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COLDWATER ROAD LANDFILL - MID 005 356 860 POST-CLOSURE GROUNDWATER MONITORING REPORT



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1. INTRODUCTION

On behalf of Revitalizing Auto Communities Environmental Response (RACER) Trust, Ramboll Americas Engineering Solutions, Inc. (Ramboll) has prepared this report to present the results of the semiannual groundwater sampling event conducted in June 2021 for the Coldwater Road Landfill (Site) ([Figure 1](#)).

2. SAMPLING AND ANALYSIS

During this event groundwater samples were collected from six monitoring wells screened in perched zones (B-7, B-9, B-18A, B-19Ar, B-24r, and B-28) and six monitoring wells screened in the drift unit (B-20D, B-21D, B-22D, B-23Dr, B-27D, and OBG MW-16D). Samples were collected during the week of June 7, 2021.

Groundwater samples were analyzed for specific conductivity (Method 120.1), chloride (Method 300.0), cyanide (CN, Method 335.4), sulfate (Method 300.0), phenols (Method 420.1), total organic carbon (TOC, Method 5310C), total organic halides (TOX, Method 9020B), 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 from the perched zone were collected using a Whale pump (B-18A and B-19Ar) or peristaltic pump. The wells were purged “dry”, allowed to recharge, and the samples were collected as soon as sufficient water was present to obtain the necessary sample volume. This was done in accordance with Ramboll procedures and the site-specific Field Method Guide ([Appendix A](#)) because low-flow sampling techniques resulted in greater than 0.3 ft of drawdown in each of the perched zone wells sampled during this event.

Groundwater samples from the drift aquifer were collected using a bladder pump and low-flow sampling techniques. Samples to be analyzed for dissolved metals were field filtered. Groundwater sampling logs are included in [Appendix B](#).

Well gauging was conducted on June 8, 2021 and sampling occurred between June 8, 2021 through June 11, 2021. 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, and Metals); and [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 potentiometric surface map was prepared for the perched zone wells ([Figure 3](#)) and for the deeper drift unit ([Figure 4](#)). Additional site monitoring wells (not part of the landfill monitoring program) were used to aid in the creation of the contour maps.

The perched zone static water elevations were down approximately 1 foot (at most 2 feet) compared to the elevations collected the previous year. Groundwater in the perched zone includes discontinuous perched saturated zones within an otherwise clayey matrix.

[Figure 3](#) provides interpreted potentiometric surface contours for the groundwater elevation data collected during the June 2021 semiannual sampling event. Based on these contours, the groundwater flow direction in the perched zone appears to be predominantly toward the northwest but turning toward the west in the westward extension of the Site.

The drift unit static water elevations were consistent with historical data. Groundwater in the drift unit flows in a southerly direction as shown on [Figure 4](#).

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 reporting limit of 5 µg/L. The results were similar or less than previous results, which ranged from below the reporting limit to 37 µg/L at B-9 (8/31/1995).
- Copper concentrations were not detected above the reporting limit of 5 µg/L; except in monitoring well B-19Ar (5 µg/L). The results were similar or less than previous results, which ranged from below the reporting limit to 203 µg/L at OBG MW-16D (6/25/2009).
- Nickel concentrations were not detected above the reporting limit of 5 µg/L; except in monitoring well B-19Ar (6 µg/L). The results were similar or less than previous results, which ranged from below the reporting limit to 370 µg/L at B-22D (6/21/1995).
- Zinc concentrations ranged from below the reporting limit of 5 µg/L in monitoring wells OBG MW-16D, B-9, B-20D, B-21D, B-23Dr, B-27D, duplicate from B-27D, and B-28 to 16 µg/L in monitoring well B-18A. The results were similar or less than previous results, which ranged from below the reporting limit to 150 µg/L at B-18A (6/21/1995).
- Iron concentrations ranged from 30 µg/L in monitoring well B-18A to 2,100 µg/L in monitoring well B-20D. The results were similar or less than previous results which ranged from below the reporting limit to 10,600 µg/L at B-24r (6/7/2005).
- Manganese concentrations ranged from 6 µg/L in monitoring well B-7 to 217 µg/L in monitoring well B-19Ar. The results were similar or less than previous results which ranged from below the reporting limit to 1,900 µg/L at B-9 (6/5/2007).
- Sodium concentrations ranged from 12,400 µg/L in monitoring well OBG MW-16D to 67,600 µg/L in monitoring well B-24r. The results were similar or less than previous results which ranged from 7,280 µg/L in monitoring well OBG MW-16D (6/25/2014) to 114,000 µg/L at B-19Ar (12/9/2004).
- Chloride concentrations ranged from below the reporting limit of 10 mg/L in monitoring wells OBG MW-16D, B-20D, B-21D, B-22D, B-27D, and duplicate from B-27D to 88 mg/L in monitoring well B-19Ar. The results were similar or less than previous results which ranged from below the reporting limit to 163 mg/L at B-24r (12/23/1998).
- Sulfate concentrations ranged from 14 mg/L in monitoring well B-27D and duplicate from B-27D to 731 mg/L in monitoring well B-9. The results were similar or less than previous results which ranged from 14 mg/L in monitoring well B-27D to 1,350 mg/L in monitoring well B-9 (12/9/2004). An exception is B-28 (161 µg/L), which was elevated compared to previous results that have ranged from 78 µg/L (6/16/2010) to 142 µg/L (6/16/2020).
- TOC concentrations ranged from 2.5 mg/L in monitoring well B-27D duplicate to 6.3 mg/L in monitoring well B-7. The results were similar or less than previous results, which ranged from below the reporting limit to 71 mg/L at B-9 (11/13/1996).
- TOX concentrations were not detected above the method detection limit of 10 µg/L in monitoring wells OBG MW-16D, B-9, B-18A, B-19Ar, B-21D, B-23Dr, B-27D, and B-28 to 88.8 µg/L in monitoring well B-22D. The results were similar or less than previous results, which ranged from below the reporting limit to 230 µg/L at B-7 (11/30/2016).
- pH concentrations ranged from 6.85 in monitoring well B-9 to 7.51 in monitoring well B-27D. The results were within the range of previous results, which ranged from 4.60 in monitoring well B-7 (11/5/1998) to 9.73 in monitoring well B-18A (12/8/2005).

- Specific conductivity ranged from 635 $\mu\text{S}/\text{cm}$ in monitoring well B-27D duplicate to 2,168 $\mu\text{S}/\text{cm}$ in monitoring well B-9. The results were comparable to previous results, which ranged from 405 $\mu\text{S}/\text{cm}$ in monitoring well OBG MW-16D (11/5/1999) to 3,290 $\mu\text{S}/\text{cm}$ in monitoring well B-9 (11/20/2008).
- Cyanide, phenols, and VOCs concentrations were not detected above their respective reporting limits in the monitoring wells sampled during the June 2021 sampling event.

3. SUMMARY

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 relative percent difference (RPD) for the duplicate sample results for B-27D and MW-DUP-061121 (B-27D) were within acceptable limits.

There were no exceedances of the Shewart control limits (SCL) during this sampling event. There were positive spikes for specific conductivity in monitoring well B-21D (800 $\mu\text{S}/\text{cm}$) and for copper in monitoring well B-19Ar (5 $\mu\text{g}/\text{L}$). The spike at B-21D was not confirmed by the concentrations of metals, which were not detected (for the four primary metals [Cr, Cu, Ni, and Zn] in particular). At B-19Ar the spike was also not confirmed as the concentrations of the other metals/parameters were either not detected above the reporting limit or were comparable to previous results and were not spikes.

There was a negative (decreasing) trend in monitoring well B-18A for pH. The trend was calculated using regression analysis over the last four sampling events per the Post Closure Care Plan, January 2014.

The negative trend was not confirmed by the concentrations of other metals/parameters. The trend does not suggest there was a release from the landfill and will continue to be evaluated 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 2021. If you have any questions, please feel free to contact Clifford Yantz at (313) 333-0211.

Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to 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 submitted 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

A handwritten signature in blue ink, reading "Clifford Scott Yantz", is written over a horizontal line.

Clifford S. Yantz

Managing Hydrogeologist – Ramboll Americas Engineering Solutions, Inc.

As agent for RACER Trust

Date: August 18, 2021

cc: file

TABLES

TABLE 1
RACER Trust - Coldwater Road
Depth to Groundwater Levels in Monitoring Wells

June 8, 2021

Well ID	Top of Casing Elevation (ft)*	Depth to Water (ft)	Static Water Elevation (ft)
<i>Landfill Monitoring Wells</i>			
B-7	813.63	16.95	796.68
B-9	807.45	6.09	801.36
B-18A	810.85	21.12	789.73
B-19A	812.66	9.64	803.02
B-19AR	811.80	38.03	773.77
B-20D	815.14	70.14	745.00
B-21D	821.07	80.42	740.65
B-22D	822.15	84.51	737.64
B-23DR	812.12	81.15	730.97
B-24R	816.04	14.32	801.72
B-27D	812.70	75.81	736.89
B-28	816.46	5.68	810.78
OBG MW-16D	807.43	58.21	749.22
<i>former WWTP Monitoring Wells</i>			
OBG MW-1	811.56	5.96	805.60
OBG MW-2	813.77	8.61	805.16
OBG MW-3	810.09	4.76	805.33
OBG MW-4	812.66	5.84	806.82
OBG MW-5	816.04	8.31	807.73
OBG MW-6	815.75	12.44	803.31
OBG MW-7	813.47	8.69	804.78
OBG MW-8	817.50	10.44	807.06
OBG MW-9	809.97	4.22	805.75
OBG MW-10	811.54	7.40	804.14
<i>Additional Site Monitoring Wells</i>			
OBG MW-11	801.94	7.45	794.49
OBG MW-12D	797.13	47.67	749.46
OBG MW-12S	796.88	9.63	787.25
OBG MW-13	801.81	7.02	794.79
OBG MW-14	810.98	8.71	802.27
OBG MW-15D	810.68	79.81	730.87
OBG MW-17D	800.09	50.74	749.35
OBG MW-17S	800.51	11.64	788.87
OBG MW-18D	800.17	50.62	749.55
OBG MW-18S	799.32	15.23	784.09
OBG MW-19D	795.37	46.83	748.54
OBG MW-20	783.93	27.23	DRY
OBG MW-21	797.49	5.61	791.88
OBG MW-22	794.11	5.38	788.73
OBG MW-23 (D)	776.76	28.60	748.16
OBG MW-24	781.50	6.95	774.55
OBG MW-26	772.34	7.69	764.65
OBG MW-27 (D)	771.94	23.66	748.28
OBG MW-28	800.35	13.21	787.14
OBG MW-29 (D)	NO SURVEY DATA	25.48	--
<i>Piezometers</i>			
PZ-1	790.30	16.91	773.39
<i>Peregrine Site Wells</i>			
MW-19-13	807.85	2.32	805.53
MW-20-13	810.81	4.81	806.00
MW-15-10	808.15	76.75	731.40
MW-16-10	798.64	66.95	731.69
PFW-1	809.51	77.80	731.71

Notes

Casing elevations were provided by Norwy & Hale Surveyors and are in feet relative to National Geodetic Vertical Datum

-- No data.

Top of casing elevations were resurveyed in June 2017.

R - Indicates a replacement well location.

Monitoring wells OBG MW-25, PZ-2, and PZ-3 were abandon on July 7, 2020 as part of the onsite berm construction.

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

Monitoring Well	Sample Date	Indicator Parameters					Dissolved Metals (µg/L)							Inorganics (mg/L)			
		TOC (mg/L)	TOX (µg/L)	pH	SpC	Temp	Cr	Cu	Ni	Zn	Fe	Mn	Na	Chloride	Cyanide	Phenols	Sulfate
		EGLE Residential Drinking Water Criteria & RBSLs					100 (A)	1,000 (E)	100 (A)	2,400							
B-2D	6/21/1995	5.3	<10	9.01	434	15.0	<20	<20	<30	<20	--	--	--	--	--	--	--
	8/31/1995	6.3	130	8.27	479	14.4	<20	<20	<40	<20	--	--	--	--	--	--	--
	2/9/1996	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/19/1996	5.2	<100	7.52	580	12.4	<20	<20	<20	<20	--	--	--	--	--	--	--
	8/21/1996	7.4	<5	7.69	641	13.9	<20	<20	<20	50	--	--	--	--	--	--	--
	11/13/1996	11.0	<5	7.26	769	7.6	<20	<20	<20	30	--	--	--	--	--	--	--
	5/6/1997	26.0	<100	6.30	1500	7.0	10	<10	28	30	--	--	--	--	--	--	--
	11/6/1997	15.0	<100	6.90	660	9.0	<10	<10	39	<10	280	577	--	12	<0.005	<0.020	79
	5/4/1998	29.0	12	6.68	549	12.4	<10	<10	<5	<10	--	--	--	--	--	--	--
	11/5/1998	52.0	18	4.70	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	8.50	523	14.5	<10	<10	<5	<10	--	--	--	--	--	--	--
	11/5/1999	6.4	<100	7.40	405	12.8	<10	<10	<5	40	70	21	35,100	4	<0.005	<0.020	42
	4/26/2000	5.4	<100	7.96	770	17.4	<10	<10	<5	<10	--	--	--	--	--	--	--
	12/8/2000	5.5	<10	6.68	610	9.7	<10	<10	9	<10	40	--	22,900	7	<0.005	<0.020	81
	5/15/2001	5.5	<100	7.79	890	13.2	<10	<10	<5	<10	--	--	--	--	--	--	--
	10/18/2001	4.1	<100	7.43	1830	9.4	<10	<10	<5	<10	230	--	12,900	2	<0.005	<0.020	32
	10/18/2001	3.6	<100	7.39	1780	7.8	<10	<10	<5	<10	210	--	12,700	1	<0.005	<0.020	32
	5/16/2002	4.0	<100	7.19	1000	11.6	<10	<10	<5	<10	--	--	--	--	--	--	--
	11/7/2002	2.6	<30	7.38	490	9.5	<5	<5	<5	<5	140	8	11,900	2	<0.005	<0.020	32
	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	6.91	530	12.9	<5	<5	<5	<5	--	--	--	--	--	--	--
	11/13/2003	2.8	<30	7.97	630	7.7	<5	<5	<5	<5	110	7	--	2	<0.005	<0.010	31
	6/30/2004	4.2	<30	6.28	570	15.8	<5	<5	<5	7	--	--	--	--	--	--	--
	12/10/2004	2.0	<30	6.83	550	10.2	<5	<5	<5	10	760	145	10,700	2	<0.005	<0.010	35
	6/8/2005	2.0	<30	7.95	620	11.5	<5	<5	<5	<5	660	199	10,900	<5	<0.005	<0.010	34
	12/8/2005	3.0	<30	6.89	642	10.2	9	<4	<5	<10	140	120	13,300	--	--	--	--
Duplicate	6/28/2006	6.3	<30	7.41	671	12.2	<5	<4	<5	8	110	70	15,000	2	<0.005	<0.010	50
	6/28/2006	5.1	<30	7.41	682	12.2	<5	<4	<5	8	120	70	15,200	3	<0.005	<0.010	50
	11/30/2006	5.1	43.3	7.21	677	8.4	<5	<4	<5	18	--	--	--	--	--	--	--
	6/8/2007	2.4	69.1	6.78	644	14.1	8	2	1	6	110	104	14,800	4	<0.005	<0.010	44
Replicate	11/14/2007	5.2	<30	7.06	783	14.9	1	1	4	9	--	--	--	--	--	--	--
	6/25/2008	5.7	<60	6.90	920	18.4	<5	1	5	7	350	32	26,100	10	<0.005	<0.010	98
	11/20/2008	4.5	<30	6.84	806	9.1	<5	<1	<5	<5	--	--	--	--	--	--	--
	6/25/2009	5.6	<30	6.95	924	23.7	<5	203	<5	113	22	77	29,700	10	<0.005	<0.010	104
	11/16/2009	4	<30	7.17	835	10.2	<5	<4	<5	6	--	--	--	--	--	--	--
	6/16/2010	5	<30	7.09	841	13.9	<5	<4	<5	<5	40	83	19,000	7	<0.005	<0.020	75
	11/10/2010	4	<30	7.17	779	11.3	11	<4	<5	<5	--	--	--	--	--	--	--
	6/21/2011	2.9	<30	6.99	742	19.3	9	<4	<5	<5	250	55	16,900	6	<0.005	<0.010	57
	6/21/2011	--	--	--	--	--	<5	--	--	--	--	--	--	--	--	--	--
	11/15/2011	3	16	7.05	751	11.3	<5	<4	<5	<5	--	--	--	--	--	--	--
	6/27/2012	2.2	16	7.00	714	12.7	<5	<4	<5	<5	<20	25	17,300	<5	<0.005	<0.02	43
	12/6/2012	2.6	<40	7.47	714	10.2	<5	<4	<5	<5	--	--	--	--	--	--	--
OBG MW-16D	6/6/2013	1.6	<10	6.78	742	12.5	<5	<4	<5	26	990	31	24,400	<5	<0.005	<0.02	68
	11/6/2013	2.6	<10	7.34	726	11.8	<5	<4	<5	<5	--	--	--	--	--	--	--
	6/25/2014	2.6	<30	7.27	717	12.8	<5	<5	11	7	<20	26	7,280	<5	<0.005	<0.02	48
	6/24/2015	2.2	<30	7.12	621	12.4	<5	<5	<5	<5	<20	11	15,100	<5	<0.005	<0.02	41
	6/27/2016	2.6	55	6.42	730	17.2	<5	<5	<5	<5	40	<5	16,100	<5	<0.005	<0.02	50
	6/22/2017	2.3	<30	7.09	691	12.5	<5	<5	<5	<5	20	7	15,500	<5	<0.005	<0.02	44
	6/13/2018	2.1	<60	6.85	679	14.1	<5	<5	<5	5	2,640	162	13,400	<5	<0.005	<0.02	40
	11/7/2018	3.3	<150	7.60	657	9.7	<5	<5	<5	<5	2,870	47	18,400	<5	<0.005	<0.02	32
	6/4/2019	5.0	<150	7.91	501	12.4	<5	<5	<5	6	340	53	15,800	<10	<0.004	<0.02	32
	6/18/2020	2.7	<40	7.70	590	13.2	<5	<5	<5	<5	1,090	62	11,500	<10	<0.004	<0.02	30
	6/10/2021	3.3	<10	7.47	636	13.5	<5	<5	<5	<5	1,940	61	12,400	<10	<0.004	<0.02	28

See notes on page 13.

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

Monitoring Well	Sample Date	Indicator Parameters					Dissolved Metals (µg/L)							Inorganics (mg/L)			
		TOC (mg/L)	TOX (µg/L)	pH	SpC	Temp	Cr	Cu	Ni	Zn	Fe	Mn	Na	Chloride	Cyanide	Phenols	Sulfate
		EGLE Residential Drinking Water Criteria & RBSLs					100 (A)	1,000 (E)	100 (A)	2,400							
B-7	6/21/1995	8.7	23	7.48	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	6.91	1,508	13.2	<20	<20	<20	20	--	--	--	--	--	--	--
	8/21/1996	55.0	26	7.59	1,567	17.1	<20	<20	<20	60	--	--	--	--	--	--	--
	11/13/1996	27.0	<5	7.95	1,960	7.2	<20	<20	<20	50	--	--	--	--	--	--	--
	5/6/1997	16.0	<100	7.20	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	6.61	1,270	10.7	<10	<10	<5	20	--	--	--	--	--	--	--
	11/5/1998	4.0	<10	4.60	1,240	11.2	<10	<10	8	30	10	424	31,000	--	--	--	--
Duplicate	12/23/1998	--	--	--	--	--	--	--	--	--	--	--	--	58	<0.005	<0.020	161
	4/26/1999	3.9	<100	7.50	1,413	14.2	<10	<10	10	<10	--	--	--	--	--	--	--
	11/5/1999	5.1	<100	6.50	1,230	14.2	<10	<10	8	30	260	313	41,800	64	<0.005	<0.020	301
	4/26/2000	4.8	<100	7.58	1,450	10.2	<10	<10	<5	<10	--	--	--	--	--	--	--
	4/26/2000	5.9	<100	NS	NS	NS	<10	<10	6	10	--	--	--	--	--	--	--
	12/8/2000	4.2	<10	7.05	1,180	9.5	<10	<10	20	10	50	--	58,900	79	<0.005	<0.020	227
	5/16/2001	5.0	<100	7.30	1,330	13.0	<10	<10	7	<10	--	--	--	--	--	--	--
	10/18/2001	5.3	<100	7.19	1,210	12.5	<10	<10	5	<10	330	--	60,800	81	<0.005	NA	205
	5/16/2002	3.9	<100	7.19	1,850	11.9	<10	<10	<5	10	--	--	--	--	--	--	--
	11/7/2002	NR	NR	7.35	1,120	10.3	<5	<5	5	5	250	<5	65,500	NA	NA	NA	NA
Replicate	6/4/2003	3.3	<30	6.90	1,460	12.6	<5	<5	<5	<5	--	--	--	--	--	--	--
	11/13/2003	3.9	<30	6.90	1,590	9.6	<5	<5	<5	5	190	<5	--	85	<0.005	<0.010	279
	6/30/2004	4.3	43	7.13	1,353	16.0	<5	<5	9	7	--	--	--	--	--	--	--
	12/9/2004	4.0	<30	5.32	1,290	10.8	<5	<5	7	14	180	74	71,200	78	<0.005	<0.010	251
	6/8/2005	7.0	86	7.36	1,121	10.9	5	<5	9	13	170	31	81,900	80	<0.005	<0.010	254
	12/7/2005	7.5	<30	8.70	1,430	12.2	10	<4	6	20	150	50	85,300	--	--	--	--
	6/29/2006	4.3	<30	7.19	1,470	11.7	5	<4	9	18	190	150	76,900	73	<0.005	<0.010	270
	11/29/2006	4.4	<30	6.88	1,380	15.3	<5	<4	9	11	--	--	--	--	--	--	--
	6/7/2007	3.9	23.7	6.87	1,400	13.4	11	27	5	14	130	42	87,300	72	<0.005	<0.010	208
	11/14/2007	3.5	<30	6.85	1,350	13.4	14	6	16	20	--	--	--	--	--	--	--
	6/25/2008	3.8	72.9	6.90	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	6.80	1,258	5.5	<5	3	5	17	--	--	--	--	--	--	--
	6/24/2009	4.5	<30	6.90	1,184	20.0	<5	3	<5	14	67	36	84,500	40	<0.005	<0.010	154
	11/17/2009	8	25.3	7.31	1,090	10.3	<5	<4	<5	<5	--	--	--	--	--	--	--
	6/17/2010	5	<30	7.04	1,290	16.3	<5	<4	<5	<5	<20	47	86,000	61	<0.005	<0.020	160
	11/8/2010	8	103	7.16	997	13.9	17	<4	<5	<5	--	--	--	--	--	--	--
	6/22/2011	4.3	25	7.25	910	13.7	10	<4	5	6	220	6	55,200	26	<0.005	<0.010	88
	6/22/2011	--	--	--	--	--	<5	--	--	--	--	--	--	--	--	--	--
	11/16/2011	5	28	7.04	974	12.8	<5	6	8	11	--	--	--	--	--	--	--
	6/27/2012	3.7	97	6.77	1,082	15.0	<5	<4	<5	<5	<20	58	64,900	40	<0.005	<0.02	134
	12/6/2012	7.9	<40	7.12	825	8.7	<5	4	<5	9	--	--	--	--	--	--	--
	6/5/2013	4.5	6	7.24	921	14.0	<5	<4	<5	24	30	13	27,500	32	<0.005	<0.02	106
	11/4/2013	8.7	16	7.10	733	11.6	14	6	<5	<5	--	--	--	--	--	--	--
	6/25/2014	--	--	7.10	--	13.3	--	--	--	--	--	--	--	--	--	--	--
	11/18/2014	6.5	28	7.31	896	4.8	<5	6	6	6	--	--	--	--	--	--	--
	6/24/2015	4.2	<30	6.98	1,019	16.3	<5	<5	<5	<5	<20	69	58,900	36	<0.005	<0.02	122
	11/18/2015	3.7	16	7.06	1,231	14.7	<5	<5	7	7	--	--	--	--	--	--	--
	6/23/2016	3.9	77	7.14	852	15.1	<5	<5	<5	<5	30	41	41,700	22	<0.005	<0.02	82
	11/30/2016	5.3	230	7.21	880	13.3	<5	<5	<5	<5	--	--	--	--	--	--	--
	6/21/2017	3.9	12	6.78	1,092	11.0	<5	<5	<5	<5	40	37	51,700	41	<0.005	<0.02	155
	11/7/2017	6.5	39	6.94	841	10.8	<5	5	<5	<5	--	--	--	--	--	--	--
	6/12/2018	4.2	<60	6.95	932	11.0	<5	<5	<5	10	230	26	39,800	27	<0.005	<0.02	116
	11/7/2018	6.5	170	7.25	952	11.4	<5	<5	<5	<5	--	--	--	--	--	--	--
	5/30/2019	6.0	<150	7.35	737	10.7	<5	<5	<5	7	40	<5	32,400	20	<0.004	<0.02	110
	11/21/2019	5.4	<40	7.44	910	12.5	<5	<5	<5	5	--	--	--	--	--	--	--
	6/18/2020	5.6	<40	7.33	728	15.3	<5	<5	<5	5	130	41	35,400	27	<0.004	<0.02	145
	11/5/2020	6.2	21.0	6.92	1,126	13.5	<5	<5	<5	<5	--	--	--	--	--	--	--
	6/11/2021	6.3	15.0	7.08	1,057	18.8	<5	<5	<5	6	90	6	43,700	27	<0.004	<0.02	167

See notes on page 13.

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

Monitoring Well	Sample Date	Indicator Parameters					Dissolved Metals (µg/L)							Inorganics (mg/L)			
		TOC (mg/L)	TOX (µg/L)	pH	SpC	Temp	Cr	Cu	Ni	Zn	Fe	Mn	Na	Chloride	Cyanide	Phenols	Sulfate
		EGLE Residential Drinking Water Criteria & RBSLs					100 (A)	1,000 (E)	100 (A)	2,400							
B-9	6/21/1995	3.5	34	7.68	2,400	14.6	<20	<20	<30	<20	--	--	--	--	--	--	--
	8/31/1995	3.9	<10	7.72	1,829	14.8	37	43	<40	<20	--	--	--	--	--	--	--
	2/9/1996	3.1	<10	7.34	2,860	8.0	<20	<20	<40	<20	--	--	--	--	--	--	--
	6/19/1996	2.1	<100	6.81	2,550	11.5	<20	<20	<20	<20	--	--	--	--	--	--	--
	8/21/1996	2.3	<5	8.04	2,310	16.4	<20	<20	<20	70	--	--	--	--	--	--	--
	11/13/1996	71.0	<5	6.79	3,280	9.2	<20	<20	<20	40	--	--	--	--	--	--	--
	5/6/1997	3.0	<100	6.80	2,600	10.0	<10	<10	51	20	--	--	--	--	--	--	--
	11/6/1997	2.0	<100	6.50	2,800	11.0	<10	<10	183	40	650	741	--	141	<0.005	<0.020	1,178
	5/4/1998	3.0	<5	6.58	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	7.69	1,860	12.2	<10	<10	19	20	--	--	--	--	--	--	--
	11/5/1999	2.5	<100	6.75	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	7.56	2,780	9.5	<10	<10	12	30	--	--	--	--	--	--	--
	12/8/2000	5.0	<10	7.56	2,400	7.8	<10	<10	46	<10	50	--	69,500	142	<0.005	<0.020	1,246
	5/16/2001	4.8	<100	7.41	1,070	12.6	<10	<10	7	10	--	--	--	--	--	--	--
	10/17/2001	4.0	<100	7.54	2,130	10.8	<10	<10	8	20	940	--	66,000	122	<0.005	NA	1,150
	5/16/2002	1.9	<100	7.19	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	6.78	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	6.91	2,379	12.7	<5	8	19	28	--	--	--	--	--	--	--
	12/9/2004	3.0	<30	5.88	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	7.09	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	8.58	2,830	11.9	11	5	12	40	320	410	58,500	--	--	--	--
	6/29/2006	1.9	<30	6.82	2,820	12.4	6	6	13	19	390	330	63,600	125	<0.005	<0.010	1,150
Duplicate	11/30/2006	2.7	36.7	7.15	2,830	12.5	<5	6	<5	14	--	--	--	--	--	--	--
	6/5/2007	2.1	<30	6.70	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	6.67	3,000	9.4	2	6	24	18	--	--	--	--	--	--	--
	7/2/2008	1.8	36.4	6.44	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	6.35	3,290	8.1	<5	<1	13	<5	--	--	--	--	--	--	--
	11/20/2008	2.0	127	6.35	3,280	8.1	<5	<1	13	<5	--	--	--	--	--	--	--
	6/25/2009	1.6	<30	6.67	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	6.71	3,030	12.7	<5	<4	16	8	--	--	--	--	--	--	--
	6/15/2010	3	27.5	6.69	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	6.37	2,910	12.9	19	4	7	15	--	--	--	--	--	--	--
	6/22/2011	1.9	<30	6.70	2,600	14.0	17	6	21	12	780	661	63,300	99	<0.005	<0.010	972
	6/22/2011	--	--	--	--	--	<5	--	--	--	--	--	--	--	--	--	--
Replicate	11/16/2011	2	50	7.18	3,060	12.9	<5	<4	7	<5	--	--	--	--	--	--	--
	6/26/2012	2	21	6.53	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	6.80	3,210	12.0	<5	8	17	23	--	--	--	--	--	--	--
	6/5/2013	2.1	15	7.07	2,660	12.5	<5	<4	6	25	40	173	66,400	106	<0.005	<0.02	1,150
	11/6/2013	2.2	NS	6.36	2,730	13.0	10	8	47	8	--	--	--	--	--	--	--
	6/25/2014	1.9	25	6.82	2,650	11.5	<5	<5	18	8	<20	159	27,100	108	<0.005	<0.02	1,070
	11/19/2014	2.1	29	6.77	2,670	8.12	<5	6	14	12	--	--	--	--	--	--	--
	6/24/2015	2.0	17	6.38	2,480	11.8	<5	<5	<5	<5	<20	89	62,400	87	<0.005	<0.02	1,040
	11/18/2015	2.0	<30	6.68	2,670	13.5	<5	<5	7	<5	--	--	--	--	--	--	--
	6/24/2016	1.9	150	6.68	2,190	12.9	<5	<5	10	<5	20	95	52,800	71	<0.005	<0.02	776
	11/29/2016	1.9	13	6.77	2,780	13.9	<5	<5	8	9	--	--	--	--	--	--	--
	6/20/2017	1.8	12	6.75	2,250	11.5	<5	<5	5	<5	17	172	54,600	74	<0.005	<0.02	770
	11/7/2017	2.1	<30	6.57	2,540	13.1	<5	<5	8	11	--	--	--	--	--	--	--
	6/12/2018	1.9	<60	5.78	2,420	11.6	<5	<5	6	8	20	89	55,500	85	<0.005	<0.02	931
	11/6/2018	4.9	<150	6.74	3,010	13.6	<5	<5	7	<5	--	--	--	--	--	--	--
	6/3/2019	4.3	<150	6.89	2,200	10.7	<5	<5	<5	7	70	12	52,200	69	<0.004	<0.02	838
	11/21/2019	3.2	77	7.05	2,620	12.8	<5	<5	6	9	--	--	--	--	--	--	--
	6/17/2020	4.3	45	7.13	2,260	13.1	<5	<5	<5	13	160	31	52,200	76	<0.004	<0.02	929
	11/5/2020	7.3	14.6	6.72	2,800	13.8	<5	<5	7	6	--	--	--	--	--	--	--
	6/11/2021	5.4	<10	6.85	2,168	14.7	<5	<5	<5	<5	50	124	50,700	62	<0.004	<0.02	731

See notes on page 13.

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

		Indicator Parameters					Dissolved Metals (µg/L)								Inorganics (mg/L)			
Monitoring Well	Sample Date	TOC (mg/L)	TOX (µg/L)	pH	SpC	Temp	Cr	Cu	Ni	Zn	Fe	Mn	Na	Chloride	Cyanide	Phenols	Sulfate	
EGLE Residential Drinking Water Criteria & RBSLs							100 (A)	1,000 (E)	100 (A)	2,400								
B-18A	6/21/1995	2.7	<10	7.54	1,048	13.3	<20	<20	<30	150	--	--	--	--	--	--	--	
	8/31/1995	3.0	<10	7.91	989	13.2	<20	<20	<40	<20	--	--	--	--	--	--	--	
	2/9/1996	2.3	<10	7.42	1,021	9.3	<20	<20	<40	<20	--	--	--	--	--	--	--	
	6/19/1996	1.4	<100	7.04	944	13.2	<20	<20	<20	<20	--	--	--	--	--	--	--	
	8/21/1996	2.4	<5	7.49	1,041	12.8	<20	<20	<20	60	--	--	--	--	--	--	--	
	11/13/1996	19.0	<5	7.22	1,331	6.4	<20	<20	<20	70	--	--	--	--	--	--	--	
	5/6/1997	2.0	<100	6.50	900	10.0	<10	<10	13	10	--	--	--	--	--	--	--	
	11/6/1997	4.0	<100	6.40	1,100	10.0	<10	<10	62	10	380	62	--	12	<0.005	<0.020	130	
	5/4/1998	2.0	<5	6.72	862	11.8	<10	<10	<5	20	--	--	--	--	--	--	--	
	11/5/1998	1.0	<10	6.00	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	8.10	921	14.0	<10	<10	<5	20	--	--	--	--	--	--	--	
11/5/1999	4.3	<100	7.10	832	14.0	<10	<10	<5	60	180	155	39,200	8	<0.005	<0.020	130		
4/26/2000	2.4	<100	7.50	980	10.4	<10	<10	<5	30	--	--	--	--	--	--	--		
12/8/2000	2.6	<10	6.96	990	9.9	<10	<10	15	<10	<10	--	34,500	7	<0.005	<0.020	126		
Duplicate	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	7.91	1,160	12.9	<10	<10	<5	10	--	--	--	--	--	--	--	--	
10/17/2001	2.2	<100	7.09	1,020	12.2	<10	<10	<5	<10	350	--	35,400	7	<0.005	<0.020	132		
5/16/2002	1.5	<100	7.19	2,080	12.2	<10	<10	<5	10	--	--	--	--	--	--	--	--	
11/7/2002	1.9	<30	7.16	820	10.1	<5	<5	<5	<5	190	26	40,800	10	<0.005	<0.020	134		
6/4/2003	1.6	<30	6.92	790	13.1	<5	<5	<5	5	--	--	--	--	--	--	--	--	
Duplicate	11/13/2003	1	<30	7.68	1,180	7.1	<5	<5	<5	<5	160	<5	--	10	<0.005	<0.010	129	
11/13/2003	--	--	--	--	--	--	--	--	--	--	--	--	--	11	<0.005	<0.010	130	
6/29/2004	1.2	<30	7.19	863	12.0	<5	<5	7	10	--	--	--	--	--	--	--	--	
12/9/2004	3	<30	6.19	960	10.5	<5	<5	9	12	900	363	37,900	14	<0.005	<0.010	127		
6/8/2005	2	<30	7.38	819	10.9	<5	<5	6	16	170	80	40,000	11	<0.005	<0.010	120		
12/8/2005	2.6	<30	9.73	1,120	10.1	11	<4	<5	10	390	170	47,000	--	--	--	--	--	
6/27/2006	1.2	<30	7.09	1,110	13.2	5	4	<5	46	170	50	48,200	13	<0.005	<0.010	125		
11/30/2006	1.4	119	7.18	1,100	11.5	5	<4	<5	9	--	--	--	--	--	--	--	--	
6/4/2007	1	19.9	7.01	1,070	13.2	9	3	3	14	110	22	51,800	15	<0.005	<0.010	114		
11/14/2007	<1	19	6.91	1,090	13.7	1	2	6	11	--	--	--	--	--	--	--	--	
6/25/2008	12	34.1	7.10	1,060	20.4	<5	2	<5	11	310	<5	54,800	15	<0.005	<0.010	110		
11/18/2008	<1	<30	6.58	1,088	2.9	<5	<1	<5	<5	--	--	--	--	--	--	--	--	
6/24/2009	<1	<30	7.25	1,060	26.2	<5	1	<5	15	<20	<5	53,100	16	<0.005	<0.010	111		
11/18/2009	2	<30	6.89	1,070	11.7	<5	<4	<5	45	--	--	--	--	--	--	--	--	
6/17/2010	1	<30	7.19	1,080	17.5	<5	<4	<5	8	<20	<5	45,500	15	<0.005	<0.020	109		
11/10/2010	2	28	6.91	1,065	9.5	12	<4	<5	<5	--	--	--	--	--	--	--	--	
6/21/2011	1.2	<30	7.16	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	7.01	1,063	12.0	<5	<4	<5	<5	--	--	--	--	--	--	--	--	
Duplicate	6/27/2012	1.2	<40	6.99	1,057	14.4	<5	<4	<5	<5	30	26	50,000	18	<0.005	<0.02	103	
6/27/2012	1.2	<40	6.99	1,054	14.4	<5	<4	<5	5	40	27	46,500	18	<0.005	<0.02	101		
12/6/2012	1.5	<40	7.03	1,071	9.3	<5	<4	5	9	--	--	--	--	--	--	--	--	
6/5/2013	1.5	4.7	7.17	1,040	14.6	<5	<4	<5	31	20	12	43,900	19	<0.005	<0.02	110		
11/5/2013	1.4	<10	7.15	1,063	12.1	<5	<4	<5	11	--	--	--	--	--	--	--	--	
6/24/2014	1.5	<30	7.03	1,048	12.8	<5	<5	6	7	<20	20	20,500	18	<0.005	<0.02	107		
11/19/2014	1.4	16	7.10	1,073	6.27	<5	<4	5	7	--	--	--	--	--	--	--	--	
Duplicate	11/19/2014	1.5	<60	7.10	1,072	6.27	<5	<4	5	7	--	--	--	--	--	--	--	
6/23/2015	1.3	<30	6.95	1,060	15.5	<5	<5	<5	<5	30	10	43,600	18	<0.005	<0.02	110		
11/18/2015	1.4	<30	7.03	1,065	12.2	<5	<5	<5	5	--	--	--	--	--	--	--	--	
6/23/2016	1.4	55	7.08	1,063	13.8	<5	<5	<5	<5	30	7	42,400	19	<0.005	<0.02	108		
11/30/2016	1.2	<30	7.10	1,059	11.4	<5	<5	<5	7	--	--	--	--	--	--	--	--	
6/20/2017	1.5	<30	6.97	1,075	12.7	<5	<5	<5	8	<20	27	36,300	18	<0.005	<0.02	118		
11/7/2017	1.2	<30	6.96	1,092	11.6	<5	<5	<5	<5	--	--	--	--	--	--	--	--	
6/12/2018	1.4	<60	6.90	1,074	12.4	<5	<5	<5	10	160	41	32,900	16	<0.005	<0.02	131		
11/7/2018	3.0	<150	6.85	1,106	11.7	<5	<5	<5	7	--	--	--	--	--	--	--	--	
Duplicate	6/3/2019	3.6	<150	7.36	1,050	11.2	<5	<5	<5	9	<20	15	34,900	18	<0.004	<0.02	127	
6/3/2019	3.8	<150	7.36	1,056	11.2	<5	<5	<5	34	110	16	35,300	17	<0.004	<0.02	127		
11/20/2019	2.2	65	7.30	1,055	11.2	<5	<5	<5	8	--	--	--	--	--	--	--	--	
Duplicate	6/18/2020	3.2	44	7.18	725	13.2	<5	<5	<5	7	50	65	39,700	20	<0.004	<0.02	137	
6/18/2020	3.9	<40	7.18	769	13.2	<5	<5	<5	6	50	68	40,800	20	<0.004	<0.02	138		
11/5/2020	4.3	9.42	7.09	1,084	13.2	<5	<5	<5	9	--	--	--	--	--	--	--	--	
	6/11/2021	3.7	8.78 J	7.07	1,080	16.0	<5	<5	<5	16	30	40	40,000	21	<0.004	<0.02	125	

See notes on page 13.

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

Monitoring Well	Sample Date	Indicator Parameters					Dissolved Metals (µg/L)							Inorganics (mg/L)			
		TOC (mg/L)	TOX (µg/L)	pH	SpC	Temp	Cr	Cu	Ni	Zn	Fe	Mn	Na	Chloride	Cyanide	Phenols	Sulfate
		EGLE Residential Drinking Water Criteria & RBSLs					100 (A)	1,000 (E)	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	6.84	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
Duplicate	5/16/2001	4.0	<100	7.14	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	7.19	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	6.92	1,350	12.9	<5	<5	<5	<5	--	--	--	--	--	--	--
	11/13/2003	3.4	<30	7.59	1,620	10.2	<5	<5	<5	<5	20	<5	--	148	<0.005	<0.010	229
	6/29/2004	3.9	<30	7.17	1,316	14.7	<5	<5	<5	8	--	--	--	--	--	--	--
	12/9/2004	5.0	33	6.24	1,340	9.9	<5	<5	<5	9	240	11	111,000	116	<0.005	<0.010	233
	12/9/2004	5.0	<30	--	--	--	<5	<5	<5	7	170	<5	114,000	116	<0.005	<0.010	233
	6/7/2005	3.0	<30	7.09	829	12.2	<5	<5	7	<5	1,320	228	15,700	52	<0.005	<0.010	130
	12/8/2005	5.5	<30	--	1,390	--	10	<4	<5	20	160	<20	81,400	--	--	--	--
	12/8/2005	5.3	<30	7.13	1,390	12.3	10	<4	<5	<10	150	<20	74,800	--	--	--	--
	2/14/2006	--	--	7.95	840	5.9	<5	--	--	--	--	--	--	--	--	--	--
	6/29/2006	2.7	<30	7.58	860	12.0	<5	<4	12	21	240	210	22,400	51	<0.005	<0.010	153
	11/30/2006	6.2	33.7	7.18	1,300	11.4	5	<4	<5	<5	--	--	--	--	--	--	--
Duplicate	6/7/2007	2	<30	6.97	899	11.4	6	4	4	9	70	21	19,700	58	<0.005	<0.010	136
	11/13/2007	1.5	<30	7.27	1,070	12.1	3	7	26	11	--	--	--	--	--	--	--
	6/25/2008	2.4	38.8	7.13	1,060	17.4	<5	3	<5	16	380	9	18,500	58	<0.005	<0.010	148
	11/18/2008	1.3	<30	7.00	1,052	8.0	<5	1	<5	14	--	--	--	--	--	--	--
	6/24/2009	1.0	<30	7.74	911	17.3	<5	2	<5	<5	36	<5	21,200	60	<0.005	<0.010	147
	11/19/2009	2	<30	7.41	994	10.4	<5	<4	<5	7	--	--	--	--	--	--	--
	6/15/2010	2	<30	7.57	992	16.1	<5	<4	<5	<5	<20	<5	19,800	59	<0.005	<0.020	154
	11/10/2010	2	<30	6.91	1,128	8.7	12	<4	<5	<5	--	--	--	--	--	--	--
	6/22/2011	1.5	<30	7.35	902	17.2	5	<4	5	<5	240	<5	22,400	64	<0.005	<0.010	140
	6/22/2011	--	--	--	--	--	<5	--	--	--	--	--	--	--	--	--	--
	11/16/2011	2	26	7.06	1,091	8.4	<5	<4	<5	5	--	--	--	--	--	--	--
	6/27/2012	1.5	<40	7.78	1,005	13.3	<5	<4	<5	<5	<20	<5	23,200	62	<0.005	<0.02	145
	12/6/2012	1.8	<40	7.36	1,129	10.2	<5	<4	5	6	--	--	--	--	--	--	--
	6/5/2013	1.5	39	8.16	777	13.0	<5	<4	<5	25	40	<5	27,700	72	<0.005	<0.02	136
	11/6/2013	1.6	3.6	7.33	1,104	11.6	<5	<4	10	<5	--	--	--	--	--	--	--
Re-sample	6/23/2014	2.0	23	8.40	817	17.3	<5	<5	5	<5	<20	<5	11,900	74	<0.005	<0.02	136
	11/20/2014	2.1	190	7.37	1,038	6.16	<5	6	6	10	--	--	--	--	--	--	--
	6/23/2015	1.5	<30	6.77	1,165	20.2	<5	6	<5	26	30	50	28,700	72	<0.005	<0.02	132
	11/19/2015	1.4	17	6.90	1,170	10.6	<5	<5	7	7	--	--	--	--	--	--	--
	6/27/2016	1.5	71	8.13	712	18.8	<5	<5	<5	<5	40	<5	26,700	70	<0.005	<0.02	128
	11/30/2016	1.8	12	7.39	1,104	11.2	14	14	20	39	--	--	--	--	--	--	--
	1/12/2017	--	--	7.34	--	11.1	<5	<5	6	11	--	--	--	--	--	--	--
	6/21/2017	2.0	30	7.29	1,064	12.1	<5	<5	<5	<5	<20	13	28,200	75	<0.005	<0.02	131
	11/7/2017	2.6	120	7.05	1,134	12.0	<5	<5	<5	<5	--	--	--	--	--	--	--
	6/12/2018	1.8	<60	8.63	688	12.5	<5	<5	<5	<5	30	<5	24,700	81	<0.005	<0.02	135
	11/7/2018	5.9	<150	7.35	1,176	11.1	6	5	11	15	--	--	--	--	--	--	--
	6/3/2019	6.5	<150	7.26	1,062	11.7	<5	<5	7	10	2,760	203	27,300	82	<0.004	<0.02	148
	11/21/2019	2.4	<40	7.36	1,121	11.1	7	6	12	23	--	--	--	--	--	--	--
	6/18/2020	3.1	<40	7.26	845	13.4	<5	<5	6	8	1,180	276	22,200	88	<0.004	<0.02	157
	11/5/2020	6.6	19.4	7.02	1,172	13.0	8	108	11	42	--	--	--	--	--	--	--
Re-sample	12/4/2020	--	--	--	--	--	<5	<5	6	13	--	--	--	--	--	--	--
	6/9/2021	4.0	5.8 J	7.28	1,194	18.1	<5	5	6	12	1,690	217	23,800	88	<0.004	<0.02	150

See notes on page 13.

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

Monitoring Well	Sample Date	Indicator Parameters					Dissolved Metals (µg/L)							Inorganics (mg/L)			
		TOC (mg/L)	TOX (µg/L)	pH	SpC	Temp	Cr	Cu	Ni	Zn	Fe	Mn	Na	Chloride	Cyanide	Phenols	Sulfate
		EGLE Residential Drinking Water Criteria & RBSLs					100 (A)	1,000 (E)	100 (A)	2,400							
B-20D	6/21/1995	2.8	<10	8.27	771	15.1	<20	<20	<30	<20	--	--	--	--	--	--	--
	8/31/1995	4.7	47	8.10	1,204	14.6	<20	20	<40	<20	--	--	--	--	--	--	--
	2/9/1996	21.0	38	7.12	801	9.1	32	28	54	120	--	--	--	--	--	--	--
	6/19/1996	2.4	<100	7.92	745	11.9	<20	<20	<20	<20	--	--	--	--	--	--	--
	8/21/1996	3.0	<5	7.97	750	13.1	<20	<20	<20	40	--	--	--	--	--	--	--
	11/13/1996	16.0	<5	7.69	1,075	6.7	<20	<20	<20	40	--	--	--	--	--	--	--
	5/6/1997	3.0	<100	6.80	640	10.0	<10	<10	15	10	--	--	--	--	--	--	--
	11/6/1997	5.0	<100	6.70	700	10.0	<10	20	41	<10	260	35	--	5	<0.005	<0.020	101
	5/4/1998	4.0	<5	6.77	579	12.2	<10	<10	<5	<10	--	--	--	--	--	--	--
	11/5/1998	3.0	11	6.47	667	13.5	<10	<10	<5	10	<10	18	31,000	--	--	--	--
Duplicate	11/5/1998	5.0	16	6.48	677	13.6	<10	<10	<5	10	170	8	30,300	--	--	--	--
Duplicate	12/23/1998	--	--	--	--	--	--	--	--	--	--	--	--	3	<0.005	<0.020	92
	12/23/1998	--	--	--	--	--	--	--	--	--	--	--	--	3	<0.005	<0.020	89
	4/26/1999	3.2	<100	8.40	506	13.0	<10	<10	<5	10	--	--	--	--	--	--	--
	11/5/1999	5.3	<100	7.45	677	12.5	<10	<10	<5	60	130	60	31,400	33	<0.005	<0.020	105
	4/26/2000	3.2	<100	7.40	760	14.9	<10	<10	<5	<10	--	--	--	--	--	--	--
	12/8/2000	3.2	<10	7.45	780	4.7	<10	<10	15	<10	20	--	19,700	2	<0.005	<0.020	113
	5/15/2001	2.7	<100	6.99	590	13.0	<10	<10	<5	<10	--	--	--	--	--	--	--
	10/18/2001	2.5	<100	7.85	930	10.4	<10	<10	<5	<10	300	--	20,600	2	<0.005	<0.020	105
	5/16/2002	3.2	<100	7.21	780	11.9	<10	<10	<5	10	--	--	--	--	--	--	--
	11/7/2002	1.8	<30	7.59	610	8.7	<5	<5	<5	<5	250	74	20,900	3	<0.005	<0.020	115
Duplicate	6/3/2003	2.5	<30	7.36	620	12.8	<5	<5	<5	<5	--	--	--	--	--	--	--
	11/13/2003	1.3	<30	7.97	630	7.7	<5	<5	5	<5	200	15	--	5	<0.005	<0.010	127
	6/29/2004	9.4	<30	7.48	666	13.1	<5	<5	11	<5	--	--	--	--	--	--	--
	12/10/2004	2.0	<30	6.59	830	10.8	<5	<5	11	10	2,110	92	16,800	3	<0.005	<0.010	148
	6/7/2005	4.0	<30	7.30	707	11.9	7	<5	5	<5	2,140	66	16,500	<5	<0.005	<0.010	155
	12/8/2005	4.1	<30	4.84	957	11.1	11	<4	26	<10	120	120	20,600	--	--	--	--
	6/28/2006	1.7	<30	7.36	979	12.5	7	<4	<5	5	2,120	60	17,600	2	<0.005	<0.010	169
	11/30/2006	3.4	<30	7.49	980	12.5	6	<4	6	<5	--	--	--	--	--	--	--
	6/8/2007	3.4	30.9	6.72	929	13.4	10	22	19	124	610	160	25,500	4	<0.005	0.074	144
	11/13/2007	2.1	<30	7.19	932	13.5	3	1	13	9	--	--	--	--	--	--	--
Duplicate	6/25/2008	<1	<60	7.01	946	15.5	<5	2	<5	7	2,400	55	19,500	4	<0.005	<0.010	164
	11/18/2008	1	36.1	6.89	1,006	12.6	<5	4	6	22	--	--	--	--	--	--	--
	6/24/2009	1.1	<30	7.17	1,000	19.4	<5	<1	<5	<5	1,720	56	21,000	3	<0.005	<0.010	180
	6/24/2009	<1	<30	7.17	1,010	19.4	<5	<1	<5	<5	1,640	56	20,800	3	<0.005	<0.010	183
	11/18/2009	2	<30	7.02	1,030	12.1	<5	<4	<5	5	--	--	--	--	--	--	--
	6/16/2010	2	<30	7.30	1,020	15.1	<5	<4	<5	<5	1,930	49	19,000	2	<0.005	<0.020	177
	11/9/2010	3	<30	7.02	998	11.7	11	<4	<5	<5	--	--	--	--	--	--	--
	6/22/2011	1.6	<30	7.23	967	15.5	9	<4	<5	13	2,550	54	18,600	<5	<0.005	<0.010	164
	6/22/2011	--	--	--	--	--	<5	--	--	--	--	--	--	--	--	--	--
	11/16/2011	2	50	7.02	1,006	9.8	<5	<4	<5	5	--	--	--	--	--	--	--
Duplicate	11/16/2011	2	26	7.02	1,002	9.8	<5	<4	<5	6	--	--	--	--	--	--	--
Duplicate	6/25/2012	2	15	6.79	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	7.54	1,008	9.8	<5	<4	<5	7	--	--	--	--	--	--	--
	6/5/2013	1.7	<10	7.00	1,000	11.5	<5	<4	<5	11	1,840	48	19,500	<5	<0.005	<0.02	201
	6/5/2013	1.9	<10	7.00	1,000	11.5	<5	<4	<5	<5	1,780	47	17,100	<5	<0.005	<0.02	200
	11/5/2013	1.7	NS	7.22	992	11.8	<5	<4	<5	39	--	--	--	--	--	--	--
	6/23/2014	1.9	<30	7.01	972	13.8	<5	<5	5	<5	1,360	47	8,620	<5	<0.005	<0.02	192
	6/24/2015	1.8	<30	7.13	959	13.7	<5	<5	<5	<5	1,960	48	18,500	<10	<0.005	<0.02	178
	6/24/2015	1.7	<30	7.13	958	13.7	<5	<5	<5	<5	1,970	50	18,600	<10	<0.005	<0.02	178
	6/23/2016	1.7	68	7.01	945	17.4	<5	<5	<5	<5	1,880	65	18,500	<5	<0.005	<0.02	161
	6/22/2017	1.6	<30	7.11	926	12.4	<5	<5	<5	<5	2,080	48	18,700	<5	<0.005	<0.02	144
Duplicate	6/22/2017	1.6	<30	7.11	926	12.4	<5	<5	<5	<5	2,140	49	18,300	<5	<0.005	<0.02	146
Duplicate	6/14/2018	1.5	<60	6.96	882	14.3	<5	<5	<5	5	2,440	67	18,100	<5	<0.005	<0.02	132
	6/14/2018	3.0	<60	6.96	892	14.3	<5	<5	<5	7	2,630	72	17,300	<5	<0.005	<0.02	130
	5/31/2019	3.0	<150	7.69	797	12.1	<5	<5	<5	<5	910	41	21,400	<10	<0.004	<0.02	119
	6/18/2020	2.9	67	7.47	618	15.5	<5	<5	<5	<5	1,730	47	17,100	<10	<0.004	<0.02	132
	6/9/2021	3.5	15.5	7.42	870	13.9	<5	<5	<5	<5	2,100	51	17,000	<10	<0.004	<0.02	124

See notes on page 13.

