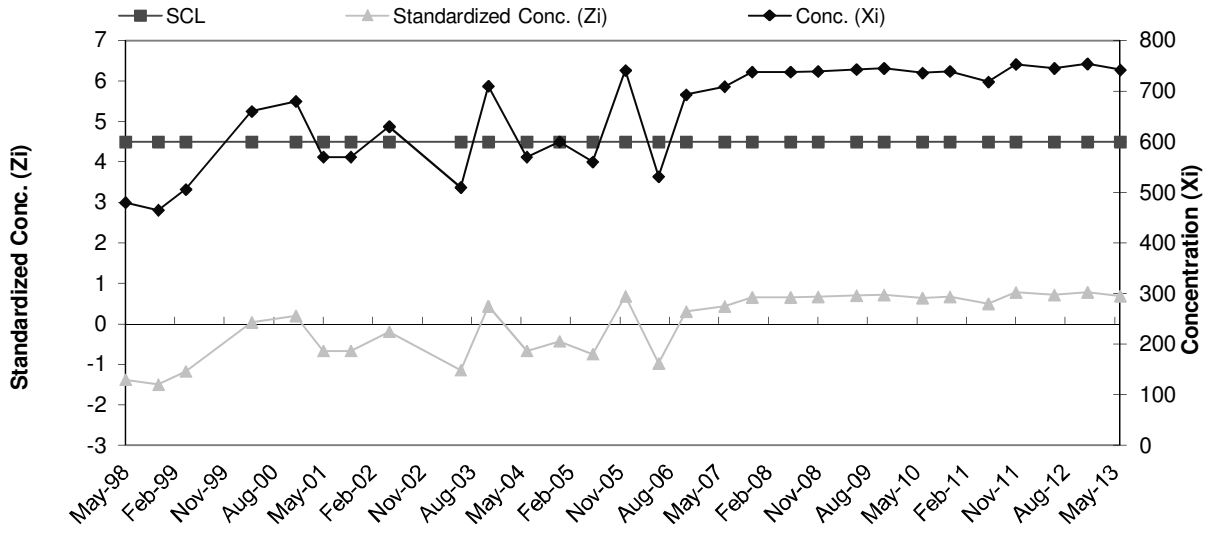


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-21d SpC

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

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-98	4.5	480	-1.37	35	Nov-11	4.5	753	0.78
10	Nov-98	4.5	465	-1.49	36	Jun-12	4.5	745	0.72
11	Apr-99	4.5	506	-1.17	37	Dec-12	4.5	754	0.79
12	Apr-00	4.5	660	0.05	38	Jun-13	4.5	742	0.69
13	Dec-00	4.5	680	0.20					
14	May-01	4.5	570	-0.66					
15	Oct-01	4.5	570	-0.66					
16	May-02	4.5	630	-0.19					
18	Jun-03	4.5	510	-1.14					
19	Nov-03	4.5	710	0.44					
20	Jun-04	4.5	570	-0.66					
21	Dec-04	4.5	600	-0.43					
22	Jun-05	4.5	560	-0.74					
23	Dec-05	4.5	741	0.69					
24	Jun-06	4.5	531.3	-0.97					
25	Nov-06	4.5	693	0.31					
26	Jun-07	4.5	709	0.43					
27	Nov-07	4.5	738	0.66					
28	Jun-08	4.5	738	0.66					
29	Nov-08	4.5	739	0.67					
30	Jun-09	4.5	743	0.70					
31	Nov-09	4.5	745	0.72					
32	Jun-10	4.5	736	0.65					
33	Nov-10	4.5	739	0.67					
34	Jun-11	4.5	718	0.50					

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

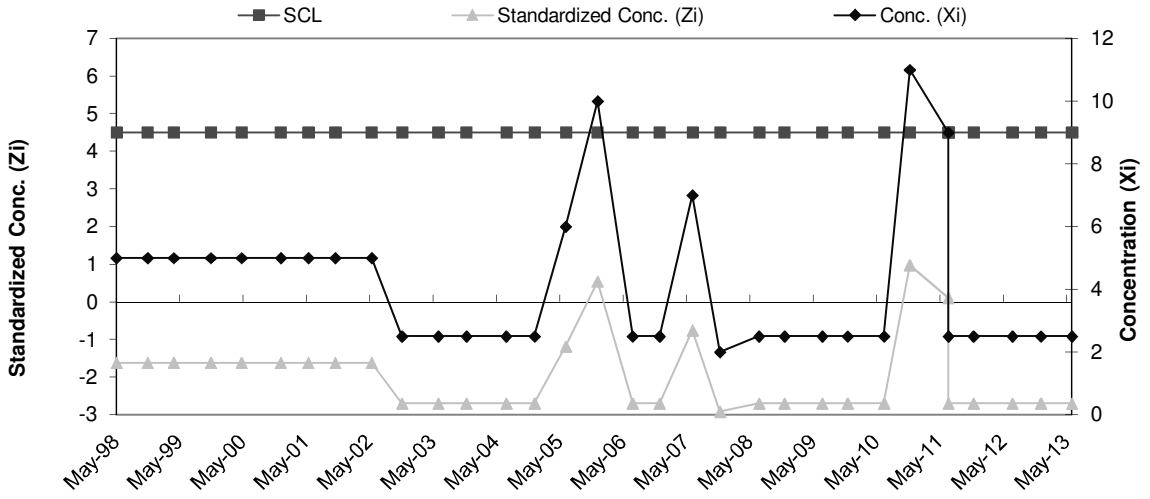


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-22D Cr

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

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-98	4.5	5	-1.62	37	Nov-11	4.5	2.5	-2.70
10	Nov-98	4.5	5	-1.62	38	Jun-12	4.5	2.5	-2.70
11	Apr-99	4.5	5	-1.62	39	Dec-12	4.5	2.5	-2.70
12	Nov-99	4.5	5	-1.62	40	Jun-13	4.5	2.5	-2.70
13	Apr-00	4.5	5	-1.62					
14	Dec-00	4.5	5	-1.62					
15	May-01	4.5	5	-1.62					
16	Oct-01	4.5	5	-1.62					
17	May-02	4.5	5	-1.62					
18	Nov-02	4.5	2.5	-2.70					
19	Jun-03	4.5	2.5	-2.70					
20	Nov-03	4.5	2.5	-2.70					
21	Jun-04	4.5	2.5	-2.70					
22	Dec-04	4.5	2.5	-2.70					
23	Jun-05	4.5	6	-1.19					
24	Dec-05	4.5	10	0.54					
25	Jun-06	4.5	2.5	-2.70					
26	Nov-06	4.5	2.5	-2.70					
27	Jun-07	4.5	7	-0.76					
28	Nov-07	4.5	2	-2.92					
29	Jun-08	4.5	2.5	-2.70					
30	Nov-08	4.5	2.5	-2.70					
31	Jun-09	4.5	2.5	-2.70					
32	Nov-09	4.5	2.5	-2.70					
33	Jun-10	4.5	2.5	-2.70					
34	Nov-10	4.5	11	0.97					
35	Jun-11	4.5	9	0.11					
36	Jun-11	4.5	2.5	-2.70					

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

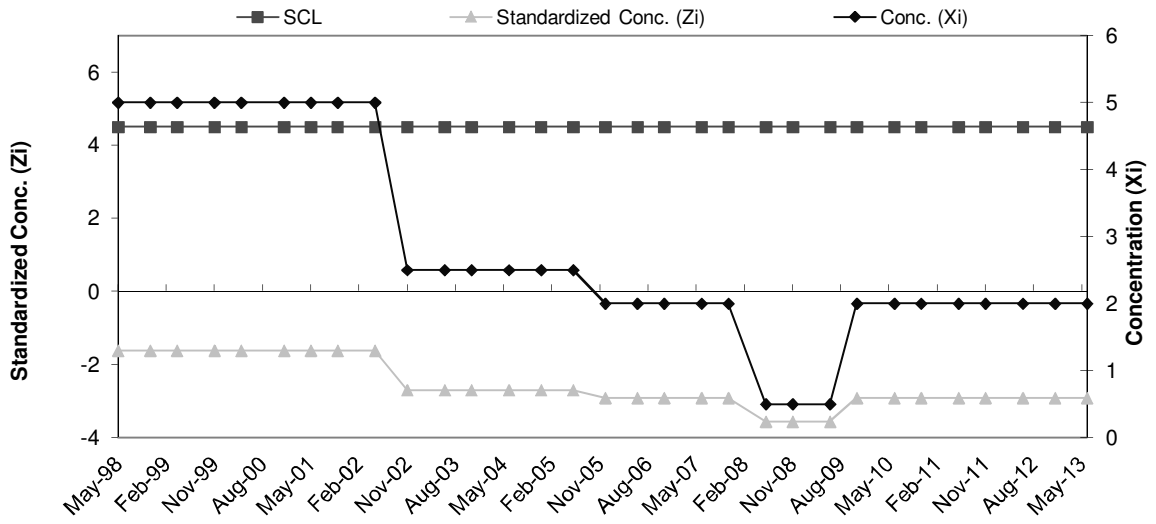


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-22D Cu

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

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-98	4.5	5	-1.62	36	Nov-11	4.5	2	-2.92
10	Nov-98	4.5	5	-1.62	37	Jun-12	4.5	2	-2.92
11	Apr-99	4.5	5	-1.62	38	Dec-12	4.5	2	-2.92
12	Nov-99	4.5	5	-1.62	39	Jun-13	4.5	2	-2.92
13	Apr-00	4.5	5	-1.62					
14	Dec-00	4.5	5	-1.62					
15	May-01	4.5	5	-1.62					
16	Oct-01	4.5	5	-1.62					
17	May-02	4.5	5	-1.62					
18	Nov-02	4.5	2.5	-2.70					
19	Jun-03	4.5	2.5	-2.70					
20	Nov-03	4.5	2.5	-2.70					
21	Jun-04	4.5	2.5	-2.70					
22	Dec-04	4.5	2.5	-2.70					
23	Jun-05	4.5	2.5	-2.70					
24	Dec-05	4.5	2	-2.92					
25	Jun-06	4.5	2	-2.92					
26	Nov-06	4.5	2	-2.92					
27	Jun-07	4.5	2	-2.92					
28	Nov-07	4.5	2	-2.92					
29	Jun-08	4.5	0.5	-3.56					
30	Nov-08	4.5	0.5	-3.56					
31	Jun-09	4.5	0.5	-3.56					
32	Nov-09	4.5	2	-2.92					
33	Jun-10	4.5	2	-2.92					
34	Nov-10	4.5	2	-2.92					
35	Jun-11	4.5	2	-2.92					