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

Monitoring Well	Sample Date	Indicator Parameters					Dissolved Metals (µg/L)							Inorganics (mg/L)			
		TOC (mg/L)	TOX (µg/L)	pH	SpC	Temp	Cr	Cu	Ni	Zn	Fe	Mn	Na	Chloride	Cyanide	Phenols	Sulfate
		EGLE Residential Drinking Water Criteria & RBSLs					100 (A)	1,000 (E)	100 (A)	2,400							
B-21D	6/21/1995	4.2	<10	8.27	870	14.5	<20	<20	<30	61	--	--	--	--	--	--	--
	8/31/1995	3.3	19	8.09	684	14.2	<20	21	<40	<20	--	--	--	--	--	--	--
	2/9/1996	4.1	<10	7.70	646	8.6	<20	<20	<40	<20	--	--	--	--	--	--	--
	6/19/1996	5.3	<100	7.58	577	14.1	<20	<20	<20	<20	--	--	--	--	--	--	--
	8/21/1996	2.5	<5	7.93	576	13.8	<20	<20	<20	50	--	--	--	--	--	--	--
	11/13/1996	17.0	<5	7.28	810	8.8	<20	<20	<20	40	--	--	--	--	--	--	--
	5/6/1997	2.0	<100	6.82	530	10.2	<10	<10	8	<10	--	--	--	--	--	--	--
	11/6/1997	3.0	<100	6.70	540	10.0	<10	<10	30	<10	240	27	--	2	<0.005	<0.020	33
	5/4/1998	16.0	<5	6.90	480	11.5	<10	<10	<5	20	--	--	--	--	--	--	--
	11/5/1998	5.0	<10	7.24	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	8.24	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	8.20	660	14.1	<10	<10	<5	<10	--	--	--	--	--	--	--
	12/8/2000	4.2	<10	8.44	680	7.1	<10	<10	11	<10	<10	--	29,600	2	<0.005	<0.020	36
Duplicate	5/15/2001	1.9	<100	7.94	570	13.0	<10	<10	<5	10	--	--	--	--	--	--	--
	5/15/2001	1.9	<100	8.32	560	13.0	<10	<10	<5	10	--	--	--	--	--	--	--
	10/18/2001	3.4	<100	7.61	570	13.7	<10	<10	<5	<10	200	--	22,200	1	<0.005	<0.020	41
	5/16/2002	6.1	<100	7.19	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	7.27	510	13.0	<5	<5	<5	6	--	--	--	--	--	--	--
	11/13/2003	1.0	<30	7.81	710	8.7	<5	<5	<5	9	100	<5	--	4	<0.005	<0.010	48
	6/30/2004	4.0	<30	6.77	570	14.8	<5	<5	<5	7	--	--	--	--	--	--	--
	12/10/2004	2.0	<30	6.40	600	9.9	<5	<5	<5	7	1,330	44	20,100	2	<0.005	<0.010	50
	6/8/2005	3.0	<30	7.70	560	14.2	<5	<5	12	6	1,350	72	21,000	<5	<0.005	<0.010	44
	12/8/2005	4.4	<30	5.49	741	11.4	8	<4	8	<10	1,070	60	21,500	--	--	--	--
	6/28/2006	1.5	<30	7.44	718	12.8	<5	6	5	13	430	60	23,500	2	<0.005	<0.010	53
	11/30/2006	1.8	49.1	7.59	693	11.5	<5	<4	<5	<5	--	--	--	--	--	--	--
	6/8/2007	1.2	<30	6.30	709	13.2	10	2	5	7	1,200	49	21,500	4	<0.005	<0.010	60
	11/14/2007	<1	<30	7.26	738	14.5	2	1	5	8	--	--	--	--	--	--	--
Duplicate	6/26/2008	1.8	16.8	7.07	738	16.9	<5	1	<5	<5	1,390	40	22,700	3	<0.005	<0.010	60
	11/19/2008	1.1	<30	6.93	739	11.0	<5	<1	5	<5	--	--	--	--	--	--	--
	6/25/2009	<1	<30	6.69	743	16.1	<5	<1	<5	<5	1,210	34	25,100	3	<0.005	<0.010	64
	11/19/2009	2	41.2	7.17	745	10.2	<5	<4	<5	6	--	--	--	--	--	--	--
	11/19/2009	2	<30	7.17	739	10.2	<5	<4	<5	<5	--	--	--	--	--	--	--
	6/17/2010	2	<30	7.40	736	13.2	<5	<4	<5	<5	980	34	23,700	3	<0.005	<0.020	58
	11/10/2010	1	<30	7.28	739	11.0	11	<4	<5	<5	--	--	--	--	--	--	--
	6/22/2011	1.4	<30	7.41	718	19.5	10	<4	<5	<5	1,540	33	23,300	<5	<0.005	<0.010	61
	6/22/2011	--	--	--	--	--	7	--	--	--	--	--	--	--	--	--	--
	11/16/2011	1	7.9	7.16	753	10.6	<5	<4	<5	<5	--	--	--	--	--	--	--
	6/26/2012	1.3	<40	7.26	745	19.5	<5	<4	<5	<5	640	42	25,800	<5	<0.005	<0.02	66
	12/6/2012	1.6	<40	7.57	754	9.1	<5	<4	<5	8	--	--	--	--	--	--	--
	6/5/2013	1.6	<10	7.16	742	13.5	<5	<4	<5	26	990	31	24,400	<5	<0.005	<0.02	68
	11/6/2013	1.5	<10	7.49	760	12.1	<5	<4	<5	14	--	--	--	--	--	--	--
	6/24/2014	1.5	<30	7.43	754	16.5	<5	<5	<5	<5	850	28	11,200	<5	<0.005	<0.02	77
Replicate	6/24/2015	1.4	<30	7.19	683	15.2	<5	<5	<5	<5	710	37	24,700	<10	<0.005	<0.02	81
	6/24/2016	1.4	59	6.94	790	15.2	<5	<5	<5	<5	1,290	35	22,600	<5	<0.005	<0.02	91
	6/21/2017	1.4	<30	7.21	790	13.0	<5	<5	<5	<5	1,210	36	25,000	<5	<0.005	<0.02	90
	6/14/2018	1.4	<60	7.02	786	14.4	<5	<5	5	11	4,310	123	22,700	<5	<0.005	<0.02	90
	5/30/2019	2.7	<150	7.70	658	11.9	<5	<5	<5	<5	270	30	25,600	<10	<0.004	<0.02	79
	6/17/2020	2.9	40	7.57	554	12.5	<5	<5	<5	<5	1,400	33	21,200	<10	<0.004	<0.02	108
	6/10/2021	3.3	<10	7.36	800	15.7	<5	<5	<5	<5	1,920	45	24,600	<10	<0.004	<0.02	90

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

Monitoring Well	Sample Date	Indicator Parameters					Dissolved Metals (µg/L)							Inorganics (mg/L)			
		TOC (mg/L)	TOX (µg/L)	pH	SpC	Temp	Cr	Cu	Ni	Zn	Fe	Mn	Na	Chloride	Cyanide	Phenols	Sulfate
		EGLE Residential Drinking Water Criteria & RBSLs					100 (A)	1,000 (E)	100 (A)	2,400							
B-22D	6/21/1995	2.6	<10	7.71	573	15.5	<20	<20	370	<20	--	--	--	--	--	--	--
	8/31/1995	4.5	47	8.25	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	7.51	600	13.4	<20	<20	<20	20	--	--	--	--	--	--	--
	8/21/1996	1.7	<5	8.08	608	14.2	<20	<20	<20	50	--	--	--	--	--	--	--
	11/13/1996	10.0	<5	7.22	817	7.7	<20	<20	<20	50	--	--	--	--	--	--	--
	5/6/1997	2.0	<100	6.67	550	10.1	<10	<10	<5	<10	--	--	--	--	--	--	--
	11/6/1997	7.0	<100	6.90	550	10.0	<10	<10	29	10	1,360	55	--	2	<0.005	<0.020	32
	5/4/1998	5.0	<5	7.07	501	11.7	<10	<10	<5	<10	--	--	--	--	--	--	--
	11/5/1998	6.0	<10	6.60	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	8.20	485	13.2	<10	<10	<5	10	--	--	--	--	--	--	--
	11/5/1999	2.6	<100	7.30	474	13.6	<10	<10	<5	20	90	31	27,900	2	<0.005	<0.020	29
	4/26/2000	2.5	<100	8.20	670	14.2	<10	<10	<5	<10	--	--	--	--	--	--	--
	12/8/2000	2.5	<10	7.49	510	5.4	<10	<10	8	<10	<10	--	26,500	2	<0.005	<0.020	31
	5/15/2001	6.7	<100	8.01	690	13.7	<10	<10	6	30	--	--	--	--	--	--	--
	10/18/2001	1.7	<100	7.59	2,610	10.2	<10	<10	<5	<10	200	--	27,800	1	<0.005	<0.020	33
	5/16/2002	3.2	<100	7.06	630	12.1	<10	<10	<5	<10	--	--	--	--	--	--	--
	11/7/2002	1.5	<30	7.39	480	8.8	<5	<5	<5	<5	120	11	25,200	2	<0.005	<0.020	35
	6/3/2003	2.3	<30	6.78	570	13.1	<5	<5	<5	<5	--	--	--	--	--	--	--
	11/14/2003	1.6	<30	8.05	660	9.8	<5	<5	<5	9	6	<5	--	3	<0.005	<0.010	37
	6/30/2004	1.7	<30	6.27	610	15.5	<5	<5	<5	6	--	--	--	--	--	--	--
	12/10/2004	2.0	<30	6.95	600	10.3	<5	<5	<5	6	1,280	37	25,100	2	<0.005	<0.010	42
	6/8/2005	2.0	<30	7.67	531	13.2	6	<5	<5	<5	1,370	38	23,700	<5	<0.005	<0.010	40
	12/8/2005	2.7	<30	5.75	702	11.7	10	<4	46	<10	2,200	250	25,400	--	--	--	--
	6/28/2006	<1	<30	7.48	682	13.0	<5	<4	<5	<5	1,290	30	25,800	2	<0.005	<0.010	42
	11/30/2006	2.2	<30	7.53	684	13.3	<5	<4	<5	7	--	--	--	--	--	--	--
	Duplicate 11/30/2006	5.3	<30	7.53	676	13.3	<5	<4	<5	<5	--	--	--	--	--	--	--
	6/8/2007	3.8	<30	6.59	680	14.3	7	2	1	5	1,180	32	28,100	3	<0.005	<0.010	46
	Duplicate 6/8/2007	3.1	21.1	6.59	669	14.3	9	2	1	4	1,210	31	28,400	4	<0.005	<0.010	47
	11/14/2007	1.1	<30	7.30	710	14.2	2	2	3	6	--	--	--	--	--	--	--
	6/26/2008	1.7	22.6	7.09	694	19.3	<5	<1	<5	5	1,100	33	25,900	3	<0.005	<0.010	46
	Duplicate 6/26/2008	2.6	<30	7.09	710	19.3	<5	<1	<5	7	1,150	34	26,400	3	<0.005	<0.010	46
	11/19/2008	8.9	<30	6.93	699	8.2	<5	<1	8	8	--	--	--	--	--	--	--
	6/25/2009	1.1	<30	6.74	705	16.6	<5	<1	<5	<5	1,340	30	28,500	2	<0.005	<0.010	54
	11/18/2009	2	<30	7.15	710	11.4	<5	<4	<5	<5	--	--	--	--	--	--	--
	6/16/2010	2	<30	7.43	715	15.7	<5	<4	<5	<5	1,100	28	26,000	2	<0.005	<0.020	51
	11/11/2010	2	<30	7.31	704	10.3	11	<4	<5	<5	--	--	--	--	--	--	--
	6/21/2011	1.3	<30	7.35	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	7.39	714	10.1	<5	<4	<5	12	--	--	--	--	--	--	--
	6/25/2012	2	<40	6.45	714	12.7	<5	<4	<5	8	1,830	42	30,000	<5	<0.005	<0.02	51
	12/6/2012	1.6	<40	7.58	716	10.1	<5	<4	<5	9	--	--	--	--	--	--	--
	6/3/2013	1.6	46	6.81	701	15.6	<5	<4	<5	<5	1,000	27	28,100	<5	<0.005	<0.02	53
	11/6/2013	1.5	<10	7.52	713	11.4	<5	<4	<5	12	--	--	--	--	--	--	--
	6/24/2014	1.5	<30	7.46	707	14.7	<5	<5	<5	<5	850	26	12,700	<5	<0.005	<0.02	53
	6/23/2015	1.8	<30	7.46	710		<5	<5	<5	8	1,030	27	28,300	<10	<0.005	<0.02	55
	Duplicate 6/22/2016	2.4	100	7.19	716	13.0	<5	<5	<5	<5	920	27	27,100	<5	<0.005	<0.02	54
	6/22/2016	2.4	29	7.19	716	13.0	<5	<5	<5	<5	950	28	27,300	<5	<0.005	<0.02	54
	6/21/2017	1.5	<30	7.21	718	13.4	<5	<5	<5	<5	970	30	29,000	<5	<0.005	<0.02	54
	6/13/2018	1.5	<60	7.02	707	14.6	<5	<5	<5	5	1,320	29	31,000	<5	<0.005	<0.02	54
	5/30/2019	3.1	<150	7.76	647	11.7	<5	<5	<5	13	320	27	28,500	<10	<0.004	<0.02	55
	6/17/2020	5.2	<40	7.61	535	15.2	<5	<5	<5	<5	1,560	36	26,700	<10	<0.004	<0.02	58
	6/10/2021	2.8	88.8	7.40	722	16.3	<5	<5	<5	5	1,310	27	28,700	<10	<0.004	<0.02	54

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

Monitoring Well	Sample Date	Indicator Parameters					Dissolved Metals (µg/L)							Inorganics (mg/L)			
		TOC (mg/L)	TOX (µg/L)	pH	SpC	Temp	Cr	Cu	Ni	Zn	Fe	Mn	Na	Chloride	Cyanide	Phenols	Sulfate
		EGLE Residential Drinking Water Criteria & RBSLs					100 (A)	1,000 (E)	100 (A)	2,400							
B-23D	6/21/1995	3.4	<10	7.27	680	15.1	<20	<20	<30	<20	--	--	--	--	--	--	--
	8/31/1995	3.9	96	8.24	845	15.4	<20	<20	<40	<20	--	--	--	--	--	--	--
	2/9/1996	3.8	34	7.54	751	11.3	<20	<20	<40	<20	--	--	--	--	--	--	--
	6/19/1996	2.2	<100	8.25	632	14.2	<20	<20	<20	<20	--	--	--	--	--	--	--
	8/21/1996	1.7	<5	8.94	691	14.6	<20	<20	<20	50	--	--	--	--	--	--	--
	11/13/1996	40.0	<5	7.66	977	7.6	<20	<20	<20	40	--	--	--	--	--	--	--
	5/6/1997	2.0	<100	6.80	610	11.0	<10	<10	9	<10	--	--	--	--	--	--	--
	11/6/1997	3.0	<100	6.00	620	10.0	<10	<10	31	<10	160	15	--	2	<0.005	<0.020	25
	5/4/1998	2.0	<5	6.38	558	12.2	<10	<10	<5	<10	--	--	--	--	--	--	--
	11/5/1998	5.0	<10	6.50	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	8.10	552	13.3	<10	<10	<5	<10	--	--	--	--	--	--	--
	Duplicate 4/26/1999	3.0	<100	NS	NS	NS	<10	<10	<5	<10	--	--	--	--	--	--	--
	11/5/1999	3.4	<100	7.40	546	13.3	<10	<10	<5	<10	80	14	34,700	3	<0.005	<0.020	26
	Duplicate 11/5/1999	3.1	<100	NS	NS	NS	<10	<10	<5	<10	90	15	33,300	3	<0.005	<0.020	25
B-23DR	4/26/2000	3.2	<100	7.90	800	13.7	<10	<10	<5	<10	--	--	--	--	--	--	--
	12/8/2000	2.0	<10	6.99	570	7.0	<10	<10	7	<10	60	--	35,400	2	<0.005	<0.020	22
	5/15/2001	3.2	<100	7.88	790	13.1	<10	<10	<5	10	--	--	--	--	--	--	--
	10/17/2001	1.8	<100	7.46	600	11.3	<10	<10	<5	<10	170	--	32,800	2	<0.005	<0.020	23
	5/16/2002	5.4	<100	7.19	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
	Duplicate 6/3/2003	3.9	<30	6.86	640	12.9	<5	<5	<5	<5	--	--	--	--	--	--	--
	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	6.66	640	11.3	<5	<5	11	10	500	65	30,500	2	<0.005	<0.010	25
	Duplicate 6/7/2005	2.0	<30	7.34	594	12.2	<5	<5	<5	<5	2,520	49	20,600	25	<0.005	<0.010	60
	6/7/2005	2.0	<30	--	--	--	<5	<5	<5	<5	2,580	48	20,600	25	<0.005	<0.010	59
	12/8/2005	3.8	<30	6.22	700	6.1	7	<4	<5	<10	370	60	39,200	--	--	--	--
	6/27/2006	1.2	<30	7.12	760	13.4	5	<4	<5	5	2,280	50	20,500	26	<0.005	0.010	67
	11/30/2006	2.2	<30	7.56	568	11.8	<5	<4	<5	6	--	--	--	--	--	--	--
	6/8/2007	1.1	33.7	6.49	736	13.1	7	1	1	5	1,100	43	23,800	28	<0.005	<0.010	62
	11/16/2007	<1	<30	7.28	780	21.4	2	1	3	8	--	--	--	--	--	--	--
	6/26/2008	2.0	27.2	7.00	753	18.2	<5	1	<5	<5	1,850	44	23,700	22	<0.005	<0.010	54
	11/21/2008	<1	<30	6.74	763	6.0	<5	<1	<5	19	--	--	--	--	--	--	--
	6/25/2009	<1	<30	6.73	776	18.9	<5	<1	<5	<5	1,500	43	23,900	29	<0.005	<0.010	63
	11/18/2009	2	<30	7.22	756	11.9	<5	<4	<5	10	--	--	--	--	--	--	--
	6/16/2010	2	<30	7.36	747	18.2	<5	<4	<5	<5	950	35	23,200	20	<0.005	<0.020	45
	Duplicate 11/11/2010	2	21.5	7.28	743	12.8	11	<4	<5	<5	--	--	--	--	--	--	--
	11/11/2010	2	<30	7.28	742	12.8	11	<4	<5	<5	--	--	--	--	--	--	--
	6/21/2011	1.2	<30	7.33	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	7.19	721	13.1	<5	<4	<5	8	--	--	--	--	--	--	--
	6/26/2012	1	<40	6.78	748	12.7	<5	<4	<5	<5	1,810	42	25,100	25	<0.005	<0.02	50
	12/5/2012	1.6	<40	6.63	755	9.6	<5	<4	<5	7	--	--	--	--	--	--	--
	6/3/2013	1.4	14	7.06	720	15.4	<5	<4	<5	<5	980	32	23,500	20	<0.005	<0.02	44
	11/5/2013	1.4	4	7.32	746	12.6	<5	<4	<5	28	--	--	--	--	--	--	--
	6/25/2014	3.0	<30	7.31	746	13.9	<5	<5	6	5	970	36	10,900	26	<0.005	0.025	51
	6/24/2015	1.9	<30	7.16	747	14.9	<5	<5	<5	<5	1,370	39	24,300	22	<0.005	<0.02	47
	6/22/2016	1.5	60	7.10	788	14.6	<5	<5	<5	<5	1,600	38	23,500	30	<0.005	<0.02	54
	6/21/2017	1.5	<30	7.41	844	12.8	<5	<5	<5	<5	400	45	27,300	38	<0.005	<0.02	64
	6/14/2018	1.3	<60	6.92	865	15.9	<5	<5	<5	<5	2,320	53	30,100	43	<0.005	<0.02	65
	6/4/2019	2.6	<150	7.61	803	12.3	<5	<5	<5	<5	830	42	28,300	44	<0.004	<0.02	71
	6/16/2020	2.7	<40	7.51	822	15.0	<5	<5	<5	<5	1,840	42	28,200	40	<0.004	<0.02	68
	6/9/2021	3.5	3.84 J	7.45	842	14.9	<5	<5	<5	<5	1,860	42	28,100	34	<0.004	<0.02	62

See notes on page 13.

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

		Indicator Parameters					Dissolved Metals (µg/L)							Inorganics (mg/L)				
Monitoring Well	Sample Date	TOC (mg/L)	TOX (µg/L)	pH	SpC	Temp	Cr	Cu	Ni	Zn	Fe	Mn	Na	Chloride	Cyanide	Phenols	Sulfate	
EGLE Residential Drinking Water Criteria & RBSLs							100 (A)	1,000 (E)	100 (A)	2,400								
B-24	6/21/1995	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	8/31/1995	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	2/9/1996	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	6/19/1996	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	8/21/1996	5.6	<5	7.80	1,502	12.7	<20	<20	<20	90	--	--	--	--	--	--	--	
	11/13/1996	20.0	<5	7.09	2,030	7.8	<20	<20	<20	50	--	--	--	--	--	--	--	
	5/6/1997	5.0	<100	6.40	1,700	10.0	<10	<10	31	10	--	--	--	--	--	--	--	
	11/6/1997	--	--	--	--	--	--	--	--	--	--	--	--	NS	NS	NS	NS	
	5/4/1998	4.0	<5	6.52	1,410	11.6	<10	<10	8	20	--	--	--	--	--	--	--	
	11/5/1998	4.0	23	5.50	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	7.20	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	
B-24R	5/15/2001	NS	NS	6.40	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	
	6/7/2005	8.0	<30	7.27	857	10.6	8	<5	<5	<5	10,600	448	27,100	49	<0.005	<0.010	206	
	12/8/2005	6.6	<30	5.16	1,120	11.9	11	<4	<5	10	3,180	210	28,700	--	--	--	--	
	6/28/2006	4.7	<30	7.31	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	7.31	1,100	11.7	6	<4	<5	<5	--	--	--	--	--	--	--	
	6/4/2007	4.5	110	7.19	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	7.13	1,130	14.0	3	1	5	7	--	--	--	--	--	--	--	
	6/26/2008	4.3	<30	6.99	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	6.76	1,125	5.3	<5	<1	<5	<5	--	--	--	--	--	--	--	
	6/24/2009	5.2	<30	6.62	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	7.08	1,140	12.9	<5	<4	<5	<5	--	--	--	--	--	--	--	
	6/16/2010	4	22.7	7.02	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	6.90	1,136	13.5	11	<4	<5	<5	--	--	--	--	--	--	--	
	6/21/2011	3.7	<30	7.11	1,136	17.5	10	<4	6	<5	1,130	255	51,700	45	<0.005	<0.010	206	
	Duplicate	6/21/2011	3.7	<30	7.11	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	7.69	1,141	11.1	<5	<4	<5	<5	--	--	--	--	--	--	--	--
	6/26/2012	3.5	16	6.80	1,219	13.7	<5	<4	<5	<5	1,200	242	72,000	45	<0.005	<0.02	219	
	12/6/2012	4.2	48	6.98	1,204	10.2	<5	<4	<5	6	--	--	--	--	--	--	--	--
6/3/2013	4	4.8	7.19	1,127	11.4	<5	<4	<5	<5	110	130	38,600	45	<0.005	<0.02	227		
11/5/2013	4	5.5	7.16	1,203	12.6	<5	<4	<5	<5	--	--	--	--	--	--	--	--	
Duplicate	11/5/2013	4	<10	7.16	1,203	12.6	<5	<4	<5	--	--	--	--	--	--	--	--	
6/24/2014	3.7	16	7.10	1,202	13.9	<5	8	8	9	60	238	24,300	45	<0.005	<0.02	243		
Duplicate	6/24/2014	3.7	16	7.10	1,201	13.9	<5	<5	7	<5	8	231	25,000	46	<0.005	<0.02	240	
11/19/2014	3.9	21	6.98	1,290	5.44	<5	<4	11	<5	--	--	--	--	--	--	--	--	
6/24/2015	3.5	<30	7.03	1,235	15.4	<5	<5	7	<5	<20	240	59,600	44	<0.005	<0.02	261		
11/18/2015	3.6	19	7.03	1,234	12.9	<5	<5	5	<5	--	--	--	--	--	--	--	--	
Duplicate	11/18/2015	3.5	18	7.03	1,233	12.9	<5	<5	6	7	--	--	--	--	--	--	--	
6/23/2016	3.2	110	6.88	1,275	15.0	<5	<5	<5	<5	320	210	67,800	45	<0.005	<0.02	245		
11/29/2016	3.4	12	7.19	1,220	10.7	<5	<5	<5	<5	--	--	--	--	--	--	--	--	
6/20/2017	3.1	14	7.10	1,307	11.4	<5	<5	<5	<5	<20	74	74,400	48	<0.005	<0.02	246		
11/7/2017	3.4	<30	7.09	1,231	11.3	<5	<5	<5	<5	--	--	--	--	--	--	--	--	
6/12/2018	2.9	<60	7.07	1,280	11.4	<5	<5	<5	7	100	64	64,500	47	<0.005	<0.02	240		
11/7/2018	3.7	<150	7.22	1,269	11.0	<5	<5	<5	<5	--	--	--	--	--	--	--	--	
5/30/2019	4.7	<150	7.17	1,161	11.2	<5	<5	<5	13	540	108	70,100	46	<0.004	<0.02	249		
11/21/2019	4.0	59	7.26	1,216	11.8	<5	<5	<5	7	--	--	--	--	--	--	--	--	
6/17/2020	5.4	<40	7.38	1,125	14.9	<5	<5	<5	6	70	44	62,600	49	<0.004	<0.02	271		
11/5/2020	5.2	18.5	7.07	1,257	14.4	<5	<5	<5	<5	--	--	--	--	--	--	--	--	
Duplicate	11/5/2020	5.2	4.26	7.07	1,226	14.4	<5	<5	<5	<5	--	--	--	--	--	--	--	
	6/10/2021	5.3	11.4	7.24	1,295	17.8	<5	<5	<5	7	170	54	67,600	49	<0.004	<0.02	258	

See notes on page 13.

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

Monitoring Well	Sample Date	Indicator Parameters					Dissolved Metals (µg/L)							Inorganics (mg/L)			
		TOC (mg/L)	TOX (µg/L)	pH	SpC	Temp	Cr	Cu	Ni	Zn	Fe	Mn	Na	Chloride	Cyanide	Phenols	Sulfate
		EGLE Residential Drinking Water Criteria & RBSLs					100 (A)	1,000 (E)	100 (A)	2,400							
B-27D	12/8/2005	3.7	<30	5.14	714	4.8	9	<4	6	<10	240	140	34,200	--	--	--	--
	6/27/2006	1.3	<30	7.11	644	13.5	6	<4	7	6	1,050	110	32,300	--	--	--	--
	11/30/2006	<1	<30	7.49	540	11.7	<5	<4	<5	6	--	--	--	--	--	--	--
	6/8/2007	4	25.7	6.58	628	14.6	9	2	3	36	1,520	58	36,300	4	<0.005	<0.010	23
	11/15/2007	1.9	<30	7.33	649	11.6	2	1	5	32	--	--	--	--	--	--	--
	6/26/2008	1.7	<30	7.05	659	16.3	<5	<1	<5	<5	300	59	33,900	2	<0.005	<0.010	23
	11/21/2008	1.3	<30	6.81	667	6.6	<5	<1	<5	<5	--	--	--	--	--	--	--
	6/25/2009	<1	<30	6.79	651	16.5	<5	1	<5	<5	2,030	52	37,200	2	<0.005	<0.010	20
	11/18/2009	2	<30	7.29	653	11.2	<5	<4	<5	<5	--	--	--	--	--	--	--
	6/15/2010	2	<30	7.41	646	15.7	<5	<4	<5	<5	1,250	36	32,200	2	<0.005	<0.020	19
Duplicate	6/15/2010	2	31.2	7.41	652	15.7	<5	<4	<5	<5	1,220	35	31,700	2	<0.005	<0.020	20
Replicate	11/9/2010	2	<30	7.18	651	13.3	10	<4	<5	<5	--	--	--	--	--	--	--
	6/21/2011	1.5	<30	7.47	640	15.6	9	<4	<5	<5	1,370	29	34,600	<5	<0.005	<0.010	19
	6/21/2011	--	--	--	--	--	<5	--	--	--	--	--	--	--	--	--	--
	11/15/2011	1	34	7.22	652	12.1	<5	<4	6	8	--	--	--	--	--	--	--
	6/26/2012	1.5	<40	7.17	653	13.0	<5	<4	<5	<5	1,450	28	34,200	<5	<0.005	<0.02	20
	12/5/2012	1.7	<40	6.79	654	11.0	<5	<4	<5	10	--	--	--	--	--	--	--
	6/3/2013	1.5	4.3	8.34	645	12.1	<5	<4	<5	<5	1,670	29	32,500	<5	<0.005	<0.02	21
	11/5/2013	1.8	<10	7.37	640	12.0	<5	<4	<5	28	--	--	--	--	--	--	--
	6/24/2014	1.9	<30	7.40	637	16.0	<5	<5	<5	<5	680	34	15,800	<5	<0.005	<0.02	18
	6/22/2015	1.8	<30	7.20	635	14.2	<5	<5	<5	<5	710	27	34,100	<5	<0.005	<0.02	18
Duplicate	6/22/2016	1.6	30	7.20	640	14.1	<5	<5	<5	<5	930	20	33,200	<5	<0.005	<0.02	15
	6/20/2017	1.4	<30	7.40	642	14.7	<5	<5	<5	<5	1,220	43	35,600	<5	<0.005	<0.02	17
	6/12/2018	1.7	<60	7.16	667	12.6	<5	<5	<5	6	1,380	33	43,700	<5	<0.005	<0.02	16
	6/4/2019	3.5	<150	7.61	638	12.4	<5	<5	<5	<5	1,040	32	47,500	<5	<0.004	<0.02	15
	6/17/2020	3.4	<40	7.67	622	12.6	<5	<5	<5	<5	1,180	28	35,700	<10	<0.004	<0.02	17
	6/11/2021	2.8	8.52 J	7.51	660	13.5	<5	<5	<5	<5	1,300	28	39,400	<10	<0.004	<0.02	14
	6/11/2021	2.5	10.4	7.51	635	13.5	<5	<5	<5	<5	1,440	31	40,400	<10	<0.004	<0.02	14

See notes on page 13.

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

Monitoring Well	Sample Date	Indicator Parameters					Dissolved Metals (µg/L)							Inorganics (mg/L)			
		TOC (mg/L)	TOX (µg/L)	pH	SpC	Temp	Cr	Cu	Ni	Zn	Fe	Mn	Na	Chloride	Cyanide	Phenols	Sulfate
		EGLE Residential Drinking Water Criteria & RBSLs					100 (A)	1,000 (E)	100 (A)	2,400							
Duplicate	11/21/2005	--	--	6.21	994	12.3	--	--	--	<5	--	--	--	--	--	--	--
	11/21/2005	--	--	6.21	--	12.3	--	--	--	7	--	--	--	--	--	--	--
Duplicate B-28	6/27/2006	3	<30	7.12	828	13.2	5	<4	<5	18	2,380	210	17,000	--	--	--	--
	12/1/2006	2.4	<30	7.48	812	12.3	<5	<4	<5	5	--	--	--	--	--	--	--
	12/1/2006	3.3	<30	7.48	810	12.3	<5	<4	<5	<5	--	--	--	--	--	--	--
	6/5/2007	2.1	<30	6.84	845	10.6	9	2	3	6	1,690	160	25,100	12	<0.005	<0.010	87
	11/15/2007	2.5	15	6.81	816	9.1	3	2	5	11	--	--	--	--	--	--	--
	6/27/2008	1.8	<30	6.87	840	17.6	<5	1	<5	5	370	84	16,300	10	<0.005	<0.010	88
	11/19/2008	1.1	<30	6.75	804	7.0	<5	<1	<5	<5	--	--	--	--	--	--	--
	6/24/2009	1.1	<30	6.96	822	19.5	<5	<1	<5	<5	204	132	14,600	10	<0.005	<0.010	84
	11/18/2009	2	<30	6.94	814	11.6	<5	<4	<5	20	--	--	--	--	--	--	--
	6/16/2010	2	<30	7.02	841	17.6	<5	<4	<5	<5	790	173	19,100	12	<0.005	<0.020	78
Replicate	11/10/2010	3	<30	7.05	813	13.3	18	<4	<5	<5	--	--	--	--	--	--	--
	6/21/2011	1.5	<30	7.23	837	14.1	9	<4	5	<5	1,380	130	23,400	12	<0.005	<0.010	80
	6/21/2011	--	--	--	--	--	<5	--	--	--	--	--	--	--	--	--	--
Duplicate	11/15/2011	2	160	7.17	823	12.5	<5	<4	<5	<5	--	--	--	--	--	--	--
	6/26/2012	2	<40	6.45	849	13.0	<5	<4	<5	<5	1,960	84	29,800	12	<0.005	<0.02	80
	12/6/2012	1.6	<40	7.25	823	11.4	<5	<4	<5	<5	--	--	--	--	--	--	--
Replicate	12/6/2012	1.7	<40	7.25	823	11.4	<5	<4	<5	<5	--	--	--	--	--	--	--
	6/3/2013	1.5	10	6.88	834	13.1	<5	<4	5	<5	1,310	111	26,000	12	<0.005	<0.02	87
	11/5/2013	1.6	<10	7.26	842	12.9	<5	<4	<5	<5	--	--	--	--	--	--	--
	6/24/2014	1.5	<30	7.03	852	12.2	<5	9	<5	<5	1,490	53	15,400	12	<0.005	<0.02	89
	7/28/2014	--	--	--	--	--	--	<5	--	--	--	--	--	--	--	--	--
Duplicate	11/19/2014	1.6	<60	7.05	844	7.48	<5	<4	<5	<5	--	--	--	--	--	--	--
	6/22/2015	1.5	<30	7.04	860	13.4	<5	<5	<5	<5	3,330	53	37,100	11	<0.005	<0.02	92
	11/18/2015	1.6	<30	7.13	849	13.8	<5	<5	<5	6	--	--	--	--	--	--	--
	6/24/2016	1.6	49	7.18	866	15.0	<5	<5	<5	<5	4,960	53	45,800	11	<0.005	<0.02	92
	11/29/2016	1.5	<30	7.27	853	12.6	<5	<5	<5	<5	--	--	--	--	--	--	--
Duplicate	11/29/2016	1.5	16	7.27	860	12.6	<5	<5	<5	<5	--	--	--	--	--	--	--
	6/20/2017	1.6	18	7.05	863	11.4	<5	<5	<5	<5	80	35	30,000	13	<0.005	<0.02	106
	11/7/2017	1.6	<30	7.11	859	12.5	<5	<5	<5	<5	--	--	--	--	--	--	--
Duplicate	11/7/2017	1.5	<30	7.11	867	12.5	<5	<5	<5	<5	--	--	--	--	--	--	--
	6/12/2018	1.6	<60	7.09	839	12.2	<5	<5	<5	<5	60	27	14,600	12	<0.005	<0.02	100
	11/7/2018	1.5	<150	7.37	880	11.8	<5	<5	<5	<5	--	--	--	--	--	--	--
Duplicate	11/7/2018	1.6	<150	7.37	880	11.8	<5	<5	<5	<5	--	--	--	--	--	--	--
	5/29/2019	3.4	<150	7.39	803	11.0	<5	<5	<5	<5	50	84	16,200	13	<0.004	<0.02	118
Duplicate	11/21/2019	2.1	<40	7.34	839	12.2	<5	<5	<5	5	--	--	--	--	--	--	--
	6/16/2020	2.8	41	7.38	862	14.4	<5	<5	<5	<5	110	74	14,200	13	<0.004	<0.02	142
	11/5/2020	3.8	<10	7.09	904	13.8	<5	<5	<5	<5	--	--	--	--	--	--	--
	6/9/2021	3.6	8.14 J	7.12	936	15.1	<5	<5	<5	<5	280	82	14,900	11	<0.004	<0.02	161

See notes on page 13.

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

Monitoring Well	Sample Date	Indicator Parameters					Dissolved Metals (µg/L)							Inorganics (mg/L)			
		TOC (mg/L)	TOX (µg/L)	pH	SpC	Temp	Cr	Cu	Ni	Zn	Fe	Mn	Na	Chloride	Cyanide	Phenols	Sulfate
		EGLE Residential Drinking Water Criteria & RBSLs					100 (A)	1,000 (E)	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	6,350	<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
	11/6/2013	<1	<10	--	2,350	--	<5	<4	<5	<5	--	--	--	--	--	--	--
	6/24/2014	<1	<30	--	1,930	--	<5	<5	<5	<5	<20	<5	<1000	<2.5	<0.005	<0.02	<2.5
	6/24/2015	<1	<30	--	4.09	--	<5	<5	<5	<5	<20	<5	140	<2	<0.005	<0.02	<2
	6/24/2016	<1	6.2	--	2,220	--	<5	<5	<5	<5	<20	<5	<500	<2.5	<0.005	<0.02	<2
	6/22/2017	<1	<30	--	5,780	--	<5	<5	<5	<5	<20	<5	<200	<5	<0.005	<0.02	<5
	11/7/2017	<1	<30	--	7.07	--	<5	<5	<5	<5	--	--	--	--	--	--	--
	6/14/2018	1.2	<60	--	28.8	--	<5	<5	<5	<5	<20	<5	<250	<2.5	<0.005	<0.02	<2.5
	6/3/2019	<1	<150	--	2.63	--	<5	<5	<5	<5	<20	<5	530	<2.5	<0.004	<0.02	<2.5
	6/18/2020	<1	<40	--	3.31	--	<5	<5	<5	<5	<20	<5	<500	<2.5	<0.004	<0.02	<2.5
	6/11/2021	<1	<10	--	1,400	--	<5	<5	<5	<5	<20	<5	<500	<2.5	<0.004	<0.02	<2.5

Notes

- 1) < = Not detected.
 - 2) NS = Not sampled, insufficient liquid encountered.
 - 3) NR = No Result, insufficient sample volume.
 - 4) J = Estimated value less than reporting limit, but greater than method detection limit.
 - 5) T = Temperature in degrees Celsius.
 - 6) -- = Not analyzed.
 - 7) Dup = Duplicate sample.
- Exceeds MDEQ Residential Drinking Water Criteria
- 8) A = Criterion is the state of Michigan drinking water standard established pursuant to Section 5 of 1976 PA 399, MCL 325.1005.
 - 9) 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 Leachate Sumps - Analytical Results
Volatile Organic Compounds (µg/L)

	B-7	B-9	B-18A	OBG MW-16D	B-19Ar	B-20D	B-21D	B-22D
Parameter	11-Jun-21	11-Jun-21	11-Jun-21	10-Jun-21	9-Jun-21	9-Jun-21	10-Jun-21	10-Jun-21
Acetone	<50	<50	<50	<50	<50	<50	<50	<50
Acrylonitrile	<2	<2	<2	<2	<2	<2	<2	<2
2-Butanone	<25	<25	<25	<25	<25	<25	<25	<25
Benzene	<1	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	<1	<1	<1	<1	<1	<1	<1	<1
Bromobenzene	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<5	<5	<5	<5	<5	<5	<5	<5
sec-Butylbenzene	<1	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	<1	<1	<1	<1	<1	<1	<1	<1
Carbon disulfide	<5	<5	<5	<5	<5	<5	<5	<5
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	<5	<5	<5	<5	<5	<5	<5	<5
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<5	<5	<5	<5	<5	<5	<5	<5
1,1-Dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,3-Dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1
Dibromochloromethane	<5	<5	<5	<5	<5	<5	<5	<5
Dibromomethane	<5	<5	<5	<5	<5	<5	<5	<5
Dichlorodifluoromethane	<5	<5	<5	<5	<5	<5	<5	<5
Diethyl ether	<10	<10	<10	<10	<10	<10	<10	<10
trans-1,2-Dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,4-Dichloro-2-butene	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1
2-Hexanone	<50	<50	<50	<50	<50	<50	<50	<50
Hexachloroethane	<5	<5	<5	<5	<5	<5	<5	<5
p-Isopropyltoluene	<5	<5	<5	<5	<5	<5	<5	<5
Isopropylbenzene	<5	<5	<5	<5	<5	<5	<5	<5
2-Methylnaphthalene	<5	<5	<5	<5	<5	<5	<5	<5
4-Methyl-2-pentanone	<50	<50	<50	<50	<50	<50	<50	<50
tert-Methyl butyl ether (MTBE)	<5	<5	<5	<5	<5	<5	<5	<5
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5
Napthalene	<5	<5	<5	<5	<5	<5	<5	<5
n-Propylbenzene	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1,2-Tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-Trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	<5	<5	<5	<5	<5	<5	<5	<5
1,2,3-Trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trimethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	<5	<5	<5	<5	<5	<5	<5	<5
1,2,4-Trimethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	<1	<1	<1	<1	<1	<1	<1	<1
Tetrahydrofuran	<90	<90	<90	<90	<90	<90	<90	<90
Toluene	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	<1	<1	<1	<1	<1	<1	<1	<1
p,m-Xylene	<2	<2	<2	<2	<2	<2	<2	<2

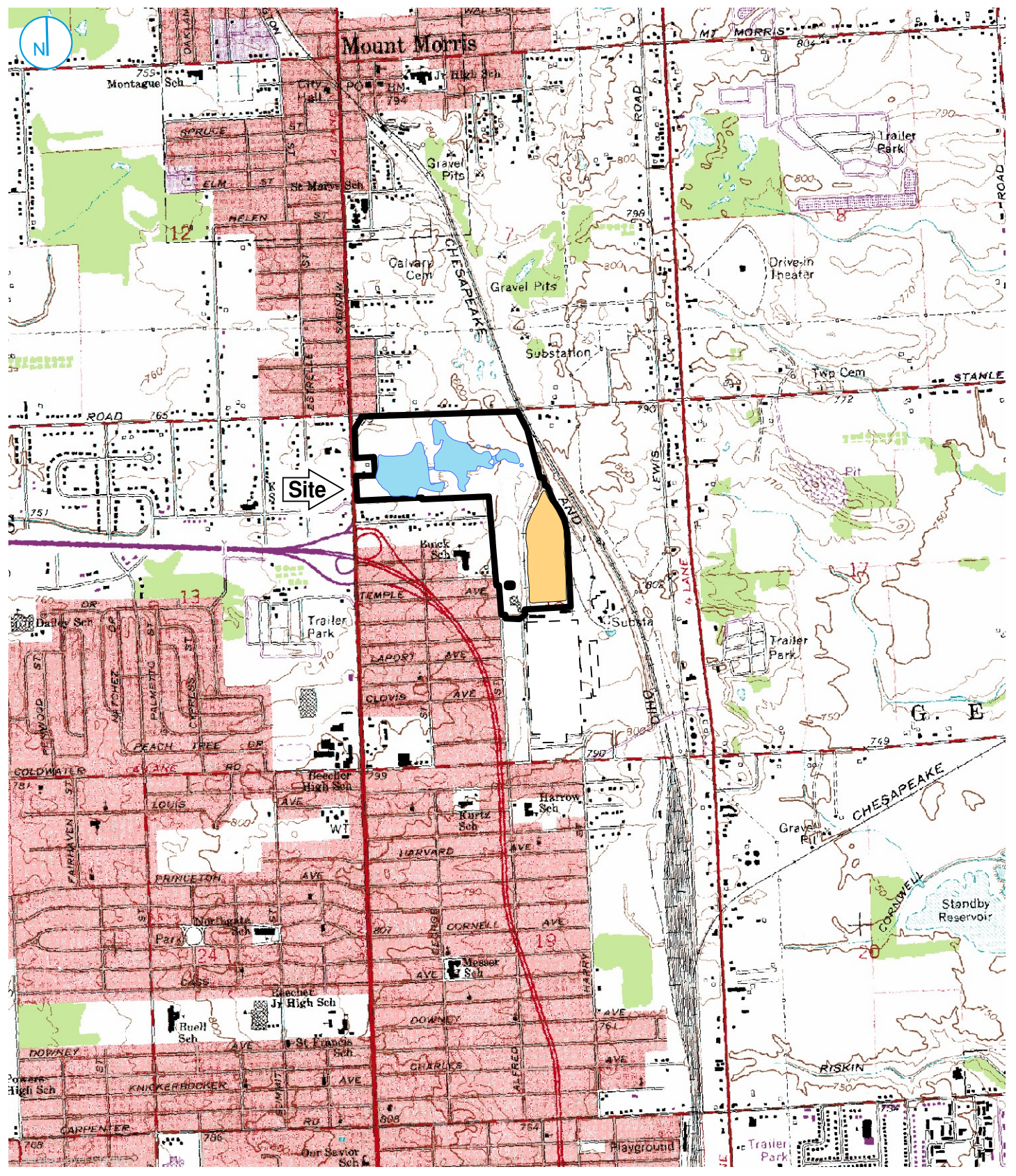
Notes:
 Analysis in µg/L
 EPA Method 8260 used for analysis.
 Dup- Duplicate analysis

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

	B-23Dr	B-24r	B-27D	MW-DUP-061121 (B-27D)	B-28	Equipment Blank-1	Trip Blank-061021	Trip Blank-061121
Parameter	9-Jun-21	10-Jun-21	11-Jun-21	11-Jun-21	9-Jun-21	11-Jun-21	10-Jun-21	11-Jun-21
Acetone	<50	<50	<50	<50	<50	<50	<50	<50
Acrylonitrile	<2	<2	<2	<2	<2	<2	<2	<2
2-Butanone	<25	<25	<25	<25	<25	<25	<25	<25
Benzene	<1	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	<1	<1	<1	<1	<1	<1	<1	<1
Bromobenzene	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<5	<5	<5	<5	<5	<5	<5	<5
sec-Butylbenzene	<1	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	<1	<1	<1	<1	<1	<1	<1	<1
Carbon disulfide	<5	<5	<5	<5	<5	<5	<5	<5
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	<5	<5	<5	<5	<5	<5	<5	<5
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<5	<5	<5	<5	<5	<5	<5	<5
1,1-Dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,3-Dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1
Dibromochloromethane	<5	<5	<5	<5	<5	<5	<5	<5
Dibromomethane	<5	<5	<5	<5	<5	<5	<5	<5
Dichlorodifluoromethane	<5	<5	<5	<5	<5	<5	<5	<5
Diethyl ether	<10	<10	<10	<10	<10	<10	<10	<10
trans-1,2-Dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,4-Dichloro-2-butene	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1
2-Hexanone	<50	<50	<50	<50	<50	<50	<50	<50
Hexachloroethane	<5	<5	<5	<5	<5	<5	<5	<5
p-Isopropyltoluene	<5	<5	<5	<5	<5	<5	<5	<5
Isopropylbenzene	<5	<5	<5	<5	<5	<5	<5	<5
2-Methylnapthalene	<5	<5	<5	<5	<5	<5	<5	<5
4-Methyl-2-pentanone	<50	<50	<50	<50	<50	<50	<50	<50
tert-Methyl butyl ether (MTBE)	<5	<5	<5	<5	<5	<5	<5	<5
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5
Napthalene	<5	<5	<5	<5	<5	<5	<5	<5
n-Propylbenzene	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1,2-Tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-Trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	<5	<5	<5	<5	<5	<5	<5	<5
1,2,3-Trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trimethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	<5	<5	<5	<5	<5	<5	<5	<5
1,2,4-Trimethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	<1	<1	<1	<1	<1	<1	<1	<1
Tetrahydrofuran	<90	<90	<90	<90	<90	<90	<90	<90
Toluene	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	<1	<1	<1	<1	<1	<1	<1	<1
p,m-Xylene	<2	<2	<2	<2	<2	<2	<2	<2

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

FIGURES



Map Scale: 1:124,000;
Map Center: 83°41'9"W 43°5'51"N

- Wetlands
- Site Buildings
- Landfill-poly
- Former Powerhouse
- Former Plant
- Landfill Property

0 1,000 2,000 Feet

SITE LOCATION

FIGURE 1

RACER TRUST
Coldwater Road Landfill
Flint, Michigan

A RAMBOLL COMPANY

RAMBOLL

I:\Racer-Trust\1088190\GIS\Coldwater_Road\MXD\2021_Semiannual_GW_Report\002-Figure 2 GW_Report_Site_Layout.mxd

PROJECT: 1940100783 | DATED: 7/27/2021 | DESIGNER: MONETANT



- PERCHED MONITORING WELL
- DRIFT MONITORING WELL
- OTHER MONITORING WELL / PIEZOMETER
- ABANDONED WELL
- LEACHATE COLLECTION SUMP
- ACCESS PORT FOR LEAK DETECTION VAULT
- PROPERTY BOUNDARY
- FORMER BUILDING



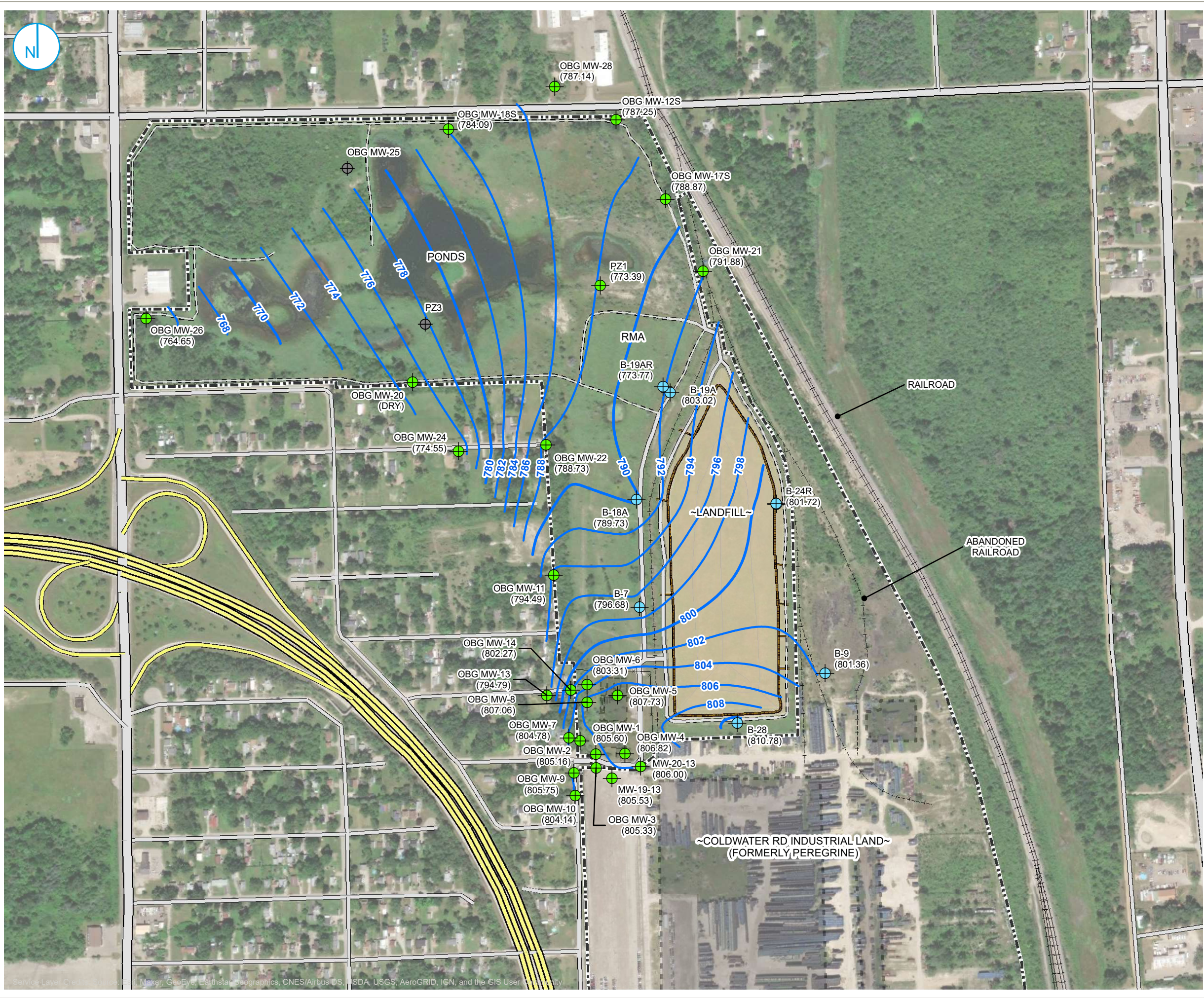
SITE LAYOUT

Racer Trust
COLDWATER ROAD
FLINT, MICHIGAN

FIGURE 2

O'BRIEN & GERE ENGINEERS, INC.
A RAMBOLL COMPANY





- ABANDONED WELL
 - LANDFILL MONITORING WELL / PIEZOMETER
 - OTHER MONITORING WELL / PIEZOMETER
 - GROUNDWATER CONTOUR (JUNE 8, 2021)
 - PROPERTY BOUNDARY
 - FORMER BUILDING
- (800.93) GROUNDWATER ELEVATION

NOTES

THE GROUNDWATER ELEVATION FOR MONITORING WELLS B-19A, B-19AR, AND PZ-1 WERE NOT USED IN DEVELOPING THE GROUNDWATER POTENTIOMETRIC SURFACE DUE TO THE DEPTH OF THESE WELLS AND VERTICAL GRADIENTS AT THE SITE.

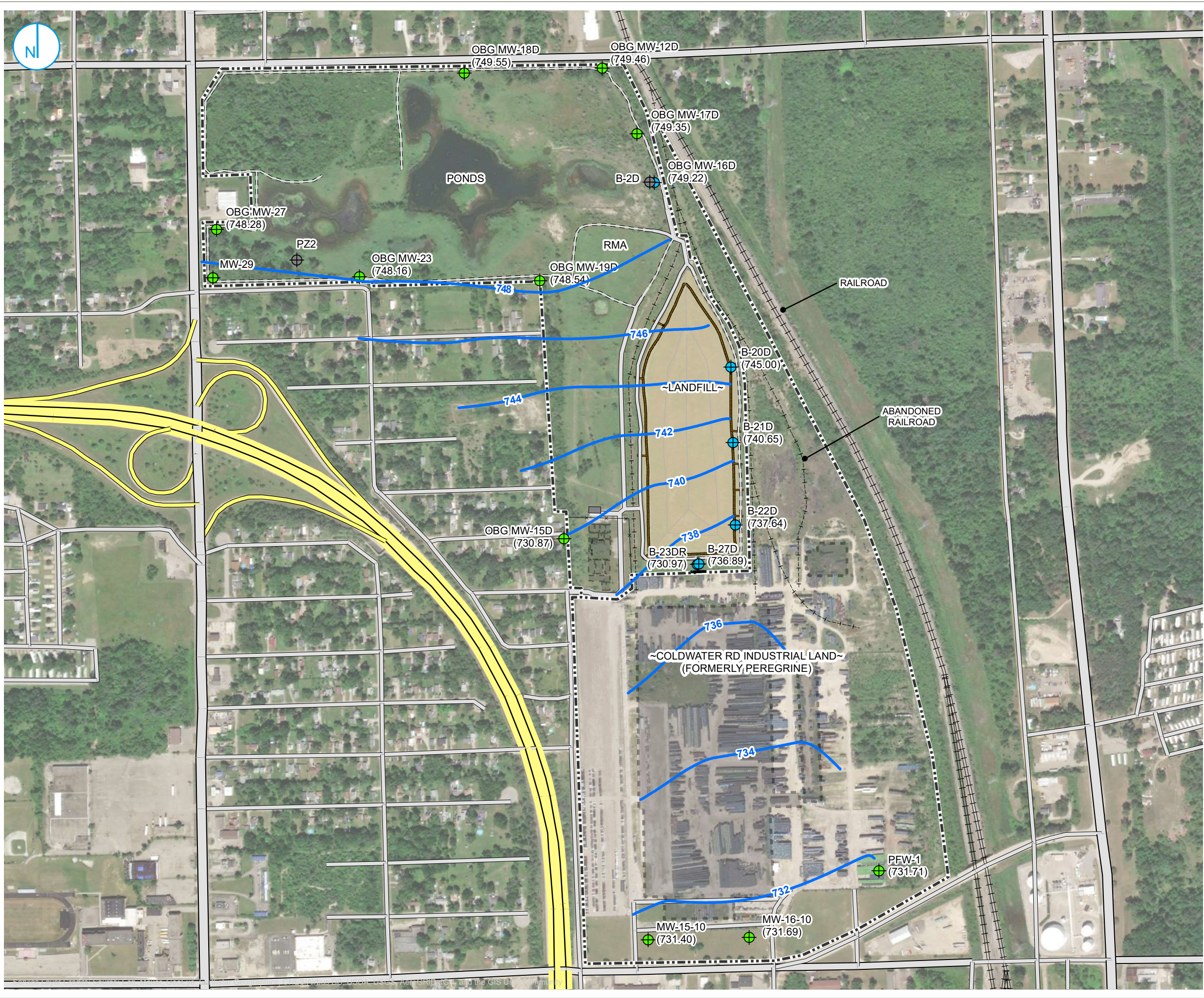
THE ADDITIONAL SITE MONITORING WELLS WERE USED IN THE CREATION OF THE GROUNDWATER CONTOURS BUT ARE NOT PART OF THE LANDFILL MONITORING PROGRAM.



PERCHED ZONE GROUNDWATER ELEVATION MAP
JUNE 8, 2021

RACER TRUST
COLDWATER ROAD
FLINT, MICHIGAN

FIGURE 3



- LANDFILL MONITORING WELL / PIEZOMETER
- ABANDONED WELL
- OTHER MONITORING WELL / PIEZOMETER
- GROUNDWATER CONTOUR (JUNE 8, 2021)
- PROPERTY BOUNDARY
- FORMER BUILDING
- (800.93) GROUNDWATER ELEVATION

NOTES
THE GROUNDWATER ELEVATIONS FOR MONITORING WELLS B-23DR AND OBG MW-15D WERE NOT USED IN DEVELOPING THE GROUNDWATER POTENTIOMETRIC SURFACE DUE TO THE DEPTH OF THESE WELLS AND APPARENT VERTICAL GRADIENT WITHIN THE DRIFT UNIT.

MW-29 HAS NOT BEEN SURVEYED.

THE ADDITIONAL SITE MONITORING WELLS WERE USED IN THE CREATION OF THE GROUNDWATER CONTOURS BUT ARE NOT PART OF THE LANDFILL MONITORING PROGRAM.

0 275 550
Feet

DRIFT UNIT GROUNDWATER ELEVATION MAP JUNE 8, 2021

RACER TRUST
COLDWATER ROAD
FLINT, MICHIGAN

FIGURE 3

O'BRIEN & GERE ENGINEERS, INC.
A RAMBOLL COMPANY



APPENDIX A SAMPLING PROCEDURES

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1 Introduction

This procedure is for the collection of groundwater samples for laboratory analysis.

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

One of the most important aspects of groundwater 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 "Low Stress/Low Flow" purging and sampling method will be utilized to purge the well to allow representative water from the formation to replace the standing water within the sampling zone of the well. Experience has shown that the low stress/low flow technique typically achieves representative groundwater 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, or excessive drawdown is produced using standard low stress/low flow methods due to the presence of low permeability materials within a well's screened zone. Ultra-low flow techniques are conducted at purging rates below 100 ml per minute, and should only be utilized after low stress/low flow methods have been attempted (see Section 2.2 for further discussion on the purging of wells prior to sample collection).

2 Procedural Guidelines

The following describes techniques for groundwater sampling: Low Stress/Low Flow Methods. Low stress/low flow methods will be employed when it is critical to collect groundwater samples truly representative of the groundwater present, and to minimize the impact of sediment/colloid presence.

2.1 PREPARATORY REQUIREMENTS

Prior to groundwater sampling, an inspection will be performed on each well. The inspection will include:

- Inspecting the concrete pad for cracks
- Inspecting the protective steel cover
- Inspecting the integrity of the PVC well casing (to the extent possible)
- Inspecting the well caps
- Inspecting the well identification markings to confirm they are legible (if illegible, re-mark)
- Inspecting the locks to assess whether they are in good working condition.

Results of the well inspection will be documented on the Groundwater Sampling Log for each well. If the inspection indicates repairs are required, these will be performed prior to the next sampling event. Corrective actions implemented to repair well(s) will also be documented on the Groundwater Sampling Log and/or the field notebook for the facility.

Groundwater purging and sampling data will be recorded on the Groundwater Sampling Log.

2.2 WELL PURGING AND STABILIZATION MONITORING (LOW STRESS/LOW FLOW METHOD)

The procedure for sampling the monitoring wells is as follows:

- 1) Sampling equipment will first be decontaminated prior to each use by the following protocol:
 - Scrub equipment thoroughly in a low-sudsing detergent solution (e.g., Alconox). Pump low-sudsing detergent solution through submersible pump for approximately 5 minutes, if utilized
 - Rinse equipment thoroughly with distilled water, and pump distilled water through submersible pump, if utilized
 - Wrap equipment in plastic for handling and/or storage until next use
 - Decontamination of disposable tubing, if used, will not be necessary
- 2) Calibrate field instrument and document calibration activity. Calibration shall be performed in accordance with manufacturer's recommendations, and noted on the Groundwater Sampling Log

- 3) An electric water level probe will be used to measure the depth from the top of the casing to the top of water to the nearest 0.01-ft. The measurement will be recorded in a dedicated field notebook and Groundwater Sampling Log
- 4) Measure the depth from the top of casing to the bottom of the well for the initial sampling event
- 5) Slowly lower the pump and/or tubing into the well positioning the pump intake at the mid-point of the well screen taking care to minimize disturbing the well
- 6) 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 groundwater flow rate is achieved, and three consecutive readings for each parameter are within the following limits:

pH	±0.1 pH units for three consecutive readings;
temperature	±3 percent for three consecutive readings;
conductivity	±3 percent for three consecutive readings;
ORP	±10 millivolts (mV) for three consecutive readings;
DO	±10 percent for three consecutive readings; and
Turbidity	±10 percent for three consecutive readings or a final value of less than 5 nephelometric turbidity units (NTU).
- 7) Verify that drawdowns of 0.3 ft or less are maintained and make adjustments as necessary. Record drawdown measurements and note adjustments in pumping rates as necessary on the Groundwater Sampling Log. If drawdowns of 0.3 ft or less cannot be maintained utilize ultra-low flow purge techniques. However, if ultra-low flow purging still results in excessive drawdown, the well will be purged “dry” and allowed to recharge, and the sample will be collected as soon as sufficient water is present to obtain the necessary sample volume
- 8) Obtain a sample for chemical analyses immediately upon stabilization of field parameter measurements. Field filter the sample for dissolved metals using a 0.45-micron filter prior to preserving with acid. Samples are to be collected in the order of volatility as follows: TOC/TOX (or VOCs) and dissolved metals.

If after 2 hours of purging the indicator parameters have not stabilized, as recommended in the USEPA guidance, the purging will be discontinued and the sample will be collected with an explanation of attempts to achieve stabilization.

Either a decontaminated submersible pump or peristaltic pump (for shallow wells only) may be utilized to purge each well. If a submersible pump is utilized in the purging process, then it will be decontaminated prior to and after sampling each well. Sampling equipment must be protected from the

ground surface by a clean plastic sheet laid around the work area. Water from purging will not be containerized.

2.3 SAMPLE PRESERVATION

Sample bottles will be labeled with sample identification, collection date and time, filtration/preservative status. Sample bottles will be filled and capped securely and immediately preserved (if required) and stored at 4 degrees Celsius in a cooler.

The cooler and samples will be prepared for shipment or transport by the following procedure:

- 1) Prepare cooler(s) for shipment.
 - Tape drain(s) of cooler shut
 - Place mailing label with laboratory address on top of cooler(s).
- 2) Arrange sample containers in a manner to prevent potential sample container breakage.
- 3) Confirm the bottle labels are completed correctly. Place clear tape over bottle labels to prevent moisture accumulation from causing the label to peel off.
- 4) Seal sample containers within plastic zip-lock bags to prevent packing material from contacting samples.
- 5) Place packing material at the bottom of the cooler to act as a cushion for the sample containers.
- 6) Fill remaining spaces with packing material.
- 7) Confirm containers are firmly packed in cooler.
- 8) If ice is required to preserve the samples, cubes should be repackaged in double zip-lock bags, and placed on top of the packing material.
- 9) Sign COC form (or obtain signature) and indicate the time and date it was relinquished to Federal Express or other carrier, as appropriate.
- 10) Separate copies of COC forms. Seal proper copies within a large zip-lock bag and tape to inside lid of cooler. Retain copies of forms in-house.
- 11) Close lid and latch.
- 12) Tape cooler shut on both ends, making several complete revolutions with strapping tape.
- 13) Relinquish to Federal Express or other courier service. Retain airbill receipt for project records (Note: Samples will be shipped for "NEXT DAY" delivery).

If samples are delivered directly to the laboratory, or the laboratories in-house courier, by the sampling team, the packaging/shipping requirements may be omitted. COC procedures; however, must be strictly maintained.

2.4 SAMPLE MANAGEMENT AND CHAIN-OF-CUSTODY

COC procedures document the history of sample containers and samples from the time of preparation of sample containers through sample collection, shipment, and analysis. A sample is considered in custody if:

- The sample is in the sampler's physical possession
- The sample is secured by the sampler to prevent tampering
- The sample is secured by the sampler employee in an area that is restricted to authorized personnel.

To maintain a record of sample collection, transfer between personnel, shipment, and receipt by the laboratory, a COC record will be completed for each sample at each sampling location. Each time the samples are transferred, signatures of the person relinquishing and receiving the samples, as well as the date and time, will be documented.

Parallel field notebook/Groundwater Sampling Log and COC records will be maintained. Recorded information will include:

- Sampling Location
- Time and Date
- Sampling Method
- Method of Preservation.

Additionally, the field notebook will also include information on weather conditions, depth to water, total depth of the well, field parameter and instrument calibration records and other useful or pertinent information. The notebook will be kept at the facility or with their designated contractor.

2.5 QUALITY ASSURANCE/QUALITY CONTROL (QA/QC) MEASURES

Field QA/QC procedures will consist of collecting one equipment blank (if reusable equipment is used) and one duplicate sample (one additional sample from one of the wells) for each sampling event. The duplicate sample will be assigned a separate sample identification and submitted to the laboratory "blind".

The procedure for collecting an equipment blank will be to pass distilled water through the decontaminated sampling device into a laboratory-supplied sample bottles. An equipment blank sample will not be required if disposable sampling equipment is used.

3 References

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

USEPA (Region 1) Low Stress (low flow) Purging and Sampling Procedure for the Collection of Groundwater Samples from Monitoring Wells (EQASOP-GW 001), January 19, 2010.

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

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

APPENDIX B

GROUNDWATER SAMPLING LOGS

Standard Groundwater Sampling Log

Date 6/9/2021
 Site Name RACER Coldwater Rd
 Location Flint, MI
 Project No. 1940100783
 Personnel GDR/DEP

Weather 87°F, partly cloudy
 Well # B-7
 Evacuation Method Whale Pump-Peristaltic
 Sampling Method Purged Dry

Well Information:

Depth of Well * 28.84 ft.
 Depth to Water * 16.97 (6/11/21) 21.13 ft.
 Length of Water Column 11.87 ft.
 Volume of Water in Well 1.93 gal.(s)
 3X Volume of Water in Well 5.80 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? Yes

* Measurements taken from ☒ Well Casing ☐ Protective Casing ☐ (Other, Specify)

Instrument Calibration:

Calibrated within range

pH Yes
 ORP Yes
 Conductivity Yes
 DO Yes

Water parameters:

Drawdown measured	Temperature Celsius	Conductivity mS/cm	Dissolved Oxygen mg/L	pH	ORP mV	Turbidity NTUs
0.3 feet or less	±3 percent	±3 percent	±10 percent	±0.1 pH units	±10 millivolts	±10 percent
initial <u>20.45</u>	initial <u>22.58</u>	initial <u>0.67</u>	initial <u>4.64</u>	initial <u>7.29</u>	initial <u>171.6</u>	initial <u>20.70</u>
5 min <u>26.15</u>	<u>18.02</u>	<u>0.87</u>	<u>7.64</u>	<u>7.54</u>	<u>155.7</u>	<u>N/A (dry)</u>
10 min						
15 min						
20 min						
25 min						
30 min						
35 min <u>(6/11/21) 21.13</u>	<u>26.53</u>	<u>0.69</u>	<u>2.51</u>	<u>7.11</u>	<u>98.5</u>	<u>1050</u>
40 min <u>21.88</u>	<u>18.30</u>	<u>0.80</u>	<u>0.71</u>	<u>7.09</u>	<u>81.5</u>	<u>28.5</u>
45 min <u>22.32</u>	<u>18.79</u>	<u>0.81</u>	<u>0.67</u>	<u>7.08</u>	<u>75.3</u>	<u>39.1</u>
50 min						
55 min						
60 min						
65 min						
70 min						
75 min						
80 min						
85 min						
90 min						

Water Sample:

Time Collected (6/11/21) 12:15

Physical Appearance at Start

Physical Appearance at Sampling

Color slightly turbid/brown
 Odor no
 Turbidity (> 100 NTU) 1050
 Sheen/Free Product no

Color clear
 Odor no
 Turbidity (> 100 NTU) 39.10
 Sheen/Free Product no

Samples collected:

Analyses	# Bottles	Bottle size/type	Preservative	Field Filtered
PFAS (7979)	3	15 ml Plastic	None	No

Notes:

6/11/21: DTW before sampling - 20.37' btoc
 DTW after sampling - 24.87' btoc

2nd round of readings taken on 6/11/21

Standard Groundwater Sampling Log

Date 6/10/2021
 Site Name RACER Coldwater Rd
 Location Flint, MI
 Project No. 1940100783
 Personnel GDR/DEP

Weather 86°F, partly cloudy
 Well # B-9
 Evacuation Method Whale Pump-Peristaltic
 Sampling Method Purge Dry

Well Information:

Depth of Well * 25.23 ft.
 Depth to Water * 6.11 (6/11/21) 8.85 ft.
 Length of Water Column 19.12 ft.
 Volume of Water in Well 3.12 gal.(s)
 3X Volume of Water in Well 9.35 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 5 gal.(s)
 Did well go dry? Yes

* Measurements taken from ☒ Well Casing ☐ Protective Casing ☐ (Other, Specify) _____

Instrument Calibration:

Calibrated within range

pH Yes
 ORP Yes
 Conductivity Yes
 DO Yes

Water parameters:

Drawdown measured 0.3 feet or less	Temperature Celsius ±3 percent	Conductivity mS/cm ±3 percent	Dissolved Oxygen mg/L ±10 percent	pH ±0.1 pH units	ORP mV ±10 millivolts	Turbidity NTUs ±10 percent
initial <u>7.17</u>	initial <u>18.08</u>	initial <u>1.75</u>	initial <u>0.49</u>	initial <u>6.85</u>	initial <u>193.7</u>	initial <u>208</u>
5 min <u>8.31</u>	<u>13.48</u>	<u>1.93</u>	<u>0.10</u>	<u>6.81</u>	<u>146.0</u>	<u>63.7</u>
10 min <u>9.44</u>	<u>13.48</u>	<u>1.96</u>	<u>0.10</u>	<u>6.80</u>	<u>113.2</u>	<u>54.6</u>
15 min <u>17.48</u>	<u>11.31</u>	<u>1.96</u>	<u>0.18</u>	<u>6.81</u>	<u>97.8</u>	<u>46.3</u>
20 min <u>18.57</u>	<u>11.47</u>	<u>1.98</u>	<u>0.50</u>	<u>6.81</u>	<u>54.9</u>	<u>99.3</u>
25 min <u>22.13</u>	<u>11.54</u>	<u>1.96</u>	<u>6.77</u>	<u>6.77</u>	<u>77.1</u>	<u>N/A (dry)</u>
30 min _____	_____	_____	_____	_____	_____	_____
35 min _____	_____	_____	_____	_____	_____	_____
40 min _____	_____	_____	_____	_____	_____	_____
45 min _____	_____	_____	_____	_____	_____	_____
50 min <u>(6/11/21) 8.85</u>	<u>23.65</u>	<u>1.50</u>	<u>6.75</u>	<u>7.13</u>	<u>233.5</u>	<u>136</u>
55 min <u>9.33</u>	<u>15.06</u>	<u>1.59</u>	<u>8.13</u>	<u>6.89</u>	<u>151.4</u>	<u>45.4</u>
60 min <u>9.82</u>	<u>14.68</u>	<u>1.59</u>	<u>7.87</u>	<u>6.85</u>	<u>132.3</u>	<u>20.8</u>
65 min _____	_____	_____	_____	_____	_____	_____
70 min _____	_____	_____	_____	_____	_____	_____
75 min _____	_____	_____	_____	_____	_____	_____
80 min _____	_____	_____	_____	_____	_____	_____
85 min _____	_____	_____	_____	_____	_____	_____
90 min _____	_____	_____	_____	_____	_____	_____

Water Sample:

Time Collected (6/11/21) 9:25:00 AM

Physical Appearance at Start

Physical Appearance at Sampling

Color slightly turbid
 Odor no
 Turbidity (> 100 NTU) 208
 Sheen/Free Product no

Color clear
 Odor no
 Turbidity (> 100 NTU) 20.8
 Sheen/Free Product no

Samples collected:

Analyses	# Bottles	Bottle size/type	Preservative	Field Filtered
PFAS (7979)	3	15 ml Plastic	None	No

Notes:

6/11/21: DTW before purging - 8.17' btoc
 DTW after sampling - 10.93' btoc

2nd round of readings taken on 6/11/21

Standard Groundwater Sampling Log

Date 6/9/21-6/11/21
 Site Name RACER Coldwater Rd
 Location Flint, MI
 Project No. 1940100783
 Personnel GDR

Weather partly cloudy, 80's
 Well # B-18A
 Evacuation Method Whale Pump
 Sampling Method purged dry

Well Information:

Depth of Well * 43.56 ft.
 Depth to Water * 21.10 - 6/11/21 was 33.78 ft.
 Length of Water Column 22.46 ft.
 Volume of Water in Well 3.67 gal.(s)
 3X Volume of Water in Well 11.01 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 8.5 gal.(s)
 Did well go dry? yes

* Measurements taken from ☒ Well Casing ☐ Protective Casing ☐ (Other, Specify) _____

Instrument Calibration:

Calibrated within range

pH Yes
 ORP Yes
 Conductivity Yes
 DO Yes

Water parameters:

Drawdown measured 0.3 feet or less	Temperature Celsius ±3 percent	Conductivity mS/cm ±3 percent	Dissolved Oxygen mg/L ±10 percent	pH ±0.1 pH units	ORP mV ±10 millivolts	Turbidity NTUs ±10 percent
initial <u>20.69</u>	initial <u>24.29</u>	initial <u>0.8</u>	initial <u>3.41</u>	initial <u>7.49</u>	initial <u>142.7</u>	initial <u>10.8</u>
5 min <u>21.92</u>	<u>16.76</u>	<u>0.91</u>	<u>3.46</u>	<u>7.29</u>	<u>126.9</u>	<u>50.8</u>
10 min <u>22.55</u>	<u>17.58</u>	<u>0.93</u>	<u>3.30</u>	<u>7.26</u>	<u>119.7</u>	<u>26.7</u>
15 min <u>24.74</u>	<u>13.48</u>	<u>0.97</u>	<u>2.96</u>	<u>7.23</u>	<u>118.3</u>	<u>7.36</u>
20 min <u>26.88</u>	<u>12.79</u>	<u>0.92</u>	<u>2.45</u>	<u>7.19</u>	<u>116.9</u>	<u>1.40</u>
25 min <u>31.85</u>	<u>12.40</u>	<u>0.92</u>	<u>2.14</u>	<u>7.18</u>	<u>114.5</u>	<u>3.89</u>
30 min <u>37.07</u>	<u>12.49</u>	<u>0.92</u>	<u>0.92</u>	<u>7.15</u>	<u>100.4</u>	<u>1.96</u>
35 min <u>39.49</u>	<u>12.57</u>	<u>0.94</u>	<u>0.41</u>	<u>7.11</u>	<u>87.7</u>	<u>1.56</u>
40 min <u>40.20</u>	<u>12.48</u>	<u>0.95</u>	<u>0.60</u>	<u>7.10</u>	<u>47.6</u>	<u>5.86</u>
45 min <u>42.10</u>	<u>12.80</u>	<u>0.95</u>	<u>0.76</u>	<u>7.12</u>	<u>45.1</u>	<u>7.64</u>
50 min _____	_____	_____	_____	_____	_____	_____
55 min <u>(6/11/21) 33.78</u>	<u>22.30</u>	<u>0.76</u>	<u>2.90</u>	<u>7.14</u>	<u>85.6</u>	<u>31.8</u>
60 min <u>34.80</u>	<u>16.21</u>	<u>0.86</u>	<u>2.04</u>	<u>7.09</u>	<u>77.5</u>	<u>29.0</u>
65 min <u>34.80</u>	<u>16.00</u>	<u>0.86</u>	<u>2.25</u>	<u>7.07</u>	<u>76.5</u>	<u>21.7</u>
70 min <u>36.14</u>	_____	_____	_____	_____	_____	_____
75 min _____	_____	_____	_____	_____	_____	_____
80 min _____	_____	_____	_____	_____	_____	_____
85 min _____	_____	_____	_____	_____	_____	_____
90 min _____	_____	_____	_____	_____	_____	_____

Water Sample:

Time Collected 6/11/2021 - 10:55

Physical Appearance at Start

Physical Appearance at Sampling

Color clear
 Odor None
 Turbidity (> 100 NTU) 31.8
 Sheen/Free Product None

Color clear
 Odor None
 Turbidity (> 100 NTU) 21.7
 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 Amber	H ₂ SO ₄	
TOC	2	40 ml Glass	H ₂ SO ₄	
TOX	1	250 ml Amber	H ₂ SO ₄	
Sulfate, Chlorides, SpC	1	500 ml Plastic	None	

Notes:

Standard Groundwater Sampling Log

Date 6/8/21-6/9/21
 Site Name RACER Coldwater Rd
 Location Flint, MI
 Project No. 1940100783
 Personnel GDR/KBS

Weather sunny, 80s
 Well # B-19Ar
 Evacuation Method Whale Pump
 Sampling Method Purge Dry

Well Information:

Depth of Well * 47.12 ft.
 Depth to Water * 37.66 - 6/9 was 38.40 ft.
 Length of Water Column 9.46 ft.
 Volume of Water in Well 1.54 gal.(s)
 3X Volume of Water in Well 4.62 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 3 gal.(s)
 Did well go dry? yes

* Measurements taken from ☒ Well Casing ☐ Protective Casing ☐ (Other, Specify) _____

Instrument Calibration:

Calibrated within range

pH Yes
 ORP Yes
 Conductivity Yes
 DO Yes

Water parameters:

Drawdown measured 0.3 feet or less	Temperature Celsius ±3 percent	Conductivity mS/cm ±3 percent	Dissolved Oxygen mg/L ±10 percent	pH ±0.1 pH units	ORP mV ±10 millivolts	Turbidity NTUs ±10 percent
initial <u>38.70</u>	initial <u>26.04</u>	initial <u>0.90</u>	initial <u>0.84</u>	initial <u>7.07</u>	initial <u>-8.0</u>	initial <u>>1000</u>
5 min <u>41.59</u>	<u>14.10</u>	<u>1.07</u>	<u>0.74</u>	<u>7.17</u>	<u>10.8</u>	<u>123</u>
10 min <u>43.75</u>	<u>13.11</u>	<u>1.08</u>	<u>0.28</u>	<u>7.17</u>	<u>26.2</u>	<u>106</u>
15 min <u></u>	<u>12.8</u>	<u>1.09</u>	<u>0.15</u>	<u>7.21</u>	<u>19.1</u>	<u></u>
20 min <u>45.55</u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>
25 min <u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>
30 min <u>(6/9/21) 38.40</u>	<u>21.25</u>	<u>0.90</u>	<u>3.21</u>	<u>7.31</u>	<u>46.9</u>	<u>268</u>
35 min <u>39.91</u>	<u>18.20</u>	<u>0.96</u>	<u>3.53</u>	<u>7.29</u>	<u>62.3</u>	<u>139</u>
40 min <u></u>	<u>18.07</u>	<u>0.99</u>	<u>3.58</u>	<u>7.28</u>	<u>69.2</u>	<u>124</u>
45 min <u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u>after field filter</u>	<u>62</u>
50 min <u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>
55 min <u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>
60 min <u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>
65 min <u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>
70 min <u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>
75 min <u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>
80 min <u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>
85 min <u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>
90 min <u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>

Water Sample:

Time Collected 6/9/2021 - 13:05

Physical Appearance at Start

Physical Appearance at Sampling

Color light brown
 Odor None
 Turbidity (> 100 NTU) >1000
 Sheen/Free Product None

Color cloudy / light brown
 Odor None
 Turbidity (> 100 NTU) 124
 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 Amber	H ₂ SO ₄	
TOC	2	40 ml Glass	H ₂ SO ₄	
TOX	1	250 ml Amber	H ₂ SO ₄	
Sulfate, Chlorides, SpC	1	500 ml Plastic	None	

Notes:

Standard Groundwater Sampling Log

Date 6/9/2021
 Site Name RACER Coldwater Rd
 Location Flint, MI
 Project No. 1940100783
 Personnel KBS

Weather mostly sunny, 80s
 Well # B-20D
 Evacuation Method bladder pump
 Sampling Method low flow

Well Information:

Depth of Well * 90.91 ft.
 Depth to Water * 70.05 ft.
 Length of Water Column 20.86 ft.
 Volume of Water in Well 3.40 gal.(s)
 3X Volume of Water in Well 10.20 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 3.75 gal.(s)
 Did well go dry? no

* Measurements taken from ☒ Well Casing ☐ Protective Casing ☐ (Other, Specify) _____

Instrument Calibration:

Calibrated within range

pH Yes
 ORP Yes
 Conductivity Yes
 DO Yes

Water parameters:

Drawdown measured 0.3 feet or less	Temperature Celsius ±3 percent	Conductivity mS/cm ±3 percent	Dissolved Oxygen mg/L ±10 percent	pH ±0.1 pH units	ORP mV ±10 millivolts	Turbidity NTUs ±10 percent
initial <u>7.81</u>	initial <u>20.40</u>	initial <u>0.64</u>	initial <u>0.99</u>	initial <u>7.47</u>	initial <u>-75.1</u>	initial <u>361</u>
5 min <u>70.81</u>	<u>15.20</u>	<u>0.70</u>	<u>0.30</u>	<u>7.45</u>	<u>-81.9</u>	<u>281</u>
10 min <u>70.81</u>	<u>14.62</u>	<u>0.71</u>	<u>0.20</u>	<u>7.44</u>	<u>-82.1</u>	<u>236</u>
15 min <u>70.81</u>	<u>14.30</u>	<u>0.72</u>	<u>0.14</u>	<u>7.43</u>	<u>-82.3</u>	<u>135</u>
20 min <u>70.81</u>	<u>14.42</u>	<u>0.72</u>	<u>0.12</u>	<u>7.43</u>	<u>-82.1</u>	<u>94.3</u>
25 min <u>70.81</u>	<u>13.89</u>	<u>0.72</u>	<u>0.11</u>	<u>7.43</u>	<u>-79.7</u>	<u>67.5</u>
30 min <u>70.81</u>	<u>13.97</u>	<u>0.72</u>	<u>0.08</u>	<u>7.43</u>	<u>-81.2</u>	<u>45.8</u>
35 min <u>70.81</u>	<u>13.76</u>	<u>0.72</u>	<u>0.07</u>	<u>7.43</u>	<u>-81.0</u>	<u>30.8</u>
40 min <u>70.94</u>	<u>14.25</u>	<u>0.72</u>	<u>0.06</u>	<u>7.42</u>	<u>-82.1</u>	<u>21.6</u>
45 min <u>70.94</u>	<u>14.03</u>	<u>0.72</u>	<u>0.05</u>	<u>7.42</u>	<u>-81.4</u>	<u>16.2</u>
50 min <u>70.94</u>	<u>13.87</u>	<u>0.72</u>	<u>0.05</u>	<u>7.43</u>	<u>-80.7</u>	<u>10.3</u>
55 min <u>70.94</u>	<u>13.82</u>	<u>0.72</u>	<u>0.05</u>	<u>7.43</u>	<u>-79.8</u>	<u>10.4</u>
60 min <u>70.94</u>	<u>13.93</u>	<u>0.72</u>	<u>0.05</u>	<u>7.42</u>	<u>-80.3</u>	<u>9.65</u>
65 min _____	_____	_____	_____	_____	_____	_____
70 min _____	_____	_____	_____	_____	_____	_____
75 min _____	_____	_____	_____	_____	_____	_____
80 min _____	_____	_____	_____	_____	_____	_____
85 min _____	_____	_____	_____	_____	_____	_____
90 min _____	_____	_____	_____	_____	_____	_____

Water Sample:

Time Collected 15:23

Physical Appearance at Start _____

Physical Appearance at Sampling _____

Color light gray
 Odor None
 Turbidity (> 100 NTU) 361
 Sheen/Free Product None

Color clear
 Odor None
 Turbidity (> 100 NTU) 9.65
 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 Amber	H ₂ SO ₄	
TOC	2	40 ml Glass	H ₂ SO ₄	
TOX	1	250 ml Amber	H ₂ SO ₄	
Sulfate, Chlorides, SpC	1	500 ml Plastic	None	

Notes:

		Standard Groundwater Sampling Log	
Date	6/10/2021	Weather	sunny, 80s
Site Name	RACER Coldwater Rd	Well #	B-21D
Location	Flint, MI	Evacuation Method	bladder pump
Project No.	1940100783	Sampling Method	low flow
Personnel	KBS		
Well Information:			
Depth of Well *	98.30 ft.	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	
Depth to Water *	79.65 ft.		
Length of Water Column	18.65 ft.		
Volume of Water in Well	3.04 gal.(s)		
3X Volume of Water in Well	9.12 gal.(s)		
		Volume removed before sampling	3 gal.(s)
		Did well go dry?	no
		(Other, Specify)	
* Measurements taken from ☒ Well Casing ☐ Protective Casing ☐			
Instrument Calibration:			
Calibrated within range			
pH	Yes		
ORP	Yes		
Conductivity	Yes		
DO	Yes		
Water parameters:			
Drawdown measured	Temperature Celsius	Conductivity mS/cm	Dissolved Oxygen mg/L
0.3 feet or less	±3 percent	±3 percent	±10 percent
pH	ORP mV	Turbidity NTUs	
±0.1 pH units	±10 millivolts	±10 percent	
initial	initial	initial	initial
5 min	20.25	0.56	1.62
10 min	15.99	0.60	1.39
15 min	16.86	0.60	2.03
20 min	16.84	0.61	2.25
25 min	17.09	0.62	2.37
30 min	16.96	0.59	2.47
35 min	17.04	0.65	2.54
40 min			
45 min	18.01	0.64	2.94
50 min	15.15	0.64	2.76
55 min	18.10	0.64	2.76
60 min	17.95	0.64	2.64
65 min	15.83	0.64	1.45
70 min	15.83	0.64	1.39
75 min	15.70	0.64	1.34
80 min	15.74	0.66	1.33
85 min	15.47	0.66	1.19
90 min	15.36	0.67	1.25
95 min	15.62	0.68	1.23
100 min	15.86	0.69	1.21
105 min	15.68	0.69	1.22
7.49	-41.5	>1000	
7.49	-32.9	>1000	
7.45	-43.2	727	
7.43	-43.5	457	
7.41	-48.1	342	
7.41	-60.0	285	
7.40	-61.0		
7.39	-69.5	152	
7.39	-68.4	129	
7.39	-68.9	149	
7.39	-70.5	148	
7.38	-70.8	141	
7.39	-66.9	139	
7.38	-73.2	92.7	
7.38	-71.8	84.0	
7.37	-73.1	77.9	
7.37	-75.4	60.4	
7.36	-74.1	50.6	
7.36	-78.3	48.4	
7.36	-77.7	46.8	
Water Sample:			
Time Collected	11:40		
Physical Appearance at Start		Physical Appearance at Sampling	
Color	brownish gray	Color	clear
Odor	None	Odor	None
Turbidity (> 100 NTU)	>1000	Turbidity (> 100 NTU)	46.8
Sheen/Free Product	None	Sheen/Free Product	None
Samples collected:			
Analyses	# Bottles	Bottle size/type	Preservative
VOCs	3	40 ml Glass	HCL
Dissolved Metals - Cu, Cr, Ni, Zn, Fe, Mn, Na	1	125 ml Plastic	HNO ₃
Cyanide	1	125 ml Plastic	NAOH
Phenols	1	125 ml Amber	H ₂ SO ₄
TOC	2	40 ml Glass	H ₂ SO ₄
TOX	1	250 ml Amber	H ₂ SO ₄
Sulfate, Chlorides, SpC	1	500 ml Plastic	None
Notes:			

Standard Groundwater Sampling Log

Date 6/10/2021
 Site Name RACER Coldwater Rd
 Location Flint, MI
 Project No. 1940100783
 Personnel KBS

Weather mostly sunny, 80's
 Well # B-22D
 Evacuation Method bladder pump
 Sampling Method low flow

Well Information:

Depth of Well * 99.30 ft.
 Depth to Water * 84.24 ft.
 Length of Water Column 15.06 ft.
 Volume of Water in Well 2.45 gal.(s)
 3X Volume of Water in Well 7.36 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 1 1/2 gal.(s)
 Did well go dry? no

* Measurements taken from ☒ Well Casing ☐ Protective Casing ☐ (Other, Specify) _____

Instrument Calibration:

Calibrated within range

pH Yes
 ORP Yes
 Conductivity Yes
 DO Yes

Water parameters:

Drawdown measured 0.3 feet or less	Temperature Celsius ±3 percent	Conductivity mS/cm ±3 percent	Dissolved Oxygen mg/L ±10 percent	pH ±0.1 pH units	ORP mV ±10 millivolts	Turbidity NTUs ±10 percent
initial <u>85.02</u>	initial <u>28.20</u>	initial <u>0.54</u>	initial <u>1.91</u>	initial <u>7.64</u>	initial <u>-91.3</u>	initial <u>71.5</u>
5 min <u>84.91</u>	<u>16.79</u>	<u>0.62</u>	<u>0.50</u>	<u>7.42</u>	<u>-97.7</u>	<u>66.1</u>
10 min <u>84.91</u>	<u>16.21</u>	<u>0.62</u>	<u>0.51</u>	<u>7.41</u>	<u>-95.5</u>	<u>54.3</u>
15 min <u>84.91</u>	<u>15.92</u>	<u>0.62</u>	<u>0.59</u>	<u>7.41</u>	<u>-92.9</u>	<u>40.8</u>
20 min <u>84.91</u>	<u>16.15</u>	<u>0.63</u>	<u>0.53</u>	<u>7.40</u>	<u>-93.3</u>	<u>32.7</u>
25 min _____	_____	_____	_____	_____	_____	_____
30 min <u>84.91</u>	<u>16.28</u>	<u>0.62</u>	<u>0.52</u>	<u>7.40</u>	<u>-93.0</u>	<u>27.6</u>
35 min <u>84.91</u>	<u>16.23</u>	<u>0.62</u>	<u>0.52</u>	<u>7.39</u>	<u>-92.5</u>	<u>25.5</u>
40 min <u>84.91</u>	<u>16.71</u>	<u>0.63</u>	<u>0.53</u>	<u>7.39</u>	<u>-93.6</u>	<u>21.4</u>
45 min <u>84.91</u>	<u>16.15</u>	<u>0.62</u>	<u>0.51</u>	<u>7.39</u>	<u>-91.8</u>	<u>23.2</u>
50 min <u>84.91</u>	<u>16.36</u>	<u>0.62</u>	<u>0.49</u>	<u>7.39</u>	<u>-91.5</u>	<u>21.2</u>
55 min <u>84.91</u>	<u>16.28</u>	<u>0.63</u>	<u>0.50</u>	<u>7.40</u>	<u>-93.8</u>	<u>21.8</u>
60 min _____	_____	_____	_____	_____	_____	_____
65 min _____	_____	_____	_____	_____	_____	_____
70 min _____	_____	_____	_____	_____	_____	_____
75 min _____	_____	_____	_____	_____	_____	_____
80 min _____	_____	_____	_____	_____	_____	_____
85 min _____	_____	_____	_____	_____	_____	_____
90 min _____	_____	_____	_____	_____	_____	_____

Water Sample:

Time Collected 14:12

Physical Appearance at Start _____

Physical Appearance at Sampling _____

Color slightly light gray
 Odor None
 Turbidity (> 100 NTU) 71.5
 Sheen/Free Product None

Color clear
 Odor None
 Turbidity (> 100 NTU) 21.8
 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 Amber	H ₂ SO ₄	
TOC	2	40 ml Glass	H ₂ SO ₄	
TOX	1	250 ml Amber	H ₂ SO ₄	
Sulfate, Chlorides, SpC	1	500 ml Plastic	None	

Notes:

Standard Groundwater Sampling Log

Date 6/9/2021
 Site Name RACER Coldwater Rd
 Location Flint, MI
 Project No. 1940100783
 Personnel KBS

Weather mostly sunny, 80s
 Well # B-23Dr
 Evacuation Method bladder pump
 Sampling Method low flow

Well Information:

Depth of Well * 110.50 ft.
 Depth to Water * 81.16 ft.
 Length of Water Column 29.34 ft.
 Volume of Water in Well 4.78 gal.(s)
 3X Volume of Water in Well 14.35 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 3.5 gal.(s)
 Did well go dry? no

* Measurements taken from ☒ Well Casing ☐ Protective Casing ☐ (Other, Specify) _____

Instrument Calibration:

Calibrated within range

pH Yes
 ORP Yes
 Conductivity Yes
 DO Yes

Water parameters:

Drawdown measured 0.3 feet or less	Temperature Celsius ±3 percent	Conductivity mS/cm ±3 percent	Dissolved Oxygen mg/L ±10 percent	pH ±0.1 pH units	ORP mV ±10 millivolts	Turbidity NTUs ±10 percent
initial <u>81.20</u>	initial <u>17.70</u>	initial <u>0.66</u>	initial <u>0.99</u>	initial <u>7.49</u>	initial <u>-66.8</u>	initial <u>68.2</u>
5 min <u>81.20</u>	<u>14.51</u>	<u>0.71</u>	<u>0.38</u>	<u>7.45</u>	<u>-72.7</u>	<u>100</u>
10 min <u>81.20</u>	<u>14.56</u>	<u>0.71</u>	<u>0.31</u>	<u>7.46</u>	<u>-75.2</u>	<u>112</u>
15 min <u>81.20</u>	<u>14.76</u>	<u>0.69</u>	<u>0.27</u>	<u>7.47</u>	<u>-77.3</u>	<u>101</u>
20 min <u>81.20</u>	<u>14.69</u>	<u>0.68</u>	<u>0.22</u>	<u>7.46</u>	<u>-75.9</u>	<u>53.4</u>
25 min <u>81.20</u>	<u>14.70</u>	<u>0.68</u>	<u>0.19</u>	<u>7.46</u>	<u>-75.7</u>	<u>43.1</u>
30 min <u>81.20</u>	<u>15.11</u>	<u>0.69</u>	<u>0.17</u>	<u>7.45</u>	<u>-77.0</u>	<u>30.4</u>
35 min <u>81.20</u>	<u>15.18</u>	<u>0.69</u>	<u>0.18</u>	<u>7.44</u>	<u>-76.7</u>	<u>28.5</u>
40 min <u>81.20</u>	<u>15.04</u>	<u>0.69</u>	<u>0.16</u>	<u>7.45</u>	<u>-77.4</u>	<u>21.1</u>
45 min <u>81.20</u>	<u>15.10</u>	<u>0.69</u>	<u>0.14</u>	<u>7.45</u>	<u>-78.2</u>	<u>19.0</u>
50 min <u>81.20</u>	<u>15.14</u>	<u>0.69</u>	<u>0.14</u>	<u>7.45</u>	<u>-78.4</u>	<u>17.9</u>
55 min <u>81.20</u>	<u>15.05</u>	<u>0.68</u>	<u>0.13</u>	<u>7.45</u>	<u>-78.4</u>	<u>11.7</u>
60 min <u>81.20</u>	<u>14.80</u>	<u>0.68</u>	<u>0.12</u>	<u>7.45</u>	<u>-78.2</u>	<u>10.7</u>
65 min <u>81.20</u>	<u>14.86</u>	<u>0.69</u>	<u>0.11</u>	<u>7.45</u>	<u>-79.0</u>	<u>8.57</u>
70 min _____	_____	_____	_____	_____	_____	_____
75 min _____	_____	_____	_____	_____	_____	_____
80 min _____	_____	_____	_____	_____	_____	_____
85 min _____	_____	_____	_____	_____	_____	_____
90 min _____	_____	_____	_____	_____	_____	_____

Water Sample:

Time Collected 11:25

Physical Appearance at Start

Physical Appearance at Sampling

Color light gray
 Odor None
 Turbidity (> 100 NTU) 68.2
 Sheen/Free Product None

Color clear
 Odor None
 Turbidity (> 100 NTU) 8.57
 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 Amber	H ₂ SO ₄	
TOC	2	40 ml Glass	H ₂ SO ₄	
TOX	1	250 ml Amber	H ₂ SO ₄	
Sulfate, Chlorides, SpC	1	500 ml Plastic	None	

Notes:

		Standard Groundwater Sampling Log				
Date	6/17/2020	Weather	sunny, 70s			
Site Name	RACER Coldwater Rd	Well #	B-27D			
Location	Flint, MI	Evacuation Method	badder pump			
Project No.	75178	Sampling Method	low flow			
Personnel	WHL, KBS					
Well Information:						
Depth of Well *	88.47 ft.	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				
Depth to Water *	75.01 ft.					
Length of Water Column	13.46 ft.					
Volume of Water in Well	2.20 gal.(s)					
3X Volume of Water in Well	6.58 gal.(s)	Volume removed before sampling	6 gal.(s)			
		Did well go dry?	no			
* Measurements taken from ☒ Well Casing ☐ Protective Casing ☐ (Other, Specify) _____						
Instrument Calibration:						
	Calibrated within range					
pH	Yes					
ORP	Yes					
Conductivity	Yes					
DO	Yes					
Water parameters:						
Drawdown measured 0.3 feet or less	Temperature Celsius ±3 percent	Conductivity mS/cm ±3 percent	Dissolved Oxygen mg/L ±10 percent	pH ±0.1 pH units	ORP mV ±10 millivolts	Turbidity NTUs ±10 percent
initial 75.04	initial 13.80	initial 0.42	initial 0.42	initial 7.66	initial -57.9	initial >1000
5 min 75.31	12.80	0.42	0.20	7.66	-75.1	>1000
10 min 75.41	12.57	0.41	0.17	7.62	-71.0	>1000
15 min 75.41	12.74	0.41	0.31	7.66	-74.3	928
20 min 75.41	12.62	0.41	0.19	7.66	-78.1	981
25 min 75.41	13.40	0.40	0.19	7.67	-71.8	978
30 min 75.41	12.53	0.40	0.17	7.67	-80.6	981
35 min 75.41	12.57	0.40	0.13	7.67	-82.9	898
40 min 75.41	12.66	0.39	0.15	7.67	-84.1	846
45 min 75.41	12.71	0.38	0.07	7.67	-85.8	
50 min 75.41	12.53	0.38	0.06	7.67	-86.3	857
55 min 75.41	12.67	0.37	0.17	7.67	-87.2	723
60 min 75.41	12.53	0.37	0.04	7.67	-87.3	677
65 min 75.41	12.80	0.36	0.29	7.67	-87.5	654
70 min 75.41	12.89	0.36	0.53	7.67	-84.4	639
75 min 75.41	12.57	0.36	0.09	7.67	-85.9	589
80 min 75.41	12.61	0.35	0.07	7.67	-86.1	537
85 min 75.41	12.66	0.35	0.09	7.67	-86.3	
90 min 75.41	12.57	0.35	0.06	7.67	-87.0	537
95 min 75.41	12.62	0.34	0.03	7.67	-87.4	398
100 min 75.41	12.65	0.34	0.03	7.67	-87.5	413
105 min 75.41	12.57	0.33	0.03	7.67	-87.8	415
110 min 75.41	12.59	0.33	0.02	7.67	-85.0	417
Water Sample:						
Time Collected	12:06					
Physical Appearance at Start	Physical Appearance at Sampling					
Color	gray		Color	light gray		
Odor	None		Odor	None		
Turbidity (> 100 NTU)	>1000		Turbidity (> 100 NTU)	417		
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 Amber	H ₂ SO ₄			
TOC	2	40 ml Glass	H ₂ SO ₄			
TOX	1	250 ml Amber	H ₂ SO ₄			
Sulfate, Chlorides, SpC	1	500 ml Plastic	None			
Notes:						
Collected MW-DUP-061121						

Standard Groundwater Sampling Log

Date 6/8/21-6/9/21
 Site Name RACER Coldwater Rd
 Location Flint, MI
 Project No. 1940100783
 Personnel GDR

Weather mostly cloudy, 80's
 Well # B-28
 Evacuation Method Whale Pump-Peristaltic
 Sampling Method purge dry

Well Information:

Depth of Well * 32.22 ft.
 Depth to Water * 5.02 - 6/9/21 was 7.25 ft.
 Length of Water Column 27.20 ft.
 Volume of Water in Well 4.43 gal.(s)
 3X Volume of Water in Well 13.30 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 14 gal.(s)
 Did well go dry? yes

* Measurements taken from ☒ Well Casing ☐ Protective Casing ☐ (Other, Specify) _____

Instrument Calibration:

Calibrated within range

pH Yes
 ORP Yes
 Conductivity Yes
 DO Yes

Water parameters:

Drawdown measured 0.3 feet or less		Temperature Celsius ±3 percent		Conductivity mS/cm ±3 percent		Dissolved Oxygen mg/L ±10 percent		pH ±0.1 pH units		ORP mV ±10 millivolts		Turbidity NTUs ±10 percent	
initial	5.90	initial	20.06	initial	0.83	initial	1.78	initial	7.31	initial	38.5	initial	561
5 min	6.60		16.3		0.92		0.39		7.17		38.7		219
10 min	10.74		12.36		0.91		0.04		7.20		33.7		39.7
15 min	13.79		12.2		0.91		0.03		7.20		12.1		42.0
20 min	16.65		12.7		0.90		0.02		7.20		-6.3		18.7
25 min	16.99		12.4		0.91		0.02		7.19		-15.4		16.9
30 min	17.80		12.59		0.91		0.03		7.19		-20		20.9
35 min	18.63		13.26		0.91		0.37		7.23		-10.2		14.3
40 min	23.42		11.65		0.93		0.60		7.22		-3.7		10.9
45 min	23.80		11.65		0.94		0.71		7.23		-15.9		34.7
50 min	24.66		11.47		0.95		0.43		7.21		-27.1		148
55 min	25.79		11.44		0.94		0.88		7.24		-16.1		146
60 min	27.41		11.52		0.93		2.74		7.27		-7.4		99.0
65 min	28.52		11.59		0.91		1.01		7.23		-14.6		147
70 min	26.66		12.33		0.92		1.17		7.22		31.3		174
75 min													
80 min	(6/9/21) 7.25		19.91		0.72		2.41		7.00		149.5		174
85 min	7.70		15.74		0.78		2.39		7.08		94.1		39.4
90 min	8.53		15.12		0.78		2.30		7.12		76.4		16.19

Water Sample:

Time Collected 6/9/2021 - 10:25

Physical Appearance at Start

Physical Appearance at Sampling

Color light gray
 Odor None
 Turbidity (> 100 NTU) 561
 Sheen/Free Product None

Color clear
 Odor None
 Turbidity (> 100 NTU) 16.2
 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 Amber	H ₂ SO ₄	
TOC	2	40 ml Glass	H ₂ SO ₄	
TOX	1	250 ml Amber	H ₂ SO ₄	
Sulfate, Chlorides, SpC	1	500 ml Plastic	None	

Notes:

Standard Groundwater Sampling Log

Date 6/10/2021
 Site Name RACER Coldwater Rd
 Location Flint, MI
 Project No. 1940100783
 Personnel KBS

Weather sunny, 80's
 Well # OBG MW-16D
 Evacuation Method bladder pump
 Sampling Method low flow

Well Information:

Depth of Well * 75.10 ft.
 Depth to Water * 58.16 ft.
 Length of Water Column 16.94 ft.
 Volume of Water in Well 2.76 gal.(s)
 3X Volume of Water in Well 8.28 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 1/2 gal.(s)
 Did well go dry? no

* Measurements taken from ☒ Well Casing ☐ Protective Casing ☐ (Other, Specify) _____

Instrument Calibration:

Calibrated within range

pH Yes
 ORP Yes
 Conductivity Yes
 DO Yes

Water parameters:

Drawdown measured 0.3 feet or less	Temperature Celsius ±3 percent	Conductivity mS/cm ±3 percent	Dissolved Oxygen mg/L ±10 percent	pH ±0.1 pH units	ORP mV ±10 millivolts	Turbidity NTUs ±10 percent
initial <u>58.20</u>	initial <u>23.81</u>	initial <u>0.47</u>	initial <u>1.65</u>	initial <u>7.63</u>	initial <u>-89.0</u>	initial <u>92.2</u>
5 min <u>58.20</u>	<u>15.04</u>	<u>0.54</u>	<u>0.16</u>	<u>7.50</u>	<u>-116.3</u>	<u>95.0</u>
10 min <u>58.20</u>	<u>14.22</u>	<u>0.55</u>	<u>0.11</u>	<u>7.49</u>	<u>-119.0</u>	<u>51.5</u>
15 min <u>58.20</u>	<u>14.14</u>	<u>0.55</u>	<u>0.10</u>	<u>7.48</u>	<u>-118.5</u>	<u>38.6</u>
20 min <u>58.20</u>	<u>14.17</u>	<u>0.55</u>	<u>0.07</u>	<u>7.48</u>	<u>-117.9</u>	<u>29.8</u>
25 min <u>58.20</u>	<u>13.89</u>	<u>0.55</u>	<u>0.07</u>	<u>7.48</u>	<u>-116.6</u>	<u>21.1</u>
30 min <u>58.20</u>	<u>13.34</u>	<u>0.55</u>	<u>0.05</u>	<u>7.48</u>	<u>-114.8</u>	<u>29.5</u>
35 min <u>58.20</u>	<u>13.12</u>	<u>0.55</u>	<u>0.04</u>	<u>7.48</u>	<u>-115.1</u>	<u>28.5</u>
40 min <u>58.20</u>	<u>13.16</u>	<u>0.55</u>	<u>0.05</u>	<u>7.47</u>	<u>-115.6</u>	<u>24.5</u>
45 min <u>58.20</u>	<u>13.22</u>	<u>0.55</u>	<u>0.05</u>	<u>7.48</u>	<u>-115.2</u>	<u>15.0</u>
50 min <u>58.20</u>	<u>13.44</u>	<u>0.55</u>	<u>0.06</u>	<u>7.47</u>	<u>-114.6</u>	<u>13.2</u>
55 min <u>58.20</u>	<u>13.48</u>	<u>0.55</u>	<u>0.06</u>	<u>7.47</u>	<u>-114.3</u>	<u>9.41</u>
60 min _____	_____	_____	_____	_____	_____	_____
65 min _____	_____	_____	_____	_____	_____	_____
70 min _____	_____	_____	_____	_____	_____	_____
75 min _____	_____	_____	_____	_____	_____	_____
80 min _____	_____	_____	_____	_____	_____	_____
85 min _____	_____	_____	_____	_____	_____	_____
90 min _____	_____	_____	_____	_____	_____	_____

Water Sample:

Time Collected 16:28

Physical Appearance at Start _____

Physical Appearance at Sampling _____

Color clear / light gray
 Odor None
 Turbidity (> 100 NTU) 92.2
 Sheen/Free Product None

Color clear
 Odor None
 Turbidity (> 100 NTU) 9.41
 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 Amber	H ₂ SO ₄	
TOC	2	40 ml Glass	H ₂ SO ₄	
TOX	1	250 ml Amber	H ₂ SO ₄	
Sulfate, Chlorides, SpC	1	500 ml Plastic	None	

Notes:

APPENDIX C

ANALYTICAL LABORATORY RESULTS



Analytical Laboratory Report

Report ID: S25134.01(01)
Generated on 06/29/2021

Report to

Attention: Clifford Yantz
Ramboll
3600 Green Court Ste 750
Ann Arbor, MI 48105

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

Report produced by

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

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

Contacts for report questions:
John Lavery (johnlavery@meritlabs.com)
Barbara Ball (bball@meritlabs.com)

Report Summary

Lab Sample ID(s): S25134.01-S25134.05
Project: RACER Coldwater Road
Collected Date(s): 06/09/2021
Submitted Date/Time: 06/10/2021 12:45
Sampled by: Kevin Schneider
P.O. #: 1940002628 (TASK 1)

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Maya Murshak
Technical Director



Analytical Laboratory Report

General Report Notes

Analytical results relate only to the samples tested, in the condition received by the laboratory.

Methods may be modified for improved performance.

Results reported on a dry weight basis where applicable.

'Not detected' indicates that parameter was not found at a level equal to or greater than the reporting limit (RL).

40 CFR Part 136 Table II Required Containers, Preservation Techniques and Holding Times for the Clean Water Act specify that samples for acrolein and acrylonitrile need to be preserved at a pH in the range of 4 to 5 or if not preserved, analyzed within 3 days of sampling.

QA/QC corresponding to this analytical report is a separate document with the same Merit ID reference and is available upon request.

Full accreditation certificates are available upon request. Starred (*) analytes are not NELAP accredited.

Samples are held by the lab for 30 days from the final report date unless a written request to hold longer is provided by the client.

Report shall not be reproduced except in full, without the written approval of Merit Laboratories, Inc.

Limits for drinking water samples, are listed as the MCL Limits (Maximum Contaminant Level Concentrations)

PFAS requirement: Section 9.3.8 of U.S. EPA Method 537.1 states "If the method analyte(s) found in the Field Sample is present in the FRB at a concentration greater than 1/3 the MRL, then all samples collected with that FRB are invalid and must be recollected and reanalyzed."

Samples submitted without an accompanying FRB may not be acceptable for compliance purposes.