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

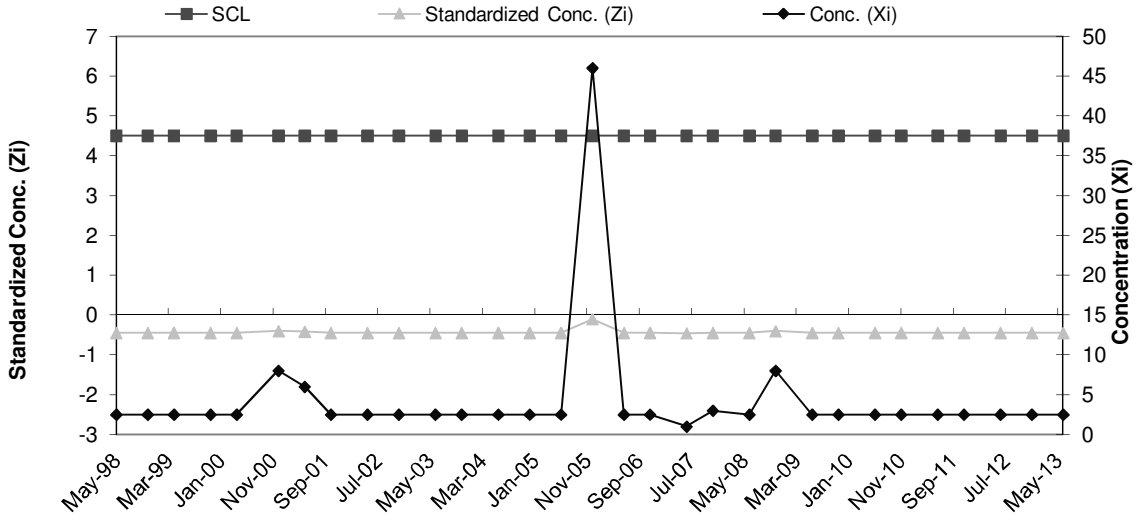


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-22D Ni

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

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-98	4.5	2.5	-0.45	36	Nov-11	4.5	2.5	-0.45
10	Nov-98	4.5	2.5	-0.45	37	Jun-12	4.5	2.5	-0.45
11	Apr-99	4.5	2.5	-0.45	38	Dec-12	4.5	2.5	-0.45
12	Nov-99	4.5	2.5	-0.45	39	Jun-13	4.5	2.5	-0.45
13	Apr-00	4.5	2.5	-0.45					
14	Dec-00	4.5	8	-0.40					
15	May-01	4.5	6	-0.42					
16	Oct-01	4.5	2.5	-0.45					
17	May-02	4.5	2.5	-0.45					
18	Nov-02	4.5	2.5	-0.45					
19	Jun-03	4.5	2.5	-0.45					
20	Nov-03	4.5	2.5	-0.45					
21	Jun-04	4.5	2.5	-0.45					
22	Dec-04	4.5	2.5	-0.45					
23	Jun-05	4.5	2.5	-0.45					
24	Dec-05	4.5	46	-0.10					
25	Jun-06	4.5	2.5	-0.45					
26	Nov-06	4.5	2.5	-0.45					
27	Jun-07	4.5	1	-0.46					
28	Nov-07	4.5	3	-0.44					
29	Jun-08	4.5	2.5	-0.45					
30	Nov-08	4.5	8	-0.40					
31	Jun-09	4.5	2.5	-0.45					
32	Nov-09	4.5	2.5	-0.45					
33	Jun-10	4.5	2.5	-0.45					
34	Nov-10	4.5	2.5	-0.45					
35	Jun-11	4.5	2.5	-0.45					

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

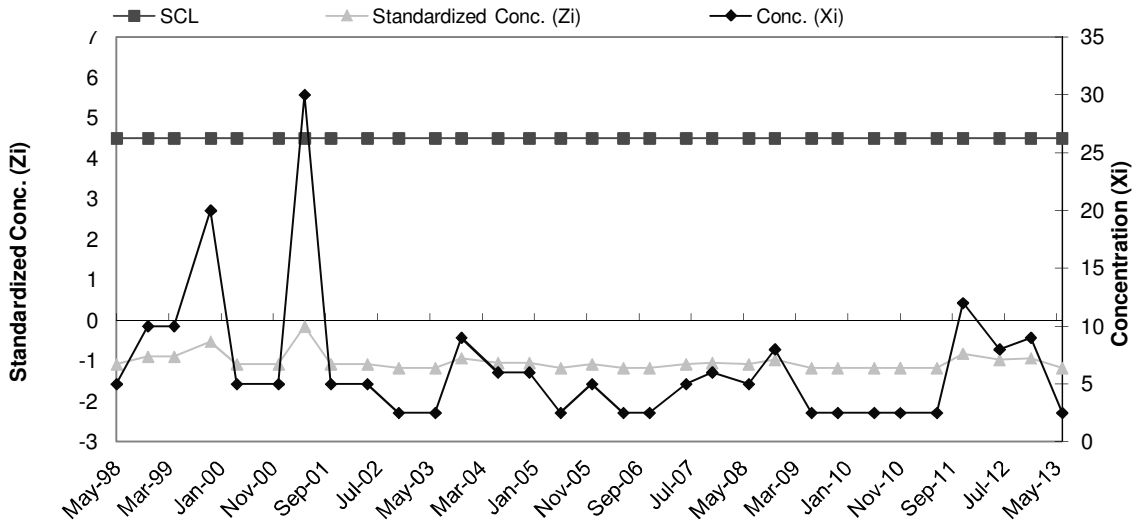


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-22D Zn

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	10		
2	Aug-95	47		
3	Feb-96	80		
4	Jun-96	20	**34.00**	**26.69**
5	Aug-96	50		
6	Nov-96	50		
7	May-97	5		
8	Nov-97	10		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-98	4.5	5	-1.09	36	Nov-11	4.5	12	-0.82
10	Nov-98	4.5	10	-0.90	37	Jun-12	4.5	8	-0.97
11	Apr-99	4.5	10	-0.90	38	Dec-12	4.5	9	-0.94
12	Nov-99	4.5	20	-0.52	39	Jun-13	4.5	2.5	-1.18
13	Apr-00	4.5	5	-1.09					
14	Dec-00	4.5	5	-1.09					
15	May-01	4.5	30	-0.15					
16	Oct-01	4.5	5	-1.09					
17	May-02	4.5	5	-1.09					
18	Nov-02	4.5	2.5	-1.18					
19	Jun-03	4.5	2.5	-1.18					
20	Nov-03	4.5	9	-0.94					
21	Jun-04	4.5	6	-1.05					
22	Dec-04	4.5	6	-1.05					
23	Jun-05	4.5	2.5	-1.18					
24	Dec-05	4.5	5	-1.09					
25	Jun-06	4.5	2.5	-1.18					
26	Nov-06	4.5	2.5	-1.18					
27	Jun-07	4.5	5	-1.09					
28	Nov-07	4.5	6	-1.05					
29	Jun-08	4.5	5	-1.09					
30	Nov-08	4.5	8	-0.97					
31	Jun-09	4.5	2.5	-1.18					
32	Nov-09	4.5	2.5	-1.18					
33	Jun-10	4.5	2.5	-1.18					
34	Nov-10	4.5	2.5	-1.18					
35	Jun-11	4.5	2.5	-1.18					

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

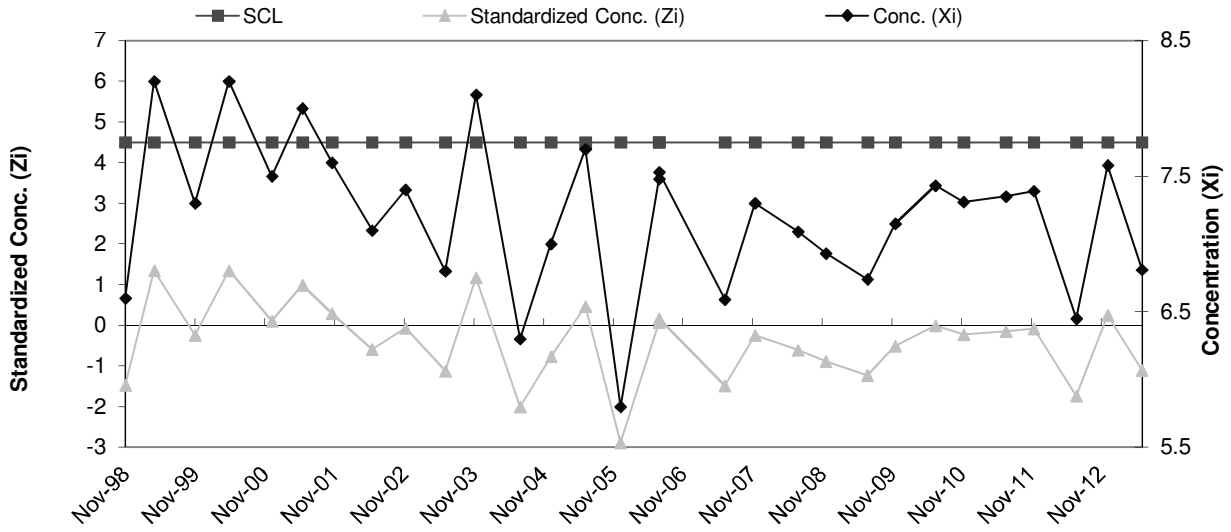


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-22D pH

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	7.7		
2	Aug-95	8.3		
3	Jun-96	7.5		
4	Aug-96	8.1	**7.44**	**0.57**
5	Nov-96	7.2		
6	May-97	6.7		
7	Nov-97	6.9		
8	May-98	7.1		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Nov-98	4.5	6.6	-1.47	35	Nov-11	4.5	7.4	-0.08
10	Apr-99	4.5	8.2	1.34	36	Jun-12	4.5	6.5	-1.74
11	Nov-99	4.5	7.3	-0.24	37	Dec-12	4.5	7.6	0.25
12	Apr-00	4.5	8.2	1.34	38	Jun-13	4.5	6.8	-1.10
13	Dec-00	4.5	7.5	0.11					
14	May-01	4.5	8	0.99					
15	Oct-01	4.5	7.6	0.29					
16	May-02	4.5	7.1	-0.59					
17	Nov-02	4.5	7.4	-0.07					
18	Jun-03	4.5	6.8	-1.12					
19	Nov-03	4.5	8.1	1.17					
20	Jun-04	4.5	6.3	-2.00					
21	Dec-04	4.5	7	-0.77					
22	Jun-05	4.5	7.7	0.46					
23	Dec-05	4.5	5.8	-2.88					
24	Jun-06	4.5	7.5	0.07					
25	Jun-06	4.5	7.5	0.16					
26	Jun-07	4.5	6.6	-1.49					
27	Nov-07	4.5	7.3	-0.24					
28	Jun-08	4.5	7.1	-0.61					
29	Nov-08	4.5	6.9	-0.89					
30	Jun-09	4.5	6.7	-1.23					
31	Nov-09	4.5	7.2	-0.51					
32	Jun-10	4.5	7.4	-0.01					
33	Nov-10	4.5	7.3	-0.22					
34	Jun-11	4.5	7.4	-0.15					

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

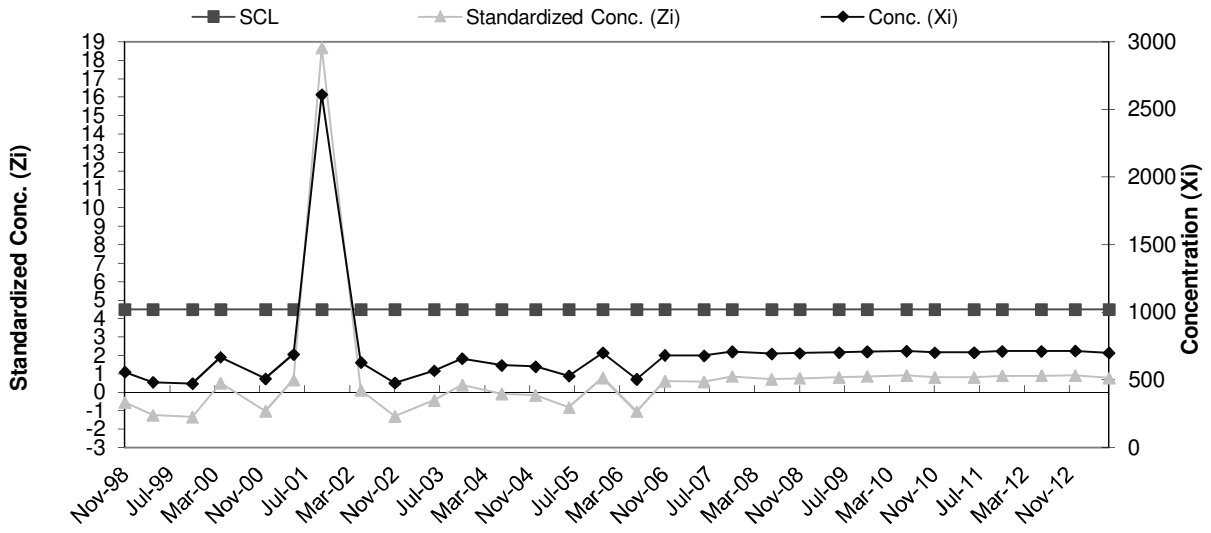


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-22D SpC

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	573		
2	Aug-95	739		
3	Jun-96	600		
4	Aug-96	608	**617.25**	**106.65**
5	Nov-96	817		
6	May-97	550		
7	Nov-97	550		
8	May-98	501		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Nov-98	4.5	559	-0.55	35	Nov-11	4.5	714	0.91
10	Apr-99	4.5	485	-1.24	36	Jun-12	4.5	714	0.91
11	Nov-99	4.5	474	-1.34	37	Dec-12	4.5	716	0.93
12	Apr-00	4.5	670	0.49	38	Jun-13	4.5	701	0.79
13	Dec-00	4.5	510	-1.01					
14	May-01	4.5	690	0.68					
15	Oct-01	4.5	2610	18.68					
16	May-02	4.5	630	0.12					
17	Nov-02	4.5	480	-1.29					
18	Jun-03	4.5	570	-0.44					
19	Nov-03	4.5	660	0.40					
20	Jun-04	4.5	610	-0.07					
21	Dec-04	4.5	600	-0.16					
22	Jun-05	4.5	531	-0.81					
23	Dec-05	4.5	702	0.79					
24	Jun-06	4.5	507	-1.04					
25	Nov-06	4.5	684	0.63					
26	Jun-07	4.5	680	0.59					
27	Nov-07	4.5	710	0.87					
28	Jun-08	4.5	694	0.72					
29	Nov-08	4.5	699	0.77					
30	Jun-09	4.5	705	0.82					
31	Nov-09	4.5	710	0.87					
32	Jun-10	4.5	715	0.92					
33	Nov-10	4.5	704	0.81					
34	Jun-11	4.5	705	0.82					