Report Narrative

There is no additional narrative for this analytical report

Laboratory Certifications

Authority	Certification ID
Michigan DEQ	#9956
DOD ELAP/ISO 17025	#69699
WBENC	#2005110032
Ohio VAP	#CL0002
Indiana DOH	#C-MI-07
New York NELAC	#11814
North Carolina DENR	#680
North Carolina DOH	#26702
Alaska CSLAP	#17-001
Pennsylvania DEP	#68-05884

Qualifier Descriptions

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

Glossary of Abbreviations

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



Analytical Laboratory Report

Method Summary

Method	Version
E120.1	EPA Method 120.1 Revision 1982
E200.8	EPA Method 200.8 Revision 5.4
E300.0	EPA Method 300.0 Revision 2.1
E335.4/SM4500-CN	EPA Method 335.4 Revision 1.0 / Standard Method 4500-CN E 20th Edition
E420.1	EPA Method 420.1 Editorial Revision 1978
N/A	Not Applicable
SM5310C	Standard Method 5310C 2011
SW3015A	SW 846 Method 3015A Revision 1 February 2007
SW5030C/8260C	SW 846 Method 8260C Revision 3 August 2006 / 5030C Revision 3 May 2003
SW9020B	SW 846 Method 9020B Revision 2 September 1994



Analytical Laboratory Report

Sample Summary (5 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S25134.01	B-28	Groundwater	06/09/21 10:25
S25134.02	B-23Dr	Groundwater	06/09/21 11:25
S25134.03	B-19Ar	Groundwater	06/09/21 13:05
S25134.04	B-20D	Groundwater	06/09/21 15:23
S25134.05	Trip Blank_061021	Water	06/09/21 00:01



Analytical Laboratory Report

Lab Sample ID: S25134.01

Sample Tag: B-28

Collected Date/Time: 06/09/2021 10:25

Matrix: Groundwater

COC Reference: 142945

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	125ml Plastic	HNO3	Yes	4.5	IR
2	40ml Glass	H2SO4	Yes	4.5	IR
1	250ml Amber	H2SO4	Yes	4.5	IR
1	1L Plastic	None	Yes	4.5	IR
1	125ml Plastic	NaOH	Yes	4.5	IR
3	40ml Glass	HCL	Yes	4.5	IR
1	125ml Amber	H2SO4	Yes	4.5	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	06/15/21 12:30	BML	
Metal Digestion	Completed	SW3015A	06/15/21 09:30	CCM	
Metal Digestion	Completed	SW3015A	06/15/21 10:50	CCM	

Inorganics

Method: E120.1, Run Date: 06/10/21 17:38, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Conductivity	936	1		umhos/cm	1		

Method: E300.0, Run Date: 06/11/21 10:16, Analyst: JDP

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chloride	11	10	0.16	mg/L	10	16887-00-6	
Sulfate	161	10	0.59	mg/L	10	14808-79-8	

Method: E335.4/SM4500-CN, Run Date: 06/11/21 10:52, Analyst: JDP

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Cyanide, Total	Not detected	0.004	0.001	mg/L	2	57-12-5	

Method: E420.1, Run Date: 06/15/21 16:24, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Phenols	Not detected	0.02		mg/L	1.7		

Method: SM5310C, Run Date: 06/10/21 18:03, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
TOC	3.6	1		mg/L	1		

Metals

Method: E200.8, Run Date: 06/15/21 12:13, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Sodium	14.9	2.5		mg/L	50	7440-23-5	

Method: E200.8, Run Date: 06/15/21 10:44, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chromium, Dissolved	Not detected	0.005		mg/L	5	7440-47-3	
Copper, Dissolved	Not detected	0.005		mg/L	5	7440-50-8	
Iron, Dissolved	0.28	0.02		mg/L	5	7439-89-6	



Analytical Laboratory Report

Lab Sample ID: S25134.01 (continued)

Sample Tag: B-28

Method: E200.8, Run Date: 06/15/21 10:44, Analyst: CCM (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Manganese, Dissolved	0.082	0.005		mg/L	5	7439-96-5	
Nickel, Dissolved	Not detected	0.005		mg/L	5	7440-02-0	
Zinc, Dissolved	Not detected	0.005		mg/L	5	7440-66-6	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/15/21 02:22, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	50		ug/L	1	67-64-1	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Benzene	Not detected	1		ug/L	1	71-43-2	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
Bromochloromethane	Not detected	1		ug/L	1	74-97-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Bromoform	Not detected	1		ug/L	1	75-25-2	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Chloroform	Not detected	1		ug/L	1	67-66-3	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Diethyl ether	Not detected	10		ug/L	1	60-29-7	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
trans-1,4-Dichloro-2-butene	Not detected	1		ug/L	1	110-57-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Hexachloroethane	Not detected	5		ug/L	1	67-72-1	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
2-Methylnaphthalene	Not detected	5		ug/L	1	91-57-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	



Analytical Laboratory Report

Lab Sample ID: S25134.01 (continued)

Sample Tag: B-28

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/15/21 02:22, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Methyl iodide	Not detected	1		ug/L	1	74-88-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Styrene	Not detected	1		ug/L	1	100-42-5	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Tetrahydrofuran*	Not detected	90		ug/L	1	109-99-9	
Toluene	Not detected	1		ug/L	1	108-88-3	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
o-Xylene	Not detected	1		ug/L	1	95-47-6	
p,m-Xylene*	Not detected	2		ug/L	1		

Organics

Method: SW9020B, Run Date: 06/16/21 13:58, Analyst: GEL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
TOX*	8,140	10,000	3,330	ug/L	1		OJ

O-Analysis performed by outside laboratory. See attached report. J-Estimated value less than reporting limit, but greater than MDL



Analytical Laboratory Report

Lab Sample ID: S25134.02

Sample Tag: B-23Dr

Collected Date/Time: 06/09/2021 11:25

Matrix: Groundwater

COC Reference: 142945

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	125ml Plastic	HNO3	Yes	4.5	IR
2	40ml Glass	H2SO4	Yes	4.5	IR
1	250ml Amber	H2SO4	Yes	4.5	IR
1	1L Plastic	None	Yes	4.5	IR
1	125ml Plastic	NaOH	Yes	4.5	IR
3	40ml Glass	HCL	Yes	4.5	IR
1	125ml Amber	H2SO4	Yes	4.5	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	06/15/21 12:30	BML	
Metal Digestion	Completed	SW3015A	06/15/21 09:30	CCM	
Metal Digestion	Completed	SW3015A	06/15/21 10:50	CCM	

Inorganics

Method: E120.1, Run Date: 06/10/21 17:40, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Conductivity	842	1		umhos/cm	1		

Method: E300.0, Run Date: 06/11/21 10:29, Analyst: JDP

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chloride	34	10	0.16	mg/L	10	16887-00-6	
Sulfate	62	10	0.59	mg/L	10	14808-79-8	

Method: E335.4/SM4500-CN, Run Date: 06/11/21 10:54, Analyst: JDP

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Cyanide, Total	Not detected	0.004	0.001	mg/L	2	57-12-5	

Method: E420.1, Run Date: 06/15/21 16:26, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Phenols	Not detected	0.02		mg/L	1.7		

Method: SM5310C, Run Date: 06/10/21 18:22, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
TOC	3.5	1		mg/L	1		

Metals

Method: E200.8, Run Date: 06/15/21 12:15, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Sodium	28.1	2.5		mg/L	50	7440-23-5	

Method: E200.8, Run Date: 06/15/21 10:48, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chromium, Dissolved	Not detected	0.005		mg/L	5	7440-47-3	
Copper, Dissolved	Not detected	0.005		mg/L	5	7440-50-8	
Iron, Dissolved	1.86	0.02		mg/L	5	7439-89-6	



Analytical Laboratory Report

Lab Sample ID: S25134.02 (continued)

Sample Tag: B-23Dr

Method: E200.8, Run Date: 06/15/21 10:48, Analyst: CCM (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Manganese, Dissolved	0.042	0.005		mg/L	5	7439-96-5	
Nickel, Dissolved	Not detected	0.005		mg/L	5	7440-02-0	
Zinc, Dissolved	Not detected	0.005		mg/L	5	7440-66-6	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/15/21 02:45, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	50		ug/L	1	67-64-1	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Benzene	Not detected	1		ug/L	1	71-43-2	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
Bromochloromethane	Not detected	1		ug/L	1	74-97-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Bromoform	Not detected	1		ug/L	1	75-25-2	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Chloroform	Not detected	1		ug/L	1	67-66-3	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Diethyl ether	Not detected	10		ug/L	1	60-29-7	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
trans-1,4-Dichloro-2-butene	Not detected	1		ug/L	1	110-57-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Hexachloroethane	Not detected	5		ug/L	1	67-72-1	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
2-Methylnaphthalene	Not detected	5		ug/L	1	91-57-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	



Analytical Laboratory Report

Lab Sample ID: S25134.02 (continued)

Sample Tag: B-23Dr

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/15/21 02:45, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Methyl iodide	Not detected	1		ug/L	1	74-88-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Styrene	Not detected	1		ug/L	1	100-42-5	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Tetrahydrofuran*	Not detected	90		ug/L	1	109-99-9	
Toluene	Not detected	1		ug/L	1	108-88-3	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
o-Xylene	Not detected	1		ug/L	1	95-47-6	
p,m-Xylene*	Not detected	2		ug/L	1		

Organics

Method: SW9020B, Run Date: 06/21/21 12:03, Analyst: GEL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
TOX*	3,840	10,000	3,330	ug/L	1		OJ

O-Analysis performed by outside laboratory. See attached report. J-Estimated value less than reporting limit, but greater than MDL



Analytical Laboratory Report

Lab Sample ID: S25134.03

Sample Tag: B-19Ar

Collected Date/Time: 06/09/2021 13:05

Matrix: Groundwater

COC Reference: 142945

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	125ml Plastic	HNO3	Yes	4.5	IR
2	40ml Glass	H2SO4	Yes	4.5	IR
1	250ml Amber	H2SO4	Yes	4.5	IR
1	1L Plastic	None	Yes	4.5	IR
1	125ml Plastic	NaOH	Yes	4.5	IR
3	40ml Glass	HCL	Yes	4.5	IR
1	125ml Amber	H2SO4	Yes	4.5	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	06/15/21 12:30	BML	
Metal Digestion	Completed	SW3015A	06/15/21 09:30	CCM	
Metal Digestion	Completed	SW3015A	06/15/21 10:50	CCM	

Inorganics

Method: E120.1, Run Date: 06/10/21 17:42, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Conductivity	1,194	1		umhos/cm	1		

Method: E300.0, Run Date: 06/11/21 10:42, Analyst: JDP

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chloride	88	10	0.16	mg/L	10	16887-00-6	
Sulfate	150	10	0.59	mg/L	10	14808-79-8	

Method: E335.4/SM4500-CN, Run Date: 06/11/21 10:56, Analyst: JDP

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Cyanide, Total	Not detected	0.004	0.001	mg/L	2	57-12-5	

Method: E420.1, Run Date: 06/15/21 16:28, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Phenols	Not detected	0.02		mg/L	1.7		

Method: SM5310C, Run Date: 06/10/21 18:42, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
TOC	4.0	1		mg/L	1		

Metals

Method: E200.8, Run Date: 06/15/21 12:16, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Sodium	23.8	2.5		mg/L	50	7440-23-5	

Method: E200.8, Run Date: 06/15/21 10:50, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chromium, Dissolved	Not detected	0.005		mg/L	5	7440-47-3	
Copper, Dissolved	0.005	0.005		mg/L	5	7440-50-8	
Iron, Dissolved	1.69	0.02		mg/L	5	7439-89-6	



Analytical Laboratory Report

Lab Sample ID: S25134.03 (continued)

Sample Tag: B-19Ar

Method: E200.8, Run Date: 06/15/21 10:50, Analyst: CCM (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Manganese, Dissolved	0.217	0.005		mg/L	5	7439-96-5	
Nickel, Dissolved	0.006	0.005		mg/L	5	7440-02-0	
Zinc, Dissolved	0.012	0.005		mg/L	5	7440-66-6	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/15/21 03:08, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	50		ug/L	1	67-64-1	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Benzene	Not detected	1		ug/L	1	71-43-2	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
Bromochloromethane	Not detected	1		ug/L	1	74-97-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Bromoform	Not detected	1		ug/L	1	75-25-2	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Chloroform	Not detected	1		ug/L	1	67-66-3	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Diethyl ether	Not detected	10		ug/L	1	60-29-7	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
trans-1,4-Dichloro-2-butene	Not detected	1		ug/L	1	110-57-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Hexachloroethane	Not detected	5		ug/L	1	67-72-1	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
2-Methylnaphthalene	Not detected	5		ug/L	1	91-57-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	



Analytical Laboratory Report

Lab Sample ID: S25134.03 (continued)

Sample Tag: B-19Ar

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/15/21 03:08, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Methyl iodide	Not detected	1		ug/L	1	74-88-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Styrene	Not detected	1		ug/L	1	100-42-5	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Tetrahydrofuran*	Not detected	90		ug/L	1	109-99-9	
Toluene	Not detected	1		ug/L	1	108-88-3	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
o-Xylene	Not detected	1		ug/L	1	95-47-6	
p,m-Xylene*	Not detected	2		ug/L	1		

Organics

Method: SW9020B, Run Date: 06/21/21 13:02, Analyst: GEL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
TOX*	5,800	10,000	3,330	ug/L	1		OJ

O-Analysis performed by outside laboratory. See attached report. J-Estimated value less than reporting limit, but greater than MDL



Analytical Laboratory Report

Lab Sample ID: S25134.04

Sample Tag: B-20D

Collected Date/Time: 06/09/2021 15:23

Matrix: Groundwater

COC Reference: 142945

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	125ml Plastic	HNO3	Yes	4.5	IR
2	40ml Glass	H2SO4	Yes	4.5	IR
1	250ml Amber	H2SO4	Yes	4.5	IR
1	1L Plastic	None	Yes	4.5	IR
1	125ml Plastic	NaOH	Yes	4.5	IR
3	40ml Glass	HCL	Yes	4.5	IR
1	125ml Amber	H2SO4	Yes	4.5	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	06/15/21 12:30	BML	
Metal Digestion	Completed	SW3015A	06/15/21 09:30	CCM	
Metal Digestion	Completed	SW3015A	06/15/21 10:50	CCM	

Inorganics

Method: E120.1, Run Date: 06/10/21 17:44, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Conductivity	870	1		umhos/cm	1		

Method: E300.0, Run Date: 06/11/21 10:54, Analyst: JDP

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chloride	Not detected	10	0.16	mg/L	10	16887-00-6	
Sulfate	124	10	0.59	mg/L	10	14808-79-8	

Method: E335.4/SM4500-CN, Run Date: 06/11/21 10:58, Analyst: JDP

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Cyanide, Total	Not detected	0.004	0.001	mg/L	2	57-12-5	

Method: E420.1, Run Date: 06/15/21 16:30, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Phenols	Not detected	0.02		mg/L	1.7		

Method: SM5310C, Run Date: 06/10/21 19:01, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
TOC	3.5	1		mg/L	1		

Metals

Method: E200.8, Run Date: 06/15/21 12:18, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Sodium	17.0	2.5		mg/L	50	7440-23-5	

Method: E200.8, Run Date: 06/15/21 10:52, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chromium, Dissolved	Not detected	0.005		mg/L	5	7440-47-3	
Copper, Dissolved	Not detected	0.005		mg/L	5	7440-50-8	
Iron, Dissolved	2.10	0.02		mg/L	5	7439-89-6	



Analytical Laboratory Report

Lab Sample ID: S25134.04 (continued)

Sample Tag: B-20D

Method: E200.8, Run Date: 06/15/21 10:52, Analyst: CCM (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Manganese, Dissolved	0.051	0.005		mg/L	5	7439-96-5	
Nickel, Dissolved	Not detected	0.005		mg/L	5	7440-02-0	
Zinc, Dissolved	Not detected	0.005		mg/L	5	7440-66-6	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/15/21 03:31, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	50		ug/L	1	67-64-1	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Benzene	Not detected	1		ug/L	1	71-43-2	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
Bromochloromethane	Not detected	1		ug/L	1	74-97-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Bromoform	Not detected	1		ug/L	1	75-25-2	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Chloroform	Not detected	1		ug/L	1	67-66-3	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Diethyl ether	Not detected	10		ug/L	1	60-29-7	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
trans-1,4-Dichloro-2-butene	Not detected	1		ug/L	1	110-57-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Hexachloroethane	Not detected	5		ug/L	1	67-72-1	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
2-Methylnaphthalene	Not detected	5		ug/L	1	91-57-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	



Analytical Laboratory Report

Lab Sample ID: S25134.04 (continued)

Sample Tag: B-20D

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/15/21 03:31, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Methyl iodide	Not detected	1		ug/L	1	74-88-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Styrene	Not detected	1		ug/L	1	100-42-5	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Tetrahydrofuran*	Not detected	90		ug/L	1	109-99-9	
Toluene	Not detected	1		ug/L	1	108-88-3	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
o-Xylene	Not detected	1		ug/L	1	95-47-6	
p,m-Xylene*	Not detected	2		ug/L	1		

Organics

Method: SW9020B, Run Date: 06/21/21 13:41, Analyst: GEL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
TOX*	15,500	10,000	3,330	ug/L	1		O

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



Analytical Laboratory Report

Lab Sample ID: S25134.05

Sample Tag: Trip Blank_061021

Collected Date/Time: 06/09/2021 00:01

Matrix: Water

COC Reference: 142945

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	HCL	Yes	4.5	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	06/15/21 12:30	BML	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/15/21 01:13, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	50		ug/L	1	67-64-1	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Benzene	Not detected	1		ug/L	1	71-43-2	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
Bromochloromethane	Not detected	1		ug/L	1	74-97-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Bromoform	Not detected	1		ug/L	1	75-25-2	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Chloroform	Not detected	1		ug/L	1	67-66-3	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Diethyl ether	Not detected	10		ug/L	1	60-29-7	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
trans-1,4-Dichloro-2-butene	Not detected	1		ug/L	1	110-57-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	



Analytical Laboratory Report

Lab Sample ID: S25134.05 (continued)

Sample Tag: Trip Blank_061021

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/15/21 01:13, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Hexachloroethane	Not detected	5		ug/L	1	67-72-1	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
2-Methylnaphthalene	Not detected	5		ug/L	1	91-57-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Methyl iodide	Not detected	1		ug/L	1	74-88-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Styrene	Not detected	1		ug/L	1	100-42-5	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Tetrahydrofuran*	Not detected	90		ug/L	1	109-99-9	
Toluene	Not detected	1		ug/L	1	108-88-3	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
o-Xylene	Not detected	1		ug/L	1	95-47-6	
p,m-Xylene*	Not detected	2		ug/L	1		

Merit Laboratories Login Checklist

Lab Set ID:S25134

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

Project: RACER Coldwater Road

Submitted:06/10/2021 12:45 Login User: SRS

Attention: Clifford Yantz

Address: Ramboll
3600 Green Court Ste 750
Ann Arbor, MI 48105

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

Selection	Description	Note
Sample Receiving		
01. ☒ Yes ☐ No ☐ N/A	Samples are received at 4C +/- 2C	Thermometer # IR 4.5
02. ☒ Yes ☐ No ☐ N/A	Received on ice/ cooling process begun	
03. ☐ Yes ☒ No ☐ N/A	Samples shipped	
04. ☐ Yes ☒ No ☐ N/A	Samples left in 24 hr. drop box	
05. ☐ Yes ☐ No ☒ N/A	Are there custody seals/tape or is the drop box locked	
Chain of Custody		
06. ☒ Yes ☐ No ☐ N/A	COC adequately filled out	
07. ☒ Yes ☐ No ☐ N/A	COC signed and relinquished to the lab	
08. ☒ Yes ☐ No ☐ N/A	Sample tag on bottles match COC	
09. ☒ Yes ☐ No ☐ N/A	Subcontracting needed? Subcontacted to:	GEL
Preservation		
10. ☒ Yes ☐ No ☐ N/A	Do sample have correct chemical preservation	
11. ☒ Yes ☐ No ☐ N/A	Completed pH checks on preserved samples? (no VOAs)	
12. ☐ Yes ☒ No ☐ N/A	Did any samples need to be preserved in the lab?	
Bottle Conditions		
13. ☒ Yes ☐ No ☐ N/A	All bottles intact	
14. ☒ Yes ☐ No ☐ N/A	Appropriate analytical bottles are used	
15. ☒ Yes ☐ No ☐ N/A	Merit bottles used	
16. ☒ Yes ☐ No ☐ N/A	Sufficient sample volume received	
17. ☐ Yes ☒ No ☐ N/A	Samples require laboratory filtration	
18. ☒ Yes ☐ No ☐ N/A	Samples submitted within holding time	
19. ☐ Yes ☒ No ☐ N/A	Do water VOC or TOX bottles contain headspace	

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

Client Review By: _____ Date: _____

Merit Laboratories Bottle Preservation Check

Lab Set ID: S25134 Submitted: 06/10/2021 12:45

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

Project: RACER Coldwater Road

Attention: Clifford Yantz

Address: Ramboll

3600 Green Court Ste 750
Ann Arbor, MI 48105

Initial Preservation Check: 06/10/2021 13:14 SRS

Preservation Recheck (E200.8): N/A

Phone: 313-333-0211

FAX:

Email: Clifford.Yantz@ramboll.com

Sample ID	Bottle / Preservation	pH (Orig)	Add ml	pH (New)	Notes
S25134.01	125ml Amber H2SO4	<2			
S25134.01	125ml Plastic HNO3	<2			
S25134.01	125ml Plastic HNO3	<2			
S25134.01	125ml Plastic NaOH	>12			
S25134.01	250ml Amber H2SO4	<2			
S25134.02	125ml Amber H2SO4	<2			
S25134.02	125ml Plastic HNO3	<2			
S25134.02	125ml Plastic HNO3	<2			
S25134.02	125ml Plastic NaOH	>12			
S25134.02	250ml Amber H2SO4	<2			
S25134.03	125ml Amber H2SO4	<2			
S25134.03	125ml Plastic HNO3	<2			
S25134.03	125ml Plastic HNO3	<2			
S25134.03	125ml Plastic NaOH	>12			
S25134.03	250ml Amber H2SO4	<2			
S25134.04	125ml Amber H2SO4	<2			
S25134.04	125ml Plastic HNO3	<2			
S25134.04	125ml Plastic HNO3	<2			
S25134.04	125ml Plastic NaOH	>12			
S25134.04	250ml Amber H2SO4	<2			



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

C.O.C. PAGE #

OF

142945

REPORT TO

CHAIN OF CUSTODY RECORD

INVOICE TO

CONTACT NAME clifford Yantz / Kevin Schneider		
COMPANY Ramboll		
ADDRESS 3600 Green Court Ste 750		
CITY Ann Arbor	STATE MI	ZIP CODE 48105
PHONE NO. 313-333-0211	FAX NO.	P.O. NO. 194002628 (task 1)
E-MAIL ADDRESS Kevin.Schneider@Ramboll.com / clifford.Yantz@Ramboll.com		

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

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

PROJECT NO./NAME RACER Coldwater Road	SAMPLER(S) - PLEASE PRINT/SIGN NAME Kevin Schneider X SK
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=WPIPE	A=AIR	W=WASTE

Containers & Preservatives

MERIT LAB NO. FOR LAB USE ONLY	YEAR		SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives							ANALYSIS										Certifications
	DATE	TIME				NONE	HCl	HNO ₃	H ₂ SO ₄	NaOH	MeOH	OTHER	VOCs	TOL	phenols	cyanide	sulfate	specific conductivity	chlorides	Tox	Dissolved Metals	Total sodium	
25134.01	6/9/01	1625	B-28	GW	11	1	3	2	4	1			X	X	X	X	X	X	X	X	X	X	☐ OHIO VAP ☐ Drinking Water
.02		1125	B-23DR	GW	11	1	3	2	4	1			X	X	X	X	X	X	X	X	X	X	☐ DoD ☐ NPDES
.03		1305	B-19AR	GW	11	1	3	2	4	1			X	X	X	X	X	X	X	X	X	X	☐ NPDES
.04		1523	B-20D	GW	11	1	3	2	4	1			X	X	X	X	X	X	X	X	X	X	☐ DoD ☐ NPDES
.05			Trip Blank - 061021	QC	1	1							X										☐ NPDES
																							Project Locations
																							☐ Detroit ☐ New York
																							☐ Other
																							Special Instructions
																							Dissolved Metals
																							were field filtered
																							Metals Are:
																							Cu, Cr, Ni, Zn, Fe, Mn

RELINQUISHED BY: SIGNATURE/ORGANIZATION X SK	DATE 6/10/01	TIME 1630
RECEIVED BY: SIGNATURE/ORGANIZATION J. F. Miller	DATE 6/10/01	TIME 1030
RELINQUISHED BY: SIGNATURE/ORGANIZATION J. F. Miller	DATE 6/10/01	TIME 1245
RECEIVED BY: SIGNATURE/ORGANIZATION J. F. Miller	DATE 6/10/01	TIME 1245

RELINQUISHED BY: SIGNATURE/ORGANIZATION	DATE	TIME
RECEIVED BY: SIGNATURE/ORGANIZATION	DATE	TIME
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS
NOTES:		TEMP. ON ARRIVAL 4.5

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

June 25, 2021

John Lavery
Merit Laboratories Inc.
2680 East Lansing Drive
East Lansing, Michigan 48823

Re: Halogen Analysis
Work Order: 547290
SDG: S25134

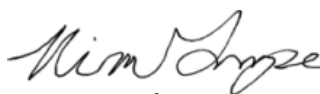
Dear John Lavery:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on June 15, 2021. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Test results for NELAP or ISO 17025 accredited tests are verified to meet the requirements of those standards, with any exceptions noted. The results reported relate only to the items tested and to the sample as received by the laboratory. These results may not be reproduced except as full reports without approval by the laboratory. Copies of GEL's accreditations and certifications can be found on our website at www.gel.com.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4523.

Sincerely,



Nina Gampe for
Samuel Hogan
Project Manager

Purchase Order: GELP20-0014
Enclosures

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 – (843) 556-8171 – www.gel.com

Certificate of Analysis Report for

MERI001 Merit Laboratories, Inc.

Client SDG: S25134 GEL Work Order: 547290

The Qualifiers in this report are defined as follows:

- * A quality control analyte recovery is outside of specified acceptance criteria
- ** Analyte is a Tracer compound
- ** Analyte is a surrogate compound
- J See case narrative for an explanation
- J Value is estimated
- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the limit as defined in the 'U' qualifier above.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Samuel Hogan.



Reviewed by _____

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: June 25, 2021

Company : Merit Laboratories Inc.
Address : 2680 East Lansing Drive

East Lansing, Michigan 48823

Contact: John Lavery
Project: Halogen Analysis

Client Sample ID:	S25134.01	Project:	MERI00220
Sample ID:	547290001	Client ID:	MERI001
Matrix:	Ground Water		
Collect Date:	09-JUN-21 10:25		
Receive Date:	15-JUN-21		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Halogen Analysis												
SW9020B TOX (Organic Halogen) "As Received"												
Total Organic Halogens	J	8.14	3.33	10.0	ug/L		1	RM3	06/16/21	1358	2139695	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 9020B	

Notes:

Column headers are defined as follows:

DF: Dilution Factor	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: June 25, 2021

Company : Merit Laboratories Inc.
Address : 2680 East Lansing Drive

East Lansing, Michigan 48823

Contact: John Lavery
Project: Halogen Analysis

Client Sample ID:	S25134.02	Project:	MERI00220
Sample ID:	547290002	Client ID:	MERI001
Matrix:	Ground Water		
Collect Date:	09-JUN-21 11:25		
Receive Date:	15-JUN-21		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Halogen Analysis												
SW9020B TOX (Organic Halogen) "As Received"												
Total Organic Halogens	J	3.84	3.33	10.0	ug/L		1	RM3	06/21/21	1203	2141533	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 9020B	

Notes:

Column headers are defined as follows:

DF: Dilution Factor	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: June 25, 2021

Company : Merit Laboratories Inc.
Address : 2680 East Lansing Drive

East Lansing, Michigan 48823

Contact: John Lavery
Project: Halogen Analysis

Client Sample ID:	S25134.03	Project:	MERI00220
Sample ID:	547290003	Client ID:	MERI001
Matrix:	Ground Water		
Collect Date:	09-JUN-21 13:05		
Receive Date:	15-JUN-21		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Halogen Analysis												
SW9020B TOX (Organic Halogen) "As Received"												
Total Organic Halogens	J	5.80	3.33	10.0	ug/L		1	RM3	06/21/21	1302	2141533	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 9020B	

Notes:

Column headers are defined as follows:

DF: Dilution Factor	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: June 25, 2021

Company : Merit Laboratories Inc.
Address : 2680 East Lansing Drive

East Lansing, Michigan 48823

Contact: John Lavery
Project: Halogen Analysis

Client Sample ID: S25134.04
Sample ID: 547290004
Matrix: Ground Water
Collect Date: 09-JUN-21 15:23
Receive Date: 15-JUN-21
Collector: Client

Project: MERI00220
Client ID: MERI001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Halogen Analysis												
SW9020B TOX (Organic Halogen) "As Received"												
Total Organic Halogens		15.5	3.33	10.0	ug/L		1	RM3	06/21/21	1341	2141533	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 9020B	

Notes:

Column headers are defined as follows:

DF: Dilution Factor	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Report Date: June 25, 2021

Page 1 of 2

Merit Laboratories Inc.
2680 East Lansing Drive
East Lansing, Michigan

Contact: John Laverty

Workorder: 547290

Parmname	NOM	Sample	Qual	QC	Units	RPD/D%	REC%	Range	Anlst	Date	Time
Halogen Analysis											
Batch	2139695										
QC1204844514	547290001	DUP									
Total Organic Halogens	J	8.14	U	ND	ug/L	200	^		RM3	06/16/21	14:11
QC1204844513	LCS										
Total Organic Halogens	100			90.2	ug/L		90.2	(71%-120%)		06/16/21	12:54
QC1204844512	MB										
Total Organic Halogens			U	ND	ug/L					06/16/21	12:34
QC1204844515	547290001	MS									
Total Organic Halogens	100	J	8.14	69.6	ug/L		61.5	(50%-144%)		06/16/21	14:30
Batch	2141533										
QC1204847526	547491001	DUP									
Total Organic Halogens	U	ND	U	ND	ug/L	N/A			RM3	06/21/21	14:43
QC1204847525	LCS										
Total Organic Halogens	100			88.9	ug/L		88.9	(71%-120%)		06/21/21	11:26
QC1204847524	MB										
Total Organic Halogens			U	ND	ug/L					06/21/21	11:05
QC1204847527	547491001	MS									
Total Organic Halogens	100	U	ND	83.5	ug/L		83	(50%-144%)		06/21/21	15:03

Notes:

The Qualifiers in this report are defined as follows:

- < Result is less than value reported
- > Result is greater than value reported
- B The target analyte was detected in the associated blank.
- E General Chemistry--Concentration of the target analyte exceeds the instrument calibration range

GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Workorder: 547290

Page 2 of 2

Parmname	NOM	Sample	Qual	QC	Units	RPD/D%	REC%	Range	Anlst	Date	Time
H	Analytical holding time was exceeded										
J	See case narrative for an explanation										
J	Value is estimated										
N/A	RPD or %Recovery limits do not apply.										
N1	See case narrative										
ND	Analyte concentration is not detected above the detection limit										
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier										
Q	One or more quality control criteria have not been met. Refer to the applicable narrative or DER.										
R	Per section 9.3.4.1 of Method 1664 Revision B, due to matrix spike recovery issues, this result may not be reported or used for regulatory compliance purposes.										
R	Sample results are rejected										
U	Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.										
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier										
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.										
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.										
d	5-day BOD--The 2:1 depletion requirement was not met for this sample										
e	5-day BOD--Test replicates show more than 30% difference between high and low values. The data is qualified per the method and can be used for reporting purposes										
h	Preparation or preservation holding time was exceeded										

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

* Indicates that a Quality Control parameter was not within specifications.

For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

**General Chemistry
Technical Case Narrative
Merit Laboratories, Inc.
SDG #: S25134
Work Order #: 547290**

Product: Total Organic Halogens (TOX)

Analytical Method: SW846 9020B

Analytical Procedure: GL-GC-E-007 REV# 16

Analytical Batch: 2139695

The following samples were analyzed using the above methods and analytical procedure(s).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
547290001	S25134.01
1204844512	Method Blank (MB)
1204844513	Laboratory Control Sample (LCS)
1204844514	547290001(S25134.01) Sample Duplicate (DUP)
1204844515	547290001(S25134.01) Matrix Spike (MS)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

Miscellaneous Information

Additional Comments

A pair of nitrate wash blanks is analyzed at the start of the batch. Although they are designated as ICB, they are performed for calculating purposes only. The value of the nitrate wash blanks are averaged and subtracted from all samples. Neither of these values should exceed 0.6 ug Cl. The PQL limit typically applied to ICB results does not apply in this application, since the results are used only to determine background concentrations and are subtracted from all calculated results.

Breakthrough effect

Breakthrough effect: If the value for a sample is greater than the reporting limit (10 ug/L), the result for the second slug should not be greater than 25% of the combined value of the first and second slug. Results which do not meet these criteria are designated with a "Fail" comment in the Breakthrough effect column on the Logbook page; however, the "fail" designation is not applicable for samples with a result of less than 10 ug/L.

Product: Total Organic Halogens (TOX)

Analytical Method: SW846 9020B

Analytical Procedure: GL-GC-E-007 REV# 16

Analytical Batch: 2141533

The following samples were analyzed using the above methods and analytical procedure(s).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
547290002	S25134.02

547290003	S25134.03
547290004	S25134.04
1204847524	Method Blank (MB)
1204847525	Laboratory Control Sample (LCS)
1204847526	547491001(NonSDG) Sample Duplicate (DUP)
1204847527	547491001(NonSDG) Matrix Spike (MS)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

Miscellaneous Information

Additional Comments

A pair of nitrate wash blanks is analyzed at the start of the batch. Although they are designated as ICB, they are performed for calculating purposes only. The value of the nitrate wash blanks are averaged and subtracted from all samples. Neither of these values should exceed 0.6 ug Cl. The PQL limit typically applied to ICB results does not apply in this application, since the results are used only to determine background concentrations and are subtracted from all calculated results.

Breakthrough effect

Breakthrough effect: If the value for a sample is greater than the reporting limit (10 ug/L), the result for the second slug should not be greater than 25% of the combined value of the first and second slug. Results which do not meet these criteria are designated with a "Fail" comment in the Breakthrough effect column on the Logbook page; however, the "fail" designation is not applicable for samples with a result of less than 10 ug/L.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

SAMPLE RECEIPT & REVIEW FORM

Client: MERI		SDG/AR/COC/Work Order: 547290		
Received By: [Signature]		Date Received: 6/15/12		
Carrier and Tracking Number		FedEx Express FedEx Ground (UPS) Field Services Courier Other		
		12 466 477 13 6143 3805		
Suspected Hazard Information		Yes ☒ No ☒	*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.	
A) Shipped as a DOT Hazardous?		Yes ☒ No ☒	Hazard Class Shipped: _____ UN#: _____ If UN2910, Is the Radioactive Shipment Survey Compliant? Yes ☒ No ☒	
B) Did the client designate the samples are to be received as radioactive?		Yes ☒ No ☒	COC notation or radioactive stickers on containers equal client designation.	
C) Did the RSO classify the samples as radioactive?		Yes ☒ No ☒	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): 0 CPM/mR/hr Classified as: Rad 1 Rad 2 Rad 3	
D) Did the client designate samples are hazardous?		Yes ☒ No ☒	COC notation or hazard labels on containers equal client designation.	
E) Did the RSO identify possible hazards?		Yes ☒ No ☒	If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other: _____	
Sample Receipt Criteria		Yes	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	☒	☒	Circle Applicable: Seals broken Damaged container Leaking container Other (describe) _____
2	Chain of custody documents included with shipment?	☒	☒	Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within (0 ≤ 6 deg C)?	☒	☒	Preservation Method: Wet Ice Ice Packs Dry ice None Other: _____ *all temperatures are recorded in Celsius TEMP: 2
4	Daily check performed and passed on IR temperature gun?	☒	☒	Temperature Device Serial #: 11121 Secondary Temperature Device Serial # (If Applicable): _____
5	Sample containers intact and sealed?	☒	☒	Circle Applicable: Seals broken Damaged container Leaking container Other (describe) _____
6	Samples requiring chemical preservation at proper pH?	☒	☒	Sample ID's and Containers Affected: _____ If Preservation added, Lot#: _____
7	Do any samples require Volatile Analysis?	☒	☒	If Yes, are Encores or Soil Kits present for solids? Yes ☒ No ☒ NA (If yes, take to VOA Freezer) Do liquid VOA vials contain acid preservation? Yes ☒ No ☒ NA (If unknown, select No) Are liquid VOA vials five of headspace? Yes ☒ No ☒ NA Sample ID's and containers affected: _____
8	Samples received within holding time?	☒	☒	ID's and tests affected: _____
9	Sample ID's on COC match ID's on bottles?	☒	☒	ID's and containers affected: _____
10	Date & time on COC match date & time on bottles?	☒	☒	Circle Applicable: No dates on containers No times on containers COC missing info Other (describe) _____
11	Number of containers received match number indicated on COC?	☒	☒	Circle Applicable: No container count on COC Other (describe) _____
12	Are sample containers identifiable as GEL provided by use of GEL labels?	☒	☒	_____
13	COC form is properly signed in relinquished/received sections?	☒	☒	Circle Applicable: Not relinquished Other (describe) _____
Comments (Use Continuation Form if needed):				

List of current GEL Certifications as of 25 June 2021

State	Certification
Alabama	42200
Alaska	17-018
Alaska Drinking Water	SC00012
Arkansas	88-0651
CLIA	42D0904046
California	2940
Colorado	SC00012
Connecticut	PH-0169
DoD ELAP/ ISO17025 A2LA	2567.01
Florida NELAP	E87156
Foreign Soils Permit	P330-15-00283, P330-15-00253
Georgia	SC00012
Georgia SDWA	967
Hawaii	SC00012
Idaho	SC00012
Illinois NELAP	200029
Indiana	C-SC-01
Kansas NELAP	E-10332
Kentucky SDWA	90129
Kentucky Wastewater	90129
Louisiana Drinking Water	LA024
Louisiana NELAP	03046 (AI33904)
Maine	2019020
Maryland	270
Massachusetts	M-SC012
Massachusetts PFAS Approv	Letter
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122021-1
New Hampshire NELAP	2054
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma	2019-165
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235-21-19
Utah NELAP	SC000122021-35
Vermont	VT87156
Virginia NELAP	460202
Washington	C780

Sample_No	Lab_Id	laboratory	Batch_No	Assoc_Blnk	Sample_Type	Analyte_Type	Coll_date	Rec_date	Ext_date	Anal_date	SDG
S25134.01	547290001	GEL	2139695	1204844512	SAMPLE	TARGET	06/09/21	06/15/21	06/16/21	06/16/21	S25134
S25134.02	547290002	GEL	2141533	1204847524	SAMPLE	TARGET	06/09/21	06/15/21	06/21/21	06/21/21	S25134
S25134.03	547290003	GEL	2141533	1204847524	SAMPLE	TARGET	06/09/21	06/15/21	06/21/21	06/21/21	S25134
S25134.04	547290004	GEL	2141533	1204847524	SAMPLE	TARGET	06/09/21	06/15/21	06/21/21	06/21/21	S25134
MB	1204844512	GEL	2139695	1204844512	MB	TARGET	06/16/21	06/16/21	06/16/21	06/16/21	S25134
LCS	1204844513	GEL	2139695	1204844512	LCS	SPIKE	06/16/21	06/16/21	06/16/21	06/16/21	S25134
S25134.01	1204844514	GEL	2139695	1204844512	DUP	TARGET	06/09/21	06/15/21	06/16/21	06/16/21	S25134
S25134.01	1204844515	GEL	2139695	1204844512	MS	SPIKE	06/09/21	06/15/21	06/16/21	06/16/21	S25134
MB	1204847524	GEL	2141533	1204847524	MB	TARGET	06/21/21	06/21/21	06/21/21	06/21/21	S25134
LCS	1204847525	GEL	2141533	1204847524	LCS	SPIKE	06/21/21	06/21/21	06/21/21	06/21/21	S25134

Parameter	Fraction	Method	Lab_Result	Uncertainty	Cas_num	Units	Lab_Qual	MDL	CRDL_CRQL	Dil_Factor	Pct_Moist
Total Organic Halogens	G	SW846 9020B	8.14			UG/L	J	3.33	10.0	1.00	100
Total Organic Halogens	G	SW846 9020B	3.84			UG/L	J	3.33	10.0	1.00	100
Total Organic Halogens	G	SW846 9020B	5.80			UG/L	J	3.33	10.0	1.00	100
Total Organic Halogens	G	SW846 9020B	15.5			UG/L		3.33	10.0	1.00	100
Total Organic Halogens	G	SW846 9020B	ND			UG/L	U	3.33	10.0	1.00	100
Total Organic Halogens	G	SW846 9020B	90.2			%		3.33	10.0	1.00	100
Total Organic Halogens	G	SW846 9020B	ND			UG/L	U	3.33	10.0	1.00	100
Total Organic Halogens	G	SW846 9020B	61.5			%		3.33	10.0	1.00	100
Total Organic Halogens	G	SW846 9020B	ND			UG/L	U	3.33	10.0	1.00	100
Total Organic Halogens	G	SW846 9020B	88.9			%		3.33	10.0	1.00	100



Quality Control Report

Report ID: QC-S25134-01
Generated on 06/30/2021

Report to

Attention: Clifford Yantz
Ramboll
3600 Green Court Ste 750
Ann Arbor, MI 48105

Phone: 313-333-0211 FAX:

Report Produced by

Merit Laboratories
2680 East Lansing Drive
East Lansing, MI 48823

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

Report Summary

Lab Sample ID(s): S25134.01-S25134.05
Project: RACER Coldwater Road
Submitted Date/Time: 06/10/2021 12:45
Sampled by: Kevin Schneider
P.O. #: 1940002628 (TASK 1)

QC Report Sections

Cover Page (Page 1)
Analysis Summary (Pages 2-6)
Prep Batch Summary (Pages 7-8)
Surrogates per Lab Sample (Pages 9-13)
Surrogates per QC Sample (Page 14)
Batch QC Results (Pages 15-28)

Report Flag Descriptions

*: QC result is outside of indicated control limits
W: Surrogate result not applicable due to sample dilution

I certify that this data package is in compliance with the terms and conditions of the program, and project, and contractual requirements both technically and for completeness. Release of the data contained in this hardcopy data package and its computer-readable data submitted has been authorized by the Quality Assurance Manager and his/her designee, as verified by the following signature.

Barbara Ball
Quality Assurance Manager

QC Report - Analysis Summary

Lab Sample ID: S25134.01

Sample Tag: B-28

Collected Date/Time: 06/09/2021 10:25

Matrix: Groundwater

COC Reference: 142945

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Inorganics						
Chloride	E300.0	06/11/21 10:16	CL210611-W1-B	CL210611-W1-B	No	BLK/LCS/MS/MSD/DU
Conductivity	E120.1	06/10/21 17:38	COND210610-W1	COND210610-W1	No	BLK/LCS/DUP
Cyanide, Total	E335.4/SM4500-CN	06/11/21 10:52	CN210611-W1	CN210611-W1	No	BLK/LCS/MS/MSD/DU
Phenols	E420.1	06/15/21 16:24	PHL210615-W1	PHL210615-W1	No	BLK/LCS/MS/DUP
Sulfate	E300.0	06/11/21 10:16	SFT210611-W1-B	SFT210611-W1-B	No	BLK/LCS/MS/MSD/DU
TOC	SM5310C	06/10/21 18:03	TOC210610-W1	TOC210610-W1	No	BLK/LCS/MS/MSD/DU
Metals						
Chromium, Dissolved	E200.8	06/15/21 10:44	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Copper, Dissolved	E200.8	06/15/21 10:44	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Iron, Dissolved	E200.8	06/15/21 10:44	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Manganese, Dissolved	E200.8	06/15/21 10:44	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Nickel, Dissolved	E200.8	06/15/21 10:44	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Sodium	E200.8	06/15/21 12:13	MT4-21-0615B	MTD-061521-3	No	BLK/LCS/MS/MSD
Zinc, Dissolved	E200.8	06/15/21 10:44	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Organics - Volatiles						
Volatile Organics - DEQ List	SW5030C/8260C	06/15/21 02:22	210614B7	VF210614W3	Yes	BLK/LCS/LCSD

QC Report - Analysis Summary

Lab Sample ID: S25134.02

Sample Tag: B-23Dr

Collected Date/Time: 06/09/2021 11:25

Matrix: Groundwater

COC Reference: 142945

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Inorganics						
Chloride	E300.0	06/11/21 10:29	CL210611-W1-B	CL210611-W1-B	No	BLK/LCS/MS/MSD/DU
Conductivity	E120.1	06/10/21 17:40	COND210610-W1	COND210610-W1	No	BLK/LCS/DUP
Cyanide, Total	E335.4/SM4500-CN	06/11/21 10:54	CN210611-W1	CN210611-W1	No	BLK/LCS/MS/MSD/DU
Phenols	E420.1	06/15/21 16:26	PHL210615-W1	PHL210615-W1	No	BLK/LCS/MS/DUP
Sulfate	E300.0	06/11/21 10:29	SFT210611-W1-B	SFT210611-W1-B	No	BLK/LCS/MS/MSD/DU
TOC	SM5310C	06/10/21 18:22	TOC210610-W1	TOC210610-W1	No	BLK/LCS/MS/MSD/DU
Metals						
Chromium, Dissolved	E200.8	06/15/21 10:48	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Copper, Dissolved	E200.8	06/15/21 10:48	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Iron, Dissolved	E200.8	06/15/21 10:48	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Manganese, Dissolved	E200.8	06/15/21 10:48	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Nickel, Dissolved	E200.8	06/15/21 10:48	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Sodium	E200.8	06/15/21 12:15	MT4-21-0615B	MTD-061521-3	No	BLK/LCS/MS/MSD
Zinc, Dissolved	E200.8	06/15/21 10:48	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Organics - Volatiles						
Volatile Organics - DEQ List	SW5030C/8260C	06/15/21 02:45	210614B7	VF210614W3	Yes	BLK/LCS/LCSD

QC Report - Analysis Summary

Lab Sample ID: S25134.03

Sample Tag: B-19Ar

Collected Date/Time: 06/09/2021 13:05

Matrix: Groundwater

COC Reference: 142945

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Inorganics						
Chloride	E300.0	06/11/21 10:42	CL210611-W1-B	CL210611-W1-B	No	BLK/LCS/MS/MSD/DU
Conductivity	E120.1	06/10/21 17:42	COND210610-W1	COND210610-W1	No	BLK/LCS/DUP
Cyanide, Total	E335.4/SM4500-CN	06/11/21 10:56	CN210611-W1	CN210611-W1	No	BLK/LCS/MS/MSD/DU
Phenols	E420.1	06/15/21 16:28	PHL210615-W1	PHL210615-W1	No	BLK/LCS/MS/DUP
Sulfate	E300.0	06/11/21 10:42	SFT210611-W1-B	SFT210611-W1-B	No	BLK/LCS/MS/MSD/DU
TOC	SM5310C	06/10/21 18:42	TOC210610-W1	TOC210610-W1	No	BLK/LCS/MS/MSD/DU
Metals						
Chromium, Dissolved	E200.8	06/15/21 10:50	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Copper, Dissolved	E200.8	06/15/21 10:50	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Iron, Dissolved	E200.8	06/15/21 10:50	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Manganese, Dissolved	E200.8	06/15/21 10:50	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Nickel, Dissolved	E200.8	06/15/21 10:50	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Sodium	E200.8	06/15/21 12:16	MT4-21-0615B	MTD-061521-3	No	BLK/LCS/MS/MSD
Zinc, Dissolved	E200.8	06/15/21 10:50	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Organics - Volatiles						
Volatile Organics - DEQ List	SW5030C/8260C	06/15/21 03:08	210614B7	VF210614W3	Yes	BLK/LCS/LCSD

QC Report - Analysis Summary

Lab Sample ID: S25134.04

Sample Tag: B-20D

Collected Date/Time: 06/09/2021 15:23

Matrix: Groundwater

COC Reference: 142945

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
<i>Inorganics</i>						
Chloride	E300.0	06/11/21 10:54	CL210611-W1-B	CL210611-W1-B	No	BLK/LCS/MS/MSD/DU
Conductivity	E120.1	06/10/21 17:44	COND210610-W1	COND210610-W1	No	BLK/LCS/DUP
Cyanide, Total	E335.4/SM4500-CN	06/11/21 10:58	CN210611-W1	CN210611-W1	No	BLK/LCS/MS/MSD/DU
Phenols	E420.1	06/15/21 16:30	PHL210615-W1	PHL210615-W1	No	BLK/LCS/MS/DUP
Sulfate	E300.0	06/11/21 10:54	SFT210611-W1-B	SFT210611-W1-B	No	BLK/LCS/MS/MSD/DU
TOC	SM5310C	06/10/21 19:01	TOC210610-W1	TOC210610-W1	No	BLK/LCS/MS/MSD/DU
<i>Metals</i>						
Chromium, Dissolved	E200.8	06/15/21 10:52	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Copper, Dissolved	E200.8	06/15/21 10:52	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Iron, Dissolved	E200.8	06/15/21 10:52	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Manganese, Dissolved	E200.8	06/15/21 10:52	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Nickel, Dissolved	E200.8	06/15/21 10:52	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Sodium	E200.8	06/15/21 12:18	MT4-21-0615B	MTD-061521-3	No	BLK/LCS/MS/MSD
Zinc, Dissolved	E200.8	06/15/21 10:52	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
<i>Organics - Volatiles</i>						
Volatile Organics - DEQ List	SW5030C/8260C	06/15/21 03:31	210614B7	VF210614W3	Yes	BLK/LCS/LCSD

QC Report - Analysis Summary

Lab Sample ID: S25134.05

Sample Tag: Trip Blank_061021

Collected Date/Time: 06/09/2021 00:01

Matrix: Water

COC Reference: 142945

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
Volatile Organics - DEQ List	SW5030C/8260C	06/15/21 01:13	210614B7	VF210614W3	Yes	BLK/LCS/LCSD

QC Report - Prep Batch Summary

Inorganics, Prep Batch ID: CL210611-W1-B

Surrogates: No, QC Types: BLK/LCS/MS/MSD/DUP

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S25134.01	Chloride	E300.0	06/11/21 10:16	CL210611-W1-B
S25134.02	Chloride	E300.0	06/11/21 10:29	CL210611-W1-B
S25134.03	Chloride	E300.0	06/11/21 10:42	CL210611-W1-B
S25134.04	Chloride	E300.0	06/11/21 10:54	CL210611-W1-B

Inorganics, Prep Batch ID: CN210611-W1

Surrogates: No, QC Types: BLK/LCS/MS/MSD/DUP

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S25134.01	Cyanide, Total	E335.4/SM4500-CN	06/11/21 10:52	CN210611-W1
S25134.02	Cyanide, Total	E335.4/SM4500-CN	06/11/21 10:54	CN210611-W1
S25134.03	Cyanide, Total	E335.4/SM4500-CN	06/11/21 10:56	CN210611-W1
S25134.04	Cyanide, Total	E335.4/SM4500-CN	06/11/21 10:58	CN210611-W1

Inorganics, Prep Batch ID: COND210610-W1

Surrogates: No, QC Types: BLK/LCS/DUP

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S25134.01	Conductivity	E120.1	06/10/21 17:38	COND210610-W1
S25134.02	Conductivity	E120.1	06/10/21 17:40	COND210610-W1
S25134.03	Conductivity	E120.1	06/10/21 17:42	COND210610-W1
S25134.04	Conductivity	E120.1	06/10/21 17:44	COND210610-W1

Inorganics, Prep Batch ID: PHL210615-W1

Surrogates: No, QC Types: BLK/LCS/MS/DUP

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S25134.01	Phenols	E420.1	06/15/21 16:24	PHL210615-W1
S25134.02	Phenols	E420.1	06/15/21 16:26	PHL210615-W1
S25134.03	Phenols	E420.1	06/15/21 16:28	PHL210615-W1
S25134.04	Phenols	E420.1	06/15/21 16:30	PHL210615-W1

Inorganics, Prep Batch ID: SFT210611-W1-B

Surrogates: No, QC Types: BLK/LCS/MS/MSD/DUP

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S25134.01	Sulfate	E300.0	06/11/21 10:16	SFT210611-W1-B
S25134.02	Sulfate	E300.0	06/11/21 10:29	SFT210611-W1-B
S25134.03	Sulfate	E300.0	06/11/21 10:42	SFT210611-W1-B
S25134.04	Sulfate	E300.0	06/11/21 10:54	SFT210611-W1-B

Inorganics, Prep Batch ID: TOC210610-W1

Surrogates: No, QC Types: BLK/LCS/MS/MSD/DUP

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S25134.01	TOC	SM5310C	06/10/21 18:03	TOC210610-W1
S25134.02	TOC	SM5310C	06/10/21 18:22	TOC210610-W1
S25134.03	TOC	SM5310C	06/10/21 18:42	TOC210610-W1
S25134.04	TOC	SM5310C	06/10/21 19:01	TOC210610-W1

Metals, Prep Batch ID: MTD-061521-1

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S25134.01	Chromium, Dissolved	E200.8	06/15/21 10:44	MT4-21-0615A
S25134.01	Copper, Dissolved	E200.8	06/15/21 10:44	MT4-21-0615A

QC Report - Prep Batch Summary

Metals, Prep Batch ID: MTD-061521-1 (continued)

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S25134.01	Iron, Dissolved	E200.8	06/15/21 10:44	MT4-21-0615A
S25134.01	Manganese, Dissolved	E200.8	06/15/21 10:44	MT4-21-0615A
S25134.01	Nickel, Dissolved	E200.8	06/15/21 10:44	MT4-21-0615A
S25134.01	Zinc, Dissolved	E200.8	06/15/21 10:44	MT4-21-0615A
S25134.02	Chromium, Dissolved	E200.8	06/15/21 10:48	MT4-21-0615A
S25134.02	Copper, Dissolved	E200.8	06/15/21 10:48	MT4-21-0615A
S25134.02	Iron, Dissolved	E200.8	06/15/21 10:48	MT4-21-0615A
S25134.02	Manganese, Dissolved	E200.8	06/15/21 10:48	MT4-21-0615A
S25134.02	Nickel, Dissolved	E200.8	06/15/21 10:48	MT4-21-0615A
S25134.02	Zinc, Dissolved	E200.8	06/15/21 10:48	MT4-21-0615A
S25134.03	Chromium, Dissolved	E200.8	06/15/21 10:50	MT4-21-0615A
S25134.03	Copper, Dissolved	E200.8	06/15/21 10:50	MT4-21-0615A
S25134.03	Iron, Dissolved	E200.8	06/15/21 10:50	MT4-21-0615A
S25134.03	Manganese, Dissolved	E200.8	06/15/21 10:50	MT4-21-0615A
S25134.03	Nickel, Dissolved	E200.8	06/15/21 10:50	MT4-21-0615A
S25134.03	Zinc, Dissolved	E200.8	06/15/21 10:50	MT4-21-0615A
S25134.04	Chromium, Dissolved	E200.8	06/15/21 10:52	MT4-21-0615A
S25134.04	Copper, Dissolved	E200.8	06/15/21 10:52	MT4-21-0615A
S25134.04	Iron, Dissolved	E200.8	06/15/21 10:52	MT4-21-0615A
S25134.04	Manganese, Dissolved	E200.8	06/15/21 10:52	MT4-21-0615A
S25134.04	Nickel, Dissolved	E200.8	06/15/21 10:52	MT4-21-0615A
S25134.04	Zinc, Dissolved	E200.8	06/15/21 10:52	MT4-21-0615A

Metals, Prep Batch ID: MTD-061521-3

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S25134.01	Sodium	E200.8	06/15/21 12:13	MT4-21-0615B
S25134.02	Sodium	E200.8	06/15/21 12:15	MT4-21-0615B
S25134.03	Sodium	E200.8	06/15/21 12:16	MT4-21-0615B
S25134.04	Sodium	E200.8	06/15/21 12:18	MT4-21-0615B

Organics - Volatiles, Prep Batch ID: VF210614W3

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S25134.01	Volatile Organics - DEQ List	SW5030C/8260C	06/15/21 02:22	210614B7
S25134.02	Volatile Organics - DEQ List	SW5030C/8260C	06/15/21 02:45	210614B7
S25134.03	Volatile Organics - DEQ List	SW5030C/8260C	06/15/21 03:08	210614B7
S25134.04	Volatile Organics - DEQ List	SW5030C/8260C	06/15/21 03:31	210614B7
S25134.05	Volatile Organics - DEQ List	SW5030C/8260C	06/15/21 01:13	210614B7

QC Report - Surrogates per Lab Sample

Lab Sample ID: S25134.01

Sample Tag: B-28

Collected Date/Time: 06/09/2021 10:25

Matrix: Groundwater

COC Reference: 142945

Organics - Volatiles, Analysis: Volatile Organics - DEQ List

Run in Batch: 210614B7, Run Date: 06/15/2021 02:22, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		93.6	80.0	124.0
1,2-Dichloroethane-D4		96.2	72.0	125.0
Toluene-D8		95.0	89.0	112.0

QC Report - Surrogates per Lab Sample

Lab Sample ID: S25134.02

Sample Tag: B-23Dr

Collected Date/Time: 06/09/2021 11:25

Matrix: Groundwater

COC Reference: 142945

Organics - Volatiles, Analysis: Volatile Organics - DEQ List

Run in Batch: 210614B7, Run Date: 06/15/2021 02:45, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		94.1	80.0	124.0
1,2-Dichloroethane-D4		99.6	72.0	125.0
Toluene-D8		95.5	89.0	112.0

QC Report - Surrogates per Lab Sample

Lab Sample ID: S25134.03

Sample Tag: B-19Ar

Collected Date/Time: 06/09/2021 13:05

Matrix: Groundwater

COC Reference: 142945

Organics - Volatiles, Analysis: Volatile Organics - DEQ List

Run in Batch: 210614B7, Run Date: 06/15/2021 03:08, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		95.0	80.0	124.0
1,2-Dichloroethane-D4		100.6	72.0	125.0
Toluene-D8		95.3	89.0	112.0

QC Report - Surrogates per Lab Sample

Lab Sample ID: S25134.04

Sample Tag: B-20D

Collected Date/Time: 06/09/2021 15:23

Matrix: Groundwater

COC Reference: 142945

Organics - Volatiles, Analysis: Volatile Organics - DEQ List

Run in Batch: 210614B7, Run Date: 06/15/2021 03:31, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		94.0	80.0	124.0
1,2-Dichloroethane-D4		99.4	72.0	125.0
Toluene-D8		95.1	89.0	112.0

QC Report - Surrogates per Lab Sample

Lab Sample ID: S25134.05

Sample Tag: Trip Blank_061021

Collected Date/Time: 06/09/2021 00:01

Matrix: Water

COC Reference: 142945

Organics - Volatiles, Analysis: Volatile Organics - DEQ List

Run in Batch: 210614B7, Run Date: 06/15/2021 01:13, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		94.9	80.0	124.0
1,2-Dichloroethane-D4		102.1	72.0	125.0
Toluene-D8		95.0	89.0	112.0

QC Report - Surrogates per QC Sample

Organics - Volatiles, Prep Batch ID: VF210614W3

QC Types: BLK/LCS/LCSD

Blank (BLK)

Lab Sample ID: 210614B7.BLKW14B

Run in Batch: 210614B7, Run Date: 06/15/2021 00:26, Prep Date: 06/14/2021, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		93.8	80.0	124.0
1,2-Dichloroethane-D4		96.8	72.0	125.0
Toluene-D8		95.3	89.0	112.0

Laboratory Control Sample (LCS)

Lab Sample ID: 210614B7.LCSW14B

Run in Batch: 210614B7, Run Date: 06/14/2021 23:17, Prep Date: 06/14/2021, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		94.7	80.0	124.0
1,2-Dichloroethane-D4		98.4	72.0	125.0
Toluene-D8		97.6	89.0	112.0

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: 210614B7.LCSDW14B, Parent Sample ID: 210614B7.LCSW14B

Run in Batch: 210614B7, Run Date: 06/14/2021 23:40, Prep Date: 06/14/2021, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		95.6	80.0	124.0
1,2-Dichloroethane-D4		101.2	72.0	125.0
Toluene-D8		95.5	89.0	112.0

QC Report - Batch QC Results

Inorganics, Prep Batch ID: CL210611-W1-B

Surrogates: No, QC Types: BLK/LCS/MS/MSD/DUP

Blank (BLK)

Lab Sample ID: CL210611-W1-B.LRB1

Run in Batch: CL210611-W1-B, Run Date: 06/11/2021 09:38, Prep Date: 06/11/2021, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Chloride		ND	1	mg/L

Blank (BLK)

Lab Sample ID: CL210611-W1-B.LRB2

Run in Batch: CL210611-W1-B, Run Date: 06/11/2021 15:18, Prep Date: 06/11/2021, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Chloride		ND	1	mg/L

Laboratory Control Sample (LCS)

Lab Sample ID: CL210611-W1-B.LCS1

Run in Batch: CL210611-W1-B, Run Date: 06/11/2021 10:03, Prep Date: 06/11/2021, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Chloride		99	90	110

Matrix Spike (MS)

Lab Sample ID: CL210611-W1-B.MS1, Parent Sample ID: S25134.01

Run in Batch: CL210611-W1-B, Run Date: 06/11/2021 12:37, Prep Date: 06/11/2021, Matrix: Liquid, Dilution: 10

Analyte	Flags	% Rec	LCL	UCL
Chloride		101	80	120

Matrix Spike Duplicate (MSD)

Lab Sample ID: CL210611-W1-B.MSD1, Parent Sample ID: CL210611-W1-B.MS1

Run in Batch: CL210611-W1-B, Run Date: 06/11/2021 12:50, Prep Date: 06/11/2021, Matrix: Liquid, Dilution: 10

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Chloride		101	80	120	0	15

Duplicate (DUP)

Lab Sample ID: CL210611-W1-B.DP1, Parent Sample ID: S25134.01

Run in Batch: CL210611-W1-B, Run Date: 06/11/2021 12:25, Prep Date: 06/11/2021, Matrix: Liquid, Dilution: 10

Analyte	Flags	RPD	RPD CL
Chloride		<1	15

QC Report - Batch QC Results

Inorganics, Prep Batch ID: CN210611-W1

Surrogates: No, QC Types: BLK/LCS/MS/MSD/DUP

Blank (BLK)

Lab Sample ID: CN210611-W1.LRB1

Run in Batch: CN210611-W1, Run Date: 06/11/2021 10:30, Prep Date: 06/11/2021, Matrix: Liquid, Dilution: 2

Analyte	Flags	Conc	RDL	Units
Cyanide, Total		ND	0.004	mg/L

Laboratory Control Sample (LCS)

Lab Sample ID: CN210611-W1.LCS1

Run in Batch: CN210611-W1, Run Date: 06/11/2021 10:36, Prep Date: 06/11/2021, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Cyanide, Total		104	90	110

Matrix Spike (MS)

Lab Sample ID: CN210611-W1.MS1, Parent Sample ID: S25093.02

Run in Batch: CN210611-W1, Run Date: 06/11/2021 10:42, Prep Date: 06/11/2021, Matrix: Liquid, Dilution: 2