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

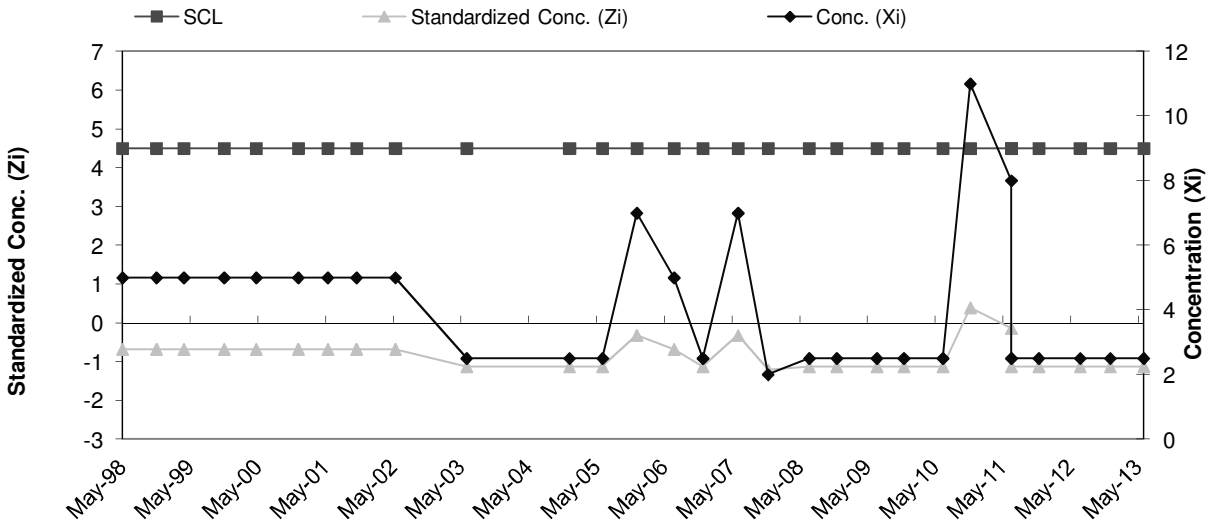


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-23d Cr

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	10		
2	Aug-95	10		
3	Feb-96	10		
4	Jun-96	10	**8.79**	**5.60**
5	Aug-96	10		
6	Nov-96	10		
7	May-97	5		
8	Nov-97	5		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-98	4.5	5	-0.68	34	Nov-11	4.5	2.5	-1.12
10	Nov-98	4.5	5	-0.68	35	Jun-12	4.5	2.5	-1.12
11	Apr-99	4.5	5	-0.68	36	Dec-12	4.5	2.5	-1.12
12	Nov-99	4.5	5	-0.68	37	Jun-13	4.5	2.5	-1.12
13	Apr-00	4.5	5	-0.68					
14	Dec-00	4.5	5	-0.68					
15	May-01	4.5	5	-0.68					
16	Oct-01	4.5	5	-0.68					
17	May-02	4.5	5	-0.68					
18	Jun-03	4.5	2.5	-1.12					
19	Dec-04	4.5	2.5	-1.12					
20	Jun-05	4.5	2.5	-1.12					
21	Dec-05	4.5	7.0	-0.32					
22	Jun-06	4.5	5.0	-0.68					
23	Nov-06	4.5	2.5	-1.12					
24	Jun-07	4.5	7	-0.32					
25	Nov-07	4.5	2	-1.21					
26	Jun-08	4.5	2.5	-1.12					
27	Nov-08	4.5	2.5	-1.12					
28	Jun-09	4.5	2.5	-1.12					
29	Nov-09	4.5	2.5	-1.12					
30	Jun-10	4.5	2.5	-1.12					
31	Nov-10	4.5	11	0.39					
32	Jun-11	4.5	8	-0.14					
33	Jun-11	4.5	2.5	-1.12					

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

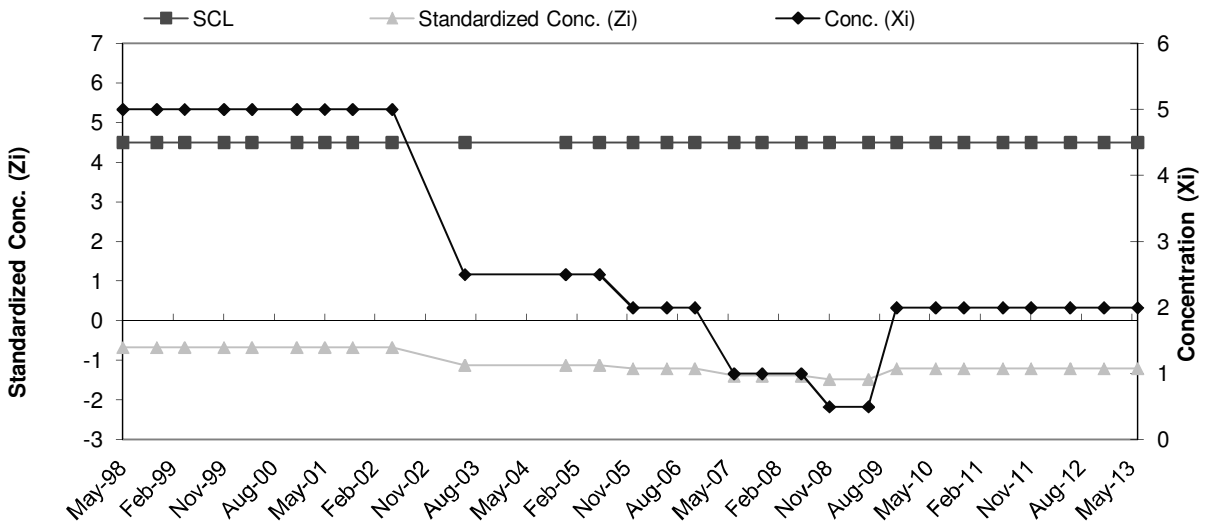


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-23d Cu

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	10	**8.75**	**5.59**
2	Aug-95	10		
3	Feb-96	10		
4	Jun-96	10		
5	Aug-96	10		
6	Nov-96	10		
7	May-97	5		
8	Nov-97	5		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-98	4.5	5	-0.67	33	Nov-11	4.5	2	-1.21
10	Nov-98	4.5	5	-0.67	34	Jun-12	4.5	2	-1.21
11	Apr-99	4.5	5	-0.67	35	Dec-12	4.5	2	-1.21
12	Nov-99	4.5	5	-0.67	36	Jun-13	4.5	2	-1.21
13	Apr-00	4.5	5	-0.67					
14	Dec-00	4.5	5	-0.67					
15	May-01	4.5	5	-0.67					
16	Oct-01	4.5	5	-0.67					
17	May-02	4.5	5	-0.67					
18	Jun-03	4.5	2.5	-1.12					
19	Dec-04	4.5	2.5	-1.12					
20	Jun-05	4.5	2.5	-1.12					
21	Dec-05	4.5	2.0	-1.21					
22	Jun-06	4.5	2.0	-1.21					
23	Nov-06	4.5	2.0	-1.21					
24	Jun-07	4.5	1	-1.39					
25	Nov-07	4.5	1	-1.39					
26	Jun-08	4.5	1	-1.39					
27	Nov-08	4.5	0.5	-1.48					
28	Jun-09	4.5	0.5	-1.48					
29	Nov-09	4.5	2	-1.21					
30	Jun-10	4.5	2	-1.21					
31	Nov-10	4.5	2	-1.21					
32	Jun-11	4.5	2	-1.21					

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

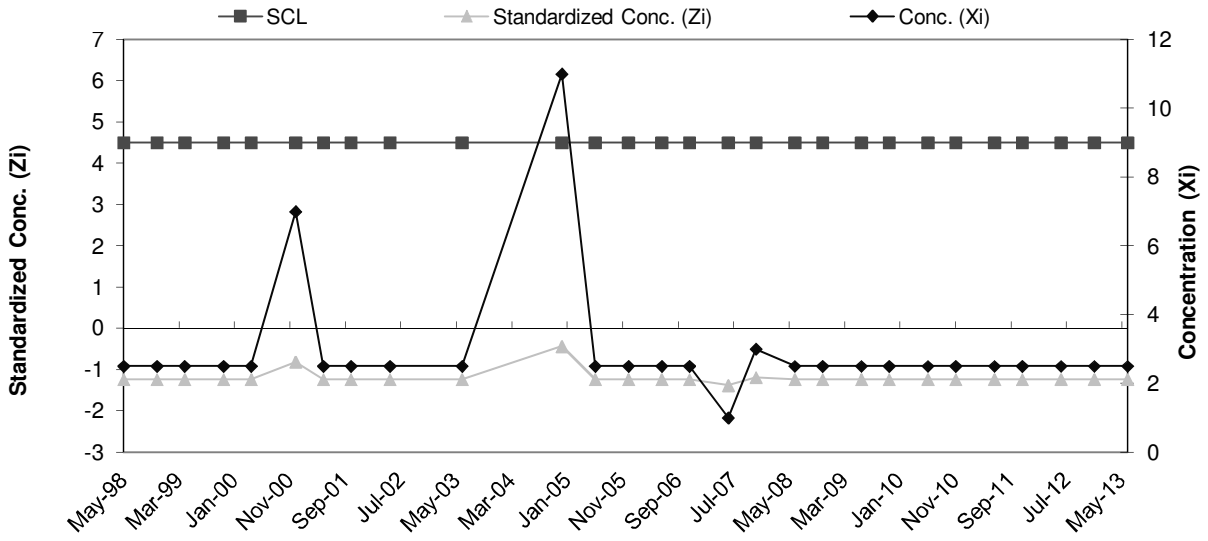


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-23d Ni

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	15	**15.61**	**10.57**
2	Aug-95	20		
3	Feb-96	20		
4	Jun-96	10		
5	Aug-96	10		
6	Nov-96	10		
7	May-97	9		
8	Nov-97	31		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-98	4.5	2.5	-1.24	33	Nov-11	4.5	2.5	-1.24
10	Nov-98	4.5	2.5	-1.24	34	Jun-12	4.5	2.5	-1.24
11	Apr-99	4.5	2.5	-1.24	35	Dec-12	4.5	2.5	-1.24
12	Nov-99	4.5	2.5	-1.24	36	Jun-13	4.5	2.5	-1.24
13	Apr-00	4.5	2.5	-1.24					
14	Dec-00	4.5	7.0	-0.81					
15	May-01	4.5	2.5	-1.24					
16	Oct-01	4.5	2.5	-1.24					
17	May-02	4.5	2.5	-1.24					
18	Jun-03	4.5	2.5	-1.24					
19	Dec-04	4.5	11.0	-0.44					
20	Jun-05	4.5	2.5	-1.24					
21	Dec-05	4.5	2.5	-1.24					
22	Jun-06	4.5	2.5	-1.24					
23	Nov-06	4.5	2.5	-1.24					
24	Jun-07	4.5	1	-1.38					
25	Nov-07	4.5	3	-1.19					
26	Jun-08	4.5	2.5	-1.24					
27	Nov-08	4.5	2.5	-1.24					
28	Jun-09	4.5	2.5	-1.24					
29	Nov-09	4.5	2.5	-1.24					
30	Jun-10	4.5	2.5	-1.24					
31	Nov-10	4.5	2.5	-1.24					
32	Jun-11	4.5	2.5	-1.24					

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

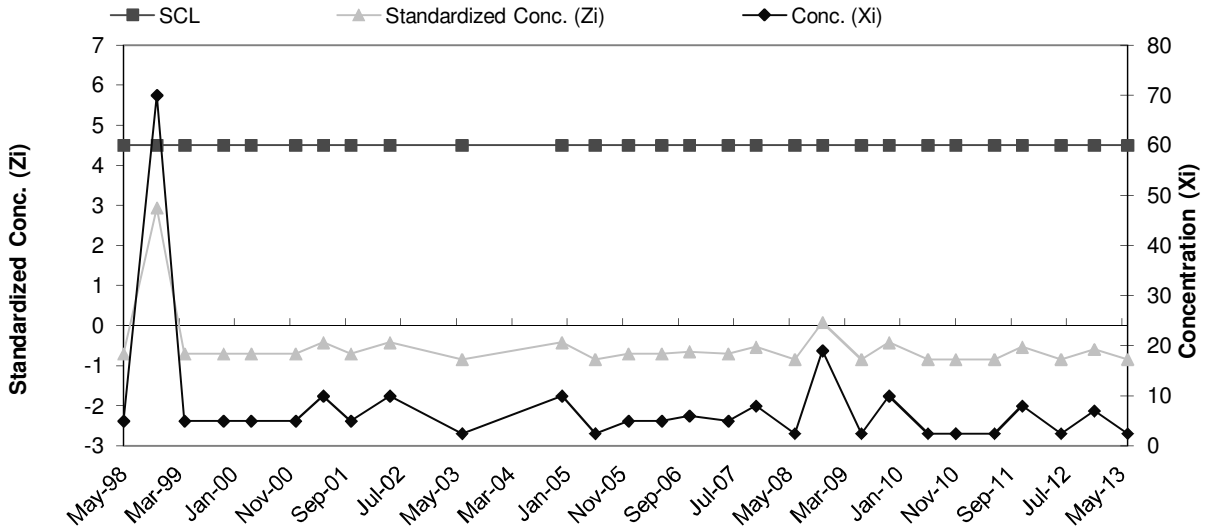


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-23d Zn

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	10		
2	Aug-95	10		
3	Feb-96	10		
4	Jun-96	10	**17.49**	**17.84**
5	Aug-96	50		
6	Nov-96	40		
7	May-97	5		
8	Nov-97	5		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-98	4.5	5.0	-0.70	33	Nov-11	4.5	8	-0.53
10	Nov-98	4.5	70.0	2.94	34	Jun-12	4.5	2.5	-0.84
11	Apr-99	4.5	5.0	-0.70	35	Dec-12	4.5	7	-0.59
12	Nov-99	4.5	5.0	-0.70	36	Jun-13	4.5	2.5	-0.84
13	Apr-00	4.5	5.0	-0.70					
14	Dec-00	4.5	5.0	-0.70					
15	May-01	4.5	10.0	-0.42					
16	Oct-01	4.5	5.0	-0.70					
17	May-02	4.5	10.0	-0.42					
18	Jun-03	4.5	2.5	-0.84					
19	Dec-04	4.5	10.0	-0.42					
20	Jun-05	4.5	2.5	-0.84					
21	Dec-05	4.5	5.0	-0.70					
22	Jun-06	4.5	5.0	-0.70					
23	Nov-06	4.5	6.0	-0.64					
24	Jun-07	4.5	5	-0.70					
25	Nov-07	4.5	8	-0.53					
26	Jun-08	4.5	2.5	-0.84					
27	Nov-08	4.5	19	0.08					
28	Jun-09	4.5	2.5	-0.84					
29	Nov-09	4.5	10	-0.42					
30	Jun-10	4.5	2.5	-0.84					
31	Nov-10	4.5	2.5	-0.84					
32	Jun-11	4.5	2.5	-0.84					

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

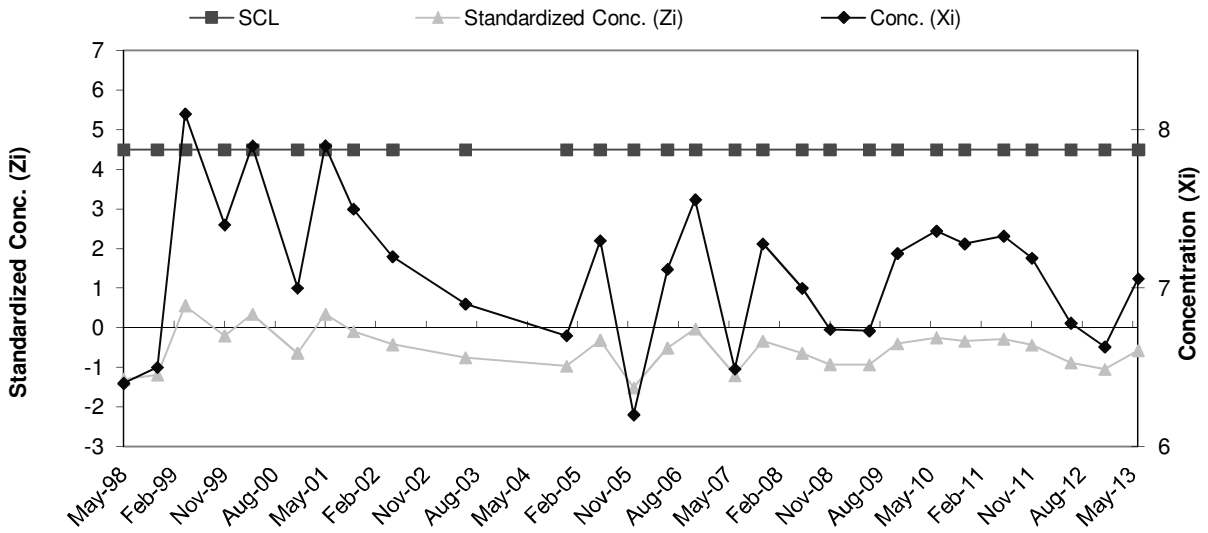


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-23d pH

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	7.3		
2	Aug-95	8.2		
3	Feb-96	7.5		
4	Jun-96	8.3	**7.59**	**0.91**
5	Aug-96	8.9		
6	Nov-96	7.7		
7	May-97	6.8		
8	Nov-97	6.0		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-98	4.5	6.4	-1.30	33	Nov-11	4.5	7.2	-0.43
10	Nov-98	4.5	6.5	-1.19	34	Jun-12	4.5	6.8	-0.88
11	Apr-99	4.5	8.1	0.56	35	Dec-12	4.5	6.6	-1.05
12	Nov-99	4.5	7.4	-0.21	36	Jun-13	4.5	7.1	-0.58
13	Apr-00	4.5	7.9	0.34					
14	Dec-00	4.5	7.0	-0.64					
15	May-01	4.5	7.9	0.34					
16	Oct-01	4.5	7.5	-0.10					
17	May-02	4.5	7.2	-0.42					
18	Jun-03	4.5	6.9	-0.75					
19	Dec-04	4.5	6.7	-0.97					
20	Jun-05	4.5	7.3	-0.31					
21	Dec-05	4.5	6.2	-1.52					
22	Jun-06	4.5	7.1	-0.51					
23	Nov-06	4.5	7.6	-0.03					
24	Jun-07	4.5	6.5	-1.20					
25	Nov-07	4.5	7.3	-0.34					
26	Jun-08	4.5	7.0	-0.64					
27	Nov-08	4.5	6.7	-0.93					
28	Jun-09	4.5	6.7	-0.94					
29	Nov-09	4.5	7.2	-0.40					
30	Jun-10	4.5	7.4	-0.25					
31	Nov-10	4.5	7.3	-0.34					
32	Jun-11	4.5	7.3	-0.28					

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

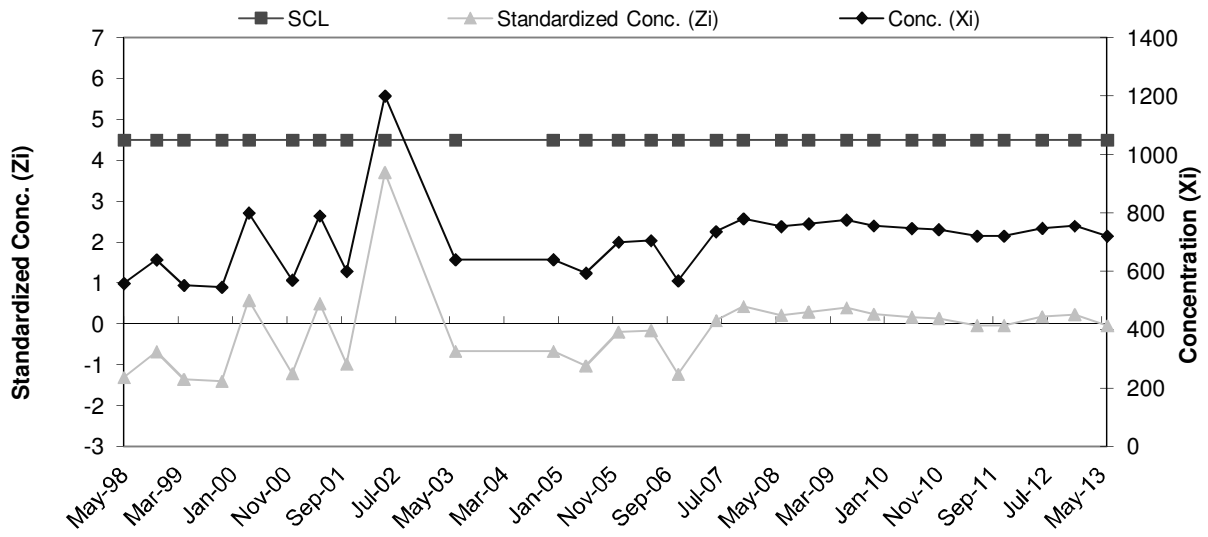


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-23d SpC

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	680		
2	Aug-95	845		
3	Feb-96	751		
4	Jun-96	632	**725.75**	**127.98**
5	Aug-96	691		
6	Nov-96	977		
7	May-97	610		
8	Nov-97	620		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	May-98	4.5	558	-1.31	33	Nov-11	4.5	721	-0.04
10	Nov-98	4.5	639	-0.68	34	Jun-12	4.5	748	0.17
11	Apr-99	4.5	552	-1.36	35	Dec-12	4.5	755	0.23
12	Nov-99	4.5	546	-1.40	36	Jun-13	4.5	720	-0.04
13	Apr-00	4.5	800	0.58					
14	Dec-00	4.5	570	-1.22					
15	May-01	4.5	790	0.50					
16	Oct-01	4.5	600	-0.98					
17	May-02	4.5	1200	3.71					
18	Jun-03	4.5	640	-0.67					
19	Dec-04	4.5	640	-0.67					
20	Jun-05	4.5	594	-1.03					
21	Dec-05	4.5	700	-0.20					
22	Jun-06	4.5	705	-0.16					
23	Nov-06	4.5	568	-1.23					
24	Jun-07	4.5	736	0.08					
25	Nov-07	4.5	780	0.42					
26	Jun-08	4.5	753	0.21					
27	Nov-08	4.5	763	0.29					
28	Jun-09	4.5	776	0.39					
29	Nov-09	4.5	756	0.24					
30	Jun-10	4.5	747	0.17					
31	Nov-10	4.5	743	0.13					
32	Jun-11	4.5	721	-0.04					