Analyte	Flags	% Rec	LCL	UCL
Cyanide, Total		96	80	120

Matrix Spike Duplicate (MSD)

Lab Sample ID: CN210611-W1.MSD1, Parent Sample ID: CN210611-W1.MS1

Run in Batch: CN210611-W1, Run Date: 06/11/2021 10:44, Prep Date: 06/11/2021, Matrix: Liquid, Dilution: 2

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Cyanide, Total		94	80	120	2	15

Duplicate (DUP)

Lab Sample ID: CN210611-W1.DP1, Parent Sample ID: S25093.02

Run in Batch: CN210611-W1, Run Date: 06/11/2021 10:40, Prep Date: 06/11/2021, Matrix: Liquid, Dilution: 2

Analyte	Flags	RPD	RPD CL
Cyanide, Total		<1	15

QC Report - Batch QC Results

Inorganics, Prep Batch ID: COND210610-W1

Surrogates: No, QC Types: BLK/LCS/DUP

Blank (BLK)

Lab Sample ID: COND210610-W1.LRB1

Run in Batch: COND210610-W1, Run Date: 06/10/2021 17:00, Prep Date: 06/10/2021, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Conductivity		ND	1	mg/L

Laboratory Control Sample (LCS)

Lab Sample ID: COND210610-W1.LCS1

Run in Batch: COND210610-W1, Run Date: 06/10/2021 17:06, Prep Date: 06/10/2021, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Conductivity		100	90	110

Laboratory Control Sample (LCS)

Lab Sample ID: COND210610-W1.LCS2

Run in Batch: COND210610-W1, Run Date: 06/10/2021 17:08, Prep Date: 06/10/2021, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Conductivity		95	90	110

Duplicate (DUP)

Lab Sample ID: COND210610-W1.DP1, Parent Sample ID: S24832.01

Run in Batch: COND210610-W1, Run Date: 06/10/2021 17:12, Prep Date: 06/10/2021, Matrix: Liquid, Dilution: 5

Analyte	Flags	RPD	RPD CL
Conductivity		<1	15

QC Report - Batch QC Results

Inorganics, Prep Batch ID: PHL210615-W1

Surrogates: No, QC Types: BLK/LCS/MS/DUP

Blank (BLK)

Lab Sample ID: PHL210615-W1.LRB1

Run in Batch: PHL210615-W1, Run Date: 06/15/2021 16:00, Prep Date: 06/15/2021, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Phenols		ND	0.01	mg/L

Laboratory Control Sample (LCS)

Lab Sample ID: PHL210615-W1.LCS1

Run in Batch: PHL210615-W1, Run Date: 06/15/2021 16:04, Prep Date: 06/15/2021, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Phenols		104	90	110

Matrix Spike (MS)

Lab Sample ID: PHL210615-W1.MS1, Parent Sample ID: S25044.08

Run in Batch: PHL210615-W1, Run Date: 06/15/2021 16:14, Prep Date: 06/15/2021, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Phenols		108	90	110

Duplicate (DUP)

Lab Sample ID: PHL210615-W1.DP1, Parent Sample ID: S24947.01

Run in Batch: PHL210615-W1, Run Date: 06/15/2021 16:08, Prep Date: 06/15/2021, Matrix: Liquid, Dilution: 3.3

Analyte	Flags	RPD	RPD CL
Phenols		<1	15

QC Report - Batch QC Results

Inorganics, Prep Batch ID: SFT210611-W1-B

Surrogates: No, QC Types: BLK/LCS/MS/MSD/DUP

Blank (BLK)

Lab Sample ID: SFT210611-W1-B.LRB1

Run in Batch: SFT210611-W1-B, Run Date: 06/11/2021 09:38, Prep Date: 06/11/2021, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Sulfate		ND	1	mg/L

Blank (BLK)

Lab Sample ID: SFT210611-W1-B.LRB2

Run in Batch: SFT210611-W1-B, Run Date: 06/11/2021 15:18, Prep Date: 06/11/2021, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Sulfate		ND	1	mg/L

Laboratory Control Sample (LCS)

Lab Sample ID: SFT210611-W1-B.LCS1

Run in Batch: SFT210611-W1-B, Run Date: 06/11/2021 10:03, Prep Date: 06/11/2021, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Sulfate		99	90	110

Matrix Spike (MS)

Lab Sample ID: SFT210611-W1-B.MS1, Parent Sample ID: S25134.01

Run in Batch: SFT210611-W1-B, Run Date: 06/11/2021 12:37, Prep Date: 06/11/2021, Matrix: Liquid, Dilution: 10

Analyte	Flags	% Rec	LCL	UCL
Sulfate		110	80	120

Matrix Spike Duplicate (MSD)

Lab Sample ID: SFT210611-W1-B.MSD1, Parent Sample ID: SFT210611-W1-B.MS1

Run in Batch: SFT210611-W1-B, Run Date: 06/11/2021 12:50, Prep Date: 06/11/2021, Matrix: Liquid, Dilution: 10

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Sulfate		110	80	120	0	15

Duplicate (DUP)

Lab Sample ID: SFT210611-W1-B.DP1, Parent Sample ID: S25134.01

Run in Batch: SFT210611-W1-B, Run Date: 06/11/2021 12:25, Prep Date: 06/11/2021, Matrix: Liquid, Dilution: 10

Analyte	Flags	RPD	RPD CL
Sulfate		<1	15

QC Report - Batch QC Results

Inorganics, Prep Batch ID: TOC210610-W1

Surrogates: No, QC Types: BLK/LCS/MS/MSD/DUP

Blank (BLK)

Lab Sample ID: TOC210610-W1.LRB1

Run in Batch: TOC210610-W1, Run Date: 06/10/2021 11:51, Prep Date: 06/10/2021, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
TOC		ND	1	mg/L

Laboratory Control Sample (LCS)

Lab Sample ID: TOC210610-W1.LCS1

Run in Batch: TOC210610-W1, Run Date: 06/10/2021 12:30, Prep Date: 06/10/2021, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
TOC		100	90	110

Matrix Spike (MS)

Lab Sample ID: TOC210610-W1.MS1, Parent Sample ID: S24861.04

Run in Batch: TOC210610-W1, Run Date: 06/10/2021 15:07, Prep Date: 06/10/2021, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
TOC		101	80	120

Matrix Spike Duplicate (MSD)

Lab Sample ID: TOC210610-W1.MSD1, Parent Sample ID: TOC210610-W1.MS1

Run in Batch: TOC210610-W1, Run Date: 06/10/2021 15:27, Prep Date: 06/10/2021, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
TOC		101	80	120	0	15

Duplicate (DUP)

Lab Sample ID: TOC210610-W1.DP1, Parent Sample ID: S24861.04

Run in Batch: TOC210610-W1, Run Date: 06/10/2021 14:47, Prep Date: 06/10/2021, Matrix: Liquid, Dilution: 1

Analyte	Flags	RPD	RPD CL
TOC	*	26	15

QC Report - Batch QC Results

Metals, Prep Batch ID: MTD-061521-1

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Blank (BLK)

Lab Sample ID: MT4-21-0615A.022.LRB

Run in Batch: MT4-21-0615A, Run Date: 06/15/2021 10:38, Prep Date: 06/15/2021, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Chromium		ND	0.001	mg/L
Copper		ND	0.001	mg/L
Iron		ND	0.004	mg/L
Manganese		ND	0.001	mg/L
Nickel		ND	0.001	mg/L
Zinc		ND	0.001	mg/L

Laboratory Control Sample (LCS)

Lab Sample ID: MT4-21-0615A.020.LCS

Run in Batch: MT4-21-0615A, Run Date: 06/15/2021 10:36, Prep Date: 06/15/2021, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Chromium		106	85	115
Copper		111	85	115
Iron		108	85	115
Manganese		109	85	115
Nickel		109	85	115
Zinc		106	85	115

Matrix Spike (MS)

Lab Sample ID: MT4-21-0615A.040.MS, Parent Sample ID: S25134.04

Run in Batch: MT4-21-0615A, Run Date: 06/15/2021 11:01, Prep Date: 06/15/2021, Matrix: Liquid, Dilution: 5

Analyte	Flags	% Rec	LCL	UCL
Chromium		112	75	125
Copper		104	75	125
Iron		112	75	125
Manganese		110	75	125
Nickel		110	75	125
Zinc		108	75	125

Matrix Spike (MS)

Lab Sample ID: MT4-21-0615A.062.MS, Parent Sample ID: S25228.09

Run in Batch: MT4-21-0615A, Run Date: 06/15/2021 11:27, Prep Date: 06/15/2021, Matrix: Liquid, Dilution: 5

Analyte	Flags	% Rec	LCL	UCL
Chromium		113	75	125
Copper		107	75	125
Iron		124	75	125
Manganese		116	75	125
Nickel		106	75	125
Zinc		112	75	125

Matrix Spike Duplicate (MSD)

Lab Sample ID: MT4-21-0615A.041.MSD, Parent Sample ID: MT4-21-0615A.040.MS

Run in Batch: MT4-21-0615A, Run Date: 06/15/2021 11:02, Prep Date: 06/15/2021, Matrix: Liquid, Dilution: 5

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Chromium		110	75	125	2	20
Copper		107	75	125	3	20

QC Report - Batch QC Results

Metals, Prep Batch ID: MTD-061521-1 (continued)

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Matrix Spike Duplicate (MSD) (continued)

Lab Sample ID: MT4-21-0615A.041.MSD, Parent Sample ID: MT4-21-0615A.040.MS

Run in Batch: MT4-21-0615A, Run Date: 06/15/2021 11:02, Prep Date: 06/15/2021, Matrix: Liquid, Dilution: 5

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Iron		80	75	125	3	20
Manganese		108	75	125	1	20
Nickel		101	75	125	8	20
Zinc		110	75	125	2	20

Matrix Spike Duplicate (MSD)

Lab Sample ID: MT4-21-0615A.063.MSD, Parent Sample ID: MT4-21-0615A.062.MS

Run in Batch: MT4-21-0615A, Run Date: 06/15/2021 11:28, Prep Date: 06/15/2021, Matrix: Liquid, Dilution: 5

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Chromium		104	75	125	8	20
Copper		102	75	125	5	20
Iron	*	68	75	125	8	20
Manganese		105	75	125	9	20
Nickel		101	75	125	5	20
Zinc		105	75	125	7	20

QC Report - Batch QC Results

Metals, Prep Batch ID: MTD-061521-3

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Blank (BLK)

Lab Sample ID: MT4-21-0615B.014.LRB

Run in Batch: MT4-21-0615B, Run Date: 06/15/2021 12:03, Prep Date: 06/15/2021, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Sodium		ND	0.05	mg/L

Laboratory Control Sample (LCS)

Lab Sample ID: MT4-21-0615B.013.LCS

Run in Batch: MT4-21-0615B, Run Date: 06/15/2021 12:02, Prep Date: 06/15/2021, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Sodium		97	85	115

Matrix Spike (MS)

Lab Sample ID: MT4-21-0615B.034.MS, Parent Sample ID: S25148.01

Run in Batch: MT4-21-0615B, Run Date: 06/15/2021 12:20, Prep Date: 06/15/2021, Matrix: Liquid, Dilution: 50

Analyte	Flags	% Rec	LCL	UCL
Sodium		93	75	125

Matrix Spike (MS)

Lab Sample ID: MT4-21-0615B.059.MS, Parent Sample ID: S25243.01

Run in Batch: MT4-21-0615B, Run Date: 06/15/2021 12:47, Prep Date: 06/15/2021, Matrix: Liquid, Dilution: 50

Analyte	Flags	% Rec	LCL	UCL
Sodium		101	75	125

Matrix Spike Duplicate (MSD)

Lab Sample ID: MT4-21-0615B.035.MSD, Parent Sample ID: MT4-21-0615B.034.MS

Run in Batch: MT4-21-0615B, Run Date: 06/15/2021 12:22, Prep Date: 06/15/2021, Matrix: Liquid, Dilution: 50

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Sodium		99	75	125	1	20

Matrix Spike Duplicate (MSD)

Lab Sample ID: MT4-21-0615B.060.MSD, Parent Sample ID: MT4-21-0615B.059.MS

Run in Batch: MT4-21-0615B, Run Date: 06/15/2021 12:48, Prep Date: 06/15/2021, Matrix: Liquid, Dilution: 50

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Sodium		99	75	125	1	20

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: VF210614W3

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Blank (BLK)

Lab Sample ID: 210614B7.BLKW14B

Run in Batch: 210614B7, Run Date: 06/15/2021 00:26, Prep Date: 06/14/2021, Matrix: WW, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Acetone		ND	10.00	ug/l
Acrylonitrile		ND	1.00	ug/l
2-Butanone (MEK)		ND	10.00	ug/l
Benzene		ND	1.00	ug/l
n-Butylbenzene		ND	1.00	ug/l
Bromobenzene		ND	1.00	ug/l
Bromochloromethane		ND	1.00	ug/l
Bromodichloromethane		ND	1.00	ug/l
Bromoform		ND	1.00	ug/l
Bromomethane		ND	1.00	ug/l
sec-Butylbenzene		ND	1.00	ug/l
tert-Butylbenzene		ND	1.00	ug/l
Carbon disulfide		ND	1.00	ug/l
Carbon tetrachloride		ND	1.00	ug/l
Chlorobenzene		ND	1.00	ug/l
Chloroethane		ND	1.00	ug/l
Chloroform		ND	1.00	ug/l
Chloromethane		ND	1.00	ug/l
1,1-Dichloroethane		ND	1.00	ug/l
1,1-Dichloroethene		ND	1.00	ug/l
1,2-Dibromo-3-chloropropane		ND	1.00	ug/l
1,2-Dibromoethane		ND	1.00	ug/l
1,2-Dichlorobenzene		ND	1.00	ug/l
1,2-Dichloroethane		ND	1.00	ug/l
1,2-Dichloropropane		ND	1.00	ug/l
1,3-Dichlorobenzene		ND	1.00	ug/l
1,4-Dichlorobenzene		ND	1.00	ug/l
cis-1,2-Dichloroethene		ND	1.00	ug/l
cis-1,3-Dichloropropene		ND	1.00	ug/l
Dibromochloromethane		ND	1.00	ug/l
Dibromomethane		ND	1.00	ug/l
Dichlorodifluoromethane		ND	1.00	ug/l
Diethyl ether		ND	1.00	ug/l
trans-1,2-Dichloroethene		ND	1.00	ug/l
trans-1,3-Dichloropropene		ND	1.00	ug/l
trans-1,4-Dichloro-2-butene		ND	1.00	ug/l
Ethylbenzene		ND	1.00	ug/l
2-Hexanone		ND	10.00	ug/l
Hexachloroethane		ND	1.00	ug/l
p-Isopropyltoluene		ND	1.00	ug/l
Isopropylbenzene		ND	1.00	ug/l
2-Methylnaphthalene		ND	1.00	ug/l
4-Methyl-2-pentanone (MIBK)		ND	10.00	ug/l
tert-Methyl butyl ether (MTBE)		ND	1.00	ug/l
Methyl iodide		ND	1.00	ug/l
Methylene chloride		ND	1.00	ug/l

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: VF210614W3 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Blank (BLK) (continued)

Lab Sample ID: 210614B7.BLKW14B

Run in Batch: 210614B7, Run Date: 06/15/2021 00:26, Prep Date: 06/14/2021, Matrix: WW, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Naphthalene		ND	1.00	ug/l
n-Propylbenzene		ND	1.00	ug/l
Styrene		ND	1.00	ug/l
1,1,1,2-Tetrachloroethane		ND	1.00	ug/l
1,1,1-Trichloroethane		ND	1.00	ug/l
1,1,2,2-Tetrachloroethane		ND	1.00	ug/l
1,1,2-Trichloroethane		ND	1.00	ug/l
1,2,3-Trichlorobenzene		ND	1.00	ug/l
1,2,3-Trichloropropane		ND	1.00	ug/l
1,2,3-Trimethylbenzene		ND	1.00	ug/l
1,2,4-Trichlorobenzene		ND	1.00	ug/l
1,2,4-Trimethylbenzene		ND	1.00	ug/l
1,3,5-Trimethylbenzene		ND	1.00	ug/l
Tetrachloroethene		ND	1.00	ug/l
Tetrahydrofuran		ND	10.00	ug/l
Toluene		ND	1.00	ug/l
Trichloroethene		ND	1.00	ug/l
Trichlorofluoromethane		ND	1.00	ug/l
Vinyl chloride		ND	1.00	ug/l
o-Xylene		ND	1.00	ug/l
p,m-Xylene		ND	1.00	ug/l

Laboratory Control Sample (LCS)

Lab Sample ID: 210614B7.LCSW14B

Run in Batch: 210614B7, Run Date: 06/14/2021 23:17, Prep Date: 06/14/2021, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Acetone		109.9	29.9	161.5
Acrylonitrile		119.9	69.9	128.9
2-Butanone (MEK)		115.0	44.0	134.4
Benzene		100.0	79.9	124.9
n-Butylbenzene		91.7	80.0	133.3
Bromobenzene		97.1	78.7	124.6
Bromochloromethane		104.6	78.2	120.8
Bromodichloromethane		101.6	80.4	128.2
Bromoform		101.6	69.4	128.0
Bromomethane		98.1	56.8	151.3
sec-Butylbenzene		90.4	77.4	129.8
tert-Butylbenzene		89.9	80.7	128.9
Carbon disulfide		91.1	63.8	137.4
Carbon tetrachloride		83.1	72.6	133.0
Chlorobenzene		100.0	79.2	122.7
Chloroethane		99.3	53.4	149.4
Chloroform		103.4	78.4	124.0
Chloromethane		102.2	23.8	166.5
1,1-Dichloroethane		105.2	71.5	126.2
1,1-Dichloroethene		91.2	69.6	139.4

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: VF210614W3 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Laboratory Control Sample (LCS) (continued)

Lab Sample ID: 210614B7.LCSW14B

Run in Batch: 210614B7, Run Date: 06/14/2021 23:17, Prep Date: 06/14/2021, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
1,2-Dibromo-3-chloropropane		103.5	21.2	189.4
1,2-Dibromoethane		101.5	70.3	133.7
1,2-Dichlorobenzene		100.6	10.0	166.2
1,2-Dichloroethane		95.4	76.0	126.3
1,2-Dichloropropane		104.7	78.6	126.4
1,3-Dichlorobenzene		101.2	77.0	131.3
1,4-Dichlorobenzene		102.1	20.7	137.7
cis-1,2-Dichloroethene		104.2	76.6	122.1
cis-1,3-Dichloropropene		103.5	79.8	129.9
Dibromochloromethane		102.9	74.6	127.2
Dibromomethane		99.7	76.9	122.1
Dichlorodifluoromethane		61.0	10.0	222.8
Diethyl ether		109.6	67.4	121.2
trans-1,2-Dichloroethene		101.4	73.6	129.3
trans-1,3-Dichloropropene		100.5	74.0	131.3
trans-1,4-Dichloro-2-butene		93.1	68.6	135.4
Ethylbenzene		96.8	79.5	129.1
2-Hexanone		99.9	55.4	136.9
Hexachloroethane		95.7	23.8	138.1
p-Isopropyltoluene		92.9	79.8	137.5
Isopropylbenzene		90.9	74.4	121.5
2-Methylnaphthalene		114.1	25.5	165.5
4-Methyl-2-pentanone (MIBK)		98.5	71.6	125.2
tert-Methyl butyl ether (MTBE)		96.8	73.2	122.4
Methyl iodide		103.5	68.8	116.4
Methylene chloride		103.2	73.3	121.1
Naphthalene		104.5	32.9	135.8
n-Propylbenzene		93.8	82.0	130.7
Styrene		100.3	69.5	126.7
1,1,1,2-Tetrachloroethane		100.0	80.3	128.2
1,1,1-Trichloroethane		90.1	79.4	130.9
1,1,2,2-Tetrachloroethane		101.2	79.8	126.3
1,1,2-Trichloroethane		101.9	78.7	123.1
1,2,3-Trichlorobenzene		104.7	75.4	131.4
1,2,3-Trichloropropane		98.4	78.3	138.8
1,2,3-Trimethylbenzene		99.7	76.3	124.2
1,2,4-Trichlorobenzene		100.9	27.4	143.4
1,2,4-Trimethylbenzene		93.9	81.4	130.8
1,3,5-Trimethylbenzene		93.3	81.3	128.9
Tetrachloroethene		77.0	74.5	124.5
Tetrahydrofuran		115.1	59.0	117.9
Toluene		97.7	79.8	124.5
Trichloroethene		94.2	79.7	124.2
Trichlorofluoromethane		79.0	59.7	151.8
Vinyl chloride		90.5	43.5	149.1
o-Xylene		97.4	80.2	131.0

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: VF210614W3 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Laboratory Control Sample (LCS) (continued)

Lab Sample ID: 210614B7.LCSW14B

Run in Batch: 210614B7, Run Date: 06/14/2021 23:17, Prep Date: 06/14/2021, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
p,m-Xylene		96.6	79.4	132.2

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: 210614B7.LCSDW14B, Parent Sample ID: 210614B7.LCSW14B

Run in Batch: 210614B7, Run Date: 06/14/2021 23:40, Prep Date: 06/14/2021, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Acetone		111.8	29.9	161.5	1.7	30.0
Acrylonitrile		120.8	69.9	128.9	0.8	30.0
2-Butanone (MEK)		108.0	44.0	134.4	6.3	30.0
Benzene		98.5	79.9	124.9	1.5	30.0
n-Butylbenzene		90.0	80.0	133.3	1.9	30.0
Bromobenzene		97.1	78.7	124.6	0.0	30.0
Bromochloromethane		104.9	78.2	120.8	0.3	30.0
Bromodichloromethane		101.3	80.4	128.2	0.3	30.0
Bromoform		103.0	69.4	128.0	1.4	30.0
Bromomethane		96.5	56.8	151.3	1.6	30.0
sec-Butylbenzene		86.7	77.4	129.8	4.2	30.0
tert-Butylbenzene		87.8	80.7	128.9	2.4	30.0
Carbon disulfide		91.1	63.8	137.4	0.1	30.0
Carbon tetrachloride		81.1	72.6	133.0	2.4	30.0
Chlorobenzene		97.8	79.2	122.7	2.2	30.0
Chloroethane		96.3	53.4	149.4	3.0	30.0
Chloroform		101.0	78.4	124.0	2.3	30.0
Chloromethane		101.1	23.8	166.5	1.2	30.0
1,1-Dichloroethane		103.4	71.5	126.2	1.7	30.0
1,1-Dichloroethene		89.1	69.6	139.4	2.4	30.0
1,2-Dibromo-3-chloropropane		103.9	21.2	189.4	0.5	30.0
1,2-Dibromoethane		102.2	70.3	133.7	0.6	30.0
1,2-Dichlorobenzene		99.6	10.0	166.2	1.0	30.0
1,2-Dichloroethane		96.2	76.0	126.3	0.8	30.0
1,2-Dichloropropane		103.1	78.6	126.4	1.5	30.0
1,3-Dichlorobenzene		97.6	77.0	131.3	3.6	30.0
1,4-Dichlorobenzene		99.5	20.7	137.7	2.6	30.0
cis-1,2-Dichloroethene		102.6	76.6	122.1	1.6	30.0
cis-1,3-Dichloropropene		103.0	79.8	129.9	0.5	30.0
Dibromochloromethane		104.3	74.6	127.2	1.3	30.0
Dibromomethane		101.3	76.9	122.1	1.5	30.0
Dichlorodifluoromethane		59.5	10.0	222.8	2.5	30.0
Diethyl ether		111.6	67.4	121.2	1.8	30.0
trans-1,2-Dichloroethene		100.1	73.6	129.3	1.3	30.0
trans-1,3-Dichloropropene		101.3	74.0	131.3	0.8	30.0
trans-1,4-Dichloro-2-butene		96.1	68.6	135.4	3.1	30.0
Ethylbenzene		94.6	79.5	129.1	2.3	30.0
2-Hexanone		100.8	55.4	136.9	0.8	30.0
Hexachloroethane		92.9	23.8	138.1	3.0	30.0
p-Isopropyltoluene		89.4	79.8	137.5	3.8	30.0

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: VF210614W3 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Laboratory Control Sample Duplicate (LCSD) (continued)

Lab Sample ID: 210614B7.LCSDW14B, Parent Sample ID: 210614B7.LCSW14B

Run in Batch: 210614B7, Run Date: 06/14/2021 23:40, Prep Date: 06/14/2021, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Isopropylbenzene		88.5	74.4	121.5	2.7	30.0
2-Methylnaphthalene		119.2	25.5	165.5	4.4	30.0
4-Methyl-2-pentanone (MIBK)		101.4	71.6	125.2	2.8	30.0
tert-Methyl butyl ether (MTBE)		97.7	73.2	122.4	0.8	30.0
Methyl iodide		101.0	68.8	116.4	2.5	30.0
Methylene chloride		101.2	73.3	121.1	2.0	30.0
Naphthalene		105.6	32.9	135.8	1.0	30.0
n-Propylbenzene		91.0	82.0	130.7	3.0	30.0
Styrene		97.9	69.5	126.7	2.5	30.0
1,1,1,2-Tetrachloroethane		99.2	80.3	128.2	0.8	30.0
1,1,1-Trichloroethane		87.8	79.4	130.9	2.6	30.0
1,1,2,2-Tetrachloroethane		102.6	79.8	126.3	1.4	30.0
1,1,2-Trichloroethane		102.3	78.7	123.1	0.4	30.0
1,2,3-Trichlorobenzene		105.9	75.4	131.4	1.2	30.0
1,2,3-Trichloropropane		97.7	78.3	138.8	0.7	30.0
1,2,3-Trimethylbenzene		96.4	76.3	124.2	3.4	30.0
1,2,4-Trichlorobenzene		99.5	27.4	143.4	1.4	30.0
1,2,4-Trimethylbenzene		92.2	81.4	130.8	1.8	30.0
1,3,5-Trimethylbenzene		91.7	81.3	128.9	1.7	30.0
Tetrachloroethene		75.2	74.5	124.5	2.3	30.0
Tetrahydrofuran		115.8	59.0	117.9	0.6	30.0
Toluene		95.3	79.8	124.5	2.5	30.0
Trichloroethene		92.6	79.7	124.2	1.7	30.0
Trichlorofluoromethane		77.2	59.7	151.8	2.3	30.0
Vinyl chloride		88.6	43.5	149.1	2.1	30.0
o-Xylene		94.9	80.2	131.0	2.6	30.0
p,m-Xylene		93.5	79.4	132.2	3.3	30.0

REPORT TO

CONTACT NAME clifford Yantz / Kevin Schneider			
COMPANY Ramboll			
ADDRESS 3600 Green Court Ste 750			
CITY Ann Arbor		STATE MI	ZIP CODE 48105
PHONE NO. 313-333-0211		FAX NO.	P.O. NO. 1940002628 (tn)
E-MAIL ADDRESS Kevin.schneider@ramboll.com / clifford.yantz@ramboll.com		QUOTENO.	

CHAIN OF CUSTODY RECORD

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

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

PROJECT NO./NAME RACER Coldwater Road	SAMPLER(S) - PLEASE PRINT/SIGN NAME Kevin Schneider <i>[Signature]</i>
TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER _____	
DELIVERABLES REQUIRED ☐ STD ☒ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER _____	

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

Containers & Preservatives

[illegible]

RELINQUISHED BY:
SIGNATURE/ORGANIZATION

RECEIVED BY:
SIGNATURE/ORGANIZATION

RELINQUISHED BY:
SIGNATURE/ORGANIZATION

RECEIVED BY:
SIGNATURE/ORGANIZATION

☒ Sampler

DATE 6/10/21 TIME 1530

DATE 6/10/12 TIME 1:03

DATE TIME

DATE 10/11/75 TIME 1:15

RELINQUISHED BY:
SIGNATURE/ORGANIZATION

RECEIVED BY:
SIGNATURE/ORGANIZATION

SEAL NO.

SEAL INTACT

YES ☐ NO ☐

INITIAL S

INITIALS

NOTES:

TEMP. ON ARRIVAL

4.5

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

REPORT TO

CONTACT NAME				Project Management Team			
COMPANY				Merit Laboratories			
ADDRESS				2680 East Lansing Drive			
CITY			East Lansing		STATE		MI
					ZIP CODE		48823
PHONE NO.		517-332-0167		FAX NO.		P.O. NO.	
E-MAIL ADDRESS				results@meritlabs.com		QUOTE NO.	

CHAIN OF CUSTODY RECORD

CONTACT NAME		Julie Teague		☒ GAME	
COMPANY		Merit Laboratories			
ADDRESS		2680 East Lansing Drive			
CITY		East Lansing		STATE	MI
				ZIP CODE	48823
PHONE NO.		517-332-0167		E-MAIL ADDRESS	
				juliet@meritlabs.com	

INVOICE TO

PROJECT NO./NAME	S25134	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	GW=GROUNDWATER	WW=WASTEWATER	S=SOIL	L=LIQUID	SD=SOLID
CODE:	SL=SLUDGE	DW=DRINKING WATER	O=OIL	WP=WPIE	A=AIR
					W=WASTE

[illegible]

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

[illegible]

RELINQUISHED BY:	<i>Bur Smith</i>	☐ Sampler	DATE	TIME
SIGNATURE/ORGANIZATION			6/14/21	1100
RECEIVED BY:			DATE	TIME
SIGNATURE/ORGANIZATION	<i>OPS</i>		6/14/21	1100
RELINQUISHED BY:			DATE	TIME
SIGNATURE/ORGANIZATION				
RECEIVED BY:			DATE	TIME
SIGNATURE/ORGANIZATION				

RELINQUISHED BY:			DATE	TIME
SIGNATURE/ORGANIZATION				
RECEIVED BY:			DATE	TIME
SIGNATURE/ORGANIZATION				
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS	NOTES:	TEMP. ON ARRIVAL _____
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS		

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



Analytical Laboratory Report

Report ID: S25228.01(01)
Generated on 06/29/2021

Report to

Attention: Clifford Yantz
Ramboll
3600 Green Court Ste 750
Ann Arbor, MI 48105

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

Additional Contacts: Kevin Schneider

Report produced by

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

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

Contacts for report questions:
John Lavery (johnlavery@meritlabs.com)
Barbara Ball (bball@meritlabs.com)

Report Summary

Lab Sample ID(s): S25228.01-S25228.11
Project: RACER Coldwater Road
Collected Date(s): 06/10/2021 - 06/11/2021
Submitted Date/Time: 06/11/2021 16:30
Sampled by: Kevin Schneider
P.O. #: 1940002628 (TASK 1)

Table of Contents

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Maya Murshak
Technical Director



Analytical Laboratory Report

General Report Notes

Analytical results relate only to the samples tested, in the condition received by the laboratory.

Methods may be modified for improved performance.

Results reported on a dry weight basis where applicable.

'Not detected' indicates that parameter was not found at a level equal to or greater than the reporting limit (RL).

40 CFR Part 136 Table II Required Containers, Preservation Techniques and Holding Times for the Clean Water Act specify that samples for acrolein and acrylonitrile need to be preserved at a pH in the range of 4 to 5 or if not preserved, analyzed within 3 days of sampling.

QA/QC corresponding to this analytical report is a separate document with the same Merit ID reference and is available upon request.

Full accreditation certificates are available upon request. Starred (*) analytes are not NELAP accredited.

Samples are held by the lab for 30 days from the final report date unless a written request to hold longer is provided by the client.

Report shall not be reproduced except in full, without the written approval of Merit Laboratories, Inc.

Limits for drinking water samples, are listed as the MCL Limits (Maximum Contaminant Level Concentrations)

PFAS requirement: Section 9.3.8 of U.S. EPA Method 537.1 states "If the method analyte(s) found in the Field Sample is present in the

FRB at a concentration greater than 1/3 the MRL, then all samples collected with that FRB are invalid and must be recollected and reanalyzed."

Samples submitted without an accompanying FRB may not be acceptable for compliance purposes.

Report Narrative

There is no additional narrative for this analytical report

Laboratory Certifications

Authority	Certification ID
Michigan DEQ	#9956
DOD ELAP/ISO 17025	#69699
WBENC	#2005110032
Ohio VAP	#CL0002
Indiana DOH	#C-MI-07
New York NELAC	#11814
North Carolina DENR	#680
North Carolina DOH	#26702
Alaska CSLAP	#17-001
Pennsylvania DEP	#68-05884

Qualifier Descriptions

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

Glossary of Abbreviations

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



Analytical Laboratory Report

Method Summary

Method	Version
E120.1	EPA Method 120.1 Revision 1982
E200.8	EPA Method 200.8 Revision 5.4
E300.0	EPA Method 300.0 Revision 2.1
E335.4/SM4500-CN	EPA Method 335.4 Revision 1.0 / Standard Method 4500-CN E 20th Edition
E420.1	EPA Method 420.1 Editorial Revision 1978
N/A	Not Applicable
SM5310C	Standard Method 5310C 2011
SW3015A	SW 846 Method 3015A Revision 1 February 2007
SW5030C/8260C	SW 846 Method 8260C Revision 3 August 2006 / 5030C Revision 3 May 2003
SW9020B	SW 846 Method 9020B Revision 2 September 1994



Analytical Laboratory Report

Sample Summary (11 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S25228.01	B-21D	Groundwater	06/10/21 11:40
S25228.02	B-24r	Groundwater	06/10/21 11:55
S25228.03	B-22D	Groundwater	06/10/21 14:12
S25228.04	OBG MW-16D	Groundwater	06/10/21 16:28
S25228.05	B-9	Groundwater	06/11/21 09:25
S25228.06	B-18A	Groundwater	06/11/21 10:55
S25228.07	B-27D	Groundwater	06/11/21 11:28
S25228.08	B-7	Groundwater	06/11/21 12:15
S25228.09	MW-DUP-061121	Groundwater	06/11/21 00:01
S25228.10	Equipment Blank-1	Water	06/11/21 12:50
S25228.11	Trip Blank-061121	Water	06/11/21 00:01



Analytical Laboratory Report

Lab Sample ID: S25228.01

Sample Tag: B-21D

Collected Date/Time: 06/10/2021 11:40

Matrix: Groundwater

COC Reference: 142922

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	125ml Plastic	HNO3	Yes	4.4	IR
2	40ml Glass	H2SO4	Yes	4.4	IR
1	250ml Amber	H2SO4	Yes	4.4	IR
1	1L Plastic	None	Yes	4.4	IR
1	125ml Plastic	NaOH	Yes	4.4	IR
3	40ml Glass	HCL	Yes	4.4	IR
1	125ml Amber	H2SO4	Yes	4.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	06/16/21 11:00	BML	
Metal Digestion	Completed	SW3015A	06/15/21 09:30	CCM	
Metal Digestion	Completed	SW3015A	06/15/21 12:00	CCM	

Inorganics

Method: E120.1, Run Date: 06/17/21 13:24, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Conductivity	800	1		umhos/cm	1		

Method: E300.0, Run Date: 06/14/21 09:15, Analyst: JDP

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chloride	Not detected	10	0.13	mg/L	10	16887-00-6	
Sulfate	90	10	1.0	mg/L	10	14808-79-8	

Method: E335.4/SM4500-CN, Run Date: 06/15/21 11:08, Analyst: JDP

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Cyanide, Total	Not detected	0.004	0.001	mg/L	2	57-12-5	

Method: E420.1, Run Date: 06/21/21 16:06, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Phenols	Not detected	0.02		mg/L	1.7		

Method: SM5310C, Run Date: 06/17/21 12:58, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
TOC	3.3	1		mg/L	1		

Metals

Method: E200.8, Run Date: 06/15/21 12:56, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Sodium	24.6	2.5		mg/L	50	7440-23-5	

Method: E200.8, Run Date: 06/15/21 11:10, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chromium, Dissolved	Not detected	0.005		mg/L	5	7440-47-3	
Copper, Dissolved	Not detected	0.005		mg/L	5	7440-50-8	
Iron, Dissolved	1.92	0.02		mg/L	5	7439-89-6	



Analytical Laboratory Report

Lab Sample ID: S25228.01 (continued)

Sample Tag: B-21D

Method: E200.8, Run Date: 06/15/21 11:10, Analyst: CCM (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Manganese, Dissolved	0.045	0.005		mg/L	5	7439-96-5	
Nickel, Dissolved	Not detected	0.005		mg/L	5	7440-02-0	
Zinc, Dissolved	Not detected	0.005		mg/L	5	7440-66-6	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/15/21 14:35, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	50		ug/L	1	67-64-1	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Benzene	Not detected	1		ug/L	1	71-43-2	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
Bromochloromethane	Not detected	1		ug/L	1	74-97-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Bromoform	Not detected	1		ug/L	1	75-25-2	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Chloroform	Not detected	1		ug/L	1	67-66-3	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Diethyl ether	Not detected	10		ug/L	1	60-29-7	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
trans-1,4-Dichloro-2-butene	Not detected	1		ug/L	1	110-57-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Hexachloroethane	Not detected	5		ug/L	1	67-72-1	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
2-Methylnaphthalene	Not detected	5		ug/L	1	91-57-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	



Analytical Laboratory Report

Lab Sample ID: S25228.01 (continued)

Sample Tag: B-21D

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/15/21 14:35, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Methyl iodide	Not detected	1		ug/L	1	74-88-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Styrene	Not detected	1		ug/L	1	100-42-5	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Tetrahydrofuran*	Not detected	90		ug/L	1	109-99-9	
Toluene	Not detected	1		ug/L	1	108-88-3	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
o-Xylene	Not detected	1		ug/L	1	95-47-6	
p,m-Xylene*	Not detected	2		ug/L	1		

Organics

Method: SW9020B, Run Date: 06/18/21 01:44, Analyst: GEL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
TOX*	Not detected	10,000	3,330	ug/L	1		OU

O-Analysis performed by outside laboratory. See attached report. U-Analyte not detected above reporting limit



Analytical Laboratory Report

Lab Sample ID: S25228.02

Sample Tag: B-24r

Collected Date/Time: 06/10/2021 11:55

Matrix: Groundwater

COC Reference: 142922

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	125ml Plastic	HNO3	Yes	4.4	IR
2	40ml Glass	H2SO4	Yes	4.4	IR
1	250ml Amber	H2SO4	Yes	4.4	IR
1	1L Plastic	None	Yes	4.4	IR
1	125ml Plastic	NaOH	Yes	4.4	IR
3	40ml Glass	HCL	Yes	4.4	IR
1	125ml Amber	H2SO4	Yes	4.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	06/16/21 11:00	BML	
Metal Digestion	Completed	SW3015A	06/15/21 09:30	CCM	
Metal Digestion	Completed	SW3015A	06/15/21 12:00	CCM	

Inorganics

Method: E120.1, Run Date: 06/17/21 13:26, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Conductivity	1,295	1		umhos/cm	1		

Method: E300.0, Run Date: 06/14/21 09:25, Analyst: JDP

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chloride	49	10	0.13	mg/L	10	16887-00-6	

Method: E300.0, Run Date: 06/14/21 11:36, Analyst: JDP

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Sulfate	258	10	1.0	mg/L	10	14808-79-8	

Method: E335.4/SM4500-CN, Run Date: 06/15/21 11:16, Analyst: JDP

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Cyanide, Total	Not detected	0.004	0.001	mg/L	2	57-12-5	

Method: E420.1, Run Date: 06/21/21 16:12, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Phenols	Not detected	0.02		mg/L	1.7		

Method: SM5310C, Run Date: 06/17/21 13:37, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
TOC	5.3	1		mg/L	1		

Metals

Method: E200.8, Run Date: 06/15/21 12:58, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Sodium	67.6	2.5		mg/L	50	7440-23-5	



Analytical Laboratory Report

Lab Sample ID: S25228.02 (continued)

Sample Tag: B-24r

Method: E200.8, Run Date: 06/15/21 11:11, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chromium, Dissolved	Not detected	0.005		mg/L	5	7440-47-3	
Copper, Dissolved	Not detected	0.005		mg/L	5	7440-50-8	
Iron, Dissolved	0.17	0.02		mg/L	5	7439-89-6	
Manganese, Dissolved	0.054	0.005		mg/L	5	7439-96-5	
Nickel, Dissolved	Not detected	0.005		mg/L	5	7440-02-0	
Zinc, Dissolved	0.007	0.005		mg/L	5	7440-66-6	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/15/21 14:58, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	50		ug/L	1	67-64-1	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Benzene	Not detected	1		ug/L	1	71-43-2	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
Bromochloromethane	Not detected	1		ug/L	1	74-97-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Bromoform	Not detected	1		ug/L	1	75-25-2	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Chloroform	Not detected	1		ug/L	1	67-66-3	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Diethyl ether	Not detected	10		ug/L	1	60-29-7	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
trans-1,4-Dichloro-2-butene	Not detected	1		ug/L	1	110-57-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Hexachloroethane	Not detected	5		ug/L	1	67-72-1	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	

Lab Sample ID: S25228.02 (continued)

Sample Tag: B-24r

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/15/21 14:58, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
2-Methylnaphthalene	Not detected	5		ug/L	1	91-57-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Methyl iodide	Not detected	1		ug/L	1	74-88-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Styrene	Not detected	1		ug/L	1	100-42-5	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Tetrahydrofuran*	Not detected	90		ug/L	1	109-99-9	
Toluene	Not detected	1		ug/L	1	108-88-3	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
o-Xylene	Not detected	1		ug/L	1	95-47-6	
p,m-Xylene*	Not detected	2		ug/L	1		

Organics

Method: SW9020B, Run Date: 06/18/21 02:50, Analyst: GEL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
TOX*	11,400	10,000	3,330	ug/L	1		O

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



Analytical Laboratory Report

Lab Sample ID: S25228.03

Sample Tag: B-22D

Collected Date/Time: 06/10/2021 14:12

Matrix: Groundwater

COC Reference: 142922

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	125ml Plastic	HNO3	Yes	4.4	IR
2	40ml Glass	H2SO4	Yes	4.4	IR
1	250ml Amber	H2SO4	Yes	4.4	IR
1	1L Plastic	None	Yes	4.4	IR
1	125ml Plastic	NaOH	Yes	4.4	IR
3	40ml Glass	HCL	Yes	4.4	IR
1	125ml Amber	H2SO4	Yes	4.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	06/16/21 11:00	BML	
Metal Digestion	Completed	SW3015A	06/15/21 09:30	CCM	
Metal Digestion	Completed	SW3015A	06/15/21 12:00	CCM	

Inorganics

Method: E120.1, Run Date: 06/17/21 13:28, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Conductivity	722	1		umhos/cm	1		

Method: E300.0, Run Date: 06/14/21 09:35, Analyst: JDP

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chloride	Not detected	10	0.13	mg/L	10	16887-00-6	
Sulfate	54	10	1.0	mg/L	10	14808-79-8	

Method: E335.4/SM4500-CN, Run Date: 06/15/21 11:18, Analyst: JDP

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Cyanide, Total	Not detected	0.004	0.001	mg/L	2	57-12-5	

Method: E420.1, Run Date: 06/21/21 16:14, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Phenols	Not detected	0.02		mg/L	1.7		

Method: SM5310C, Run Date: 06/17/21 14:32, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
TOC	2.8	1		mg/L	1		

Metals

Method: E200.8, Run Date: 06/15/21 13:00, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Sodium	28.7	2.5		mg/L	50	7440-23-5	

Method: E200.8, Run Date: 06/15/21 11:13, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chromium, Dissolved	Not detected	0.005		mg/L	5	7440-47-3	
Copper, Dissolved	Not detected	0.005		mg/L	5	7440-50-8	
Iron, Dissolved	1.31	0.02		mg/L	5	7439-89-6	



Analytical Laboratory Report

Lab Sample ID: S25228.03 (continued)

Sample Tag: B-22D

Method: E200.8, Run Date: 06/15/21 11:13, Analyst: CCM (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Manganese, Dissolved	0.027	0.005		mg/L	5	7439-96-5	
Nickel, Dissolved	Not detected	0.005		mg/L	5	7440-02-0	
Zinc, Dissolved	0.005	0.005		mg/L	5	7440-66-6	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/15/21 15:21, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	50		ug/L	1	67-64-1	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Benzene	Not detected	1		ug/L	1	71-43-2	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
Bromochloromethane	Not detected	1		ug/L	1	74-97-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Bromoform	Not detected	1		ug/L	1	75-25-2	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Chloroform	Not detected	1		ug/L	1	67-66-3	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Diethyl ether	Not detected	10		ug/L	1	60-29-7	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
trans-1,4-Dichloro-2-butene	Not detected	1		ug/L	1	110-57-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Hexachloroethane	Not detected	5		ug/L	1	67-72-1	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
2-Methylnaphthalene	Not detected	5		ug/L	1	91-57-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	



Analytical Laboratory Report

Lab Sample ID: S25228.03 (continued)

Sample Tag: B-22D

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/15/21 15:21, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Methyl iodide	Not detected	1		ug/L	1	74-88-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Styrene	Not detected	1		ug/L	1	100-42-5	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Tetrahydrofuran*	Not detected	90		ug/L	1	109-99-9	
Toluene	Not detected	1		ug/L	1	108-88-3	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
o-Xylene	Not detected	1		ug/L	1	95-47-6	
p,m-Xylene*	Not detected	2		ug/L	1		

Organics

Method: SW9020B, Run Date: 06/18/21 03:55, Analyst: GEL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
TOX*	88,800	10,000	3,330	ug/L	1		O

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



Analytical Laboratory Report

Lab Sample ID: S25228.04

Sample Tag: OBG MW-16D

Collected Date/Time: 06/10/2021 16:28

Matrix: Groundwater

COC Reference: 142922

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	125ml Plastic	HNO3	Yes	4.4	IR
2	40ml Glass	H2SO4	Yes	4.4	IR
1	250ml Amber	H2SO4	Yes	4.4	IR
1	1L Plastic	None	Yes	4.4	IR
1	125ml Plastic	NaOH	Yes	4.4	IR
3	40ml Glass	HCL	Yes	4.4	IR
1	125ml Amber	H2SO4	Yes	4.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	06/16/21 11:00	BML	
Metal Digestion	Completed	SW3015A	06/15/21 09:30	CCM	
Metal Digestion	Completed	SW3015A	06/15/21 12:00	CCM	

Inorganics

Method: E120.1, Run Date: 06/17/21 13:30, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Conductivity	636	1		umhos/cm	1		

Method: E300.0, Run Date: 06/14/21 09:45, Analyst: JDP

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chloride	Not detected	10	0.13	mg/L	10	16887-00-6	
Sulfate	28	10	1.0	mg/L	10	14808-79-8	

Method: E335.4/SM4500-CN, Run Date: 06/15/21 11:20, Analyst: JDP

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Cyanide, Total	Not detected	0.004	0.001	mg/L	2	57-12-5	

Method: E420.1, Run Date: 06/21/21 16:16, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Phenols	Not detected	0.02		mg/L	1.7		

Method: SM5310C, Run Date: 06/17/21 14:55, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
TOC	3.3	1		mg/L	1		

Metals

Method: E200.8, Run Date: 06/15/21 13:01, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Sodium	12.4	2.5		mg/L	50	7440-23-5	

Method: E200.8, Run Date: 06/15/21 11:15, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chromium, Dissolved	Not detected	0.005		mg/L	5	7440-47-3	
Copper, Dissolved	Not detected	0.005		mg/L	5	7440-50-8	
Iron, Dissolved	1.94	0.02		mg/L	5	7439-89-6	



Analytical Laboratory Report

Lab Sample ID: S25228.04 (continued)

Sample Tag: OBG MW-16D

Method: E200.8, Run Date: 06/15/21 11:15, Analyst: CCM (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Manganese, Dissolved	0.061	0.005		mg/L	5	7439-96-5	
Nickel, Dissolved	Not detected	0.005		mg/L	5	7440-02-0	
Zinc, Dissolved	Not detected	0.005		mg/L	5	7440-66-6	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/15/21 15:44, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	50		ug/L	1	67-64-1	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Benzene	Not detected	1		ug/L	1	71-43-2	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
Bromochloromethane	Not detected	1		ug/L	1	74-97-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Bromoform	Not detected	1		ug/L	1	75-25-2	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Chloroform	Not detected	1		ug/L	1	67-66-3	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Diethyl ether	Not detected	10		ug/L	1	60-29-7	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
trans-1,4-Dichloro-2-butene	Not detected	1		ug/L	1	110-57-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Hexachloroethane	Not detected	5		ug/L	1	67-72-1	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
2-Methylnaphthalene	Not detected	5		ug/L	1	91-57-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	



Analytical Laboratory Report

Lab Sample ID: S25228.04 (continued)

Sample Tag: OBG MW-16D

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/15/21 15:44, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Methyl iodide	Not detected	1		ug/L	1	74-88-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Styrene	Not detected	1		ug/L	1	100-42-5	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Tetrahydrofuran*	Not detected	90		ug/L	1	109-99-9	
Toluene	Not detected	1		ug/L	1	108-88-3	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
o-Xylene	Not detected	1		ug/L	1	95-47-6	
p,m-Xylene*	Not detected	2		ug/L	1		

Organics

Method: SW9020B, Run Date: 06/18/21 04:32, Analyst: GEL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
TOX*	Not detected	10,000	3,330	ug/L	1		OU

O-Analysis performed by outside laboratory. See attached report. U-Analyte not detected above reporting limit



Analytical Laboratory Report

Lab Sample ID: S25228.05

Sample Tag: B-9

Collected Date/Time: 06/11/2021 09:25

Matrix: Groundwater

COC Reference: 142922

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	125ml Plastic	HNO3	Yes	4.4	IR
2	40ml Glass	H2SO4	Yes	4.4	IR
1	250ml Amber	H2SO4	Yes	4.4	IR
1	1L Plastic	None	Yes	4.4	IR
1	125ml Plastic	NaOH	Yes	4.4	IR
3	40ml Glass	HCL	Yes	4.4	IR
1	125ml Amber	H2SO4	Yes	4.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	06/16/21 11:00	BML	
Metal Digestion	Completed	SW3015A	06/15/21 09:30	CCM	
Metal Digestion	Completed	SW3015A	06/15/21 12:00	CCM	

Inorganics

Method: E120.1, Run Date: 06/17/21 13:32, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Conductivity	2,168	1		umhos/cm	1		

Method: E300.0, Run Date: 06/14/21 09:55, Analyst: JDP

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chloride	62	10	0.13	mg/L	10	16887-00-6	

Method: E300.0, Run Date: 06/14/21 11:46, Analyst: JDP

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Sulfate	731	50	5.2	mg/L	50	14808-79-8	

Method: E335.4/SM4500-CN, Run Date: 06/15/21 11:22, Analyst: JDP

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Cyanide, Total	Not detected	0.004	0.001	mg/L	2	57-12-5	

Method: E420.1, Run Date: 06/21/21 16:18, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Phenols	Not detected	0.02		mg/L	1.7		

Method: SM5310C, Run Date: 06/17/21 15:14, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
TOC	5.4	1		mg/L	1		

Metals

Method: E200.8, Run Date: 06/15/21 13:03, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Sodium	50.7	2.5		mg/L	50	7440-23-5	



Analytical Laboratory Report

Lab Sample ID: S25228.05 (continued)

Sample Tag: B-9

Method: E200.8, Run Date: 06/15/21 11:17, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chromium, Dissolved	Not detected	0.005		mg/L	5	7440-47-3	
Copper, Dissolved	Not detected	0.005		mg/L	5	7440-50-8	
Iron, Dissolved	0.05	0.02		mg/L	5	7439-89-6	
Manganese, Dissolved	0.124	0.005		mg/L	5	7439-96-5	
Nickel, Dissolved	Not detected	0.005		mg/L	5	7440-02-0	
Zinc, Dissolved	Not detected	0.005		mg/L	5	7440-66-6	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/15/21 16:07, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	50		ug/L	1	67-64-1	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Benzene	Not detected	1		ug/L	1	71-43-2	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
Bromochloromethane	Not detected	1		ug/L	1	74-97-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Bromoform	Not detected	1		ug/L	1	75-25-2	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Chloroform	Not detected	1		ug/L	1	67-66-3	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Diethyl ether	Not detected	10		ug/L	1	60-29-7	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
trans-1,4-Dichloro-2-butene	Not detected	1		ug/L	1	110-57-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Hexachloroethane	Not detected	5		ug/L	1	67-72-1	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	



Analytical Laboratory Report

Lab Sample ID: S25228.05 (continued)

Sample Tag: B-9

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/15/21 16:07, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
2-Methylnaphthalene	Not detected	5		ug/L	1	91-57-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Methyl iodide	Not detected	1		ug/L	1	74-88-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Styrene	Not detected	1		ug/L	1	100-42-5	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Tetrahydrofuran*	Not detected	90		ug/L	1	109-99-9	
Toluene	Not detected	1		ug/L	1	108-88-3	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
o-Xylene	Not detected	1		ug/L	1	95-47-6	
p,m-Xylene*	Not detected	2		ug/L	1		

Organics

Method: SW9020B, Run Date: 06/22/21 01:38, Analyst: GEL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
TOX*	Not detected	10,000	3,330	ug/L	1		OU

O-Analysis performed by outside laboratory. See attached report. U-Analyte not detected above reporting limit



Analytical Laboratory Report

Lab Sample ID: S25228.06

Sample Tag: B-18A

Collected Date/Time: 06/11/2021 10:55

Matrix: Groundwater

COC Reference: 142922

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	125ml Plastic	HNO3	Yes	4.4	IR
2	40ml Glass	H2SO4	Yes	4.4	IR
1	250ml Amber	H2SO4	Yes	4.4	IR
1	1L Plastic	None	Yes	4.4	IR
1	125ml Plastic	NaOH	Yes	4.4	IR
3	40ml Glass	HCL	Yes	4.4	IR
1	125ml Amber	H2SO4	Yes	4.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	06/16/21 11:00	BML	
Metal Digestion	Completed	SW3015A	06/15/21 09:30	CCM	
Metal Digestion	Completed	SW3015A	06/15/21 12:00	CCM	

Inorganics

Method: E120.1, Run Date: 06/17/21 13:34, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Conductivity	1,080	1		umhos/cm	1		

Method: E300.0, Run Date: 06/14/21 10:05, Analyst: JDP

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chloride	21	10	0.13	mg/L	10	16887-00-6	
Sulfate	125	10	1.0	mg/L	10	14808-79-8	

Method: E335.4/SM4500-CN, Run Date: 06/15/21 11:24, Analyst: JDP

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Cyanide, Total	Not detected	0.004	0.001	mg/L	2	57-12-5	

Method: E420.1, Run Date: 06/21/21 16:20, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Phenols	Not detected	0.02		mg/L	1.7		

Method: SM5310C, Run Date: 06/17/21 15:33, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
TOC	3.7	1		mg/L	1		

Metals

Method: E200.8, Run Date: 06/15/21 13:04, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Sodium	40.0	2.5		mg/L	50	7440-23-5	

Method: E200.8, Run Date: 06/15/21 11:19, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chromium, Dissolved	Not detected	0.005		mg/L	5	7440-47-3	
Copper, Dissolved	Not detected	0.005		mg/L	5	7440-50-8	
Iron, Dissolved	0.03	0.02		mg/L	5	7439-89-6	



Analytical Laboratory Report

Lab Sample ID: S25228.06 (continued)

Sample Tag: B-18A

Method: E200.8, Run Date: 06/15/21 11:19, Analyst: CCM (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Manganese, Dissolved	0.040	0.005		mg/L	5	7439-96-5	
Nickel, Dissolved	Not detected	0.005		mg/L	5	7440-02-0	
Zinc, Dissolved	0.016	0.005		mg/L	5	7440-66-6	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/15/21 16:30, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	50		ug/L	1	67-64-1	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Benzene	Not detected	1		ug/L	1	71-43-2	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
Bromochloromethane	Not detected	1		ug/L	1	74-97-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Bromoform	Not detected	1		ug/L	1	75-25-2	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Chloroform	Not detected	1		ug/L	1	67-66-3	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Diethyl ether	Not detected	10		ug/L	1	60-29-7	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
trans-1,4-Dichloro-2-butene	Not detected	1		ug/L	1	110-57-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Hexachloroethane	Not detected	5		ug/L	1	67-72-1	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
2-Methylnaphthalene	Not detected	5		ug/L	1	91-57-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	



Analytical Laboratory Report

Lab Sample ID: S25228.06 (continued)

Sample Tag: B-18A

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/15/21 16:30, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Methyl iodide	Not detected	1		ug/L	1	74-88-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Styrene	Not detected	1		ug/L	1	100-42-5	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Tetrahydrofuran*	Not detected	90		ug/L	1	109-99-9	
Toluene	Not detected	1		ug/L	1	108-88-3	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
o-Xylene	Not detected	1		ug/L	1	95-47-6	
p,m-Xylene*	Not detected	2		ug/L	1		

Organics

Method: SW9020B, Run Date: 06/21/21 23:30, Analyst: GEL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
TOX*	8,780	10,000	3,330	ug/L	1		OJ

O-Analysis performed by outside laboratory. See attached report. J-Estimated value less than reporting limit, but greater than MDL