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

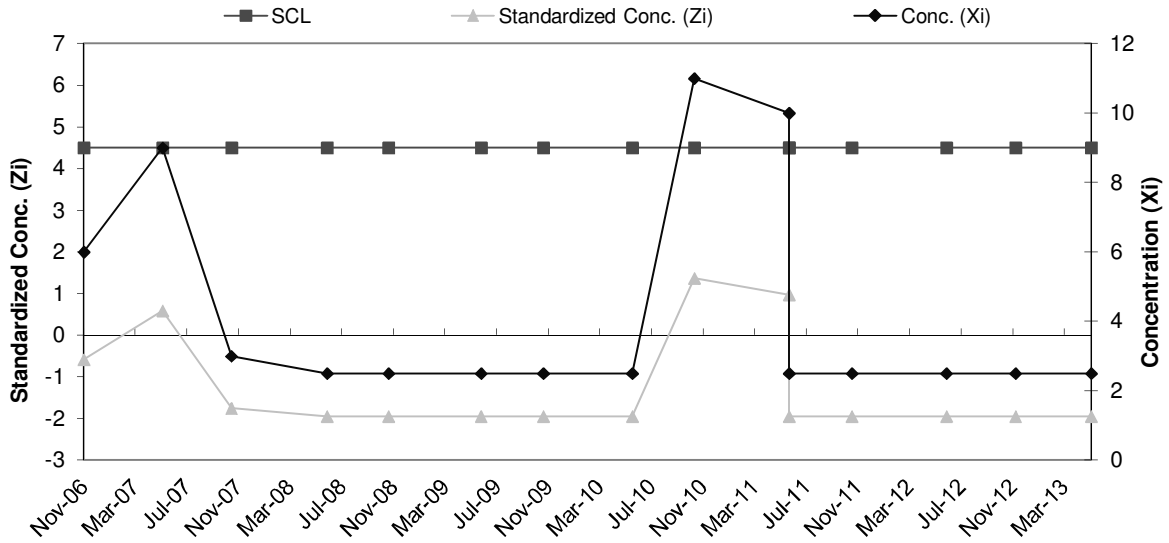


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-24 Cr

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Aug-96	10	**7.50**	**2.56**
2	Nov-96	10		
3	May-97	5		
4	May-98	5		
5	Nov-03	5		
6	Jun-05	8		
7	Dec-05	11		
8	Jun-06	6		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Nov-06	4.5	6	-0.59
10	Jun-07	4.5	9	0.59
11	Nov-07	4.5	3	-1.76
12	Jun-08	4.5	2.5	-1.95
13	Nov-08	4.5	2.5	-1.95
14	Jun-09	4.5	2.5	-1.95
15	Nov-09	4.5	2.5	-1.95
16	Jun-10	4.5	2.5	-1.95
17	Nov-10	4.5	11	1.37
18	Jun-11	4.5	10	0.98
19	Jun-11	4.5	2.5	-1.95
20	Nov-11	4.5	2.5	-1.95
21	Jun-12	4.5	2.5	-1.95
22	Dec-12	4.5	2.5	-1.95
23	Jun-13	4.5	2.5	-1.95

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

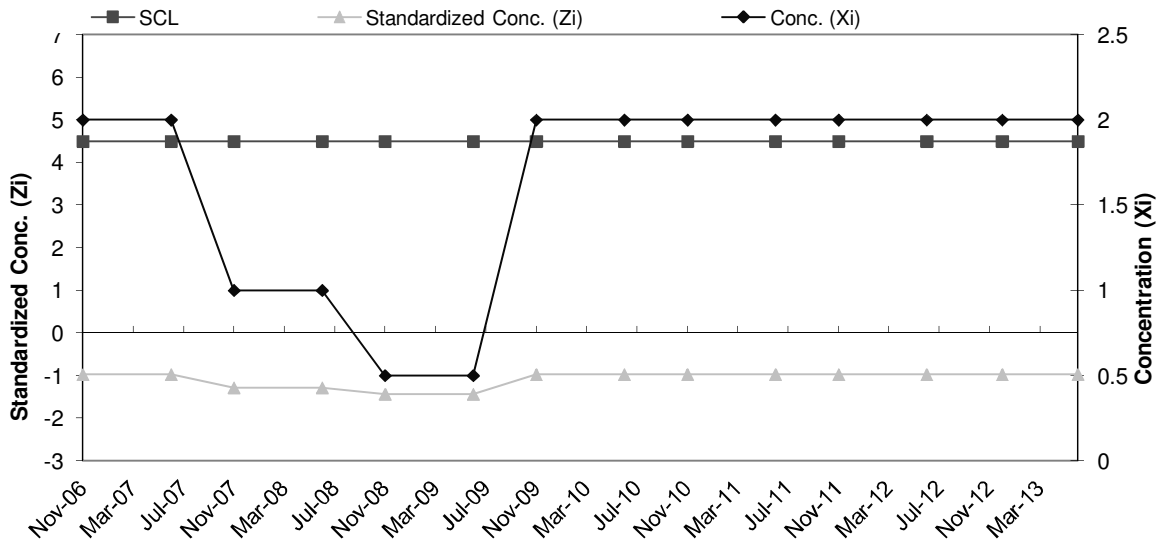


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-24 Cu

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Aug-96	10		
2	Nov-96	10		
3	May-97	5		
4	May-98	5	**5.19**	**3.25**
5	Nov-03	5		
6	Jun-05	2.5		
7	Dec-05	2		
8	Jun-06	2		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Nov-06	4.5	2	-0.98
10	Jun-07	4.5	2	-0.98
11	Nov-07	4.5	1	-1.29
12	Jun-08	4.5	1	-1.29
13	Nov-08	4.5	0.5	-1.44
14	Jun-09	4.5	0.5	-1.44
15	Nov-09	4.5	2	-0.98
16	Jun-10	4.5	2	-0.98
17	Nov-10	4.5	2	-0.98
18	Jun-11	4.5	2	-0.98
19	Nov-11	4.5	2	-0.98
20	Jun-12	4.5	2	-0.98
21	Dec-12	4.5	2	-0.98
22	Jun-13	4.5	2	-0.98

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

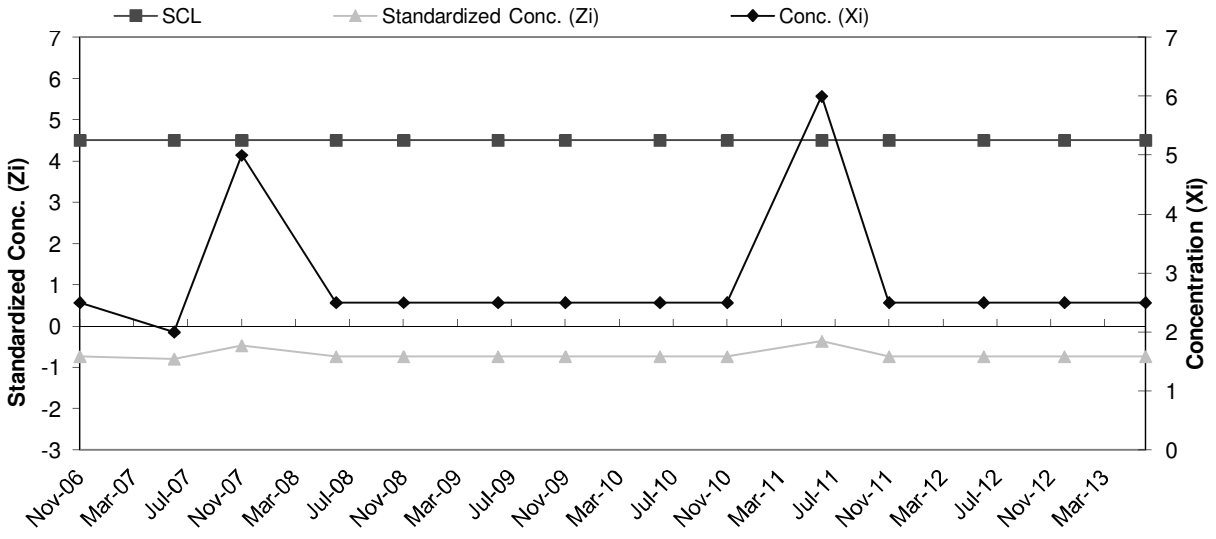


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-24 Ni

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Aug-96	10		
2	Nov-96	10		
3	May-97	31		
4	May-98	8	**9.44**	**9.35**
5	Nov-03	9		
6	Jun-05	2.5		
7	Dec-05	2.5		
8	Jun-06	2.5		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Nov-06	4.5	2.5	-0.74
10	Jun-07	4.5	2	-0.80
11	Nov-07	4.5	5	-0.47
12	Jun-08	4.5	2.5	-0.74
13	Nov-08	4.5	2.5	-0.74
14	Jun-09	4.5	2.5	-0.74
15	Nov-09	4.5	2.5	-0.74
16	Jun-10	4.5	2.5	-0.74
17	Nov-10	4.5	2.5	-0.74
18	Jun-11	4.5	6	-0.37
19	Nov-11	4.5	2.5	-0.74
20	Jun-12	4.5	2.5	-0.74
21	Dec-12	4.5	2.5	-0.74
22	Jun-13	4.5	2.5	-0.74

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

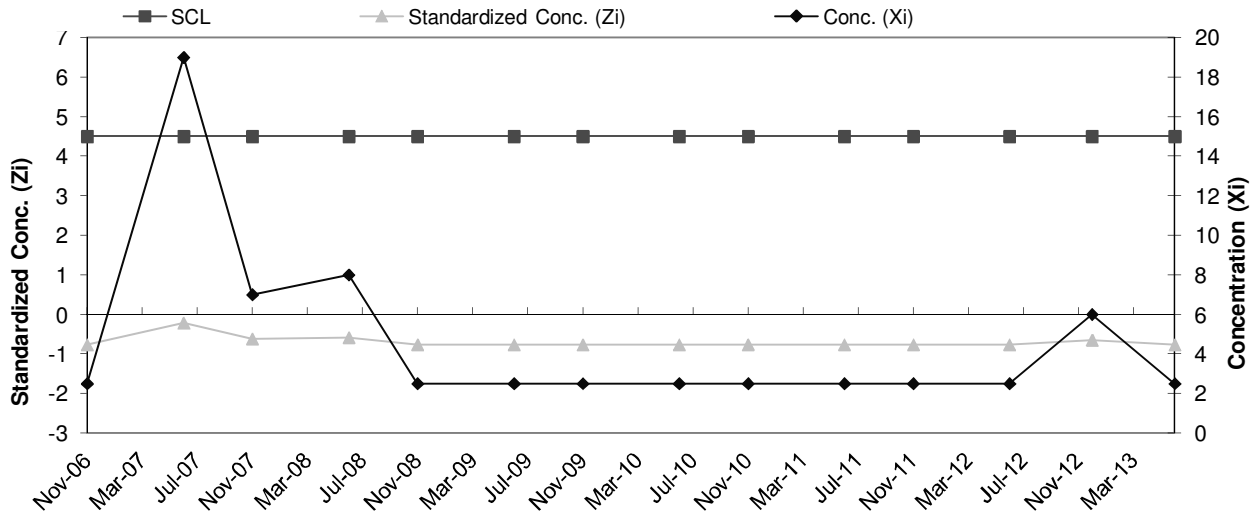


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-24 Zn

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Aug-96	90		
2	Nov-96	50		
3	May-97	10		
4	May-98	20	**25.63**	**30.14**
5	Nov-03	20		
6	Jun-05	2.5		
7	Dec-05	10		
8	Jun-06	2.5		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Nov-06	4.5	2.5	-0.77
10	Jun-07	4.5	19	-0.22
11	Nov-07	4.5	7	-0.62
12	Jun-08	4.5	8	-0.58
13	Nov-08	4.5	2.5	-0.77
14	Jun-09	4.5	2.5	-0.77
15	Nov-09	4.5	2.5	-0.77
16	Jun-10	4.5	2.5	-0.77
17	Nov-10	4.5	2.5	-0.77
18	Jun-11	4.5	2.5	-0.77
19	Nov-11	4.5	2.5	-0.77
20	Jun-12	4.5	2.5	-0.77
21	Dec-12	4.5	6	-0.65
22	Jun-13	4.5	2.5	-0.77