Analytical Laboratory Report

Lab Sample ID: S25228.07

Sample Tag: B-27D

Collected Date/Time: 06/11/2021 11:28

Matrix: Groundwater

COC Reference: 142922

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	125ml Plastic	HNO3	Yes	4.4	IR
2	40ml Glass	H2SO4	Yes	4.4	IR
1	250ml Amber	H2SO4	Yes	4.4	IR
1	1L Plastic	None	Yes	4.4	IR
1	125ml Plastic	NaOH	Yes	4.4	IR
3	40ml Glass	HCL	Yes	4.4	IR
1	125ml Amber	H2SO4	Yes	4.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	06/16/21 11:00	BML	
Metal Digestion	Completed	SW3015A	06/15/21 09:30	CCM	
Metal Digestion	Completed	SW3015A	06/15/21 12:00	CCM	

Inorganics

Method: E120.1, Run Date: 06/17/21 13:36, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Conductivity	660	1		umhos/cm	1		

Method: E300.0, Run Date: 06/14/21 10:15, Analyst: JDP

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chloride	Not detected	10	0.13	mg/L	10	16887-00-6	
Sulfate	14	10	1.0	mg/L	10	14808-79-8	

Method: E335.4/SM4500-CN, Run Date: 06/15/21 11:26, Analyst: JDP

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Cyanide, Total	Not detected	0.004	0.001	mg/L	2	57-12-5	

Method: E420.1, Run Date: 06/21/21 16:22, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Phenols	Not detected	0.02		mg/L	1.7		

Method: SM5310C, Run Date: 06/17/21 15:53, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
TOC	2.8	1		mg/L	1		

Metals

Method: E200.8, Run Date: 06/15/21 13:06, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Sodium	39.4	2.5		mg/L	50	7440-23-5	

Method: E200.8, Run Date: 06/15/21 11:21, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chromium, Dissolved	Not detected	0.005		mg/L	5	7440-47-3	
Copper, Dissolved	Not detected	0.005		mg/L	5	7440-50-8	
Iron, Dissolved	1.30	0.02		mg/L	5	7439-89-6	



Analytical Laboratory Report

Lab Sample ID: S25228.07 (continued)

Sample Tag: B-27D

Method: E200.8, Run Date: 06/15/21 11:21, Analyst: CCM (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Manganese, Dissolved	0.028	0.005		mg/L	5	7439-96-5	
Nickel, Dissolved	Not detected	0.005		mg/L	5	7440-02-0	
Zinc, Dissolved	Not detected	0.005		mg/L	5	7440-66-6	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/15/21 16:53, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	50		ug/L	1	67-64-1	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Benzene	Not detected	1		ug/L	1	71-43-2	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
Bromochloromethane	Not detected	1		ug/L	1	74-97-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Bromoform	Not detected	1		ug/L	1	75-25-2	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Chloroform	Not detected	1		ug/L	1	67-66-3	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Diethyl ether	Not detected	10		ug/L	1	60-29-7	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
trans-1,4-Dichloro-2-butene	Not detected	1		ug/L	1	110-57-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Hexachloroethane	Not detected	5		ug/L	1	67-72-1	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
2-Methylnaphthalene	Not detected	5		ug/L	1	91-57-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	



Analytical Laboratory Report

Lab Sample ID: S25228.07 (continued)

Sample Tag: B-27D

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/15/21 16:53, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Methyl iodide	Not detected	1		ug/L	1	74-88-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Styrene	Not detected	1		ug/L	1	100-42-5	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Tetrahydrofuran*	Not detected	90		ug/L	1	109-99-9	
Toluene	Not detected	1		ug/L	1	108-88-3	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
o-Xylene	Not detected	1		ug/L	1	95-47-6	
p,m-Xylene*	Not detected	2		ug/L	1		

Organics

Method: SW9020B, Run Date: 06/22/21 02:37, Analyst: GEL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
TOX*	8,520	10,000	3,330	ug/L	1		OJ

O-Analysis performed by outside laboratory. See attached report. J-Estimated value less than reporting limit, but greater than MDL



Analytical Laboratory Report

Lab Sample ID: S25228.08

Sample Tag: B-7

Collected Date/Time: 06/11/2021 12:15

Matrix: Groundwater

COC Reference: 142922

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	125ml Plastic	HNO3	Yes	4.4	IR
2	40ml Glass	H2SO4	Yes	4.4	IR
1	250ml Amber	H2SO4	Yes	4.4	IR
1	1L Plastic	None	Yes	4.4	IR
1	125ml Plastic	NaOH	Yes	4.4	IR
3	40ml Glass	HCL	Yes	4.4	IR
1	125ml Amber	H2SO4	Yes	4.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	06/16/21 11:00	BML	
Metal Digestion	Completed	SW3015A	06/15/21 09:30	CCM	
Metal Digestion	Completed	SW3015A	06/15/21 12:00	CCM	

Inorganics

Method: E120.1, Run Date: 06/17/21 13:38, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Conductivity	1,057	1		umhos/cm	1		

Method: E300.0, Run Date: 06/14/21 10:25, Analyst: JDP

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chloride	27	10	0.13	mg/L	10	16887-00-6	
Sulfate	167	10	1.0	mg/L	10	14808-79-8	

Method: E335.4/SM4500-CN, Run Date: 06/15/21 11:28, Analyst: JDP

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Cyanide, Total	Not detected	0.004	0.001	mg/L	2	57-12-5	

Method: E420.1, Run Date: 06/21/21 16:24, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Phenols	Not detected	0.02		mg/L	1.7		

Method: SM5310C, Run Date: 06/17/21 16:12, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
TOC	6.3	1		mg/L	1		

Metals

Method: E200.8, Run Date: 06/15/21 13:08, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Sodium	43.7	2.5		mg/L	50	7440-23-5	

Method: E200.8, Run Date: 06/15/21 11:23, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chromium, Dissolved	Not detected	0.005		mg/L	5	7440-47-3	
Copper, Dissolved	Not detected	0.005		mg/L	5	7440-50-8	
Iron, Dissolved	0.09	0.02		mg/L	5	7439-89-6	



Analytical Laboratory Report

Lab Sample ID: S25228.08 (continued)

Sample Tag: B-7

Method: E200.8, Run Date: 06/15/21 11:23, Analyst: CCM (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Manganese, Dissolved	0.006	0.005		mg/L	5	7439-96-5	
Nickel, Dissolved	Not detected	0.005		mg/L	5	7440-02-0	
Zinc, Dissolved	0.006	0.005		mg/L	5	7440-66-6	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/15/21 17:16, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	50		ug/L	1	67-64-1	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Benzene	Not detected	1		ug/L	1	71-43-2	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
Bromochloromethane	Not detected	1		ug/L	1	74-97-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Bromoform	Not detected	1		ug/L	1	75-25-2	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Chloroform	Not detected	1		ug/L	1	67-66-3	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Diethyl ether	Not detected	10		ug/L	1	60-29-7	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
trans-1,4-Dichloro-2-butene	Not detected	1		ug/L	1	110-57-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Hexachloroethane	Not detected	5		ug/L	1	67-72-1	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
2-Methylnaphthalene	Not detected	5		ug/L	1	91-57-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	



Analytical Laboratory Report

Lab Sample ID: S25228.08 (continued)

Sample Tag: B-7

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/15/21 17:16, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Methyl iodide	Not detected	1		ug/L	1	74-88-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Styrene	Not detected	1		ug/L	1	100-42-5	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Tetrahydrofuran*	Not detected	90		ug/L	1	109-99-9	
Toluene	Not detected	1		ug/L	1	108-88-3	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
o-Xylene	Not detected	1		ug/L	1	95-47-6	
p,m-Xylene*	Not detected	2		ug/L	1		

Organics

Method: SW9020B, Run Date: 06/22/21 03:11, Analyst: GEL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
TOX*	15,000	10,000	3,330	ug/L	1		O

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



Analytical Laboratory Report

Lab Sample ID: S25228.09

Sample Tag: MW-DUP-061121

Collected Date/Time: 06/11/2021 00:01

Matrix: Groundwater

COC Reference: 142922

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	125ml Plastic	HNO3	Yes	4.4	IR
2	40ml Glass	H2SO4	Yes	4.4	IR
1	250ml Amber	H2SO4	Yes	4.4	IR
1	1L Plastic	None	Yes	4.4	IR
1	125ml Plastic	NaOH	Yes	4.4	IR
3	40ml Glass	HCL	Yes	4.4	IR
1	125ml Amber	H2SO4	Yes	4.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	06/16/21 11:00	BML	
Metal Digestion	Completed	SW3015A	06/15/21 09:30	CCM	
Metal Digestion	Completed	SW3015A	06/15/21 12:00	CCM	

Inorganics

Method: E120.1, Run Date: 06/17/21 13:40, Analyst: JKB

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

Method: E300.0, Run Date: 06/14/21 10:35, Analyst: JDP

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chloride	Not detected	10	0.13	mg/L	10	16887-00-6	
Sulfate	14	10	1.0	mg/L	10	14808-79-8	

Method: E335.4/SM4500-CN, Run Date: 06/15/21 11:30, Analyst: JDP

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Cyanide, Total	Not detected	0.004	0.001	mg/L	2	57-12-5	

Method: E420.1, Run Date: 06/21/21 16:26, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Phenols	Not detected	0.02		mg/L	1.7		

Method: SM5310C, Run Date: 06/17/21 16:31, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
TOC	2.5	1		mg/L	1		

Metals

Method: E200.8, Run Date: 06/15/21 13:09, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Sodium	40.4	2.5		mg/L	50	7440-23-5	

Method: E200.8, Run Date: 06/15/21 11:25, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chromium, Dissolved	Not detected	0.005		mg/L	5	7440-47-3	
Copper, Dissolved	Not detected	0.005		mg/L	5	7440-50-8	
Iron, Dissolved	1.44	0.02		mg/L	5	7439-89-6	



Analytical Laboratory Report

Lab Sample ID: S25228.09 (continued)

Sample Tag: MW-DUP-061121

Method: E200.8, Run Date: 06/15/21 11:25, Analyst: CCM (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Manganese, Dissolved	0.031	0.005		mg/L	5	7439-96-5	
Nickel, Dissolved	Not detected	0.005		mg/L	5	7440-02-0	
Zinc, Dissolved	Not detected	0.005		mg/L	5	7440-66-6	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/15/21 17:39, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	50		ug/L	1	67-64-1	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Benzene	Not detected	1		ug/L	1	71-43-2	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
Bromochloromethane	Not detected	1		ug/L	1	74-97-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Bromoform	Not detected	1		ug/L	1	75-25-2	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Chloroform	Not detected	1		ug/L	1	67-66-3	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Diethyl ether	Not detected	10		ug/L	1	60-29-7	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
trans-1,4-Dichloro-2-butene	Not detected	1		ug/L	1	110-57-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Hexachloroethane	Not detected	5		ug/L	1	67-72-1	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
2-Methylnaphthalene	Not detected	5		ug/L	1	91-57-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	



Analytical Laboratory Report

Lab Sample ID: S25228.09 (continued)

Sample Tag: MW-DUP-061121

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/15/21 17:39, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Methyl iodide	Not detected	1		ug/L	1	74-88-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Styrene	Not detected	1		ug/L	1	100-42-5	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Tetrahydrofuran*	Not detected	90		ug/L	1	109-99-9	
Toluene	Not detected	1		ug/L	1	108-88-3	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
o-Xylene	Not detected	1		ug/L	1	95-47-6	
p,m-Xylene*	Not detected	2		ug/L	1		

Organics

Method: SW9020B, Run Date: 06/22/21 04:06, Analyst: GEL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
TOX*	10,400	10,000	3,330	ug/L	1		O

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



Analytical Laboratory Report

Lab Sample ID: S25228.10

Sample Tag: Equipment Blank-1

Collected Date/Time: 06/11/2021 12:50

Matrix: Water

COC Reference: 142922

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	125ml Plastic	HNO3	Yes	4.4	IR
2	40ml Glass	H2SO4	Yes	4.4	IR
1	250ml Amber	H2SO4	Yes	4.4	IR
1	1L Plastic	None	Yes	4.4	IR
1	125ml Plastic	NaOH	Yes	4.4	IR
3	40ml Glass	HCL	Yes	4.4	IR
1	125ml Amber	H2SO4	Yes	4.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	06/16/21 11:00	BML	
Metal Digestion	Completed	SW3015A	06/15/21 09:30	CCM	

Inorganics

Method: E120.1, Run Date: 06/17/21 13:42, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Conductivity	1.40	1		umhos/cm	1		

Method: E300.0, Run Date: 06/14/21 06:14, Analyst: JDP

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chloride	Not detected	2.5	0.03	mg/L	2.5	16887-00-6	
Sulfate	Not detected	2.5	0.26	mg/L	2.5	14808-79-8	

Method: E335.4/SM4500-CN, Run Date: 06/15/21 11:32, Analyst: JDP

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Cyanide, Total	Not detected	0.004	0.001	mg/L	2	57-12-5	

Method: E420.1, Run Date: 06/21/21 16:28, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Phenols	Not detected	0.02		mg/L	1.7		

Method: SM5310C, Run Date: 06/17/21 16:51, Analyst: JKB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
TOC	Not detected	1		mg/L	1		

Metals

Method: E200.8, Run Date: 06/15/21 12:04, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Sodium	Not detected	0.50		mg/L	2	7440-23-5	

Method: E200.8, Run Date: 06/15/21 10:39, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chromium	Not detected	0.005		mg/L	2	7440-47-3	
Copper	Not detected	0.005		mg/L	2	7440-50-8	
Iron	Not detected	0.02		mg/L	2	7439-89-6	
Manganese	Not detected	0.005		mg/L	2	7439-96-5	



Analytical Laboratory Report

Lab Sample ID: S25228.10 (continued)

Sample Tag: Equipment Blank-1

Method: E200.8, Run Date: 06/15/21 10:39, Analyst: CCM (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Nickel	Not detected	0.005		mg/L	2	7440-02-0	
Zinc	Not detected	0.005		mg/L	2	7440-66-6	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/15/21 14:12, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	50		ug/L	1	67-64-1	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Benzene	Not detected	1		ug/L	1	71-43-2	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
Bromochloromethane	Not detected	1		ug/L	1	74-97-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Bromoform	Not detected	1		ug/L	1	75-25-2	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Chloroform	Not detected	1		ug/L	1	67-66-3	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Diethyl ether	Not detected	10		ug/L	1	60-29-7	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
trans-1,4-Dichloro-2-butene	Not detected	1		ug/L	1	110-57-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Hexachloroethane	Not detected	5		ug/L	1	67-72-1	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
2-Methylnaphthalene	Not detected	5		ug/L	1	91-57-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	



Analytical Laboratory Report

Lab Sample ID: S25228.10 (continued)

Sample Tag: Equipment Blank-1

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/15/21 14:12, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Methyl iodide	Not detected	1		ug/L	1	74-88-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Styrene	Not detected	1		ug/L	1	100-42-5	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Tetrahydrofuran*	Not detected	90		ug/L	1	109-99-9	
Toluene	Not detected	1		ug/L	1	108-88-3	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
o-Xylene	Not detected	1		ug/L	1	95-47-6	
p,m-Xylene*	Not detected	2		ug/L	1		

Organics

Method: SW9020B, Run Date: 06/22/21 04:42, Analyst: GEL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
TOX*	Not detected	10,000	3,330	ug/L	1		OU

O-Analysis performed by outside laboratory. See attached report. U-Analyte not detected above reporting limit



Analytical Laboratory Report

Lab Sample ID: S25228.11

Sample Tag: Trip Blank-061121

Collected Date/Time: 06/11/2021 00:01

Matrix: Water

COC Reference: 142922

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	HCL	Yes	4.4	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	06/16/21 11:00	BML	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/15/21 13:48, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	50		ug/L	1	67-64-1	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Benzene	Not detected	1		ug/L	1	71-43-2	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
Bromochloromethane	Not detected	1		ug/L	1	74-97-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Bromoform	Not detected	1		ug/L	1	75-25-2	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Chloroform	Not detected	1		ug/L	1	67-66-3	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Diethyl ether	Not detected	10		ug/L	1	60-29-7	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
trans-1,4-Dichloro-2-butene	Not detected	1		ug/L	1	110-57-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	



Analytical Laboratory Report

Lab Sample ID: S25228.11 (continued)

Sample Tag: Trip Blank-061121

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 06/15/21 13:48, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Hexachloroethane	Not detected	5		ug/L	1	67-72-1	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
2-Methylnaphthalene	Not detected	5		ug/L	1	91-57-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Methyl iodide	Not detected	1		ug/L	1	74-88-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Styrene	Not detected	1		ug/L	1	100-42-5	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Tetrahydrofuran*	Not detected	90		ug/L	1	109-99-9	
Toluene	Not detected	1		ug/L	1	108-88-3	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
o-Xylene	Not detected	1		ug/L	1	95-47-6	
p,m-Xylene*	Not detected	2		ug/L	1		

Merit Laboratories Login Checklist

Lab Set ID:S25228

Client:OBG02 (Ramboll)

Project: RACER Coldwater Road

Submitted:06/11/2021 16:30 Login User: SRS

Attention: Clifford Yantz

Address: Ramboll
3600 Green Court Ste 750
Ann Arbor, MI 48105

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

Selection	Description	Note
Sample Receiving		
01. ☒ Yes ☐ No ☐ N/A	Samples are received at 4C +/- 2C Thermometer #	IR 4.4
02. ☒ Yes ☐ No ☐ N/A	Received on ice/ cooling process begun	
03. ☐ Yes ☒ No ☐ N/A	Samples shipped	
04. ☐ Yes ☒ No ☐ N/A	Samples left in 24 hr. drop box	
05. ☐ Yes ☐ No ☒ N/A	Are there custody seals/tape or is the drop box locked	
Chain of Custody		
06. ☒ Yes ☐ No ☐ N/A	COC adequately filled out	
07. ☒ Yes ☐ No ☐ N/A	COC signed and relinquished to the lab	
08. ☒ Yes ☐ No ☐ N/A	Sample tag on bottles match COC	
09. ☒ Yes ☐ No ☐ N/A	Subcontracting needed? Subcontacted to:	GEL
Preservation		
10. ☒ Yes ☐ No ☐ N/A	Do sample have correct chemical preservation	
11. ☒ Yes ☐ No ☐ N/A	Completed pH checks on preserved samples? (no VOAs)	
12. ☐ Yes ☒ No ☐ N/A	Did any samples need to be preserved in the lab?	
Bottle Conditions		
13. ☒ Yes ☐ No ☐ N/A	All bottles intact	
14. ☒ Yes ☐ No ☐ N/A	Appropriate analytical bottles are used	
15. ☒ Yes ☐ No ☐ N/A	Merit bottles used	
16. ☒ Yes ☐ No ☐ N/A	Sufficient sample volume received	
17. ☐ Yes ☒ No ☐ N/A	Samples require laboratory filtration	
18. ☒ Yes ☐ No ☐ N/A	Samples submitted within holding time	
19. ☐ Yes ☒ No ☐ N/A	Do water VOC or TOX bottles contain headspace	

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

Client Review By: _____ Date: _____

Merit Laboratories Bottle Preservation Check

Lab Set ID: S25228 Submitted: 06/11/2021 16:30

Client: OBG02 (Ramboll)

Project: RACER Coldwater Road

Initial Preservation Check: 06/11/2021 16:55 SRS

Preservation Recheck (E200.8): N/A

Attention: Clifford Yantz

Address: Ramboll

3600 Green Court Ste 750
Ann Arbor, MI 48105

Phone: 313-333-0211

FAX:

Email: Clifford.Yantz@ramboll.com

Sample ID	Bottle / Preservation	pH (Orig)	Add ml	pH (New)	Notes
S25228.01	125ml Amber H2SO4	<2			
S25228.01	125ml Plastic HNO3	<2			
S25228.01	125ml Plastic HNO3	<2			
S25228.01	125ml Plastic NaOH	>12			
S25228.01	250ml Amber H2SO4	<2			
S25228.02	125ml Amber H2SO4	<2			
S25228.02	125ml Plastic HNO3	<2			
S25228.02	125ml Plastic HNO3	<2			
S25228.02	125ml Plastic NaOH	>12			
S25228.02	250ml Amber H2SO4	<2			
S25228.03	125ml Amber H2SO4	<2			
S25228.03	125ml Plastic HNO3	<2			
S25228.03	125ml Plastic HNO3	<2			
S25228.03	125ml Plastic NaOH	>12			
S25228.03	250ml Amber H2SO4	<2			
S25228.04	125ml Amber H2SO4	<2			
S25228.04	125ml Plastic HNO3	<2			
S25228.04	125ml Plastic HNO3	<2			
S25228.04	125ml Plastic NaOH	>12			
S25228.04	250ml Amber H2SO4	<2			
S25228.05	125ml Amber H2SO4	<2			
S25228.05	125ml Plastic HNO3	<2			
S25228.05	125ml Plastic HNO3	<2			
S25228.05	125ml Plastic NaOH	>12			
S25228.05	250ml Amber H2SO4	<2			
S25228.06	125ml Amber H2SO4	<2			
S25228.06	125ml Plastic HNO3	<2			
S25228.06	125ml Plastic HNO3	<2			
S25228.06	125ml Plastic NaOH	>12			

Merit Laboratories Bottle Preservation Check

Lab Set ID: S25228 Submitted: 06/11/2021 16:30

Client: OBG02 (Ramboll)

Project: RACER Coldwater Road

Initial Preservation Check: 06/11/2021 16:55 SRS

Preservation Recheck (E200.8): N/A

Attention: Clifford Yantz

Address: Ramboll

3600 Green Court Ste 750
Ann Arbor, MI 48105

Phone: 313-333-0211

FAX:

Email: Clifford.Yantz@ramboll.com

Sample ID	Bottle / Preservation	pH (Orig)	Add ml	pH (New)	Notes
S25228.06	250ml Amber H2SO4	<2			
S25228.07	125ml Amber H2SO4	<2			
S25228.07	125ml Plastic HNO3	<2			
S25228.07	125ml Plastic HNO3	<2			
S25228.07	125ml Plastic NaOH	>12			
S25228.07	250ml Amber H2SO4	<2			
S25228.08	125ml Amber H2SO4	<2			
S25228.08	125ml Plastic HNO3	<2			
S25228.08	125ml Plastic HNO3	<2			
S25228.08	125ml Plastic NaOH	>12			
S25228.08	250ml Amber H2SO4	<2			
S25228.09	125ml Amber H2SO4	<2			
S25228.09	125ml Plastic HNO3	<2			
S25228.09	125ml Plastic HNO3	<2			
S25228.09	125ml Plastic NaOH	>12			
S25228.09	250ml Amber H2SO4	<2			
S25228.10	125ml Amber H2SO4	<2			
S25228.10	125ml Plastic HNO3	<2			
S25228.10	125ml Plastic NaOH	>12			
S25228.10	250ml Amber H2SO4	<2			



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

C.O.C. PAGE #

OF

142922

REPORT TO

CHAIN OF CUSTODY RECORD

INVOICE TO

CONTACT NAME <u>Clifford Vantz / Kevin Schneider</u>			
COMPANY <u>Ramboll</u>			
ADDRESS <u>3600 Green Court Ste 750</u>			
CITY <u>Ann Arbor</u>	STATE <u>MI</u>	ZIP CODE <u>48105</u>	
PHONE NO. <u>313-333-0211</u>	FAX NO.	P.O. NO. <u>1940002628 (tust 1)</u>	
E-MAIL ADDRESS <u>Kevin.Schneider@Ramboll.com</u> <u>Clifford.Vantz@Ramboll.com</u>		QUOTE NO.	

CONTACT NAME <u>SAME</u>		
COMPANY		
ADDRESS		
CITY	STATE	ZIP CODE
PHONE NO.	E-MAIL ADDRESS	

PROJECT NO./NAME <u>RACER Coldwater Road</u>	SAMPLER(S) - PLEASE PRINT/SIGN NAME <u>Kevin Schneider</u>
TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER	
DELIVERABLES REQUIRED ☐ STD ☒ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER	

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

Containers & Preservatives

MERIT LAB NO. FOR LAB USE ONLY	YEAR		SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	NONE	HCl	HNO ₃	H ₂ SO ₄	NaOH	MeOH	OTHER	VOCs	TOC / Tox	phenols	cyanide	sulfate	specific conductivity	chlorides	total sodium	Dissolved Metals	total metals	Certifications ☐ OHIO VAP ☐ Drinking Water ☐ DoD ☐ NPDES Project Locations ☐ Detroit ☐ New York ☐ Other Special Instructions
	DATE	TIME																					
25228.01	6/10/21	1140	B-21D	GW	11		1	3	2	4	1		X	X	X	X	X	X	X	X	X		Dissolved metals were field filtered
.02		1155	B-24C										X	X	X	X	X	X	X	X	X		
.03		1412	B-22D										X	X	X	X	X	X	X	X	X		
.04		1628	OBG MW-160										X	X	X	X	X	X	X	X	X		Metals ARE:
.05	6/11/21	925	B-9										X	X	X	X	X	X	X	X	X		Cr, Cu, Ni, Zn, Fe, Mn
.06		1055	B-18A										X	X	X	X	X	X	X	X	X		
.07		1128	B-27D										X	X	X	X	X	X	X	X	X		
.08		1215	B-7										X	X	X	X	X	X	X	X	X		
.09		-	MW-DUP-061121										X	X	X	X	X	X	X	X	X		
.10		1250	Equipment Blank-1	QC	10								X	X	X	X	X	X	X	X	X	X	
.11		-	Trip Blank-061121	QC	1								X										

RELINQUISHED BY: <u>[Signature]</u>	SAMPLER ☒	DATE <u>6/11/21</u>	TIME <u>1310</u>
RECEIVED BY: <u>[Signature]</u>		DATE <u>6/11/21</u>	TIME <u>1700</u>
RELINQUISHED BY: <u>[Signature]</u>		DATE <u>6/11/21</u>	TIME <u>16:00</u>
RECEIVED BY: <u>[Signature]</u>		DATE <u>6/11/21</u>	TIME <u>1630</u>

RELINQUISHED BY: <u>[Signature]</u>	DATE	TIME
RECEIVED BY: <u>[Signature]</u>	DATE	TIME
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS
NOTES: <u>4.4</u>		TEMP. ON ARRIVAL

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

June 25, 2021

John Lavery
Merit Laboratories Inc.
2680 East Lansing Drive
East Lansing, Michigan 48823

Re: Halogen Analysis
Work Order: 547292
SDG: S25228

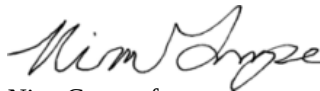
Dear John Lavery:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on June 15, 2021. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Test results for NELAP or ISO 17025 accredited tests are verified to meet the requirements of those standards, with any exceptions noted. The results reported relate only to the items tested and to the sample as received by the laboratory. These results may not be reproduced except as full reports without approval by the laboratory. Copies of GEL's accreditations and certifications can be found on our website at www.gel.com.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4523.

Sincerely,



Nina Gampe for
Samuel Hogan
Project Manager

Purchase Order: GELP20-0014
Enclosures

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 – (843) 556-8171 – www.gel.com

Certificate of Analysis Report for

MERI001 Merit Laboratories, Inc.

Client SDG: S25228 GEL Work Order: 547292

The Qualifiers in this report are defined as follows:

- * A quality control analyte recovery is outside of specified acceptance criteria
- ** Analyte is a Tracer compound
- ** Analyte is a surrogate compound
- J See case narrative for an explanation
- J Value is estimated
- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the limit as defined in the 'U' qualifier above.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Samuel Hogan.



Reviewed by _____

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: June 25, 2021

Company : Merit Laboratories Inc.
Address : 2680 East Lansing Drive

East Lansing, Michigan 48823

Contact: John Lavery
Project: Halogen Analysis

Client Sample ID:	S25228.01	Project:	MERI00220
Sample ID:	547292001	Client ID:	MERI001
Matrix:	Ground Water		
Collect Date:	10-JUN-21 11:40		
Receive Date:	15-JUN-21		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Halogen Analysis												
SW9020B TOX (Organic Halogen) "As Received"												
Total Organic Halogens	U	ND	3.33	10.0	ug/L		1	RMJ	06/18/21	0144	2140159	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 9020B	

Notes:

Column headers are defined as follows:

DF: Dilution Factor	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: June 25, 2021

Company : Merit Laboratories Inc.
Address : 2680 East Lansing Drive

East Lansing, Michigan 48823

Contact: John Lavery
Project: Halogen Analysis

Client Sample ID:	S25228.02	Project:	MERI00220
Sample ID:	547292002	Client ID:	MERI001
Matrix:	Ground Water		
Collect Date:	10-JUN-21 11:55		
Receive Date:	15-JUN-21		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Halogen Analysis												
SW9020B TOX (Organic Halogen) "As Received"												
Total Organic Halogens		11.4	3.33	10.0	ug/L		1	RMJ	06/18/21	0250	2140159	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 9020B	

Notes:

Column headers are defined as follows:

DF: Dilution Factor	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

GEL LABORATORIES LLC

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Certificate of Analysis

Report Date: June 25, 2021

Company : Merit Laboratories Inc.
Address : 2680 East Lansing Drive

East Lansing, Michigan 48823

Contact: John Lavery
Project: Halogen Analysis

Client Sample ID:	S25228.03	Project:	MERI00220
Sample ID:	547292003	Client ID:	MERI001
Matrix:	Ground Water		
Collect Date:	10-JUN-21 14:12		
Receive Date:	15-JUN-21		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Halogen Analysis												
SW9020B TOX (Organic Halogen) "As Received"												
Total Organic Halogens		88.8	3.33	10.0	ug/L		1	RMJ	06/18/21	0355	2140159	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 9020B	

Notes:

Column headers are defined as follows:

DF: Dilution Factor	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

GEL LABORATORIES LLC

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Certificate of Analysis

Report Date: June 25, 2021

Company : Merit Laboratories Inc.
Address : 2680 East Lansing Drive

East Lansing, Michigan 48823

Contact: John Lavery
Project: Halogen Analysis

Client Sample ID: S25228.04
Sample ID: 547292004
Matrix: Ground Water
Collect Date: 10-JUN-21 16:28
Receive Date: 15-JUN-21
Collector: Client

Project: MERI00220
Client ID: MERI001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Halogen Analysis												
SW9020B TOX (Organic Halogen) "As Received"												
Total Organic Halogens	U	ND	3.33	10.0	ug/L		1	RMJ	06/18/21	0432	2140159	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 9020B	

Notes:

Column headers are defined as follows:

DF: Dilution Factor	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date: June 25, 2021

Company : Merit Laboratories Inc.
Address : 2680 East Lansing Drive

East Lansing, Michigan 48823

Contact: John Lavery
Project: Halogen Analysis

Client Sample ID: S25228.05
Sample ID: 547292005
Matrix: Ground Water
Collect Date: 11-JUN-21 09:25
Receive Date: 15-JUN-21
Collector: Client

Project: MERI00220
Client ID: MERI001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Halogen Analysis												
SW9020B TOX (Organic Halogen) "As Received"												
Total Organic Halogens	U	ND	3.33	10.0	ug/L		1	RMJ	06/22/21	0138	2141282	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 9020B	

Notes:

Column headers are defined as follows:

DF: Dilution Factor	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

GEL LABORATORIES LLC

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Certificate of Analysis

Report Date: June 25, 2021

Company : Merit Laboratories Inc.
Address : 2680 East Lansing Drive

East Lansing, Michigan 48823

Contact: John Lavery
Project: Halogen Analysis

Client Sample ID: S25228.06
Sample ID: 547292006
Matrix: Ground Water
Collect Date: 11-JUN-21 10:55
Receive Date: 15-JUN-21
Collector: Client

Project: MERI00220
Client ID: MERI001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Halogen Analysis												
SW9020B TOX (Organic Halogen) "As Received"												
Total Organic Halogens	J	8.78	3.33	10.0	ug/L		1	RMJ	06/21/21	2330	2141282	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 9020B	

Notes:

Column headers are defined as follows:

DF: Dilution Factor	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date: June 25, 2021

Company : Merit Laboratories Inc.
Address : 2680 East Lansing Drive

East Lansing, Michigan 48823

Contact: John Lavery
Project: Halogen Analysis

Client Sample ID:	S25228.07	Project:	MERI00220
Sample ID:	547292007	Client ID:	MERI001
Matrix:	Ground Water		
Collect Date:	11-JUN-21 11:28		
Receive Date:	15-JUN-21		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Halogen Analysis												
SW9020B TOX (Organic Halogen) "As Received"												
Total Organic Halogens	J	8.52	3.33	10.0	ug/L		1	RMJ	06/22/21	0237	2141282	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 9020B	

Notes:

Column headers are defined as follows:

DF: Dilution Factor	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

GEL LABORATORIES LLC

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Certificate of Analysis

Report Date: June 25, 2021

Company : Merit Laboratories Inc.
Address : 2680 East Lansing Drive

East Lansing, Michigan 48823

Contact: John Lavery
Project: Halogen Analysis

Client Sample ID: S25228.08
Sample ID: 547292008
Matrix: Ground Water
Collect Date: 11-JUN-21 12:15
Receive Date: 15-JUN-21
Collector: Client

Project: MERI00220
Client ID: MERI001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Halogen Analysis												
SW9020B TOX (Organic Halogen) "As Received"												
Total Organic Halogens		15.0	3.33	10.0	ug/L		1	RMJ	06/22/21	0311	2141282	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 9020B	

Notes:

Column headers are defined as follows:

DF: Dilution Factor	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

GEL LABORATORIES LLC

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Certificate of Analysis

Report Date: June 25, 2021

Company : Merit Laboratories Inc.
Address : 2680 East Lansing Drive

East Lansing, Michigan 48823

Contact: John Lavery
Project: Halogen Analysis

Client Sample ID: S25228.09
Sample ID: 547292009
Matrix: Ground Water
Collect Date: 11-JUN-21 00:01
Receive Date: 15-JUN-21
Collector: Client

Project: MERI00220
Client ID: MERI001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Halogen Analysis												
SW9020B TOX (Organic Halogen) "As Received"												
Total Organic Halogens		10.4	3.33	10.0	ug/L		1	RMJ	06/22/21	0406	2141282	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 9020B	

Notes:

Column headers are defined as follows:

DF: Dilution Factor	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date: June 25, 2021

Company : Merit Laboratories Inc.
Address : 2680 East Lansing Drive

East Lansing, Michigan 48823

Contact: John Lavery
Project: Halogen Analysis

Client Sample ID: S25228.10
Sample ID: 547292010
Matrix: Ground Water
Collect Date: 11-JUN-21 12:50
Receive Date: 15-JUN-21
Collector: Client

Project: MERI00220
Client ID: MERI001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Halogen Analysis												
SW9020B TOX (Organic Halogen) "As Received"												
Total Organic Halogens	U	ND	3.33	10.0	ug/L		1	RMJ	06/22/21	0442	2141282	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 9020B	

Notes:

Column headers are defined as follows:

DF: Dilution Factor	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

GEL LABORATORIES LLC

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QC Summary

Report Date: June 25, 2021

Page 1 of 2

Merit Laboratories Inc.
2680 East Lansing Drive
East Lansing, Michigan

Contact: John Laverty

Workorder: 547292

Parmname	NOM	Sample	Qual	QC	Units	RPD/D%	REC%	Range	Anlst	Date	Time
Halogen Analysis											
Batch	2140159										
QC1204845056	547292001	DUP									
Total Organic Halogens		U	ND	U	ND	ug/L	N/A		RMJ	06/18/21	00:58
QC1204845055	LCS										
Total Organic Halogens	100				85.1	ug/L	85.1	(71%-120%)		06/18/21	00:13
QC1204845054	MB										
Total Organic Halogens			U	ND	ug/L					06/17/21	23:47
QC1204845057	547292001	MS									
Total Organic Halogens	100	U	ND		99.3	ug/L	99.3	(50%-144%)		06/18/21	02:08
Batch	2141282										
QC1204846973	547292006	DUP									
Total Organic Halogens		J	8.78	J	7.30	ug/L	18.4 ^	(+/-10.0)	RMJ	06/21/21	23:47
QC1204846972	LCS										
Total Organic Halogens	100				93.0	ug/L	93	(71%-120%)		06/21/21	23:08
QC1204846971	MB										
Total Organic Halogens			U	ND	ug/L					06/21/21	22:44
QC1204846974	547292006	MS									
Total Organic Halogens	100	J	8.78		115	ug/L	106	(50%-144%)		06/22/21	00:37

Notes:

The Qualifiers in this report are defined as follows:

- < Result is less than value reported
- > Result is greater than value reported
- B The target analyte was detected in the associated blank.
- E General Chemistry--Concentration of the target analyte exceeds the instrument calibration range

GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Workorder: 547292

Page 2 of 2

Parmname	NOM	Sample	Qual	QC	Units	RPD/D%	REC%	Range	Anlst	Date	Time
H	Analytical holding time was exceeded										
J	See case narrative for an explanation										
J	Value is estimated										
N/A	RPD or %Recovery limits do not apply.										
N1	See case narrative										
ND	Analyte concentration is not detected above the detection limit										
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier										
Q	One or more quality control criteria have not been met. Refer to the applicable narrative or DER.										
R	Per section 9.3.4.1 of Method 1664 Revision B, due to matrix spike recovery issues, this result may not be reported or used for regulatory compliance purposes.										
R	Sample results are rejected										
U	Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.										
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier										
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.										
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.										
d	5-day BOD--The 2:1 depletion requirement was not met for this sample										
e	5-day BOD--Test replicates show more than 30% difference between high and low values. The data is qualified per the method and can be used for reporting purposes										
h	Preparation or preservation holding time was exceeded										

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

* Indicates that a Quality Control parameter was not within specifications.

For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

**General Chemistry
Technical Case Narrative
Merit Laboratories, Inc.
SDG #: S25228
Work Order #: 547292**

Product: Total Organic Halogens (TOX)

Analytical Method: SW846 9020B

Analytical Procedure: GL-GC-E-007 REV# 16

Analytical Batch: 2140159

The following samples were analyzed using the above methods and analytical procedure(s).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
547292001	S25228.01
547292002	S25228.02
547292003	S25228.03
547292004	S25228.04
1204845054	Method Blank (MB)
1204845055	Laboratory Control Sample (LCS)
1204845056	547292001(S25228.01) Sample Duplicate (DUP)
1204845057	547292001(S25228.01) Matrix Spike (MS)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

Miscellaneous Information

Additional Comments

A pair of nitrate wash blanks is analyzed at the start of the batch. Although they are designated as ICB, they are performed for calculating purposes only. The value of the nitrate wash blanks are averaged and subtracted from all samples. Neither of these values should exceed 0.6 ug Cl. The PQL limit typically applied to ICB results does not apply in this application, since the results are used only to determine background concentrations and are subtracted from all calculated results.

Breakthrough effect

Breakthrough effect: If the value for a sample is greater than the reporting limit (10 ug/L), the result for the second slug should not be greater than 25% of the combined value of the first and second slug. Results which do not meet these criteria are designated with a "Fail" comment in the Breakthrough effect column on the Logbook page; however, the "fail" designation is not applicable for samples with a result of less than 10 ug/L.

Product: Total Organic Halogens (TOX)

Analytical Method: SW846 9020B

Analytical Procedure: GL-GC-E-007 REV# 16

Analytical Batch: 2141282

The following samples were analyzed using the above methods and analytical procedure(s).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
547292005	S25228.05
547292006	S25228.06
547292007	S25228.07
547292008	S25228.08
547292009	S25228.09
547292010	S25228.10
1204846971	Method Blank (MB)
1204846972	Laboratory Control Sample (LCS)
1204846973	547292006(S25228.06) Sample Duplicate (DUP)
1204846974	547292006(S25228.06) Matrix Spike (MS)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

Miscellaneous Information

Additional Comments

A pair of nitrate wash blanks is analyzed at the start of the batch. Although they are designated as ICB, they are performed for calculating purposes only. The value of the nitrate wash blanks are averaged and subtracted from all samples. Neither of these values should exceed 0.6 ug Cl. The PQL limit typically applied to ICB results does not apply in this application, since the results are used only to determine background concentrations and are subtracted from all calculated results.

Breakthrough effect

Breakthrough effect: If the value for a sample is greater than the reporting limit (10 ug/L), the result for the second slug should not be greater than 25% of the combined value of the first and second slug. Results which do not meet these criteria are designated with a "Fail" comment in the Breakthrough effect column on the Logbook page; however, the "fail" designation is not applicable for samples with a result of less than 10 ug/L.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.



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C.O.C. PAGE # OF

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INVOICE TO

NAME

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

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

YEAR DATE TIME

IDENTIFICATION-DESCRIPTION

SAMPLE TAG

MATRIX OF BOTTLES

Containers & Preservatives

OTHER H₂O₂ H₂SO₄ H₂CO₃ H₂PO₄ H₂PO₃ H₂PO₂ H₂PO₁ H₂PO₀ H₂PO₋₁ H₂PO₋₂ H₂PO₋₃ H₂PO₋₄ H₂PO₋₅ H₂PO₋₆ H₂PO₋₇ H₂PO₋₈ H₂PO₋₉ H₂PO₋₁₀ H₂PO₋₁₁ H₂PO₋₁₂ H₂PO₋₁₃ H₂PO₋₁₄ H₂PO₋₁₅ H₂PO₋₁₆ H₂PO₋₁₇ H₂PO₋₁₈ H₂PO₋₁₉ H₂PO₋₂₀ H₂PO₋₂₁ H₂PO₋₂₂ H₂PO₋₂₃ H₂PO₋₂₄ H₂PO₋₂₅ H₂PO₋₂₆ H₂PO₋₂₇ H₂PO₋₂₈ H₂PO₋₂₉ H₂PO₋₃₀ H₂PO₋₃₁ H₂PO₋₃₂ H₂PO₋₃₃ H₂PO₋₃₄ H₂PO₋₃₅ H₂PO₋₃₆ H₂PO₋₃₇ H₂PO₋₃₈ H₂PO₋₃₉ H₂PO₋₄₀ H₂PO₋₄₁ H₂PO₋₄₂ H₂PO₋₄₃ H₂PO₋₄₄ H₂PO₋₄₅ H₂PO₋₄₆ H₂PO₋₄₇ H₂PO₋₄₈ H₂PO₋₄₉ H₂PO₋₅₀ H₂PO₋₅₁ H₂PO₋₅₂ H₂PO₋₅₃ H₂PO₋₅₄ H₂PO₋₅₅ H₂PO₋₅₆ H₂PO₋₅₇ H₂PO₋₅₈ H₂PO₋₅₉ H₂PO₋₆₀ H₂PO₋₆₁ H₂PO₋₆₂ H₂PO₋₆₃ H₂PO₋₆₄ H₂PO₋₆₅ H₂PO₋₆₆ H₂PO₋₆₇ H₂PO₋₆₈ H₂PO₋₆₉ H₂PO₋₇₀ H₂PO₋₇₁ H₂PO₋₇₂ H₂PO₋₇₃ H₂PO₋₇₄ H₂PO₋₇₅ H₂PO₋₇₆ H₂PO₋₇₇ H₂PO₋₇₈ H₂PO₋₇₉ H₂PO₋₈₀ H₂PO₋₈₁ H₂PO₋₈₂ H₂PO₋₈₃ H₂PO₋₈₄ H₂PO₋₈₅ H₂PO₋₈₆ H₂PO₋₈₇ H₂PO₋₈₈ H₂PO₋₈₉ H₂PO₋₉₀ H₂PO₋₉₁ H₂PO₋₉₂ H₂PO₋₉₃ H₂PO₋₉₄ H₂PO₋₉₅ H₂PO₋₉₆ H₂PO₋₉₇ H₂PO₋₉₈ H₂PO₋₉₉ H₂PO₋₁₀₀ H₂PO₋₁₀₁ H₂PO₋₁₀₂ H₂PO₋₁₀₃ H₂PO₋₁₀₄ H₂PO₋₁₀₅ H₂PO₋₁₀₆ H₂PO₋₁₀₇ H₂PO₋₁₀₈ H₂PO₋₁₀₉ H₂PO₋₁₁₀ H₂PO₋₁₁₁ H₂PO₋₁₁₂ H₂PO₋₁₁₃ H₂PO₋₁₁₄ H₂PO₋₁₁₅ H₂PO₋₁₁₆ H₂PO₋₁₁₇ 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SH

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM 68 6/15/21

Client: MERI		SDG/AR/COC/Work Order: 547290-547292	
Received By: <i>[Signature]</i>		Date Received: 6/15/21	
Carrier and Tracking Number		FedEx Express FedEx Ground <u>UPS</u> Field Services Courier Other 1246647713 6143 3805	
Suspected Hazard Information	Yes ☐ No ☒	*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.	
A) Shipped as a DOT Hazardous?	Yes ☐ No ☒	Hazard Class Shipped: _____ UN#: _____ If UN2910, Is the Radioactive Shipment Survey Compliant? Yes ☐ No ☐	
B) Did the client designate the samples are to be received as radioactive?	Yes ☐ No ☒	COC notation or radioactive stickers on containers equal client designation.	
C) Did the RSO classify the samples as radioactive?	Yes ☐ No ☒	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): <u>0</u> <u>CPM</u> mR/hr Classified as: Rad 1 Rad 2 Rad 3	
D) Did the client designate samples are hazardous?	Yes ☐ No ☒	COC notation or hazard labels on containers equal client designation.	
E) Did the RSO identify possible hazards?	Yes ☐ No ☒	If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other: _____	
Sample Receipt Criteria		Yes ☐ NA ☒ No ☐	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	☒	Circle Applicable: Seal broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	☒	Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	☒	Preservation Method: <u>Wet Ice</u> Ice Packs Dry Ice None Other: _____ *all temperatures are recorded in Celsius TEMP: <u>2</u>
4	Daily check performed and passed on IR temperature gun?	☒	Temperature Device Serial #: <u>18121</u> Secondary Temperature Device Serial # (If Applicable): _____
5	Sample containers intact and sealed?	☒	Circle Applicable: Seal broken Damaged container Leaking container Other (describe)
6	Samples requiring chemical preservation at proper pH?	☒	Sample ID's and Containers Affected: _____ If Preservation added, Lot#: _____
7	Do any samples require Volatile Analysis?	☒	If Yes, are Encores or Soil Kits present for solids? Yes ☐ No ☒ NA (If yes, take to VOA Freezer) Do liquid VOA vials contain acid preservation? Yes ☐ No ☒ NA (If unknown, select No) Are liquid VOA vials free of headspace? Yes ☐ No ☒ NA Sample ID's and containers affected: _____
8	Samples received within holding time?	☒	ID's and tests affected: _____
9	Sample ID's on COC match ID's on bottles?	☒	ID's and containers affected: _____
10	Date & time on COC match date & time on bottles?	☒	Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11	Number of containers received match number indicated on COC?	☒	Circle Applicable: No container count on COC Other (describe)
12	Are sample containers identifiable as GEL provided by use of GEL labels?	☒	
13	COC form is properly signed in relinquished/received sections?	☒	Circle Applicable: Not relinquished Other (describe)
Comments (Use Continuation Form if needed):			

PM (or PMA) review: Initials GFB Date 6/15/21 Page 1 of 1

List of current GEL Certifications as of 25 June 2021

State	Certification
Alabama	42200
Alaska	17-018
Alaska Drinking Water	SC00012
Arkansas	88-0651
CLIA	42D0904046
California	2940
Colorado	SC00012
Connecticut	PH-0169
DoD ELAP/ ISO17025 A2LA	2567.01
Florida NELAP	E87156
Foreign Soils Permit	P330-15-00283, P330-15-00253
Georgia	SC00012
Georgia SDWA	967
Hawaii	SC00012
Idaho	SC00012
Illinois NELAP	200029
Indiana	C-SC-01
Kansas NELAP	E-10332
Kentucky SDWA	90129
Kentucky Wastewater	90129
Louisiana Drinking Water	LA024
Louisiana NELAP	03046 (AI33904)
Maine	2019020
Maryland	270
Massachusetts	M-SC012
Massachusetts PFAS Approv	Letter
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122021-1
New Hampshire NELAP	2054
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma	2019-165
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235-21-19
Utah NELAP	SC000122021-35
Vermont	VT87156
Virginia NELAP	460202
Washington	C780

Sample_No	Lab_Id	laboratory	Batch_No	Assoc_Blnk	Sample_Type	Analyte_Type	Coll_date	Rec_date	Ext_date	Anal_date	SDG
S25228.01	547292001	GEL	2140159	1204845054	SAMPLE	TARGET	06/10/21	06/15/21	06/18/21	06/18/21	S25228
S25228.02	547292002	GEL	2140159	1204845054	SAMPLE	TARGET	06/10/21	06/15/21	06/18/21	06/18/21	S25228
S25228.03	547292003	GEL	2140159	1204845054	SAMPLE	TARGET	06/10/21	06/15/21	06/18/21	06/18/21	S25228
S25228.04	547292004	GEL	2140159	1204845054	SAMPLE	TARGET	06/10/21	06/15/21	06/18/21	06/18/21	S25228
S25228.05	547292005	GEL	2141282	1204846971	SAMPLE	TARGET	06/11/21	06/15/21	06/22/21	06/22/21	S25228
S25228.06	547292006	GEL	2141282	1204846971	SAMPLE	TARGET	06/11/21	06/15/21	06/21/21	06/21/21	S25228
S25228.07	547292007	GEL	2141282	1204846971	SAMPLE	TARGET	06/11/21	06/15/21	06/22/21	06/22/21	S25228
S25228.08	547292008	GEL	2141282	1204846971	SAMPLE	TARGET	06/11/21	06/15/21	06/22/21	06/22/21	S25228
S25228.09	547292009	GEL	2141282	1204846971	SAMPLE	TARGET	06/11/21	06/15/21	06/22/21	06/22/21	S25228
S25228.10	547292010	GEL	2141282	1204846971	SAMPLE	TARGET	06/11/21	06/15/21	06/22/21	06/22/21	S25228
MB	1204845054	GEL	2140159	1204845054	MB	TARGET	06/17/21	06/17/21	06/17/21	06/17/21	S25228
LCS	1204845055	GEL	2140159	1204845054	LCS	SPIKE	06/18/21	06/18/21	06/18/21	06/18/21	S25228
S25228.01	1204845056	GEL	2140159	1204845054	DUP	TARGET	06/10/21	06/15/21	06/18/21	06/18/21	S25228
S25228.01	1204845057	GEL	2140159	1204845054	MS	SPIKE	06/10/21	06/15/21	06/18/21	06/18/21	S25228
MB	1204846971	GEL	2141282	1204846971	MB	TARGET	06/21/21	06/21/21	06/21/21	06/21/21	S25228
LCS	1204846972	GEL	2141282	1204846971	LCS	SPIKE	06/21/21	06/21/21	06/21/21	06/21/21	S25228
S25228.06	1204846973	GEL	2141282	1204846971	DUP	TARGET	06/11/21	06/15/21	06/21/21	06/21/21	S25228
S25228.06	1204846974	GEL	2141282	1204846971	MS	SPIKE	06/11/21	06/15/21	06/22/21	06/22/21	S25228

Parameter	Fraction	Method	Lab_Result	Uncertainty	Cas_num	Units	Lab_Qual	MDL	CRDL_CRQL	Dil_Factor	Pct_Moist
Total Organic Halogens	G	SW846 9020B	ND			UG/L	U	3.33	10.0	1.00	100
Total Organic Halogens	G	SW846 9020B	11.4			UG/L		3.33	10.0	1.00	100
Total Organic Halogens	G	SW846 9020B	88.8			UG/L		3.33	10.0	1.00	100
Total Organic Halogens	G	SW846 9020B	ND			UG/L	U	3.33	10.0	1.00	100
Total Organic Halogens	G	SW846 9020B	ND			UG/L	U	3.33	10.0	1.00	100
Total Organic Halogens	G	SW846 9020B	8.78			UG/L	J	3.33	10.0	1.00	100
Total Organic Halogens	G	SW846 9020B	8.52			UG/L	J	3.33	10.0	1.00	100
Total Organic Halogens	G	SW846 9020B	15.0			UG/L		3.33	10.0	1.00	100
Total Organic Halogens	G	SW846 9020B	10.4			UG/L		3.33	10.0	1.00	100
Total Organic Halogens	G	SW846 9020B	ND			UG/L	U	3.33	10.0	1.00	100
Total Organic Halogens	G	SW846 9020B	ND			UG/L	U	3.33	10.0	1.00	100
Total Organic Halogens	G	SW846 9020B	85.1			%		3.33	10.0	1.00	100
Total Organic Halogens	G	SW846 9020B	ND			UG/L	U	3.33	10.0	1.00	100
Total Organic Halogens	G	SW846 9020B	99.3			%		3.33	10.0	1.00	100
Total Organic Halogens	G	SW846 9020B	ND			UG/L	U	3.33	10.0	1.00	100
Total Organic Halogens	G	SW846 9020B	93			%		3.33	10.0	1.00	100
Total Organic Halogens	G	SW846 9020B	7.30			UG/L	J	3.33	10.0	1.00	100
Total Organic Halogens	G	SW846 9020B	106			%		3.33	10.0	1.00	100



Quality Control Report

Report ID: QC-S25228-01
Generated on 06/30/2021

Report to

Attention: Clifford Yantz
Ramboll
3600 Green Court Ste 750
Ann Arbor, MI 48105

Phone: 313-333-0211 FAX:

Report Produced by

Merit Laboratories
2680 East Lansing Drive
East Lansing, MI 48823

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

Report Summary

Lab Sample ID(s): S25228.01-S25228.11
Project: RACER Coldwater Road
Submitted Date/Time: 06/11/2021 16:30
Sampled by: Kevin Schneider
P.O. #: 1940002628 (TASK 1)

QC Report Sections

Cover Page (Page 1)
Analysis Summary (Pages 2-12)
Prep Batch Summary (Pages 13-16)
Surrogates per Lab Sample (Pages 17-27)
Surrogates per QC Sample (Page 28)
Batch QC Results (Pages 29-43)

Report Flag Descriptions

*: QC result is outside of indicated control limits
W: Surrogate result not applicable due to sample dilution

I certify that this data package is in compliance with the terms and conditions of the program, and project, and contractual requirements both technically and for completeness. Release of the data contained in this hardcopy data package and its computer-readable data submitted has been authorized by the Quality Assurance Manager and his/her designee, as verified by the following signature.