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

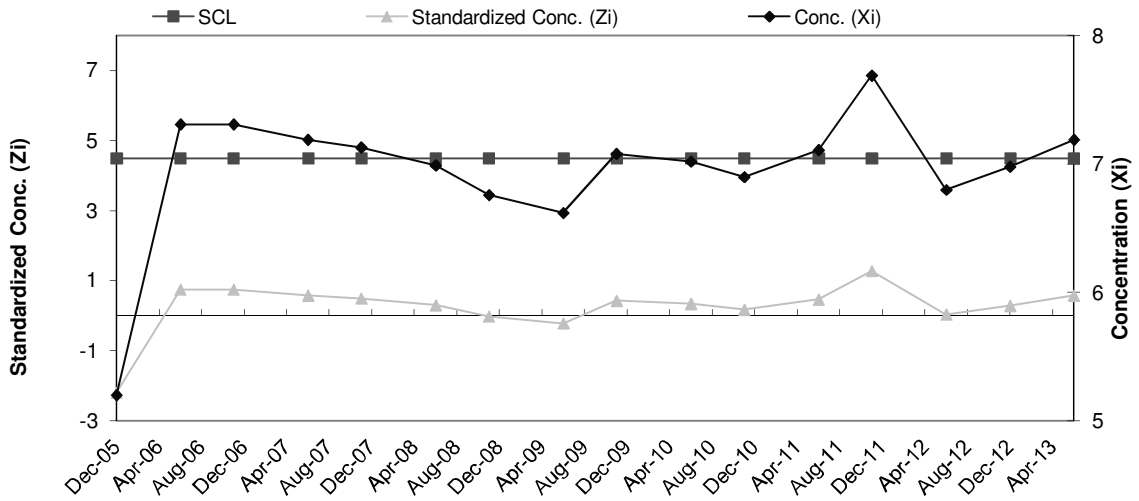


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-24 pH

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Aug-96	7.8	**6.78**	**0.72**
2	Nov-96	7.1		
3	May-97	6.4		
4	May-98	7		
5	Nov-98	6		
6	Nov-99	7		
7	May-01	6.4		
8	Jun-05	7.3		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Dec-05	4.5	5.2	-2.20
10	Jun-06	4.5	7.3	0.75
11	Nov-06	4.5	7.3	0.75
12	Jun-07	4.5	7.2	0.58
13	Nov-07	4.5	7.1	0.50
14	Jun-08	4.5	7.0	0.30
15	Nov-08	4.5	6.8	-0.02
14	Jun-09	4.5	6.6	-0.22
15	Nov-09	4.5	7.1	0.43
16	Jun-10	4.5	7.0	0.34
17	Nov-10	4.5	6.9	0.17
18	Jun-11	4.5	7.1	0.47
19	Nov-11	4.5	7.7	1.28
20	Jun-12	4.5	6.8	0.03
21	Dec-12	4.5	7.0	0.29
22	Jun-13	4.5	7.2	0.58

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

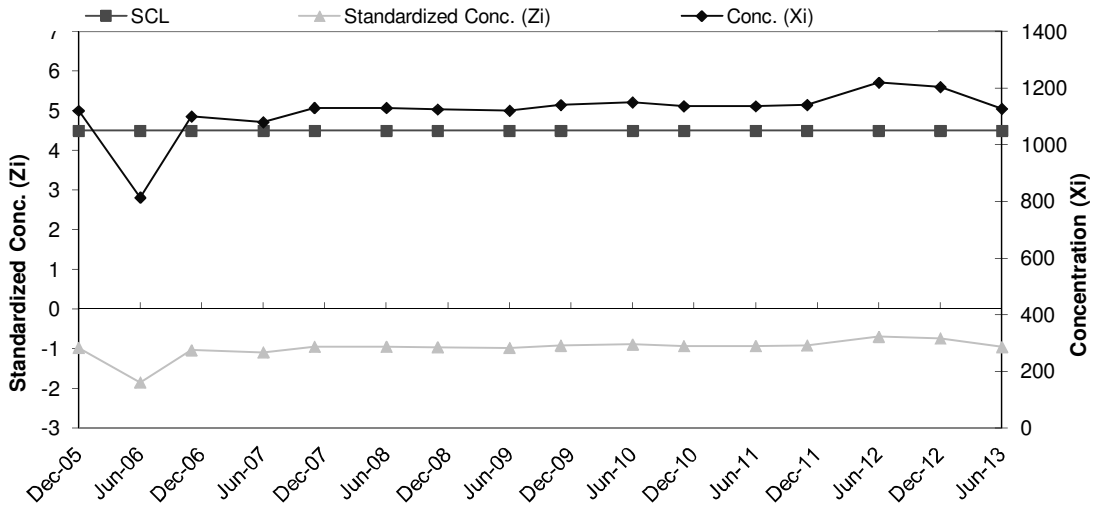


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-24 SpC

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Aug-96	1502		
2	Nov-96	2030		
3	May-97	1700		
4	May-98	1410	**1,462.00**	**351.23**
5	Nov-98	1595		
6	Nov-99	1152		
7	May-01	1450		
8	Jun-05	857		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Dec-05	4.5	1120	-0.97
10	Jun-06	4.5	814	-1.84
11	Nov-06	4.5	1100	-1.03
12	Jun-07	4.5	1080	-1.09
13	Nov-07	4.5	1130	-0.95
14	Jun-08	4.5	1130	-0.95
15	Nov-08	4.5	1125	-0.96
16	Jun-09	4.5	1120	-0.97
17	Nov-09	4.5	1140	-0.92
18	Jun-10	4.5	1150	-0.89
19	Nov-10	4.5	1136	-0.93
20	Jun-11	4.5	1136	-0.93
21	Nov-11	4.5	1141	-0.91
22	Jun-12	4.5	1219	-0.69
23	Dec-12	4.5	1204	-0.73
24	Jun-13	4.5	1127	-0.95

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

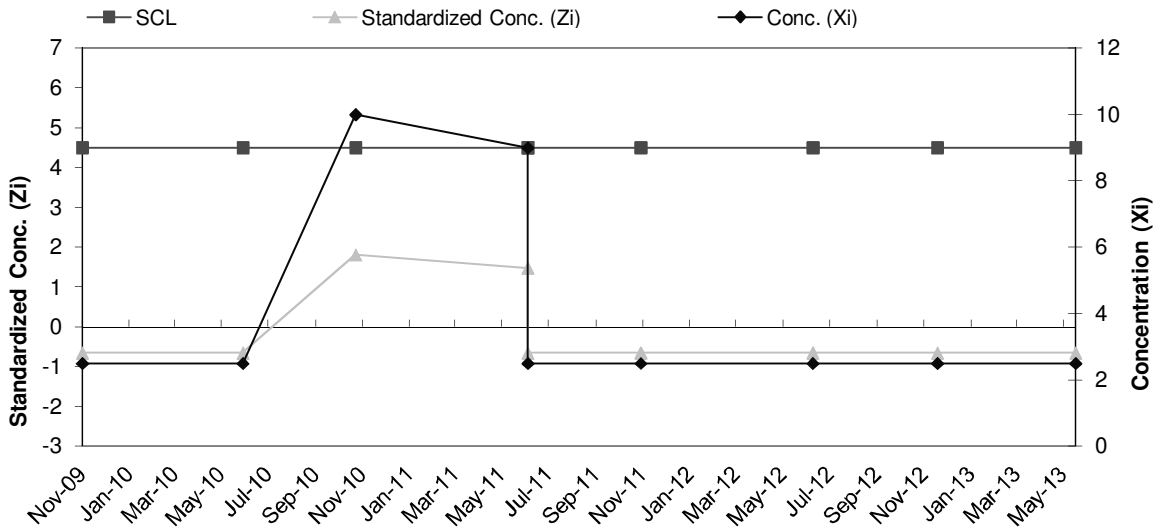


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-27 Cr

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Dec-05	9		
2	Jun-06	6		
3	Nov-06	2.5		
4	Jun-07	9	**4.50**	**3.05**
5	Nov-07	2		
6	Jun-08	2.5		
7	Nov-08	2.5		
8	Jun-09	2.5		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Nov-09	4.5	2.5	-0.66
10	Jun-10	4.5	2.5	-0.66
11	Nov-10	4.5	10	1.80
12	Jun-11	4.5	9	1.48
13	Jun-11	4.5	2.5	-0.66
14	Nov-11	4.5	2.5	-0.66
15	Jun-12	4.5	2.5	-0.66
16	Dec-12	4.5	2.5	-0.66
17	Jun-13	4.5	2.5	-0.66

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

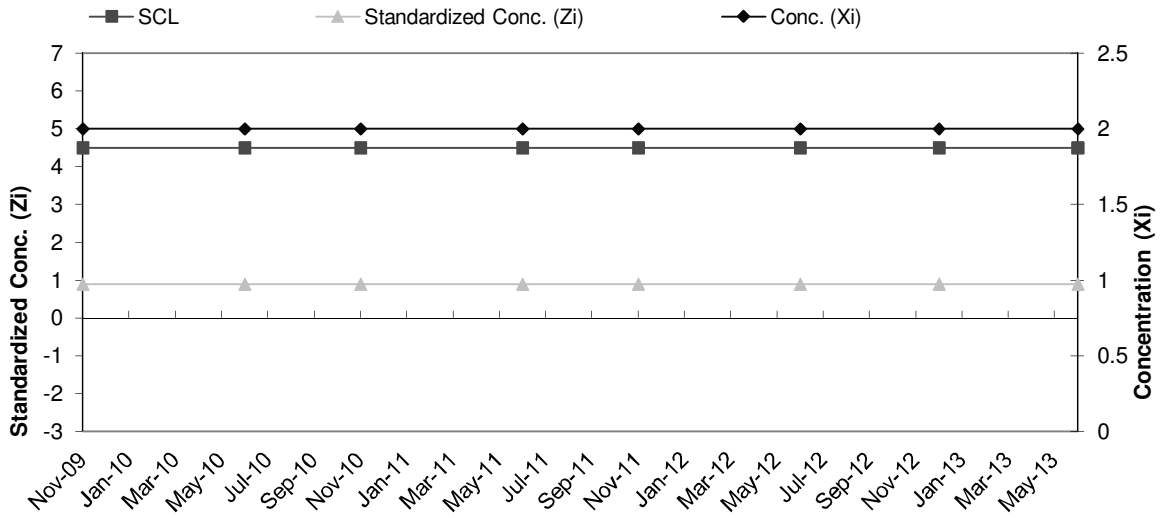


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-27 Cu

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Dec-05	2	**1.38**	**0.69**
2	Jun-06	2		
3	Nov-06	2		
4	Jun-07	2		
5	Nov-07	1		
6	Jun-08	0.5		
7	Nov-08	0.5		
8	Jun-09	1		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Nov-09	4.5	2	0.90
10	Jun-10	4.5	2	0.90
11	Nov-10	4.5	2	0.90
12	Jun-11	4.5	2	0.90
13	Nov-11	4.5	2	0.90
14	Jun-12	4.5	2	0.90
15	Dec-12	4.5	2	0.90
16	Jun-13	4.5	2	0.90

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

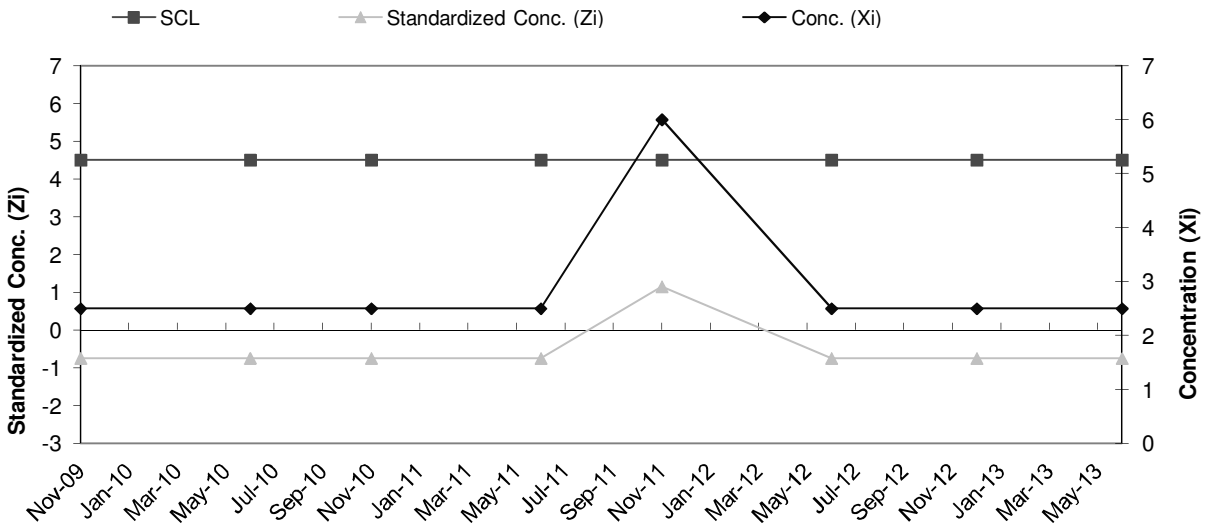


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-27 Ni

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Dec-05	6		
2	Jun-06	7		
3	Nov-06	2.5		
4	Jun-07	3	**3.88**	**1.85**
5	Nov-07	5		
6	Jun-08	2.5		
7	Nov-08	2.5		
8	Jun-09	2.5		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Nov-09	4.5	2.5	-0.74
10	Jun-10	4.5	2.5	-0.74
11	Nov-10	4.5	2.5	-0.74
12	Jun-11	4.5	2.5	-0.74
13	Nov-11	4.5	6	1.15
14	Jun-12	4.5	2.5	-0.74
15	Dec-12	4.5	2.5	-0.74
16	Jun-13	4.5	2.5	-0.74