Barbara Ball
Quality Assurance Manager

QC Report - Analysis Summary

Lab Sample ID: S25228.01

Sample Tag: B-21D

Collected Date/Time: 06/10/2021 11:40

Matrix: Groundwater

COC Reference: 142922

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Inorganics						
Chloride	E300.0	06/14/21 09:15	CL210614-W1-A	CL210614-W1-A	No	BLK/LCS/MS/MSD/DU
Conductivity	E120.1	06/17/21 13:24	COND210617-W1	COND210617-W1	No	BLK/LCS/DUP
Cyanide, Total	E335.4/SM4500-CN	06/15/21 11:08	CN210615-W1	CN210615-W1	No	BLK/LCS/MS/MSD/DU
Phenols	E420.1	06/21/21 16:06	PHL210621-W1	PHL210621-W1	No	BLK/LCS/MS/DUP
Sulfate	E300.0	06/14/21 09:15	SFT210614-W1-A	SFT210614-W1-A	No	BLK/LCS/MS/MSD/DU
TOC	SM5310C	06/17/21 12:58	TOC210617-W1	TOC210617-W1	No	BLK/LCS/MS/MSD/DU
Metals						
Chromium, Dissolved	E200.8	06/15/21 11:10	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Copper, Dissolved	E200.8	06/15/21 11:10	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Iron, Dissolved	E200.8	06/15/21 11:10	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Manganese, Dissolved	E200.8	06/15/21 11:10	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Nickel, Dissolved	E200.8	06/15/21 11:10	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Sodium	E200.8	06/15/21 12:56	MT4-21-0615B	MTD-061521-4	No	BLK/LCS/MS/MSD
Zinc, Dissolved	E200.8	06/15/21 11:10	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Organics - Volatiles						
Volatile Organics - DEQ List	SW5030C/8260C	06/15/21 14:35	210615A7	VF210615W1	Yes	BLK/LCS/LCSD

QC Report - Analysis Summary

Lab Sample ID: S25228.02

Sample Tag: B-24r

Collected Date/Time: 06/10/2021 11:55

Matrix: Groundwater

COC Reference: 142922

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Inorganics						
Chloride	E300.0	06/14/21 09:25	CL210614-W1-A	CL210614-W1-A	No	BLK/LCS/MS/MSD/DU
Conductivity	E120.1	06/17/21 13:26	COND210617-W1	COND210617-W1	No	BLK/LCS/DUP
Cyanide, Total	E335.4/SM4500-CN	06/15/21 11:16	CN210615-W1	CN210615-W1	No	BLK/LCS/MS/MSD/DU
Phenols	E420.1	06/21/21 16:12	PHL210621-W1	PHL210621-W1	No	BLK/LCS/MS/DUP
Sulfate	E300.0	06/14/21 11:36	SFT210614-W1-A	SFT210614-W1-A	No	BLK/LCS/MS/MSD/DU
TOC	SM5310C	06/17/21 13:37	TOC210617-W1	TOC210617-W1	No	BLK/LCS/MS/MSD/DU
Metals						
Chromium, Dissolved	E200.8	06/15/21 11:11	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Copper, Dissolved	E200.8	06/15/21 11:11	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Iron, Dissolved	E200.8	06/15/21 11:11	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Manganese, Dissolved	E200.8	06/15/21 11:11	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Nickel, Dissolved	E200.8	06/15/21 11:11	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Sodium	E200.8	06/15/21 12:58	MT4-21-0615B	MTD-061521-4	No	BLK/LCS/MS/MSD
Zinc, Dissolved	E200.8	06/15/21 11:11	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Organics - Volatiles						
Volatile Organics - DEQ List	SW5030C/8260C	06/15/21 14:58	210615A7	VF210615W1	Yes	BLK/LCS/LCSD

QC Report - Analysis Summary

Lab Sample ID: S25228.03

Sample Tag: B-22D

Collected Date/Time: 06/10/2021 14:12

Matrix: Groundwater

COC Reference: 142922

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Inorganics						
Chloride	E300.0	06/14/21 09:35	CL210614-W1-A	CL210614-W1-A	No	BLK/LCS/MS/MSD/DU
Conductivity	E120.1	06/17/21 13:28	COND210617-W1	COND210617-W1	No	BLK/LCS/DUP
Cyanide, Total	E335.4/SM4500-CN	06/15/21 11:18	CN210615-W1	CN210615-W1	No	BLK/LCS/MS/MSD/DU
Phenols	E420.1	06/21/21 16:14	PHL210621-W1	PHL210621-W1	No	BLK/LCS/MS/DUP
Sulfate	E300.0	06/14/21 09:35	SFT210614-W1-A	SFT210614-W1-A	No	BLK/LCS/MS/MSD/DU
TOC	SM5310C	06/17/21 14:32	TOC210617-W1	TOC210617-W1	No	BLK/LCS/MS/MSD/DU
Metals						
Chromium, Dissolved	E200.8	06/15/21 11:13	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Copper, Dissolved	E200.8	06/15/21 11:13	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Iron, Dissolved	E200.8	06/15/21 11:13	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Manganese, Dissolved	E200.8	06/15/21 11:13	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Nickel, Dissolved	E200.8	06/15/21 11:13	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Sodium	E200.8	06/15/21 13:00	MT4-21-0615B	MTD-061521-4	No	BLK/LCS/MS/MSD
Zinc, Dissolved	E200.8	06/15/21 11:13	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Organics - Volatiles						
Volatile Organics - DEQ List	SW5030C/8260C	06/15/21 15:21	210615A7	VF210615W1	Yes	BLK/LCS/LCSD

QC Report - Analysis Summary

Lab Sample ID: S25228.04

Sample Tag: OBG MW-16D

Collected Date/Time: 06/10/2021 16:28

Matrix: Groundwater

COC Reference: 142922

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Inorganics						
Chloride	E300.0	06/14/21 09:45	CL210614-W1-A	CL210614-W1-A	No	BLK/LCS/MS/MSD/DU
Conductivity	E120.1	06/17/21 13:30	COND210617-W1	COND210617-W1	No	BLK/LCS/DUP
Cyanide, Total	E335.4/SM4500-CN	06/15/21 11:20	CN210615-W1	CN210615-W1	No	BLK/LCS/MS/MSD/DU
Phenols	E420.1	06/21/21 16:16	PHL210621-W1	PHL210621-W1	No	BLK/LCS/MS/DUP
Sulfate	E300.0	06/14/21 09:45	SFT210614-W1-A	SFT210614-W1-A	No	BLK/LCS/MS/MSD/DU
TOC	SM5310C	06/17/21 14:55	TOC210617-W1	TOC210617-W1	No	BLK/LCS/MS/MSD/DU
Metals						
Chromium, Dissolved	E200.8	06/15/21 11:15	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Copper, Dissolved	E200.8	06/15/21 11:15	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Iron, Dissolved	E200.8	06/15/21 11:15	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Manganese, Dissolved	E200.8	06/15/21 11:15	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Nickel, Dissolved	E200.8	06/15/21 11:15	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Sodium	E200.8	06/15/21 13:01	MT4-21-0615B	MTD-061521-4	No	BLK/LCS/MS/MSD
Zinc, Dissolved	E200.8	06/15/21 11:15	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Organics - Volatiles						
Volatile Organics - DEQ List	SW5030C/8260C	06/15/21 15:44	210615A7	VF210615W1	Yes	BLK/LCS/LCSD

QC Report - Analysis Summary

Lab Sample ID: S25228.05

Sample Tag: B-9

Collected Date/Time: 06/11/2021 09:25

Matrix: Groundwater

COC Reference: 142922

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Inorganics						
Chloride	E300.0	06/14/21 09:55	CL210614-W1-A	CL210614-W1-A	No	BLK/LCS/MS/MSD/DU
Conductivity	E120.1	06/17/21 13:32	COND210617-W1	COND210617-W1	No	BLK/LCS/DUP
Cyanide, Total	E335.4/SM4500-CN	06/15/21 11:22	CN210615-W1	CN210615-W1	No	BLK/LCS/MS/MSD/DU
Phenols	E420.1	06/21/21 16:18	PHL210621-W1	PHL210621-W1	No	BLK/LCS/MS/DUP
Sulfate	E300.0	06/14/21 11:46	SFT210614-W1-A	SFT210614-W1-A	No	BLK/LCS/MS/MSD/DU
TOC	SM5310C	06/17/21 15:14	TOC210617-W1	TOC210617-W1	No	BLK/LCS/MS/MSD/DU
Metals						
Chromium, Dissolved	E200.8	06/15/21 11:17	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Copper, Dissolved	E200.8	06/15/21 11:17	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Iron, Dissolved	E200.8	06/15/21 11:17	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Manganese, Dissolved	E200.8	06/15/21 11:17	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Nickel, Dissolved	E200.8	06/15/21 11:17	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Sodium	E200.8	06/15/21 13:03	MT4-21-0615B	MTD-061521-4	No	BLK/LCS/MS/MSD
Zinc, Dissolved	E200.8	06/15/21 11:17	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Organics - Volatiles						
Volatile Organics - DEQ List	SW5030C/8260C	06/15/21 16:07	210615A7	VF210615W1	Yes	BLK/LCS/LCSD

QC Report - Analysis Summary

Lab Sample ID: S25228.06

Sample Tag: B-18A

Collected Date/Time: 06/11/2021 10:55

Matrix: Groundwater

COC Reference: 142922

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Inorganics						
Chloride	E300.0	06/14/21 10:05	CL210614-W1-A	CL210614-W1-A	No	BLK/LCS/MS/MSD/DU
Conductivity	E120.1	06/17/21 13:34	COND210617-W1	COND210617-W1	No	BLK/LCS/DUP
Cyanide, Total	E335.4/SM4500-CN	06/15/21 11:24	CN210615-W1	CN210615-W1	No	BLK/LCS/MS/MSD/DU
Phenols	E420.1	06/21/21 16:20	PHL210621-W1	PHL210621-W1	No	BLK/LCS/MS/DUP
Sulfate	E300.0	06/14/21 10:05	SFT210614-W1-A	SFT210614-W1-A	No	BLK/LCS/MS/MSD/DU
TOC	SM5310C	06/17/21 15:33	TOC210617-W1	TOC210617-W1	No	BLK/LCS/MS/MSD/DU
Metals						
Chromium, Dissolved	E200.8	06/15/21 11:19	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Copper, Dissolved	E200.8	06/15/21 11:19	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Iron, Dissolved	E200.8	06/15/21 11:19	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Manganese, Dissolved	E200.8	06/15/21 11:19	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Nickel, Dissolved	E200.8	06/15/21 11:19	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Sodium	E200.8	06/15/21 13:04	MT4-21-0615B	MTD-061521-4	No	BLK/LCS/MS/MSD
Zinc, Dissolved	E200.8	06/15/21 11:19	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Organics - Volatiles						
Volatile Organics - DEQ List	SW5030C/8260C	06/15/21 16:30	210615A7	VF210615W1	Yes	BLK/LCS/LCSD

QC Report - Analysis Summary

Lab Sample ID: S25228.07

Sample Tag: B-27D

Collected Date/Time: 06/11/2021 11:28

Matrix: Groundwater

COC Reference: 142922

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Inorganics						
Chloride	E300.0	06/14/21 10:15	CL210614-W1-A	CL210614-W1-A	No	BLK/LCS/MS/MSD/DU
Conductivity	E120.1	06/17/21 13:36	COND210617-W1	COND210617-W1	No	BLK/LCS/DUP
Cyanide, Total	E335.4/SM4500-CN	06/15/21 11:26	CN210615-W1	CN210615-W1	No	BLK/LCS/MS/MSD/DU
Phenols	E420.1	06/21/21 16:22	PHL210621-W1	PHL210621-W1	No	BLK/LCS/MS/DUP
Sulfate	E300.0	06/14/21 10:15	SFT210614-W1-A	SFT210614-W1-A	No	BLK/LCS/MS/MSD/DU
TOC	SM5310C	06/17/21 15:53	TOC210617-W1	TOC210617-W1	No	BLK/LCS/MS/MSD/DU
Metals						
Chromium, Dissolved	E200.8	06/15/21 11:21	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Copper, Dissolved	E200.8	06/15/21 11:21	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Iron, Dissolved	E200.8	06/15/21 11:21	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Manganese, Dissolved	E200.8	06/15/21 11:21	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Nickel, Dissolved	E200.8	06/15/21 11:21	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Sodium	E200.8	06/15/21 13:06	MT4-21-0615B	MTD-061521-4	No	BLK/LCS/MS/MSD
Zinc, Dissolved	E200.8	06/15/21 11:21	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Organics - Volatiles						
Volatile Organics - DEQ List	SW5030C/8260C	06/15/21 16:53	210615A7	VF210615W1	Yes	BLK/LCS/LCSD

QC Report - Analysis Summary

Lab Sample ID: S25228.08

Sample Tag: B-7

Collected Date/Time: 06/11/2021 12:15

Matrix: Groundwater

COC Reference: 142922

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Inorganics						
Chloride	E300.0	06/14/21 10:25	CL210614-W1-A	CL210614-W1-A	No	BLK/LCS/MS/MSD/DU
Conductivity	E120.1	06/17/21 13:38	COND210617-W1	COND210617-W1	No	BLK/LCS/DUP
Cyanide, Total	E335.4/SM4500-CN	06/15/21 11:28	CN210615-W1	CN210615-W1	No	BLK/LCS/MS/MSD/DU
Phenols	E420.1	06/21/21 16:24	PHL210621-W1	PHL210621-W1	No	BLK/LCS/MS/DUP
Sulfate	E300.0	06/14/21 10:25	SFT210614-W1-A	SFT210614-W1-A	No	BLK/LCS/MS/MSD/DU
TOC	SM5310C	06/17/21 16:12	TOC210617-W1	TOC210617-W1	No	BLK/LCS/MS/MSD/DU
Metals						
Chromium, Dissolved	E200.8	06/15/21 11:23	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Copper, Dissolved	E200.8	06/15/21 11:23	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Iron, Dissolved	E200.8	06/15/21 11:23	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Manganese, Dissolved	E200.8	06/15/21 11:23	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Nickel, Dissolved	E200.8	06/15/21 11:23	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Sodium	E200.8	06/15/21 13:08	MT4-21-0615B	MTD-061521-4	No	BLK/LCS/MS/MSD
Zinc, Dissolved	E200.8	06/15/21 11:23	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Organics - Volatiles						
Volatile Organics - DEQ List	SW5030C/8260C	06/15/21 17:16	210615A7	VF210615W1	Yes	BLK/LCS/LCSD

QC Report - Analysis Summary

Lab Sample ID: S25228.09

Sample Tag: MW-DUP-061121

Collected Date/Time: 06/11/2021 00:01

Matrix: Groundwater

COC Reference: 142922

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Inorganics						
Chloride	E300.0	06/14/21 10:35	CL210614-W1-A	CL210614-W1-A	No	BLK/LCS/MS/MSD/DU
Conductivity	E120.1	06/17/21 13:40	COND210617-W1	COND210617-W1	No	BLK/LCS/DUP
Cyanide, Total	E335.4/SM4500-CN	06/15/21 11:30	CN210615-W1	CN210615-W1	No	BLK/LCS/MS/MSD/DU
Phenols	E420.1	06/21/21 16:26	PHL210621-W1	PHL210621-W1	No	BLK/LCS/MS/DUP
Sulfate	E300.0	06/14/21 10:35	SFT210614-W1-A	SFT210614-W1-A	No	BLK/LCS/MS/MSD/DU
TOC	SM5310C	06/17/21 16:31	TOC210617-W1	TOC210617-W1	No	BLK/LCS/MS/MSD/DU
Metals						
Chromium, Dissolved	E200.8	06/15/21 11:25	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Copper, Dissolved	E200.8	06/15/21 11:25	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Iron, Dissolved	E200.8	06/15/21 11:25	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Manganese, Dissolved	E200.8	06/15/21 11:25	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Nickel, Dissolved	E200.8	06/15/21 11:25	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Sodium	E200.8	06/15/21 13:09	MT4-21-0615B	MTD-061521-4	No	BLK/LCS/MS/MSD
Zinc, Dissolved	E200.8	06/15/21 11:25	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Organics - Volatiles						
Volatile Organics - DEQ List	SW5030C/8260C	06/15/21 17:39	210615A7	VF210615W1	Yes	BLK/LCS/LCSD

QC Report - Analysis Summary

Lab Sample ID: S25228.10

Sample Tag: Equipment Blank-1

Collected Date/Time: 06/11/2021 12:50

Matrix: Water

COC Reference: 142922

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Inorganics						
Chloride	E300.0	06/14/21 06:14	CL210614-W1-A	CL210614-W1-A	No	BLK/LCS/MS/MSD/DU
Conductivity	E120.1	06/17/21 13:42	COND210617-W1	COND210617-W1	No	BLK/LCS/DUP
Cyanide, Total	E335.4/SM4500-CN	06/15/21 11:32	CN210615-W1	CN210615-W1	No	BLK/LCS/MS/MSD/DU
Phenols	E420.1	06/21/21 16:28	PHL210621-W1	PHL210621-W1	No	BLK/LCS/MS/DUP
Sulfate	E300.0	06/14/21 06:14	SFT210614-W1-A	SFT210614-W1-A	No	BLK/LCS/MS/MSD/DU
TOC	SM5310C	06/17/21 16:51	TOC210617-W1	TOC210617-W1	No	BLK/LCS/MS/MSD/DU
Metals						
Chromium	E200.8	06/15/21 10:39	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Copper	E200.8	06/15/21 10:39	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Iron	E200.8	06/15/21 10:39	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Manganese	E200.8	06/15/21 10:39	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Nickel	E200.8	06/15/21 10:39	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Sodium	E200.8	06/15/21 12:04	MT4-21-0615B	MTD-061521-3	No	BLK/LCS/MS/MSD
Zinc	E200.8	06/15/21 10:39	MT4-21-0615A	MTD-061521-1	No	BLK/LCS/MS/MSD
Organics - Volatiles						
Volatile Organics - DEQ List	SW5030C/8260C	06/15/21 14:12	210615A7	VF210615W1	Yes	BLK/LCS/LCSD

QC Report - Analysis Summary

Lab Sample ID: S25228.11

Sample Tag: Trip Blank-061121

Collected Date/Time: 06/11/2021 00:01

Matrix: Water

COC Reference: 142922

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
Volatile Organics - DEQ List	SW5030C/8260C	06/15/21 13:48	210615A7	VF210615W1	Yes	BLK/LCS/LCSD

QC Report - Prep Batch Summary

Inorganics, Prep Batch ID: CL210614-W1-A

Surrogates: No, QC Types: BLK/LCS/MS/MSD/DUP

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S25228.01	Chloride	E300.0	06/14/21 09:15	CL210614-W1-A
S25228.02	Chloride	E300.0	06/14/21 09:25	CL210614-W1-A
S25228.03	Chloride	E300.0	06/14/21 09:35	CL210614-W1-A
S25228.04	Chloride	E300.0	06/14/21 09:45	CL210614-W1-A
S25228.05	Chloride	E300.0	06/14/21 09:55	CL210614-W1-A
S25228.06	Chloride	E300.0	06/14/21 10:05	CL210614-W1-A
S25228.07	Chloride	E300.0	06/14/21 10:15	CL210614-W1-A
S25228.08	Chloride	E300.0	06/14/21 10:25	CL210614-W1-A
S25228.09	Chloride	E300.0	06/14/21 10:35	CL210614-W1-A
S25228.10	Chloride	E300.0	06/14/21 06:14	CL210614-W1-A

Inorganics, Prep Batch ID: CN210615-W1

Surrogates: No, QC Types: BLK/LCS/MS/MSD/DUP

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S25228.01	Cyanide, Total	E335.4/SM4500-CN	06/15/21 11:08	CN210615-W1
S25228.02	Cyanide, Total	E335.4/SM4500-CN	06/15/21 11:16	CN210615-W1
S25228.03	Cyanide, Total	E335.4/SM4500-CN	06/15/21 11:18	CN210615-W1
S25228.04	Cyanide, Total	E335.4/SM4500-CN	06/15/21 11:20	CN210615-W1
S25228.05	Cyanide, Total	E335.4/SM4500-CN	06/15/21 11:22	CN210615-W1
S25228.06	Cyanide, Total	E335.4/SM4500-CN	06/15/21 11:24	CN210615-W1
S25228.07	Cyanide, Total	E335.4/SM4500-CN	06/15/21 11:26	CN210615-W1
S25228.08	Cyanide, Total	E335.4/SM4500-CN	06/15/21 11:28	CN210615-W1
S25228.09	Cyanide, Total	E335.4/SM4500-CN	06/15/21 11:30	CN210615-W1
S25228.10	Cyanide, Total	E335.4/SM4500-CN	06/15/21 11:32	CN210615-W1

Inorganics, Prep Batch ID: COND210617-W1

Surrogates: No, QC Types: BLK/LCS/DUP

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S25228.01	Conductivity	E120.1	06/17/21 13:24	COND210617-W1
S25228.02	Conductivity	E120.1	06/17/21 13:26	COND210617-W1
S25228.03	Conductivity	E120.1	06/17/21 13:28	COND210617-W1
S25228.04	Conductivity	E120.1	06/17/21 13:30	COND210617-W1
S25228.05	Conductivity	E120.1	06/17/21 13:32	COND210617-W1
S25228.06	Conductivity	E120.1	06/17/21 13:34	COND210617-W1
S25228.07	Conductivity	E120.1	06/17/21 13:36	COND210617-W1
S25228.08	Conductivity	E120.1	06/17/21 13:38	COND210617-W1
S25228.09	Conductivity	E120.1	06/17/21 13:40	COND210617-W1
S25228.10	Conductivity	E120.1	06/17/21 13:42	COND210617-W1

Inorganics, Prep Batch ID: PHL210621-W1

Surrogates: No, QC Types: BLK/LCS/MS/DUP

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S25228.01	Phenols	E420.1	06/21/21 16:06	PHL210621-W1
S25228.02	Phenols	E420.1	06/21/21 16:12	PHL210621-W1
S25228.03	Phenols	E420.1	06/21/21 16:14	PHL210621-W1
S25228.04	Phenols	E420.1	06/21/21 16:16	PHL210621-W1
S25228.05	Phenols	E420.1	06/21/21 16:18	PHL210621-W1
S25228.06	Phenols	E420.1	06/21/21 16:20	PHL210621-W1
S25228.07	Phenols	E420.1	06/21/21 16:22	PHL210621-W1
S25228.08	Phenols	E420.1	06/21/21 16:24	PHL210621-W1

QC Report - Prep Batch Summary

Inorganics, Prep Batch ID: PHL210621-W1 (continued)

Surrogates: No, QC Types: BLK/LCS/MS/DUP

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S25228.09	Phenols	E420.1	06/21/21 16:26	PHL210621-W1
S25228.10	Phenols	E420.1	06/21/21 16:28	PHL210621-W1

Inorganics, Prep Batch ID: SFT210614-W1-A

Surrogates: No, QC Types: BLK/LCS/MS/MSD/DUP

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S25228.01	Sulfate	E300.0	06/14/21 09:15	SFT210614-W1-A
S25228.02	Sulfate	E300.0	06/14/21 11:36	SFT210614-W1-A
S25228.03	Sulfate	E300.0	06/14/21 09:35	SFT210614-W1-A
S25228.04	Sulfate	E300.0	06/14/21 09:45	SFT210614-W1-A
S25228.05	Sulfate	E300.0	06/14/21 11:46	SFT210614-W1-A
S25228.06	Sulfate	E300.0	06/14/21 10:05	SFT210614-W1-A
S25228.07	Sulfate	E300.0	06/14/21 10:15	SFT210614-W1-A
S25228.08	Sulfate	E300.0	06/14/21 10:25	SFT210614-W1-A
S25228.09	Sulfate	E300.0	06/14/21 10:35	SFT210614-W1-A
S25228.10	Sulfate	E300.0	06/14/21 06:14	SFT210614-W1-A

Inorganics, Prep Batch ID: TOC210617-W1

Surrogates: No, QC Types: BLK/LCS/MS/MSD/DUP

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S25228.01	TOC	SM5310C	06/17/21 12:58	TOC210617-W1
S25228.02	TOC	SM5310C	06/17/21 13:37	TOC210617-W1
S25228.03	TOC	SM5310C	06/17/21 14:32	TOC210617-W1
S25228.04	TOC	SM5310C	06/17/21 14:55	TOC210617-W1
S25228.05	TOC	SM5310C	06/17/21 15:14	TOC210617-W1
S25228.06	TOC	SM5310C	06/17/21 15:33	TOC210617-W1
S25228.07	TOC	SM5310C	06/17/21 15:53	TOC210617-W1
S25228.08	TOC	SM5310C	06/17/21 16:12	TOC210617-W1
S25228.09	TOC	SM5310C	06/17/21 16:31	TOC210617-W1
S25228.10	TOC	SM5310C	06/17/21 16:51	TOC210617-W1

Metals, Prep Batch ID: MTD-061521-1

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S25228.01	Chromium, Dissolved	E200.8	06/15/21 11:10	MT4-21-0615A
S25228.01	Copper, Dissolved	E200.8	06/15/21 11:10	MT4-21-0615A
S25228.01	Iron, Dissolved	E200.8	06/15/21 11:10	MT4-21-0615A
S25228.01	Manganese, Dissolved	E200.8	06/15/21 11:10	MT4-21-0615A
S25228.01	Nickel, Dissolved	E200.8	06/15/21 11:10	MT4-21-0615A
S25228.01	Zinc, Dissolved	E200.8	06/15/21 11:10	MT4-21-0615A
S25228.02	Chromium, Dissolved	E200.8	06/15/21 11:11	MT4-21-0615A
S25228.02	Copper, Dissolved	E200.8	06/15/21 11:11	MT4-21-0615A
S25228.02	Iron, Dissolved	E200.8	06/15/21 11:11	MT4-21-0615A
S25228.02	Manganese, Dissolved	E200.8	06/15/21 11:11	MT4-21-0615A
S25228.02	Nickel, Dissolved	E200.8	06/15/21 11:11	MT4-21-0615A
S25228.02	Zinc, Dissolved	E200.8	06/15/21 11:11	MT4-21-0615A
S25228.03	Chromium, Dissolved	E200.8	06/15/21 11:13	MT4-21-0615A
S25228.03	Copper, Dissolved	E200.8	06/15/21 11:13	MT4-21-0615A
S25228.03	Iron, Dissolved	E200.8	06/15/21 11:13	MT4-21-0615A

QC Report - Prep Batch Summary

Metals, Prep Batch ID: MTD-061521-1 (continued)

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S25228.03	Manganese, Dissolved	E200.8	06/15/21 11:13	MT4-21-0615A
S25228.03	Nickel, Dissolved	E200.8	06/15/21 11:13	MT4-21-0615A
S25228.03	Zinc, Dissolved	E200.8	06/15/21 11:13	MT4-21-0615A
S25228.04	Chromium, Dissolved	E200.8	06/15/21 11:15	MT4-21-0615A
S25228.04	Copper, Dissolved	E200.8	06/15/21 11:15	MT4-21-0615A
S25228.04	Iron, Dissolved	E200.8	06/15/21 11:15	MT4-21-0615A
S25228.04	Manganese, Dissolved	E200.8	06/15/21 11:15	MT4-21-0615A
S25228.04	Nickel, Dissolved	E200.8	06/15/21 11:15	MT4-21-0615A
S25228.04	Zinc, Dissolved	E200.8	06/15/21 11:15	MT4-21-0615A
S25228.05	Chromium, Dissolved	E200.8	06/15/21 11:17	MT4-21-0615A
S25228.05	Copper, Dissolved	E200.8	06/15/21 11:17	MT4-21-0615A
S25228.05	Iron, Dissolved	E200.8	06/15/21 11:17	MT4-21-0615A
S25228.05	Manganese, Dissolved	E200.8	06/15/21 11:17	MT4-21-0615A
S25228.05	Nickel, Dissolved	E200.8	06/15/21 11:17	MT4-21-0615A
S25228.05	Zinc, Dissolved	E200.8	06/15/21 11:17	MT4-21-0615A
S25228.06	Chromium, Dissolved	E200.8	06/15/21 11:19	MT4-21-0615A
S25228.06	Copper, Dissolved	E200.8	06/15/21 11:19	MT4-21-0615A
S25228.06	Iron, Dissolved	E200.8	06/15/21 11:19	MT4-21-0615A
S25228.06	Manganese, Dissolved	E200.8	06/15/21 11:19	MT4-21-0615A
S25228.06	Nickel, Dissolved	E200.8	06/15/21 11:19	MT4-21-0615A
S25228.06	Zinc, Dissolved	E200.8	06/15/21 11:19	MT4-21-0615A
S25228.07	Chromium, Dissolved	E200.8	06/15/21 11:21	MT4-21-0615A
S25228.07	Copper, Dissolved	E200.8	06/15/21 11:21	MT4-21-0615A
S25228.07	Iron, Dissolved	E200.8	06/15/21 11:21	MT4-21-0615A
S25228.07	Manganese, Dissolved	E200.8	06/15/21 11:21	MT4-21-0615A
S25228.07	Nickel, Dissolved	E200.8	06/15/21 11:21	MT4-21-0615A
S25228.07	Zinc, Dissolved	E200.8	06/15/21 11:21	MT4-21-0615A
S25228.08	Chromium, Dissolved	E200.8	06/15/21 11:23	MT4-21-0615A
S25228.08	Copper, Dissolved	E200.8	06/15/21 11:23	MT4-21-0615A
S25228.08	Iron, Dissolved	E200.8	06/15/21 11:23	MT4-21-0615A
S25228.08	Manganese, Dissolved	E200.8	06/15/21 11:23	MT4-21-0615A
S25228.08	Nickel, Dissolved	E200.8	06/15/21 11:23	MT4-21-0615A
S25228.08	Zinc, Dissolved	E200.8	06/15/21 11:23	MT4-21-0615A
S25228.09	Chromium, Dissolved	E200.8	06/15/21 11:25	MT4-21-0615A
S25228.09	Copper, Dissolved	E200.8	06/15/21 11:25	MT4-21-0615A
S25228.09	Iron, Dissolved	E200.8	06/15/21 11:25	MT4-21-0615A
S25228.09	Manganese, Dissolved	E200.8	06/15/21 11:25	MT4-21-0615A
S25228.09	Nickel, Dissolved	E200.8	06/15/21 11:25	MT4-21-0615A
S25228.09	Zinc, Dissolved	E200.8	06/15/21 11:25	MT4-21-0615A
S25228.10	Chromium	E200.8	06/15/21 10:39	MT4-21-0615A
S25228.10	Copper	E200.8	06/15/21 10:39	MT4-21-0615A
S25228.10	Iron	E200.8	06/15/21 10:39	MT4-21-0615A
S25228.10	Manganese	E200.8	06/15/21 10:39	MT4-21-0615A
S25228.10	Nickel	E200.8	06/15/21 10:39	MT4-21-0615A
S25228.10	Zinc	E200.8	06/15/21 10:39	MT4-21-0615A

QC Report - Prep Batch Summary

Metals, Prep Batch ID: MTD-061521-3

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S25228.10	Sodium	E200.8	06/15/21 12:04	MT4-21-0615B

Metals, Prep Batch ID: MTD-061521-4

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S25228.01	Sodium	E200.8	06/15/21 12:56	MT4-21-0615B
S25228.02	Sodium	E200.8	06/15/21 12:58	MT4-21-0615B
S25228.03	Sodium	E200.8	06/15/21 13:00	MT4-21-0615B
S25228.04	Sodium	E200.8	06/15/21 13:01	MT4-21-0615B
S25228.05	Sodium	E200.8	06/15/21 13:03	MT4-21-0615B
S25228.06	Sodium	E200.8	06/15/21 13:04	MT4-21-0615B
S25228.07	Sodium	E200.8	06/15/21 13:06	MT4-21-0615B
S25228.08	Sodium	E200.8	06/15/21 13:08	MT4-21-0615B
S25228.09	Sodium	E200.8	06/15/21 13:09	MT4-21-0615B

Organics - Volatiles, Prep Batch ID: VF210615W1

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S25228.01	Volatile Organics - DEQ List	SW5030C/8260C	06/15/21 14:35	210615A7
S25228.02	Volatile Organics - DEQ List	SW5030C/8260C	06/15/21 14:58	210615A7
S25228.03	Volatile Organics - DEQ List	SW5030C/8260C	06/15/21 15:21	210615A7
S25228.04	Volatile Organics - DEQ List	SW5030C/8260C	06/15/21 15:44	210615A7
S25228.05	Volatile Organics - DEQ List	SW5030C/8260C	06/15/21 16:07	210615A7
S25228.06	Volatile Organics - DEQ List	SW5030C/8260C	06/15/21 16:30	210615A7
S25228.07	Volatile Organics - DEQ List	SW5030C/8260C	06/15/21 16:53	210615A7
S25228.08	Volatile Organics - DEQ List	SW5030C/8260C	06/15/21 17:16	210615A7
S25228.09	Volatile Organics - DEQ List	SW5030C/8260C	06/15/21 17:39	210615A7
S25228.10	Volatile Organics - DEQ List	SW5030C/8260C	06/15/21 14:12	210615A7
S25228.11	Volatile Organics - DEQ List	SW5030C/8260C	06/15/21 13:48	210615A7

QC Report - Surrogates per Lab Sample

Lab Sample ID: S25228.01

Sample Tag: B-21D

Collected Date/Time: 06/10/2021 11:40

Matrix: Groundwater

COC Reference: 142922

Organics - Volatiles, Analysis: Volatile Organics - DEQ List

Run in Batch: 210615A7, Run Date: 06/15/2021 14:35, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		93.2	80.0	124.0
1,2-Dichloroethane-D4		92.4	72.0	125.0
Toluene-D8		93.5	89.0	112.0

Lab Sample ID: S25228.02

Sample Tag: B-24r

Collected Date/Time: 06/10/2021 11:55

Matrix: Groundwater

COC Reference: 142922

Organics - Volatiles, Analysis: Volatile Organics - DEQ List

Run in Batch: 210615A7, Run Date: 06/15/2021 14:58, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		94.4	80.0	124.0
1,2-Dichloroethane-D4		96.9	72.0	125.0
Toluene-D8		95.2	89.0	112.0

QC Report - Surrogates per Lab Sample

Lab Sample ID: S25228.03

Sample Tag: B-22D

Collected Date/Time: 06/10/2021 14:12

Matrix: Groundwater

COC Reference: 142922

Organics - Volatiles, Analysis: Volatile Organics - DEQ List

Run in Batch: 210615A7, Run Date: 06/15/2021 15:21, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		95.1	80.0	124.0
1,2-Dichloroethane-D4		97.6	72.0	125.0
Toluene-D8		94.1	89.0	112.0

QC Report - Surrogates per Lab Sample

Lab Sample ID: S25228.04

Sample Tag: OBG MW-16D

Collected Date/Time: 06/10/2021 16:28

Matrix: Groundwater

COC Reference: 142922

Organics - Volatiles, Analysis: Volatile Organics - DEQ List

Run in Batch: 210615A7, Run Date: 06/15/2021 15:44, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		95.1	80.0	124.0
1,2-Dichloroethane-D4		97.9	72.0	125.0
Toluene-D8		95.0	89.0	112.0

QC Report - Surrogates per Lab Sample

Lab Sample ID: S25228.05

Sample Tag: B-9

Collected Date/Time: 06/11/2021 09:25

Matrix: Groundwater

COC Reference: 142922

Organics - Volatiles, Analysis: Volatile Organics - DEQ List

Run in Batch: 210615A7, Run Date: 06/15/2021 16:07, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		93.6	80.0	124.0
1,2-Dichloroethane-D4		98.7	72.0	125.0
Toluene-D8		95.6	89.0	112.0

QC Report - Surrogates per Lab Sample

Lab Sample ID: S25228.06

Sample Tag: B-18A

Collected Date/Time: 06/11/2021 10:55

Matrix: Groundwater

COC Reference: 142922

Organics - Volatiles, Analysis: Volatile Organics - DEQ List

Run in Batch: 210615A7, Run Date: 06/15/2021 16:30, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		95.1	80.0	124.0
1,2-Dichloroethane-D4		94.6	72.0	125.0
Toluene-D8		93.4	89.0	112.0

QC Report - Surrogates per Lab Sample

Lab Sample ID: S25228.07

Sample Tag: B-27D

Collected Date/Time: 06/11/2021 11:28

Matrix: Groundwater

COC Reference: 142922

Organics - Volatiles, Analysis: Volatile Organics - DEQ List

Run in Batch: 210615A7, Run Date: 06/15/2021 16:53, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		94.8	80.0	124.0
1,2-Dichloroethane-D4		95.9	72.0	125.0
Toluene-D8		94.4	89.0	112.0

QC Report - Surrogates per Lab Sample

Lab Sample ID: S25228.08

Sample Tag: B-7

Collected Date/Time: 06/11/2021 12:15

Matrix: Groundwater

COC Reference: 142922

Organics - Volatiles, Analysis: Volatile Organics - DEQ List

Run in Batch: 210615A7, Run Date: 06/15/2021 17:16, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		94.6	80.0	124.0
1,2-Dichloroethane-D4		102.0	72.0	125.0
Toluene-D8		94.9	89.0	112.0

QC Report - Surrogates per Lab Sample

Lab Sample ID: S25228.09

Sample Tag: MW-DUP-061121

Collected Date/Time: 06/11/2021 00:01

Matrix: Groundwater

COC Reference: 142922

Organics - Volatiles, Analysis: Volatile Organics - DEQ List

Run in Batch: 210615A7, Run Date: 06/15/2021 17:39, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		93.7	80.0	124.0
1,2-Dichloroethane-D4		97.0	72.0	125.0
Toluene-D8		95.8	89.0	112.0

QC Report - Surrogates per Lab Sample

Lab Sample ID: S25228.10

Sample Tag: Equipment Blank-1

Collected Date/Time: 06/11/2021 12:50

Matrix: Water

COC Reference: 142922

Organics - Volatiles, Analysis: Volatile Organics - DEQ List

Run in Batch: 210615A7, Run Date: 06/15/2021 14:12, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		92.6	80.0	124.0
1,2-Dichloroethane-D4		90.2	72.0	125.0
Toluene-D8		94.2	89.0	112.0

QC Report - Surrogates per Lab Sample

Lab Sample ID: S25228.11

Sample Tag: Trip Blank-061121

Collected Date/Time: 06/11/2021 00:01

Matrix: Water

COC Reference: 142922

Organics - Volatiles, Analysis: Volatile Organics - DEQ List

Run in Batch: 210615A7, Run Date: 06/15/2021 13:48, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		94.5	80.0	124.0
1,2-Dichloroethane-D4		94.8	72.0	125.0
Toluene-D8		94.2	89.0	112.0

QC Report - Surrogates per QC Sample

Organics - Volatiles, Prep Batch ID: VF210615W1

QC Types: BLK/LCS/LCSD

Blank (BLK)

Lab Sample ID: 210615A7.BLKW15A

Run in Batch: 210615A7, Run Date: 06/15/2021 12:28, Prep Date: 06/15/2021, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		93.7	80.0	124.0
1,2-Dichloroethane-D4		91.7	72.0	125.0
Toluene-D8		94.2	89.0	112.0

Laboratory Control Sample (LCS)

Lab Sample ID: 210615A7.LCSW15A

Run in Batch: 210615A7, Run Date: 06/15/2021 11:19, Prep Date: 06/15/2021, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		93.7	80.0	124.0
1,2-Dichloroethane-D4		88.7	72.0	125.0
Toluene-D8		96.2	89.0	112.0

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: 210615A7.LCSDW15A, Parent Sample ID: 210615A7.LCSW15A

Run in Batch: 210615A7, Run Date: 06/15/2021 11:42, Prep Date: 06/15/2021, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		94.1	80.0	124.0
1,2-Dichloroethane-D4		93.2	72.0	125.0
Toluene-D8		96.9	89.0	112.0

QC Report - Batch QC Results

Inorganics, Prep Batch ID: CL210614-W1-A

Surrogates: No, QC Types: BLK/LCS/MS/MSD/DUP

Blank (BLK)

Lab Sample ID: CL210614-W1-A.LRB1

Run in Batch: CL210614-W1-A, Run Date: 06/14/2021 08:32, Prep Date: 06/14/2021, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Chloride		ND	1	mg/L

Laboratory Control Sample (LCS)

Lab Sample ID: CL210614-W1-A.LCS1

Run in Batch: CL210614-W1-A, Run Date: 06/14/2021 08:55, Prep Date: 06/14/2021, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Chloride		97	90	110

Matrix Spike (MS)

Lab Sample ID: CL210614-W1-A.MS1, Parent Sample ID: S25228.01

Run in Batch: CL210614-W1-A, Run Date: 06/14/2021 11:05, Prep Date: 06/14/2021, Matrix: Liquid, Dilution: 10

Analyte	Flags	% Rec	LCL	UCL
Chloride		98	80	120

Matrix Spike Duplicate (MSD)

Lab Sample ID: CL210614-W1-A.MSD1, Parent Sample ID: CL210614-W1-A.MS1

Run in Batch: CL210614-W1-A, Run Date: 06/14/2021 11:15, Prep Date: 06/14/2021, Matrix: Liquid, Dilution: 10

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Chloride		98	80	120	0	15

Duplicate (DUP)

Lab Sample ID: CL210614-W1-A.DP1, Parent Sample ID: S25228.01

Run in Batch: CL210614-W1-A, Run Date: 06/14/2021 10:55, Prep Date: 06/14/2021, Matrix: Liquid, Dilution: 10

Analyte	Flags	RPD	RPD CL
Chloride		<1	15

QC Report - Batch QC Results

Inorganics, Prep Batch ID: CN210615-W1

Surrogates: No, QC Types: BLK/LCS/MS/MSD/DUP

Blank (BLK)

Lab Sample ID: CN210615-W1.LRB1

Run in Batch: CN210615-W1, Run Date: 06/15/2021 11:00, Prep Date: 06/15/2021, Matrix: Liquid, Dilution: 2

Analyte	Flags	Conc	RDL	Units
Cyanide, Total		ND	0.004	mg/L

Laboratory Control Sample (LCS)

Lab Sample ID: CN210615-W1.LCS1

Run in Batch: CN210615-W1, Run Date: 06/15/2021 11:06, Prep Date: 06/15/2021, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Cyanide, Total		105	90	110

Matrix Spike (MS)

Lab Sample ID: CN210615-W1.MS1, Parent Sample ID: S25228.01

Run in Batch: CN210615-W1, Run Date: 06/15/2021 11:12, Prep Date: 06/15/2021, Matrix: Liquid, Dilution: 2

Analyte	Flags	% Rec	LCL	UCL
Cyanide, Total		96	80	120

Matrix Spike Duplicate (MSD)

Lab Sample ID: CN210615-W1.MSD1, Parent Sample ID: CN210615-W1.MS1

Run in Batch: CN210615-W1, Run Date: 06/15/2021 11:14, Prep Date: 06/15/2021, Matrix: Liquid, Dilution: 2

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Cyanide, Total		94	80	120	2	15

Duplicate (DUP)

Lab Sample ID: CN210615-W1.DP1, Parent Sample ID: S25228.01

Run in Batch: CN210615-W1, Run Date: 06/15/2021 11:10, Prep Date: 06/15/2021, Matrix: Liquid, Dilution: 2

Analyte	Flags	RPD	RPD CL
Cyanide, Total		<1	15

QC Report - Batch QC Results

Inorganics, Prep Batch ID: COND210617-W1

Surrogates: No, QC Types: BLK/LCS/DUP

Blank (BLK)

Lab Sample ID: COND210617-W1.LRB1

Run in Batch: COND210617-W1, Run Date: 06/17/2021 13:00, Prep Date: 06/17/2021, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Conductivity		ND	1	mg/L

Laboratory Control Sample (LCS)

Lab Sample ID: COND210617-W1.LCS1

Run in Batch: COND210617-W1, Run Date: 06/17/2021 13:06, Prep Date: 06/17/2021, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Conductivity		100	90	110

Laboratory Control Sample (LCS)

Lab Sample ID: COND210617-W1.LCS2

Run in Batch: COND210617-W1, Run Date: 06/17/2021 13:08, Prep Date: 06/17/2021, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Conductivity		95	90	110

Duplicate (DUP)

Lab Sample ID: COND210617-W1.DP1, Parent Sample ID: S25171.01

Run in Batch: COND210617-W1, Run Date: 06/17/2021 13:12, Prep Date: 06/17/2021, Matrix: Liquid, Dilution: 6

Analyte	Flags	RPD	RPD CL
Conductivity		<1	15

QC Report - Batch QC Results

Inorganics, Prep Batch ID: PHL210621-W1

Surrogates: No, QC Types: BLK/LCS/MS/DUP

Blank (BLK)

Lab Sample ID: PHL210621-W1.LRB1

Run in Batch: PHL210621-W1, Run Date: 06/21/2021 16:00, Prep Date: 06/21/2021, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Phenols		ND	0.01	mg/L

Laboratory Control Sample (LCS)

Lab Sample ID: PHL210621-W1.LCS1

Run in Batch: PHL210621-W1, Run Date: 06/21/2021 16:04, Prep Date: 06/21/2021, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Phenols		104	90	110

Matrix Spike (MS)

Lab Sample ID: PHL210621-W1.MS1, Parent Sample ID: S25228.01

Run in Batch: PHL210621-W1, Run Date: 06/21/2021 16:10, Prep Date: 06/21/2021, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Phenols		109	80	120

Duplicate (DUP)

Lab Sample ID: PHL210621-W1.DP1, Parent Sample ID: S25228.01

Run in Batch: PHL210621-W1, Run Date: 06/21/2021 16:08, Prep Date: 06/21/2021, Matrix: Liquid, Dilution: 1.7

Analyte	Flags	RPD	RPD CL
Phenols		<1	15

QC Report - Batch QC Results

Inorganics, Prep Batch ID: SFT210614-W1-A

Surrogates: No, QC Types: BLK/LCS/MS/MSD/DUP

Blank (BLK)

Lab Sample ID: SFT210614-W1-A.LRB1

Run in Batch: SFT210614-W1-A, Run Date: 06/14/2021 08:32, Prep Date: 06/14/2021, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Sulfate		ND	1	mg/L

Laboratory Control Sample (LCS)

Lab Sample ID: SFT210614-W1-A.LCS1

Run in Batch: SFT210614-W1-A, Run Date: 06/14/2021 08:55, Prep Date: 06/14/2021, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Sulfate		98	90	110

Matrix Spike (MS)

Lab Sample ID: SFT210614-W1-A.MS1, Parent Sample ID: S25228.01

Run in Batch: SFT210614-W1-A, Run Date: 06/14/2021 11:05, Prep Date: 06/14/2021, Matrix: Liquid, Dilution: 10

Analyte	Flags	% Rec	LCL	UCL
Sulfate		104	80	120

Matrix Spike Duplicate (MSD)

Lab Sample ID: SFT210614-W1-A.MSD1, Parent Sample ID: SFT210614-W1-A.MS1

Run in Batch: SFT210614-W1-A, Run Date: 06/14/2021 11:15, Prep Date: 06/14/2021, Matrix: Liquid, Dilution: 10

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Sulfate		105	80	120	1	15

Duplicate (DUP)

Lab Sample ID: SFT210614-W1-A.DP1, Parent Sample ID: S25228.01

Run in Batch: SFT210614-W1-A, Run Date: 06/14/2021 10:55, Prep Date: 06/14/2021, Matrix: Liquid, Dilution: 10

Analyte	Flags	RPD	RPD CL
Sulfate		1	15

QC Report - Batch QC Results

Inorganics, Prep Batch ID: TOC210617-W1

Surrogates: No, QC Types: BLK/LCS/MS/MSD/DUP

Blank (BLK)

Lab Sample ID: TOC210617-W1.LRB1

Run in Batch: TOC210617-W1, Run Date: 06/17/2021 11:59, Prep Date: 06/17/2021, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
TOC		ND	1	mg/L

Laboratory Control Sample (LCS)

Lab Sample ID: TOC210617-W1.LCS1

Run in Batch: TOC210617-W1, Run Date: 06/17/2021 12:39, Prep Date: 06/17/2021, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
TOC		99	90	110

Matrix Spike (MS)

Lab Sample ID: TOC210617-W1.MS1, Parent Sample ID: S25228.02

Run in Batch: TOC210617-W1, Run Date: 06/17/2021 13:57, Prep Date: 06/17/2021, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
TOC		94	80	120

Matrix Spike Duplicate (MSD)

Lab Sample ID: TOC210617-W1.MSD1, Parent Sample ID: TOC210617-W1.MS1

Run in Batch: TOC210617-W1, Run Date: 06/17/2021 14:16, Prep Date: 06/17/2021, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
TOC		93	80	120	1	15

Duplicate (DUP)

Lab Sample ID: TOC210617-W1.DP1, Parent Sample ID: S25228.01

Run in Batch: TOC210617-W1, Run Date: 06/17/2021 13:18, Prep Date: 06/17/2021, Matrix: Liquid, Dilution: 1

Analyte	Flags	RPD	RPD CL
TOC		3	15

QC Report - Batch QC Results

Metals, Prep Batch ID: MTD-061521-1

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Blank (BLK)

Lab Sample ID: MT4-21-0615A.022.LRB

Run in Batch: MT4-21-0615A, Run Date: 06/15/2021 10:38, Prep Date: 06/15/2021, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Chromium		ND	0.001	mg/L
Copper		ND	0.001	mg/L
Iron		ND	0.004	mg/L
Manganese		ND	0.001	mg/L
Nickel		ND	0.001	mg/L
Zinc		ND	0.001	mg/L

Laboratory Control Sample (LCS)

Lab Sample ID: MT4-21-0615A.020.LCS

Run in Batch: MT4-21-0615A, Run Date: 06/15/2021 10:36, Prep Date: 06/15/2021, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Chromium		106	85	115
Copper		111	85	115
Iron		108	85	115
Manganese		109	85	115
Nickel		109	85	115
Zinc		106	85	115

Matrix Spike (MS)

Lab Sample ID: MT4-21-0615A.040.MS, Parent Sample ID: S25134.04

Run in Batch: MT4-21-0615A, Run Date: 06/15/2021 11:01, Prep Date: 06/15/2021, Matrix: Liquid, Dilution: 5

Analyte	Flags	% Rec	LCL	UCL
Chromium		112	75	125
Copper		104	75	125
Iron		112	75	125
Manganese		110	75	125
Nickel		110	75	125
Zinc		108	75	125

Matrix Spike (MS)

Lab Sample ID: MT4-21-0615A.062.MS, Parent Sample ID: S25228.09

Run in Batch: MT4-21-0615A, Run Date: 06/15/2021 11:27, Prep Date: 06/15/2021, Matrix: Liquid, Dilution: 5

Analyte	Flags	% Rec	LCL	UCL
Chromium		113	75	125
Copper		107	75	125
Iron		124	75	125
Manganese		116	75	125
Nickel		106	75	125
Zinc		112	75	125

Matrix Spike Duplicate (MSD)

Lab Sample ID: MT4-21-0615A.041.MSD, Parent Sample ID: MT4-21-0615A.040.MS

Run in Batch: MT4-21-0615A, Run Date: 06/15/2021 11:02, Prep Date: 06/15/2021, Matrix: Liquid, Dilution: 5

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Chromium		110	75	125	2	20
Copper		107	75	125	3	20

QC Report - Batch QC Results

Metals, Prep Batch ID: MTD-061521-1 (continued)

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Matrix Spike Duplicate (MSD) (continued)

Lab Sample ID: MT4-21-0615A.041.MSD, Parent Sample ID: MT4-21-0615A.040.MS

Run in Batch: MT4-21-0615A, Run Date: 06/15/2021 11:02, Prep Date: 06/15/2021, Matrix: Liquid, Dilution: 5

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Iron		80	75	125	3	20
Manganese		108	75	125	1	20
Nickel		101	75	125	8	20
Zinc		110	75	125	2	20

Matrix Spike Duplicate (MSD)

Lab Sample ID: MT4-21-0615A.063.MSD, Parent Sample ID: MT4-21-0615A.062.MS

Run in Batch: MT4-21-0615A, Run Date: 06/15/2021 11:28, Prep Date: 06/15/2021, Matrix: Liquid, Dilution: 5

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Chromium		104	75	125	8	20
Copper		102	75	125	5	20
Iron	*	68	75	125	8	20
Manganese		105	75	125	9	20
Nickel		101	75	125	5	20
Zinc		105	75	125	7	20

QC Report - Batch QC Results

Metals, Prep Batch ID: MTD-061521-3

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Blank (BLK)

Lab Sample ID: MT4-21-0615B.014.LRB

Run in Batch: MT4-21-0615B, Run Date: 06/15/2021 12:03, Prep Date: 06/15/2021, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Sodium		ND	0.05	mg/L

Laboratory Control Sample (LCS)

Lab Sample ID: MT4-21-0615B.013.LCS

Run in Batch: MT4-21-0615B, Run Date: 06/15/2021 12:02, Prep Date: 06/15/2021, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Sodium		97	85	115

Matrix Spike (MS)

Lab Sample ID: MT4-21-0615B.034.MS, Parent Sample ID: S25148.01

Run in Batch: MT4-21-0615B, Run Date: 06/15/2021 12:20, Prep Date: 06/15/2021, Matrix: Liquid, Dilution: 50

Analyte	Flags	% Rec	LCL	UCL
Sodium		93	75	125

Matrix Spike (MS)

Lab Sample ID: MT4-21-0615B.059.MS, Parent Sample ID: S25243.01

Run in Batch: MT4-21-0615B, Run Date: 06/15/2021 12:47, Prep Date: 06/15/2021, Matrix: Liquid, Dilution: 50

Analyte	Flags	% Rec	LCL	UCL
Sodium		101	75	125

Matrix Spike Duplicate (MSD)

Lab Sample ID: MT4-21-0615B.035.MSD, Parent Sample ID: MT4-21-0615B.034.MS

Run in Batch: MT4-21-0615B, Run Date: 06/15/2021 12:22, Prep Date: 06/15/2021, Matrix: Liquid, Dilution: 50

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Sodium		99	75	125	1	20

Matrix Spike Duplicate (MSD)

Lab Sample ID: MT4-21-0615B.060.MSD, Parent Sample ID: MT4-21-0615B.059.MS

Run in Batch: MT4-21-0615B, Run Date: 06/15/2021 12:48, Prep Date: 06/15/2021, Matrix: Liquid, Dilution: 50

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Sodium		99	75	125	1	20

QC Report - Batch QC Results

Metals, Prep Batch ID: MTD-061521-4

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Blank (BLK)

Lab Sample ID: MT4-21-0615B.064.LRB

Run in Batch: MT4-21-0615B, Run Date: 06/15/2021 12:55, Prep Date: 06/15/2021, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Sodium		ND	0.05	mg/L

Laboratory Control Sample (LCS)

Lab Sample ID: MT4-21-0615B.063.LCS

Run in Batch: MT4-21-0615B, Run Date: 06/15/2021 12:54, Prep Date: 06/15/2021, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Sodium		103	85	115

Matrix Spike (MS)

Lab Sample ID: MT4-21-0615B.082.MS, Parent Sample ID: S25228.09

Run in Batch: MT4-21-0615B, Run Date: 06/15/2021 13:10, Prep Date: 06/15/2021, Matrix: Liquid, Dilution: 50

Analyte	Flags	% Rec	LCL	UCL
Sodium		100	75	125

Matrix Spike Duplicate (MSD)

Lab Sample ID: MT4-21-0615B.083.MSD, Parent Sample ID: MT4-21-0615B.082.MS

Run in Batch: MT4-21-0615B, Run Date: 06/15/2021 13:11, Prep Date: 06/15/2021, Matrix: Liquid, Dilution: 50

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Sodium		95	75	125	4	20

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: VF210615W1

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Blank (BLK)

Lab Sample ID: 210615A7.BLKW15A

Run in Batch: 210615A7, Run Date: 06/15/2021 12:28, Prep Date: 06/15/2021, Matrix: WW, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Acetone		ND	10.00	ug/l
Acrylonitrile		ND	1.00	ug/l
2-Butanone (MEK)		ND	10.00	ug/l
Benzene		ND	1.00	ug/l
n-Butylbenzene		ND	1.00	ug/l
Bromobenzene		ND	1.00	ug/l
Bromochloromethane		ND	1.00	ug/l
Bromodichloromethane		ND	1.00	ug/l
Bromoform		ND	1.00	ug/l
Bromomethane		ND	1.00	ug/l
sec-Butylbenzene		ND	1.00	ug/l
tert-Butylbenzene		ND	1.00	ug/l
Carbon disulfide		ND	1.00	ug/l
Carbon tetrachloride		ND	1.00	ug/l
Chlorobenzene		ND	1.00	ug/l
Chloroethane		ND	1.00	ug/l
Chloroform		ND	1.00	ug/l
Chloromethane		ND	1.00	ug/l
1,1-Dichloroethane		ND	1.00	ug/l
1,1-Dichloroethene		ND	1.00	ug/l
1,2-Dibromo-3-chloropropane		ND	1.00	ug/l
1,2-Dibromoethane		ND	1.00	ug/l
1,2-Dichlorobenzene		ND	1.00	ug/l
1,2-Dichloroethane		ND	1.00	ug/l
1,2-Dichloropropane		ND	1.00	ug/l
1,3-Dichlorobenzene		ND	1.00	ug/l
1,4-Dichlorobenzene		ND	1.00	ug/l
cis-1,2-Dichloroethene		ND	1.00	ug/l
cis-1,3-Dichloropropene		ND	1.00	ug/l
Dibromochloromethane		ND	1.00	ug/l
Dibromomethane		ND	1.00	ug/l
Dichlorodifluoromethane		ND	1.00	ug/l
Diethyl ether		ND	1.00	ug/l
trans-1,2-Dichloroethene		ND	1.00	ug/l
trans-1,3-Dichloropropene		ND	1.00	ug/l
trans-1,4-Dichloro-2-butene		ND	1.00	ug/l
Ethylbenzene		ND	1.00	ug/l
2-Hexanone		ND	10.00	ug/l
Hexachloroethane		ND	1.00	ug/l
p-Isopropyltoluene		ND	1.00	ug/l
Isopropylbenzene		ND	1.00	ug/l
2-Methylnaphthalene		ND	1.00	ug/l
4-Methyl-2-pentanone (MIBK)		ND	10.00	ug/l
tert-Methyl butyl ether (MTBE)		ND	1.00	ug/l
Methyl iodide		ND	1.00	ug/l
Methylene chloride		ND	1.00	ug/l

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: VF210615W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Blank (BLK) (continued)

Lab Sample ID: 210615A7.BLKW15A

Run in Batch: 210615A7, Run Date: 06/15/2021 12:28, Prep Date: 06/15/2021, Matrix: WW, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Naphthalene		ND	1.00	ug/l
n-Propylbenzene		ND	1.00	ug/l
Styrene		ND	1.00	ug/l
1,1,1,2-Tetrachloroethane		ND	1.00	ug/l
1,1,1-Trichloroethane		ND	1.00	ug/l
1,1,2,2-Tetrachloroethane		ND	1.00	ug/l
1,1,2-Trichloroethane		ND	1.00	ug/l
1,2,3-Trichlorobenzene		ND	1.00	ug/l
1,2,3-Trichloropropane		ND	1.00	ug/l
1,2,3-Trimethylbenzene		ND	1.00	ug/l
1,2,4-Trichlorobenzene		ND	1.00	ug/l
1,2,4-Trimethylbenzene		ND	1.00	ug/l
1,3,5-Trimethylbenzene		ND	1.00	ug/l
Tetrachloroethene		ND	1.00	ug/l
Tetrahydrofuran		ND	10.00	ug/l
Toluene		ND	1.00	ug/l
Trichloroethene		ND	1.00	ug/l
Trichlorofluoromethane		ND	1.00	ug/l
Vinyl chloride		ND	1.00	ug/l
o-Xylene		ND	1.00	ug/l
p,m-Xylene		ND	1.00	ug/l

Laboratory Control Sample (LCS)