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

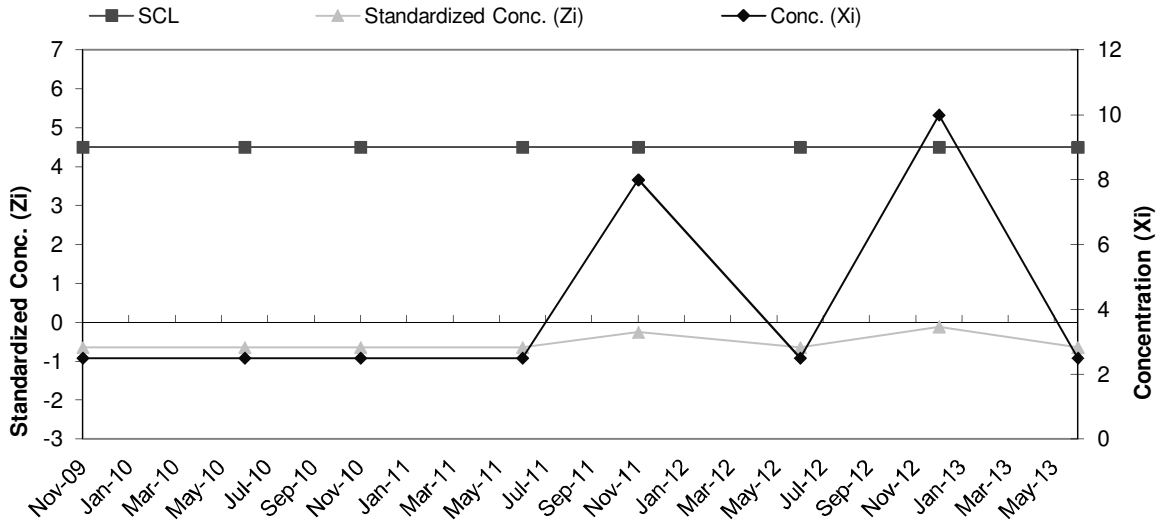


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-27 Zn

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Dec-05	5		
2	Jun-06	6		
3	Nov-06	6		
4	Jun-07	36	**11.56**	**13.97**
5	Nov-07	32		
6	Jun-08	2.5		
7	Nov-08	2.5		
8	Jun-09	2.5		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Nov-09	4.5	2.5	-0.65
10	Jun-10	4.5	2.5	-0.65
11	Nov-10	4.5	2.5	-0.65
12	Jun-11	4.5	2.5	-0.65
13	Nov-11	4.5	8	-0.26
14	Jun-12	4.5	2.5	-0.65
15	Dec-12	4.5	10	-0.11
16	Jun-13	4.5	2.5	-0.65

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

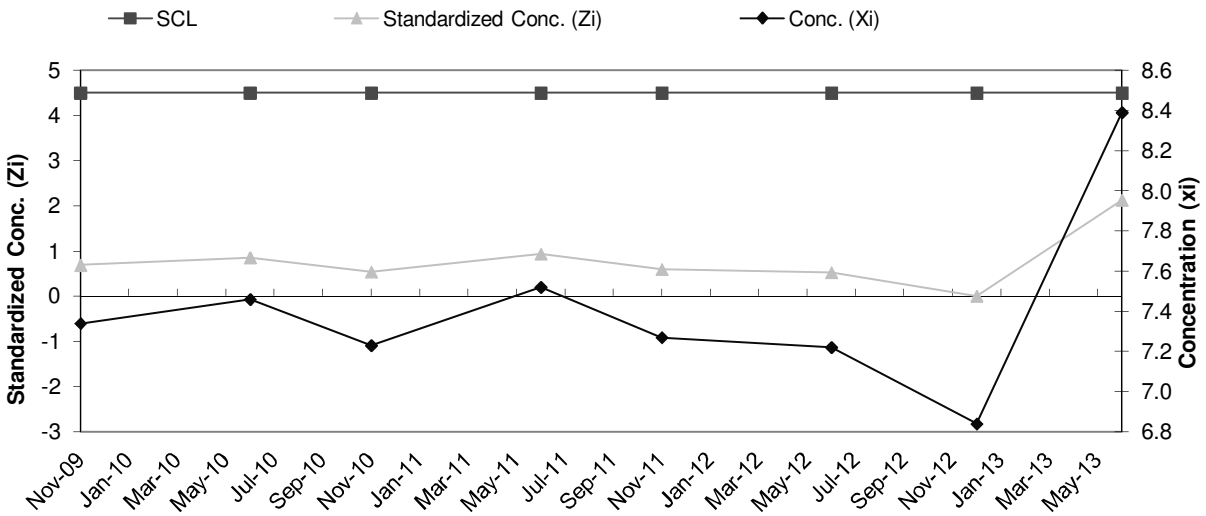


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-27 pH

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Dec-05	5.1	**6.79**	**0.73**
2	Jun-06	7.1		
3	Nov-06	7.5		
4	Jun-07	6.6		
5	Nov-07	7.3		
6	Jun-08	7.1		
7	Nov-08	6.8		
8	Jun-09	6.8		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Nov-09	4.5	7.3	0.69
10	Jun-10	4.5	7.4	0.85
11	Nov-10	4.5	7.2	0.54
12	Jun-11	4.5	7.5	0.94
13	Nov-11	4.5	7.2	0.59
14	Jun-12	4.5	7.2	0.52
15	Dec-12	4.5	6.8	0.00
16	Jun-13	4.5	8.3	2.13

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

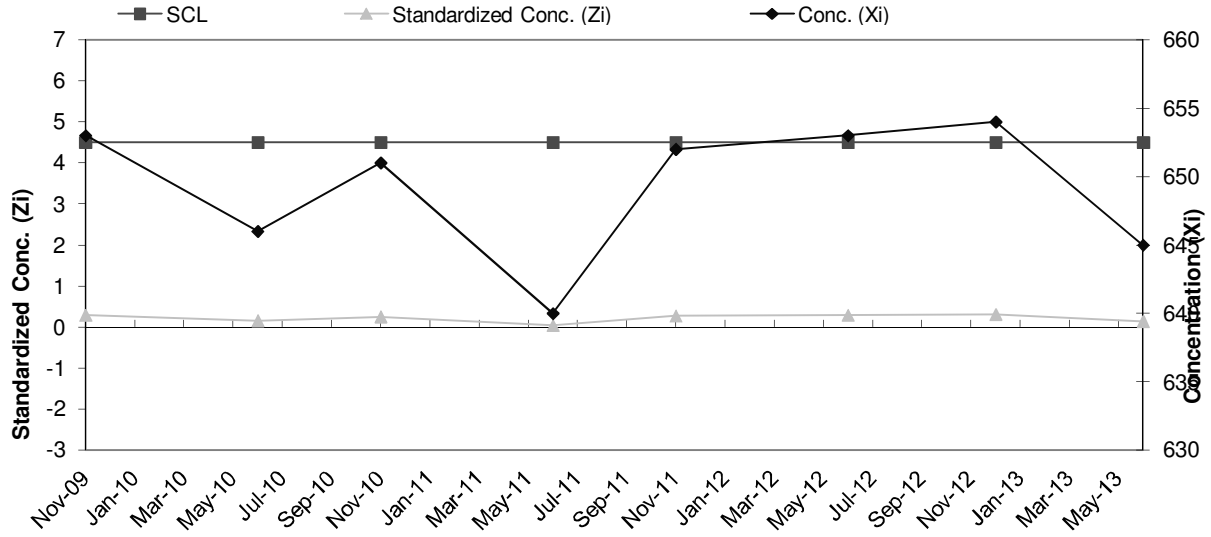


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-27 SpC

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Dec-05	714		
2	Jun-06	594		
3	Nov-06	540		
4	Jun-07	628	**637.75**	**52.08**
5	Nov-07	649		
6	Jun-08	659		
7	Nov-08	667		
8	Jun-09	651		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Nov-09	4.5	653	0.29
10	Jun-10	4.5	646	0.16
11	Nov-10	4.5	651	0.25
12	Jun-11	4.5	640	0.04
13	Nov-11	4.5	652	0.27
14	Jun-12	4.5	653	0.29
15	Dec-12	4.5	654	0.31
16	Jun-13	4.5	645	0.14

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

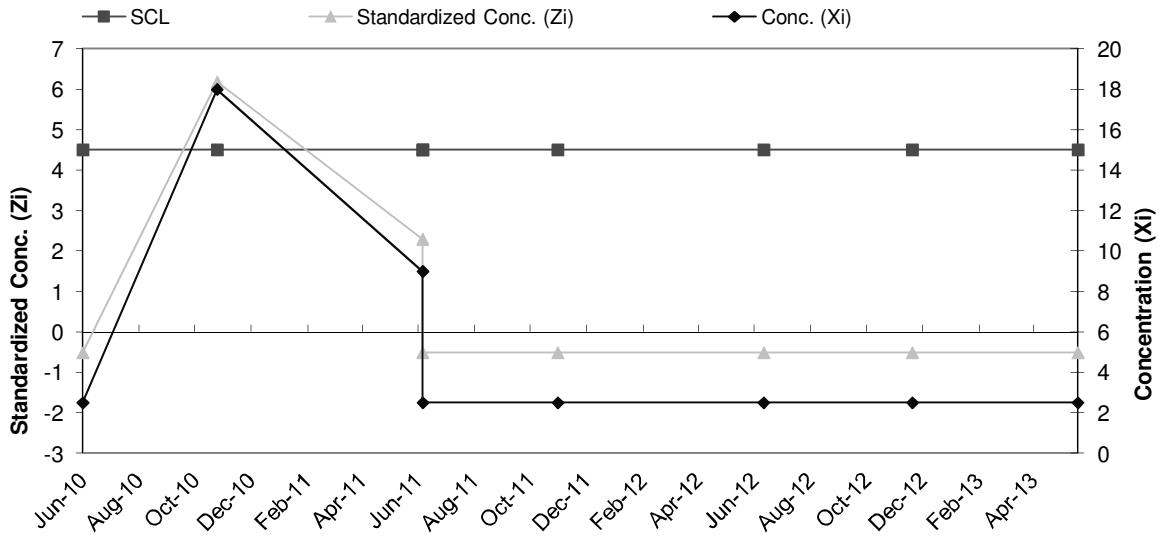


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-28 Cr

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-06	5		
2	Dec-06	2.5		
3	Jun-07	9		
4	Nov-07	3	**3.69**	**2.31**
5	Jun-08	2.5		
6	Nov-08	2.5		
7	Jun-09	2.5		
8	Nov-09	2.5		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Jun-10	4.5	2.5	-0.51
10	Nov-10	4.5	18	6.19
11	Jun-11	4.5	9	2.30
12	Jun-11	4.5	2.5	-0.51
13	Nov-11	4.5	2.5	-0.51
14	Jun-12	4.5	2.5	-0.51
15	Dec-12	4.5	2.5	-0.51
16	Jun-13	4.5	2.5	-0.51

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

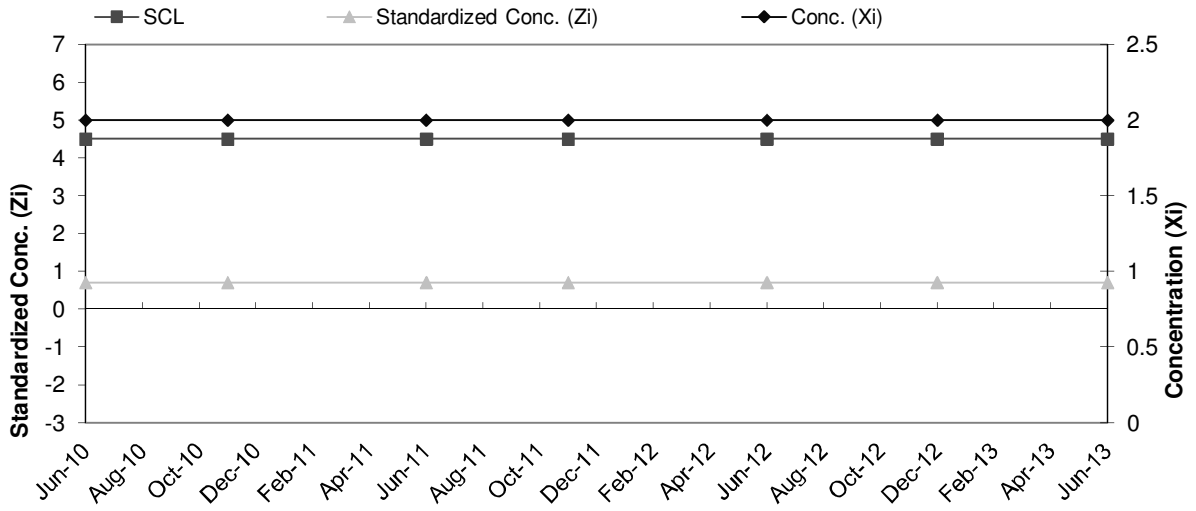


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-28 Cu

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-06	2	**1.50**	**0.71**
2	Dec-06	2		
3	Jun-07	2		
4	Nov-07	2		
5	Jun-08	1		
6	Nov-08	0.5		
7	Jun-09	0.5		
8	Nov-09	2		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Jun-10	4.5	2	0.71
10	Nov-10	4.5	2	0.71
11	Jun-11	4.5	2	0.71
12	Nov-11	4.5	2	0.71
13	Jun-12	4.5	2	0.71
14	Dec-12	4.5	2	0.71
15	Jun-13	4.5	2	0.71

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

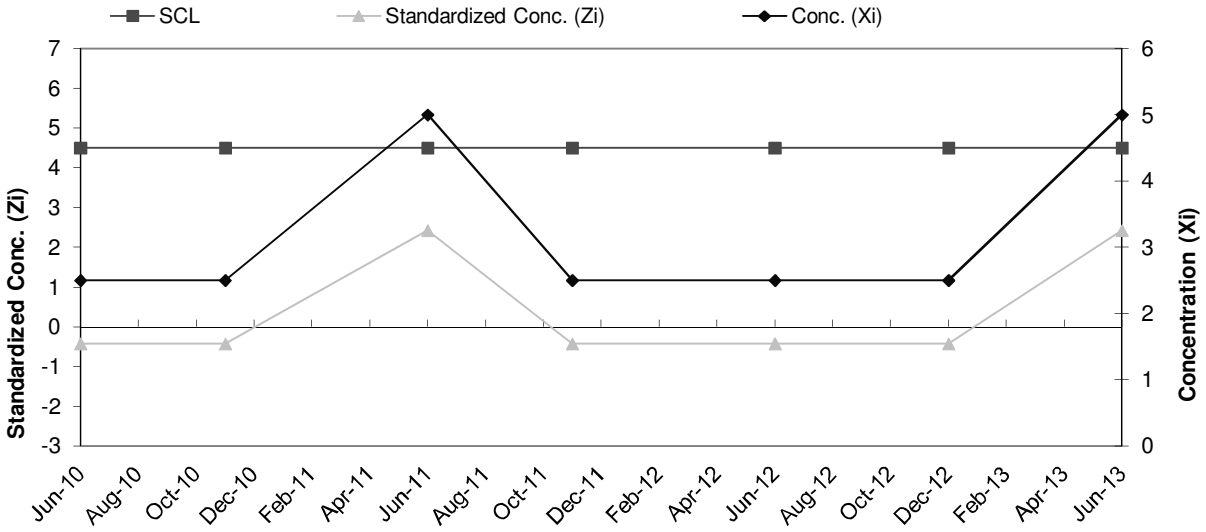


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-28 Ni

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-06	2.5		
2	Dec-06	2.5		
3	Jun-07	3		
4	Nov-07	5	**2.88**	**0.88**
5	Jun-08	2.5		
6	Nov-08	2.5		
7	Jun-09	2.5		
8	Nov-09	2.5		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Jun-10	4.5	2.5	-0.43
10	Nov-10	4.5	2.5	-0.43
9	Jun-11	4.5	5	2.43
10	Nov-11	4.5	2.5	-0.43
11	Jun-12	4.5	2.5	-0.43
12	Dec-12	4.5	2.5	-0.43
13	Jun-13	4.5	5	2.43

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

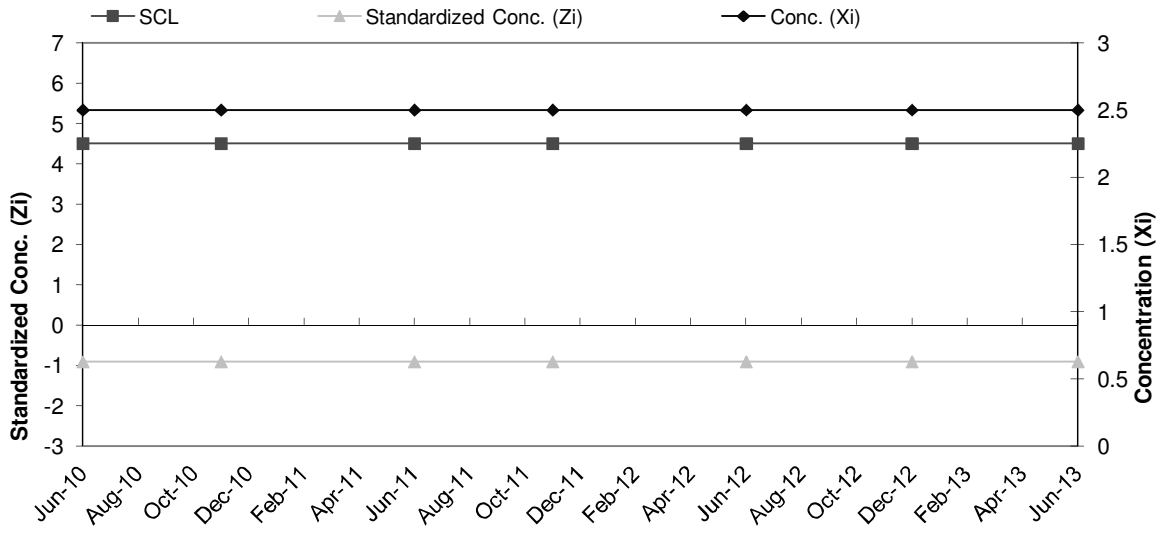


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-28 Zn

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-06	18		
2	Dec-06	5		
3	Jun-07	6		
4	Nov-07	11	**8.75**	**6.88**
5	Jun-08	5		
6	Nov-08	2.5		
7	Jun-09	2.5		
8	Nov-09	20		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Jun-10	4.5	2.5	-0.91
10	Nov-10	4.5	2.5	-0.91
11	Jun-11	4.5	2.5	-0.91
12	Nov-11	4.5	2.5	-0.91
13	Jun-12	4.5	2.5	-0.91
14	Dec-12	4.5	2.5	-0.91
15	Jun-13	4.5	2.5	-0.91

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

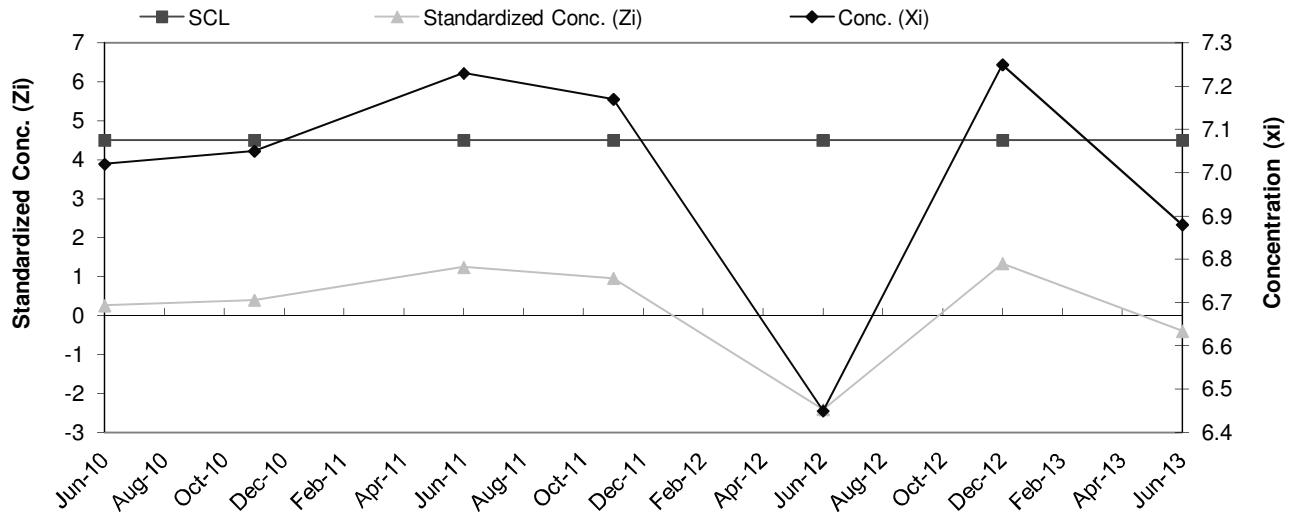


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-28 pH

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-06	7.1	**6.97**	**0.21**
2	Dec-06	7.4		
3	Jun-07	6.8		
4	Nov-07	6.8		
5	Jun-08	6.9		
6	Nov-08	6.8		
7	Jun-09	7.0		
8	Nov-09	6.9		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Jun-10	4.5	7.0	0.26
10	Nov-10	4.5	7.1	0.40
11	Jun-11	4.5	7.2	1.24
12	Nov-11	4.5	7.2	0.96
13	Jun-12	4.5	6.5	-2.42
14	Dec-12	4.5	7.3	1.34
15	Jun-13	4.5	6.9	-0.40

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

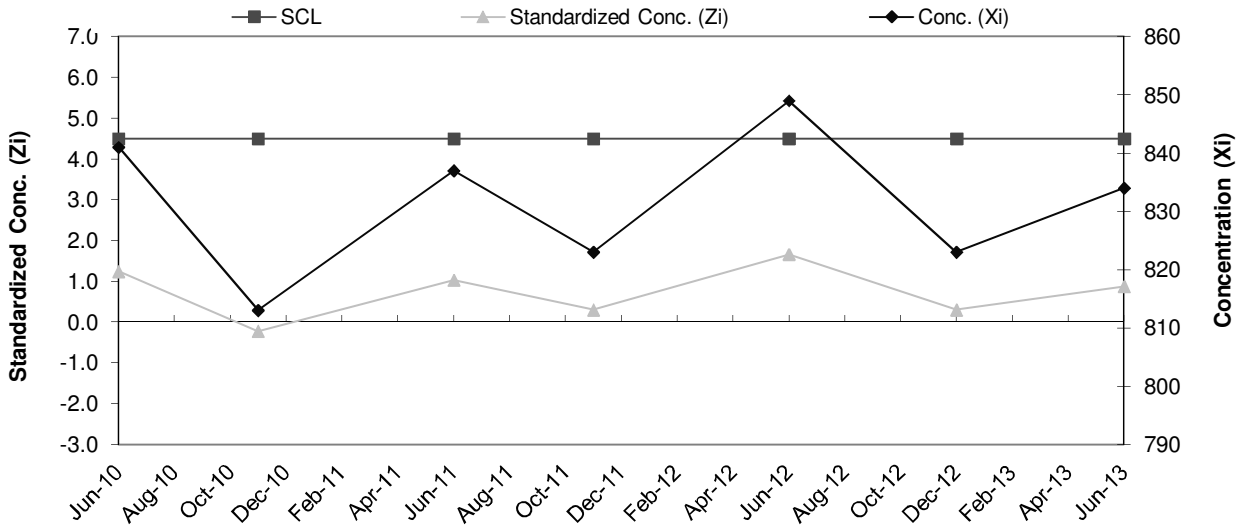


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-28 SpC

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-06	785		
2	Dec-06	812		
3	Jun-07	845		
4	Nov-07	816	**817.25**	**19.14**
5	Jun-08	840		
6	Nov-08	804		
7	Jun-09	822		
8	Nov-09	814		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Jun-10	4.5	841	1.24
10	Nov-10	4.5	813	-0.22
11	Jun-11	4.5	837	1.03
12	Nov-11	4.5	823	0.30
13	Jun-12	4.5	849	1.66
14	Dec-12	4.5	823	0.30
15	Jun-13	4.5	834	0.87

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



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