Lab Sample ID: 210615A7.LCSW15A

Run in Batch: 210615A7, Run Date: 06/15/2021 11:19, Prep Date: 06/15/2021, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Acetone		88.5	29.9	161.5
Acrylonitrile		106.8	69.9	128.9
2-Butanone (MEK)		91.7	44.0	134.4
Benzene		99.6	79.9	124.9
n-Butylbenzene		105.2	80.0	133.3
Bromobenzene		97.7	78.7	124.6
Bromochloromethane		97.0	78.2	120.8
Bromodichloromethane		100.1	80.4	128.2
Bromoform		100.3	69.4	128.0
Bromomethane		94.0	56.8	151.3
sec-Butylbenzene		101.6	77.4	129.8
tert-Butylbenzene		94.7	80.7	128.9
Carbon disulfide		95.3	63.8	137.4
Carbon tetrachloride		93.6	72.6	133.0
Chlorobenzene		99.0	79.2	122.7
Chloroethane		97.2	53.4	149.4
Chloroform		94.8	78.4	124.0
Chloromethane		97.8	23.8	166.5
1,1-Dichloroethane		98.0	71.5	126.2
1,1-Dichloroethene		93.3	69.6	139.4

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: VF210615W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Laboratory Control Sample (LCS) (continued)

Lab Sample ID: 210615A7.LCSW15A

Run in Batch: 210615A7, Run Date: 06/15/2021 11:19, Prep Date: 06/15/2021, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
1,2-Dibromo-3-chloropropane		100.6	21.2	189.4
1,2-Dibromoethane		100.8	70.3	133.7
1,2-Dichlorobenzene		102.5	10.0	166.2
1,2-Dichloroethane		93.8	76.0	126.3
1,2-Dichloropropane		102.5	78.6	126.4
1,3-Dichlorobenzene		102.8	77.0	131.3
1,4-Dichlorobenzene		103.8	20.7	137.7
cis-1,2-Dichloroethene		96.9	76.6	122.1
cis-1,3-Dichloropropene		104.7	79.8	129.9
Dibromochloromethane		103.4	74.6	127.2
Dibromomethane		97.7	76.9	122.1
Dichlorodifluoromethane		72.2	10.0	222.8
Diethyl ether		100.7	67.4	121.2
trans-1,2-Dichloroethene		96.8	73.6	129.3
trans-1,3-Dichloropropene		104.0	74.0	131.3
trans-1,4-Dichloro-2-butene		98.0	68.6	135.4
Ethylbenzene		98.7	79.5	129.1
2-Hexanone		90.3	55.4	136.9
Hexachloroethane		104.2	23.8	138.1
p-Isopropyltoluene		102.2	79.8	137.5
Isopropylbenzene		95.7	74.4	121.5
2-Methylnaphthalene		113.3	25.5	165.5
4-Methyl-2-pentanone (MIBK)		89.9	71.6	125.2
tert-Methyl butyl ether (MTBE)		88.9	73.2	122.4
Methyl iodide		96.9	68.8	116.4
Methylene chloride		94.6	73.3	121.1
Naphthalene		103.9	32.9	135.8
n-Propylbenzene		99.1	82.0	130.7
Styrene		99.4	69.5	126.7
1,1,1,2-Tetrachloroethane		99.4	80.3	128.2
1,1,1-Trichloroethane		90.1	79.4	130.9
1,1,2,2-Tetrachloroethane		98.3	79.8	126.3
1,1,2-Trichloroethane		100.4	78.7	123.1
1,2,3-Trichlorobenzene		108.8	75.4	131.4
1,2,3-Trichloropropane		94.8	78.3	138.8
1,2,3-Trimethylbenzene		100.6	76.3	124.2
1,2,4-Trichlorobenzene		104.6	27.4	143.4
1,2,4-Trimethylbenzene		95.6	81.4	130.8
1,3,5-Trimethylbenzene		96.4	81.3	128.9
Tetrachloroethene		83.1	74.5	124.5
Tetrahydrofuran		99.0	59.0	117.9
Toluene		97.6	79.8	124.5
Trichloroethene		96.5	79.7	124.2
Trichlorofluoromethane		87.3	59.7	151.8
Vinyl chloride		90.8	43.5	149.1
o-Xylene		96.6	80.2	131.0

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: VF210615W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Laboratory Control Sample (LCS) (continued)

Lab Sample ID: 210615A7.LCSW15A

Run in Batch: 210615A7, Run Date: 06/15/2021 11:19, Prep Date: 06/15/2021, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
p,m-Xylene		98.2	79.4	132.2

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: 210615A7.LCSDW15A, Parent Sample ID: 210615A7.LCSW15A

Run in Batch: 210615A7, Run Date: 06/15/2021 11:42, Prep Date: 06/15/2021, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Acetone		98.0	29.9	161.5	10.2	30.0
Acrylonitrile		111.7	69.9	128.9	4.5	30.0
2-Butanone (MEK)		98.7	44.0	134.4	7.3	30.0
Benzene		97.9	79.9	124.9	1.6	30.0
n-Butylbenzene		102.2	80.0	133.3	2.9	30.0
Bromobenzene		95.8	78.7	124.6	1.9	30.0
Bromochloromethane		96.7	78.2	120.8	0.3	30.0
Bromodichloromethane		98.9	80.4	128.2	1.3	30.0
Bromoform		102.1	69.4	128.0	1.8	30.0
Bromomethane		92.1	56.8	151.3	2.0	30.0
sec-Butylbenzene		98.8	77.4	129.8	2.7	30.0
tert-Butylbenzene		93.1	80.7	128.9	1.7	30.0
Carbon disulfide		91.8	63.8	137.4	3.8	30.0
Carbon tetrachloride		90.4	72.6	133.0	3.5	30.0
Chlorobenzene		98.4	79.2	122.7	0.5	30.0
Chloroethane		93.8	53.4	149.4	3.6	30.0
Chloroform		94.6	78.4	124.0	0.1	30.0
Chloromethane		97.2	23.8	166.5	0.6	30.0
1,1-Dichloroethane		97.0	71.5	126.2	1.0	30.0
1,1-Dichloroethene		90.8	69.6	139.4	2.7	30.0
1,2-Dibromo-3-chloropropane		104.5	21.2	189.4	3.8	30.0
1,2-Dibromoethane		102.3	70.3	133.7	1.5	30.0
1,2-Dichlorobenzene		99.8	10.0	166.2	2.6	30.0
1,2-Dichloroethane		93.8	76.0	126.3	0.1	30.0
1,2-Dichloropropane		102.4	78.6	126.4	0.0	30.0
1,3-Dichlorobenzene		99.0	77.0	131.3	3.8	30.0
1,4-Dichlorobenzene		100.4	20.7	137.7	3.4	30.0
cis-1,2-Dichloroethene		96.3	76.6	122.1	0.6	30.0
cis-1,3-Dichloropropene		104.3	79.8	129.9	0.4	30.0
Dibromochloromethane		103.1	74.6	127.2	0.3	30.0
Dibromomethane		99.0	76.9	122.1	1.4	30.0
Dichlorodifluoromethane		69.0	10.0	222.8	4.6	30.0
Diethyl ether		102.4	67.4	121.2	1.7	30.0
trans-1,2-Dichloroethene		96.1	73.6	129.3	0.7	30.0
trans-1,3-Dichloropropene		104.7	74.0	131.3	0.7	30.0
trans-1,4-Dichloro-2-butene		100.8	68.6	135.4	2.9	30.0
Ethylbenzene		96.8	79.5	129.1	1.9	30.0
2-Hexanone		97.3	55.4	136.9	7.4	30.0
Hexachloroethane		102.0	23.8	138.1	2.1	30.0
p-Isopropyltoluene		99.3	79.8	137.5	2.9	30.0

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: VF210615W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Laboratory Control Sample Duplicate (LCSD) (continued)

Lab Sample ID: 210615A7.LCSDW15A, Parent Sample ID: 210615A7.LCSW15A

Run in Batch: 210615A7, Run Date: 06/15/2021 11:42, Prep Date: 06/15/2021, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Isopropylbenzene		93.2	74.4	121.5	2.7	30.0
2-Methylnaphthalene		117.2	25.5	165.5	3.4	30.0
4-Methyl-2-pentanone (MIBK)		96.2	71.6	125.2	6.8	30.0
tert-Methyl butyl ether (MTBE)		91.0	73.2	122.4	2.3	30.0
Methyl iodide		95.3	68.8	116.4	1.7	30.0
Methylene chloride		94.2	73.3	121.1	0.4	30.0
Naphthalene		104.3	32.9	135.8	0.4	30.0
n-Propylbenzene		97.5	82.0	130.7	1.6	30.0
Styrene		97.5	69.5	126.7	1.9	30.0
1,1,1,2-Tetrachloroethane		97.5	80.3	128.2	1.9	30.0
1,1,1-Trichloroethane		87.9	79.4	130.9	2.5	30.0
1,1,2,2-Tetrachloroethane		100.6	79.8	126.3	2.3	30.0
1,1,2-Trichloroethane		101.6	78.7	123.1	1.1	30.0
1,2,3-Trichlorobenzene		107.9	75.4	131.4	0.8	30.0
1,2,3-Trichloropropane		97.9	78.3	138.8	3.2	30.0
1,2,3-Trimethylbenzene		99.9	76.3	124.2	0.7	30.0
1,2,4-Trichlorobenzene		104.0	27.4	143.4	0.6	30.0
1,2,4-Trimethylbenzene		94.7	81.4	130.8	0.9	30.0
1,3,5-Trimethylbenzene		94.2	81.3	128.9	2.3	30.0
Tetrachloroethene		81.3	74.5	124.5	2.1	30.0
Tetrahydrofuran		106.7	59.0	117.9	7.5	30.0
Toluene		96.1	79.8	124.5	1.5	30.0
Trichloroethene		94.8	79.7	124.2	1.9	30.0
Trichlorofluoromethane		85.2	59.7	151.8	2.4	30.0
Vinyl chloride		88.7	43.5	149.1	2.3	30.0
o-Xylene		95.2	80.2	131.0	1.4	30.0
p,m-Xylene		95.6	79.4	132.2	2.6	30.0



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C.O.C. PAGE #

OF

142922

REPORT TO

CHAIN OF CUSTODY RECORD

INVOICE TO

CONTACT NAME <u>Clifford Vantz / Kevin Schneider</u>			
COMPANY <u>Ramboll</u>			
ADDRESS <u>3600 Green Court Ste 750</u>			
CITY <u>Ann Arbor</u>		STATE <u>MI</u>	ZIP CODE <u>48105</u>
PHONE NO. <u>313-333-0211</u>	FAX NO.	P.O. NO. <u>1940002628 (tust 1)</u>	
E-MAIL ADDRESS <u>Kevin.Schneider@Ramboll.com</u> <u>Clifford.Vantz@Ramboll.com</u>		QUOTE NO.	

CONTACT NAME <u>SAME</u>		
COMPANY		
ADDRESS		
CITY	STATE	ZIP CODE
PHONE NO.	E-MAIL ADDRESS	

PROJECT NO./NAME <u>RACER Coldwater Road</u>	SAMPLER(S) - PLEASE PRINT/SIGN NAME <u>Kevin Schneider</u>
TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER	
DELIVERABLES REQUIRED ☐ STD ☒ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER	

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

Containers & Preservatives

MERIT LAB NO. FOR LAB USE ONLY	YEAR		SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	NONE	HCl	HNO ₃	H ₂ SO ₄	NaOH	MeOH	OTHER	VOCs	TOC / Tox	phenols	cyanide	sulfate	specific conductivity	chlorides	total sodium	Dissolved Metals	total metals	Certifications ☐ OHIO VAP ☐ Drinking Water ☐ DoD ☐ NPDES Project Locations ☐ Detroit ☐ New York ☐ Other Special Instructions
	DATE	TIME																					
25228.01	6/10/21	1140	B-21D	GW	11	1	3	2	4	1			X	X	X	X	X	X	X	X	X		Dissolved metals were field filtered
.02		1155	B-24C										X	X	X	X	X	X	X	X	X		
.03		1412	B-22D										X	X	X	X	X	X	X	X	X		
.04		1628	OBG MW-160										X	X	X	X	X	X	X	X	X		Metals ARE:
.05	6/11/21	925	B-9										X	X	X	X	X	X	X	X	X		Cr, Cu, Ni, Zn, Fe, Mn
.06		1055	B-18A										X	X	X	X	X	X	X	X	X		
.07		1128	B-27D										X	X	X	X	X	X	X	X	X		
.08		1215	B-7										X	X	X	X	X	X	X	X	X		
.09		-	MW-DUP-061121										X	X	X	X	X	X	X	X	X		
.10		1250	Equipment Blank-1	QC	10								X	X	X	X	X	X	X	X	X	X	
.11		-	Trip Blank-061121	QC	1								X										

RELINQUISHED BY: <u>[Signature]</u>	SAMPLER ☒	DATE <u>6/11/21</u>	TIME <u>1310</u>
RECEIVED BY: <u>[Signature]</u>		DATE <u>6/11/21</u>	TIME <u>1700</u>
RELINQUISHED BY: <u>[Signature]</u>		DATE <u>6/11/21</u>	TIME <u>16:00</u>
RECEIVED BY: <u>[Signature]</u>		DATE <u>6/11/21</u>	TIME <u>1630</u>

RELINQUISHED BY: <u>[Signature]</u>	DATE	TIME
RECEIVED BY: <u>[Signature]</u>	DATE	TIME
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS
NOTES: <u>4.4</u>		TEMP. ON ARRIVAL

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



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

C.O.C. PAGE # _____ OF _____

REPORT TO

CHAIN OF CUSTODY RECORD

INVOICE TO

CONTACT NAME **Project Management Team**
COMPANY **Merit Laboratories**
ADDRESS **2680 East Lansing Drive**
CITY **East Lansing** STATE **MI** ZIP CODE **48823**
PHONE NO. **517-332-0167** FAX NO. _____ P.O. NO. _____
E-MAIL ADDRESS **results@meritlabs.com** QUOTE NO. _____

CONTACT NAME **Julie Teague** ☒ SAME
COMPANY **Merit Laboratories**
ADDRESS **2680 East Lansing Drive**
CITY **East Lansing** STATE **MI** ZIP CODE **48823**
PHONE NO. **517-332-0167** E-MAIL ADDRESS **juliet@meritlabs.com**

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

PROJECT NO./NAME **S25228** 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=WIFE A=AIR W=WASTE

Containers & Preservatives

MERIT LAB NO. FOR LAB USE ONLY	YEAR		SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	NONE	HCl	HNO ₃	H ₂ SO ₄	NaOH	MeOH	OTHER	TOX
	DATE	TIME											
	6/10/21	1140	S25228.01	GW	1				X				✓
	6/10/21	1155	S25228.02	GW	1				X				✓
	6/10/21	1412	S25228.03	GW	1				X				✓
	6/10/21	1628	S25228.04	GW	1				X				✓
	6/11/21	0925	S25228.05	GW	1				X				✓
	6/11/21	1055	S25228.06	GW	1				X				✓
	6/11/21	1128	S25228.07	GW	1				X				✓
	6/11/21	1215	S25228.08	GW	1				X				✓
	6/11/21	0001	S25228.09	GW	1				X				✓
	6/11/21	1250	S25228.10	GW	1				X				✓

Certifications

☐ OHIO VAP ☐ Drinking Water

☐ DoD ☐ NPDES

Project Locations

☐ Detroit ☐ New York

☐ Other _____

Special Instructions

(Ship on ice)

Subcontracted to

GEL

2040 Savage Road

Charleston, SC 29407

RELINQUISHED BY: _____
SIGNATURE/ORGANIZATION _____
RECEIVED BY: *Sam Smith*
SIGNATURE/ORGANIZATION *UPS*
RELINQUISHED BY: _____
SIGNATURE/ORGANIZATION _____
RECEIVED BY: _____
SIGNATURE/ORGANIZATION _____

RELINQUISHED BY: _____
SIGNATURE/ORGANIZATION _____
RECEIVED BY: _____
SIGNATURE/ORGANIZATION _____
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

APPENDIX D

GROUNDWATER SAMPLING PROGRAM QA/QC SUMMARY

Appendix D

Quality Assurance/Quality Control Summary

Data verification was independently performed by Ramboll Americas Engineering Solutions, Inc. (Ramboll), to assess the groundwater monitoring data quality for samples collected during the 2021 semiannual groundwater sampling event conducted in June 2021. Data verification was utilized to confirm the quality of the field and laboratory (Merit Laboratories, Inc. (Merit) of East Lansing, Michigan and GEL Laboratories, LLC (GEL) subcontract for TOX analysis) 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 (7) quality control samples, including duplicate samples.

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.
- No breakthroughs exceeding 10% for TOX samples were reported.
- The primary and secondary constituents of concern (COCs) were not detected in Equipment Blank-1; therefore, cross-contamination during sampling and shipping is not evident.

The relative percent difference (RPD) for the duplicate sample results for B-27D and MW-Dup-061121 (B-27D) were within acceptable limits.

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

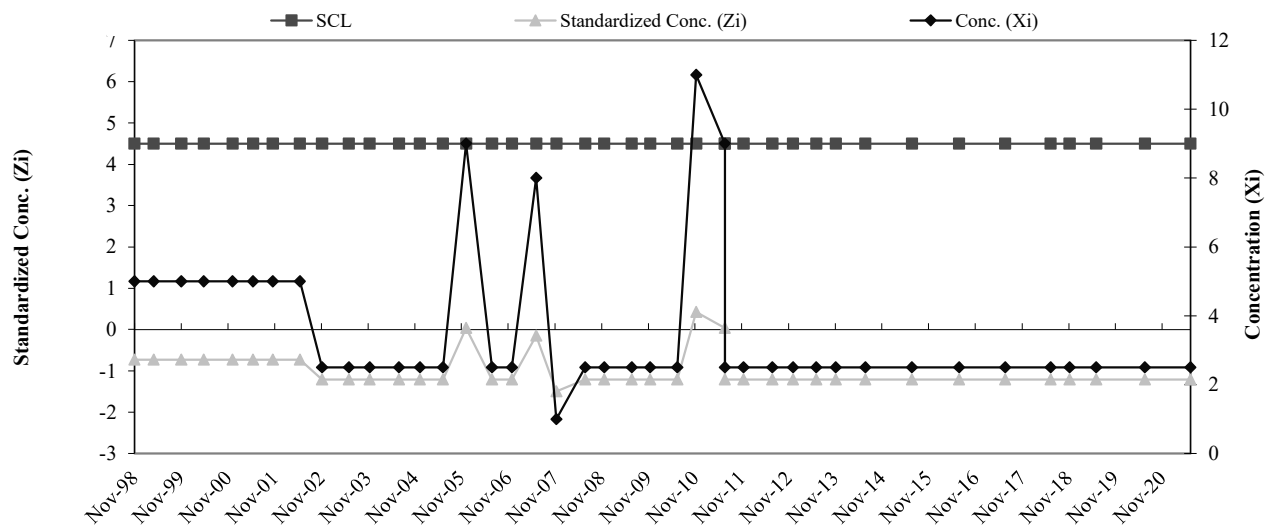
MONITORING WELL CONTROL CHARTS

COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-2D-OBGMW-16D 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	2.5	-1.21
10	Apr-99	4.5	5	-0.73	37	Jun-12	4.50	2.5	-1.21
11	Nov-99	4.5	5	-0.73	38	Dec-12	4.50	2.5	-1.21
12	Apr-00	4.5	5	-0.73	39	Jun-13	4.50	2.5	-1.21
13	Dec-00	4.5	5	-0.73	40	Nov-13	4.50	2.5	-1.21
14	May-01	4.5	5	-0.73	41	Jun-14	4.50	2.5	-1.21
15	Oct-01	4.5	5	-0.73	42	Jun-15	4.50	2.5	-1.21
16	May-02	4.5	5	-0.73	43	Jun-16	4.50	2.5	-1.21
17	Nov-02	4.5	2.5	-1.21	44	Jun-17	4.50	2.5	-1.21
18	Jun-03	4.5	2.5	-1.21	45	Jun-18	4.50	2.5	-1.21
19	Nov-03	4.5	2.5	-1.21	46	Nov-18	4.50	2.5	-1.21
20	Jun-04	4.5	2.5	-1.21	47	Jun-19	4.50	2.5	-1.21
21	Dec-04	4.5	2.5	-1.21	48	Jun-20	4.50	2.5	-1.21
22	Jun-05	4.5	2.5	-1.21	49	Jun-21	4.50	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

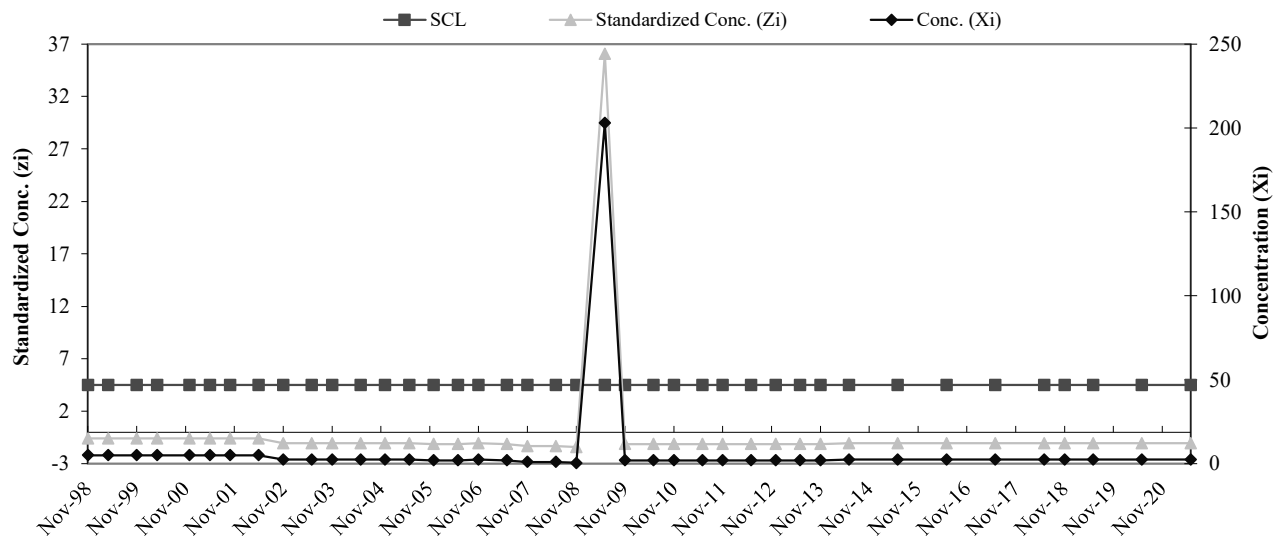


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-2D-OBGMW-16D Cu

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

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	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	39	Nov-13	4.5	2	-1.14
14	May-01	4.5	5	-0.58	40	Jun-14	4.5	2.5	-1.04
15	Oct-01	4.5	5	-0.58	41	Jun-15	4.5	2.5	-1.04
16	May-02	4.5	5	-0.58	42	Jun-16	4.5	2.5	-1.04
17	Nov-02	4.5	2.5	-1.04	43	Jun-17	4.5	2.5	-1.04
18	Jun-03	4.5	2.5	-1.04	44	Jun-18	4.5	2.5	-1.04
19	Nov-03	4.5	2.5	-1.04	45	Nov-18	4.5	2.5	-1.04
20	Jun-04	4.5	2.5	-1.04	46	Jun-19	4.5	2.5	-1.04
21	Dec-04	4.5	2.5	-1.04	47	Jun-20	4.5	2.5	-1.04
22	Jun-05	4.5	2.5	-1.04	48	Jun-21	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

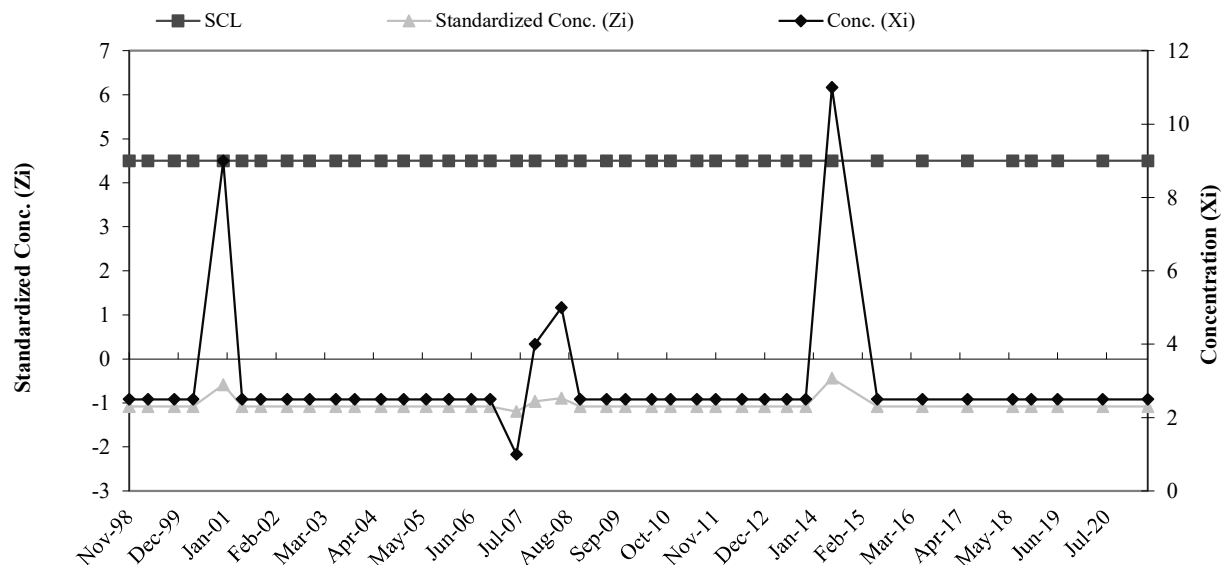


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-2D-OBGMW-16D Ni

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	39	Nov-13	4.5	2.5	-1.08
14	May-01	4.5	2.5	-1.08	40	Jun-14	4.5	11	-0.44
15	Oct-01	4.5	2.5	-1.08	41	Jun-15	4.5	2.5	-1.08
16	May-02	4.5	2.5	-1.08	42	Jun-16	4.5	2.5	-1.08
17	Nov-02	4.5	2.5	-1.08	43	Jun-17	4.5	2.5	-1.08
18	Jun-03	4.5	2.5	-1.08	44	Jun-18	4.5	2.5	-1.08
19	Nov-03	4.5	2.5	-1.08	45	Nov-18	4.5	2.5	-1.08
20	Jun-04	4.5	2.5	-1.08	46	Jun-19	4.5	2.5	-1.08
21	Dec-04	4.5	2.5	-1.08	47	Jun-20	4.5	2.5	-1.08
22	Jun-05	4.5	2.5	-1.08	48	Jun-21	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

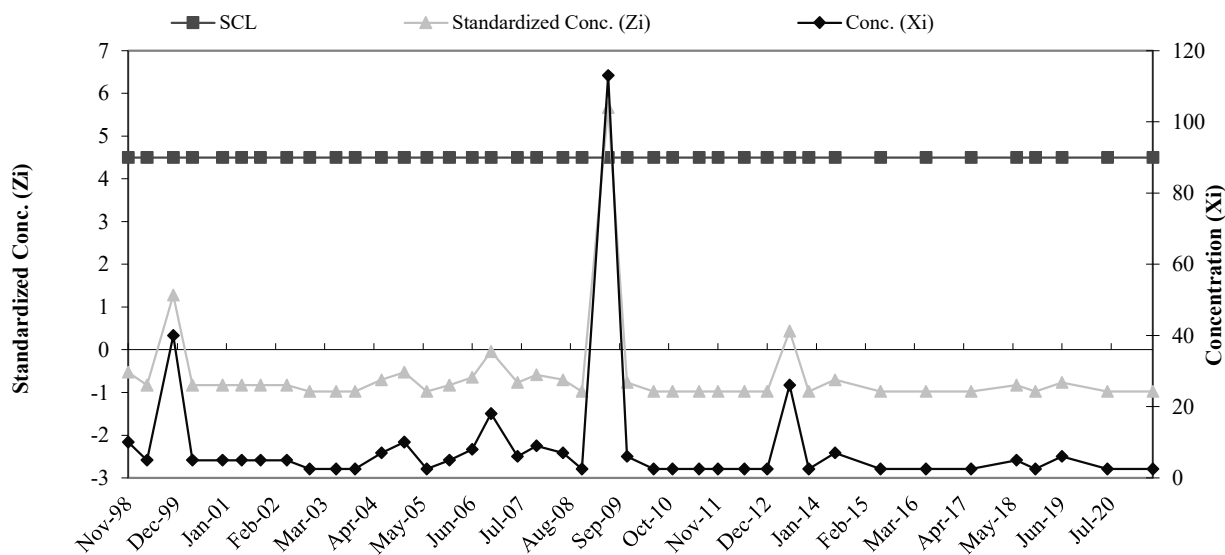


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-2D-OBGMW-16D Zn

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

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	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	39	Nov-13	4.5	2.5	-0.98
14	May-01	4.5	5	-0.83	40	Jun-14	4.5	7	-0.71
15	Oct-01	4.5	5	-0.83	41	Jun-15	4.5	2.5	-0.98
16	May-02	4.5	5	-0.83	42	Jun-16	4.5	2.5	-0.98
17	Nov-02	4.5	2.5	-0.98	43	Jun-17	4.5	2.5	-0.98
18	Jun-03	4.5	2.5	-0.98	44	Jun-18	4.5	5	-0.83
19	Nov-03	4.5	2.5	-0.98	45	Nov-18	4.5	2.5	-0.98
20	Jun-04	4.5	7	-0.71	46	Jun-19	4.5	6	-0.77
21	Dec-04	4.5	10	-0.53	47	Jun-20	4.5	2.5	-0.98
22	Jun-05	4.5	2.5	-0.98	48	Jun-21	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

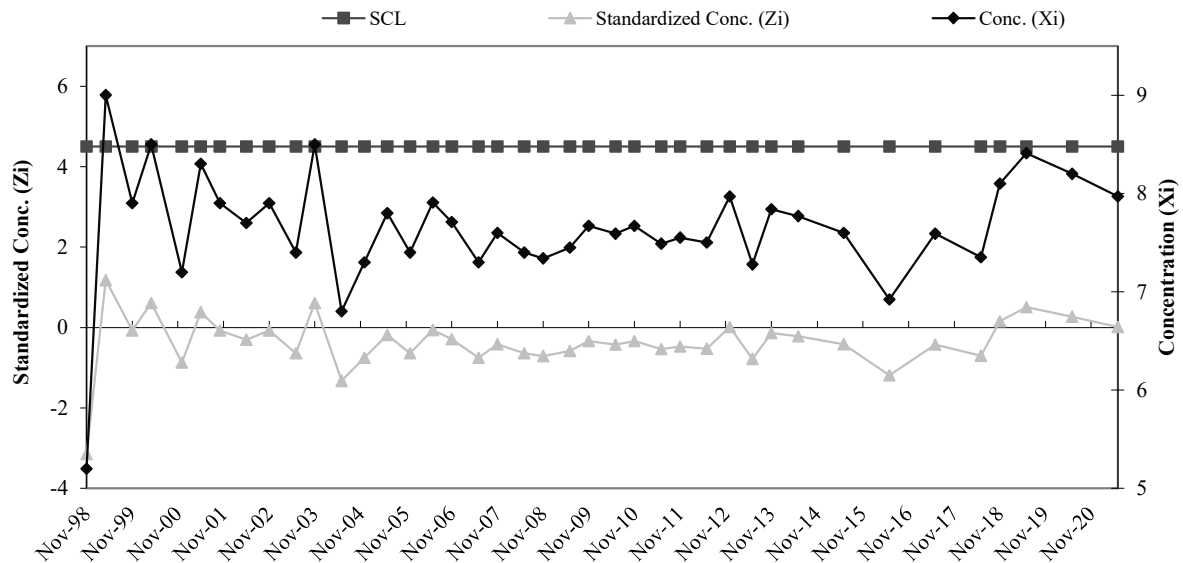


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-2D-OBGMW-16D pH

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

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	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	39	Nov-13	4.5	7.3	-0.14
14	May-01	4.5	7.8	0.38	40	Jun-14	4.5	7.3	-0.22
15	Oct-01	4.5	7.4	-0.07	41	Jun-15	4.5	7.1	-0.41
16	May-02	4.5	7.2	-0.30	42	Jun-16	4.5	6.4	-1.19
17	Nov-02	4.5	7.4	-0.07	43	Jun-17	4.5	7.1	-0.42
18	Jun-03	4.5	6.9	-0.64	44	Jun-18	4.5	6.9	-0.70
19	Nov-03	4.5	8.0	0.61	45	Nov-18	4.5	7.6	0.16
20	Jun-04	4.5	6.3	-1.32	46	Jun-19	4.5	7.9	0.51
21	Dec-04	4.5	6.8	-0.75	47	Jun-20	4.5	7.7	0.27
22	Jun-05	4.5	7.3	-0.19	48	Jun-21	4.5	7.5	0.01
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

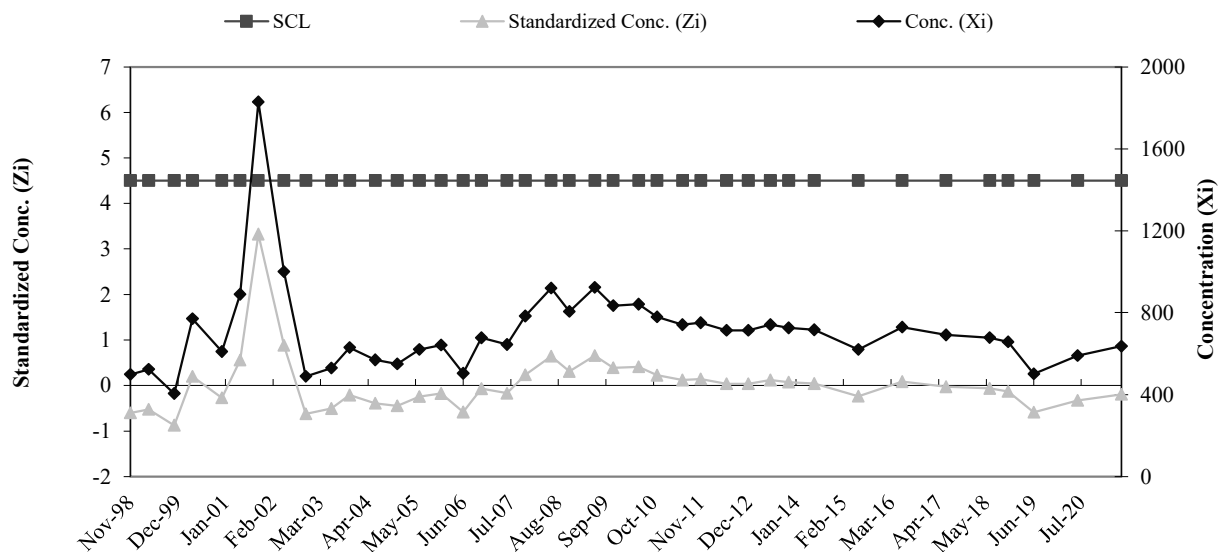


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-2D-OBGMW-16D SpC

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	39	Nov-13	4.5	726.0	0.07
14	May-01	4.5	890.0	0.56	40	Jun-14	4.5	717.0	0.05
15	Oct-01	4.5	1830.0	3.32	41	Jun-15	4.5	621.0	-0.24
16	May-02	4.5	1000.0	0.88	42	Jun-16	4.5	730.0	0.08
17	Nov-02	4.5	490.0	-0.62	43	Jun-17	4.5	691.0	-0.03
18	Jun-03	4.5	530.0	-0.51	44	Jun-18	4.5	679.0	-0.07
19	Nov-03	4.5	630.0	-0.21	45	Nov-18	4.5	657.0	-0.13
20	Jun-04	4.5	570.0	-0.39	46	Jun-19	4.5	501.0	-0.59
21	Dec-04	4.5	550.0	-0.45	47	Jun-20	4.5	590.0	-0.33
22	Jun-05	4.5	620.0	-0.24	48	Jun-21	4.5	636.0	-0.19
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

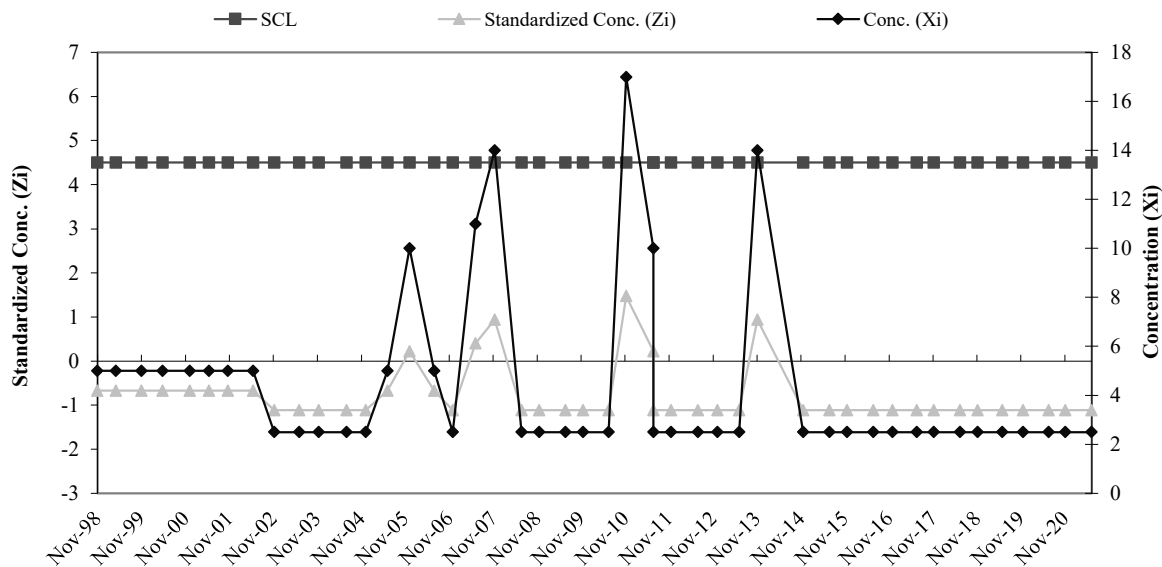


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-7 Cr

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	10	8.75	5.60
2	Aug-95	10		
3	Feb-96	10		
4	Jun-96	10		
5	Aug-96	10		
6	Nov-96	10		
7	May-97	5		
8	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	40	Nov-13	4.5	14	0.94
14	May-01	4.5	5	-0.67	41	Nov-14	4.5	2.5	-1.12
15	Oct-01	4.5	5	-0.67	42	Jun-15	4.5	2.5	-1.12
16	May-02	4.5	5	-0.67	43	Nov-15	4.5	2.5	-1.12
17	Nov-02	4.5	2.5	-1.12	44	Jun-16	4.5	2.5	-1.12
18	Jun-03	4.5	2.5	-1.12	45	Nov-16	4.5	2.5	-1.12
19	Nov-03	4.5	2.5	-1.12	46	Jun-17	4.5	2.5	-1.12
20	Jun-04	4.5	2.5	-1.12	47	Nov-17	4.5	2.5	-1.12
21	Dec-04	4.5	2.5	-1.12	48	Jun-18	4.5	2.5	-1.12
22	Jun-05	4.5	5	-0.67	49	Nov-18	4.5	2.5	-1.12
23	Dec-05	4.5	10	0.22	50	May-19	4.5	2.5	-1.12
24	Jun-06	4.5	5	-0.67	51	Nov-19	4.5	2.5	-1.12
25	Nov-06	4.5	2.5	-1.12	52	Jun-20	4.5	2.5	-1.12
26	Jun-07	4.5	11	0.40	53	Nov-20	4.5	2.5	-1.12
27	Nov-07	4.5	14	0.94	54	Jun-21	4.5	2.5	-1.12
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



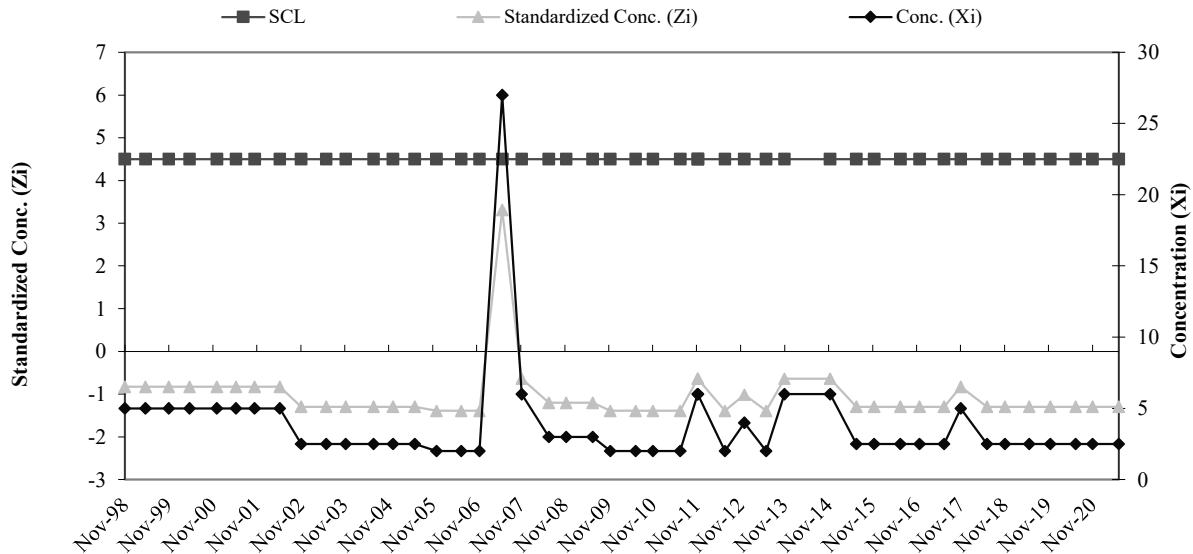
**COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART**

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	39	Nov-13	4.5	6	-0.64
14	May-01	4.5	5	-0.83	40	Nov-14	4.5	6	-0.64
15	Oct-01	4.5	5	-0.83	41	Jun-15	4.5	2.5	-1.30
16	May-02	4.5	5	-0.83	42	Nov-15	4.5	2.5	-1.30
17	Nov-02	4.5	2.5	-1.30	43	Jun-16	4.5	2.5	-1.30
18	Jun-03	4.5	2.5	-1.30	44	Nov-16	4.5	2.5	-1.30
19	Nov-03	4.5	2.5	-1.30	45	Jun-17	4.5	2.5	-1.30
20	Jun-04	4.5	2.5	-1.30	46	Nov-17	4.5	5	-0.83
21	Dec-04	4.5	2.5	-1.30	47	Jun-18	4.5	2.5	-1.30
22	Jun-05	4.5	2.5	-1.30	48	Nov-18	4.5	2.5	-1.30
23	Dec-05	4.5	2	-1.39	49	May-19	4.5	2.5	-1.30
24	Jun-06	4.5	2	-1.39	50	Nov-19	4.5	2.5	-1.30
25	Nov-06	4.5	2	-1.39	51	Jun-20	4.5	2.5	-1.30
26	Jun-07	4.5	27	3.31	52	Nov-20	4.5	2.5	-1.30
27	Nov-07	4.5	6	-0.64	53	Jun-21	4.5	2.5	-1.30
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



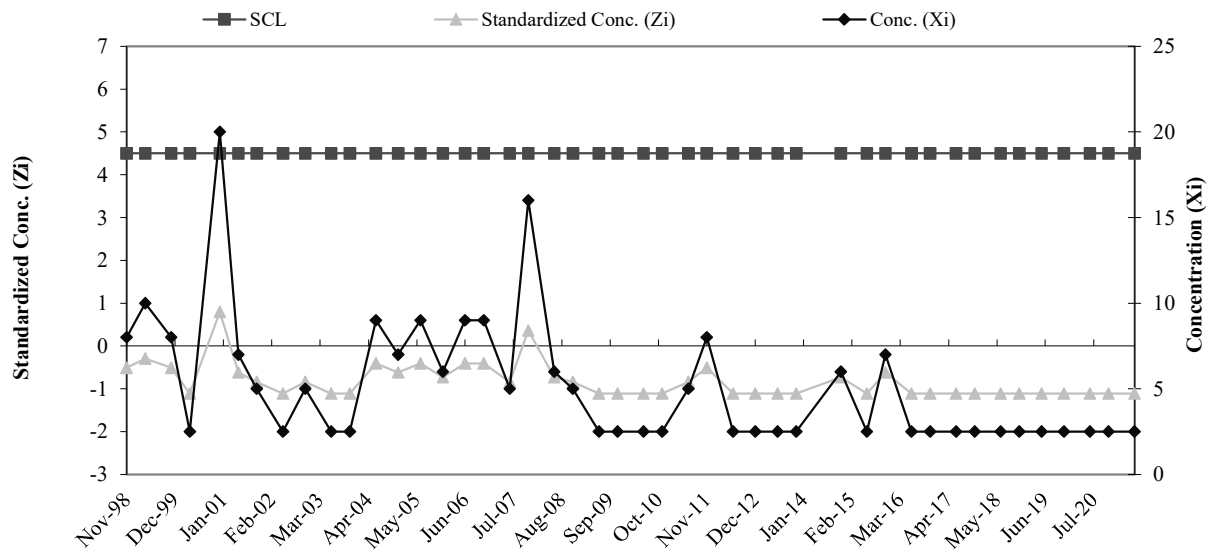
COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART

B-7 Ni

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	15	12.70	9.19
2	Aug-95	20		
3	Feb-96	20		
4	Jun-96	10		
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	39	Nov-13	4.5	2.5	-1.11
14	May-01	4.5	7	-0.62	40	Nov-14	4.5	6	-0.73
15	Oct-01	4.5	5	-0.84	41	Jun-15	4.5	2.5	-1.11
16	May-02	4.5	2.5	-1.11	42	Nov-15	4.5	7	-0.62
17	Nov-02	4.5	5	-0.84	43	Jun-16	4.5	2.5	-1.11
18	Jun-03	4.5	2.5	-1.11	44	Nov-16	4.5	2.5	-1.11
19	Nov-03	4.5	2.5	-1.11	45	Jun-17	4.5	2.5	-1.11
20	Jun-04	4.5	9	-0.40	46	Nov-17	4.5	2.5	-1.11
21	Dec-04	4.5	7	-0.62	47	Jun-18	4.5	2.5	-1.11
22	Jun-05	4.5	9	-0.40	48	Nov-18	4.5	2.5	-1.11
23	Dec-05	4.5	6	-0.73	49	May-19	4.5	2.5	-1.11
24	Jun-06	4.5	9	-0.40	50	Nov-19	4.5	2.5	-1.11
25	Nov-06	4.5	9	-0.40	51	Jun-20	4.5	2.5	-1.11
26	Jun-07	4.5	5	-0.84	52	Nov-20	4.5	2.5	-1.11
27	Nov-07	4.5	16	0.36	53	Jun-21	4.5	2.5	-1.11
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



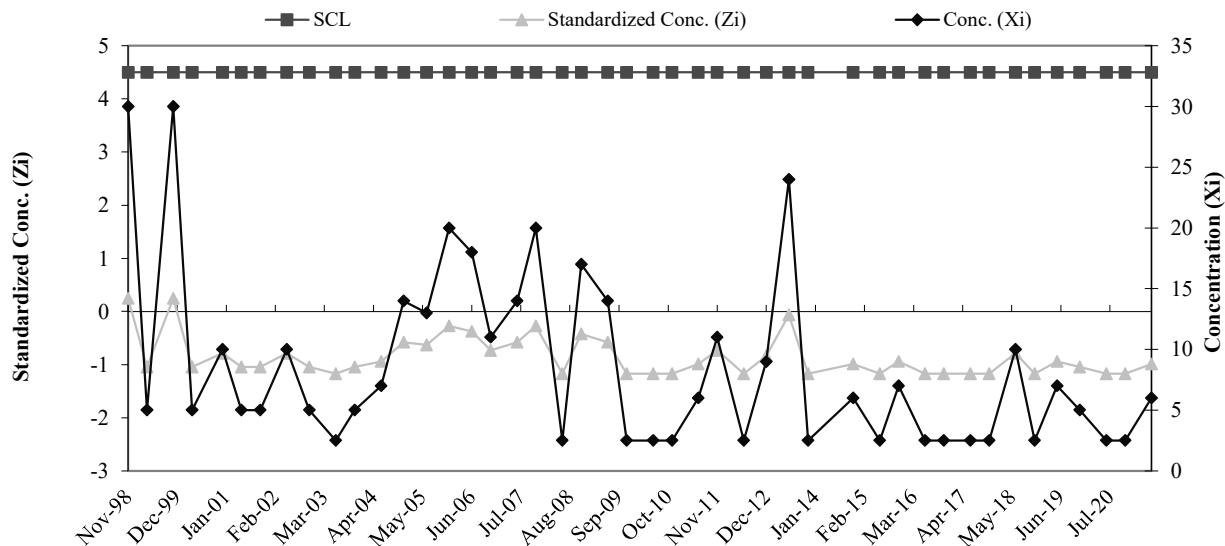
**COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART**

B-7 Zn

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	10	25.25	19.40
2	Aug-95	10		
3	Feb-96	22		
4	Jun-96	20		
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	39	Nov-13	4.5	2.5	-1.17
14	May-01	4.5	5	-1.04	40	Nov-14	4.5	6	-0.99
15	Oct-01	4.5	5	-1.04	41	Jun-15	4.5	2.5	-1.17
16	May-02	4.5	10	-0.79	42	Nov-15	4.5	7	-0.94
17	Nov-02	4.5	5	-1.04	43	Jun-16	4.5	2.5	-1.17
18	Jun-03	4.5	2.5	-1.17	44	Nov-16	4.5	2.5	-1.17
19	Nov-03	4.5	5	-1.04	45	Jun-17	4.5	2.5	-1.17
20	Jun-04	4.5	7	-0.94	46	Nov-17	4.5	2.5	-1.17
21	Dec-04	4.5	14	-0.58	47	Jun-18	4.5	10	-0.79
22	Jun-05	4.5	13	-0.63	48	Nov-18	4.5	2.5	-1.17
23	Dec-05	4.5	20	-0.27	49	May-19	4.5	7	-0.94
24	Jun-06	4.5	18	-0.37	50	Nov-19	4.5	5	-1.04
25	Nov-06	4.5	11	-0.73	51	Jun-20	4.5	2.5	-1.17
26	Jun-07	4.5	14	-0.58	52	Nov-20	4.5	2.5	-1.17
27	Nov-07	4.5	20	-0.27	53	Jun-21	4.5	6	-0.99
28	Jun-08	4.5	2.5	-1.17			4.5		
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

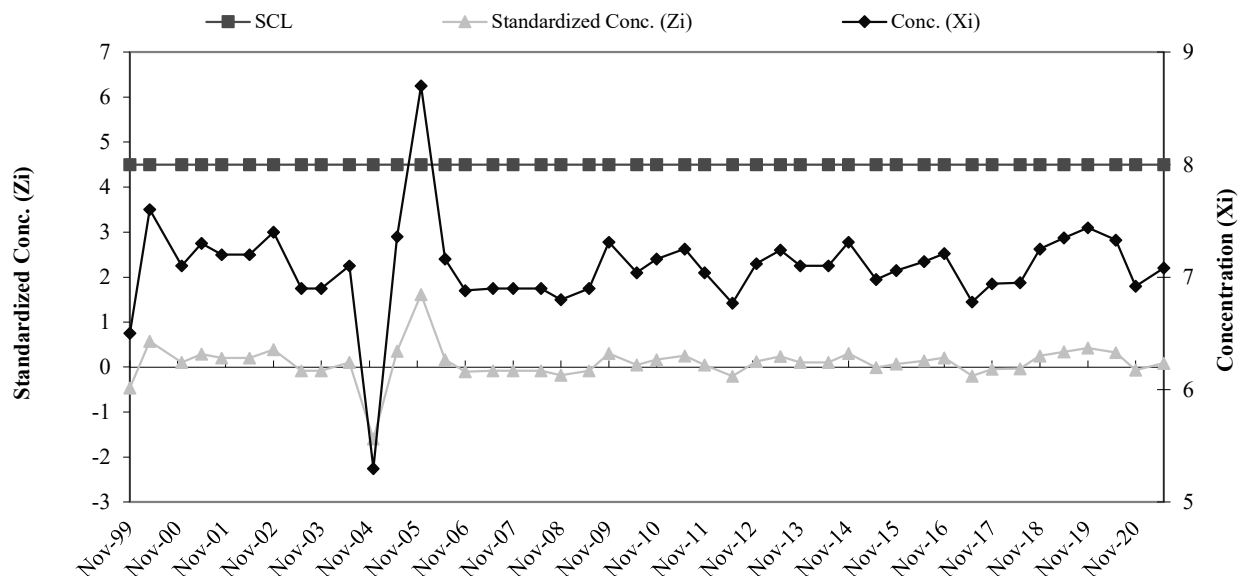


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-7 pH

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	37	Nov-13	4.5	7.1	0.11
14	May-02	4.5	7.2	0.20	38	Jun-14	4.5	7.1	0.11
15	Nov-02	4.5	7.4	0.39	39	Nov-14	4.5	7.3	0.30
16	Jun-03	4.5	6.9	-0.08	40	Jun-15	4.5	7.0	-0.01
17	Nov-03	4.5	6.9	-0.08	41	Nov-15	4.5	7.1	0.07
18	Jun-04	4.5	7.1	0.11	42	Jun-16	4.5	7.1	0.14
19	Dec-04	4.5	5.3	-1.60	43	Nov-16	4.5	7.2	0.21
20	Jun-05	4.5	7.4	0.35	44	Jun-17	4.5	6.8	-0.20
21	Dec-05	4.5	8.7	1.62	45	Nov-17	4.5	6.9	-0.04
22	Jun-06	4.5	7.2	0.16	46	Jun-18	4.5	7.0	-0.04
23	Nov-06	4.5	6.9	-0.10	47	Nov-18	4.5	7.3	0.25
24	Jun-07	4.5	6.9	-0.08	48	May-19	4.5	7.4	0.34
25	Nov-07	4.5	6.9	-0.08	49	Nov-19	4.5	7.4	0.43
26	Jun-08	4.5	6.9	-0.08	50	Jun-20	4.5	7.3	0.32
27	Nov-08	4.5	6.8	-0.18	51	Nov-20	4.5	6.9	-0.06
28	Jun-09	4.5	6.9	-0.08	52	Jun-21	4.5	7.1	0.09
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

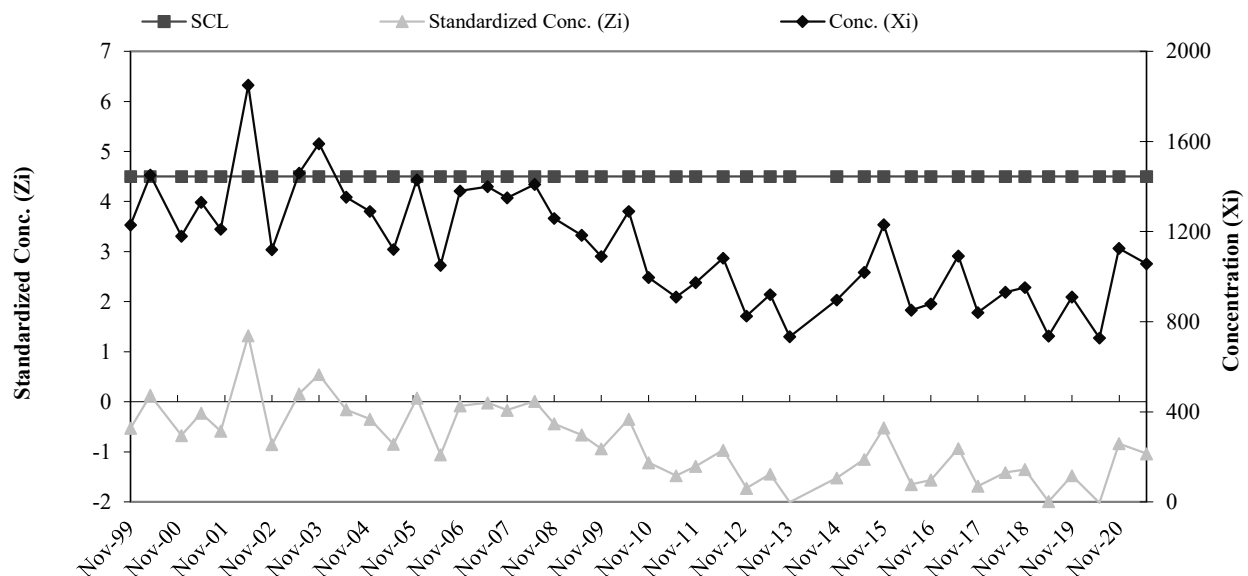


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-7 SpC

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	1509.0	1,405.88	336.33
2	Jun-96	1508.0		
3	Aug-96	1567.0		
4	Nov-96	1960.0		
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	37	Nov-13	4.5	733.0	-2.00
14	May-02	4.5	1850.0	1.32	38	Nov-14	4.5	896.0	-1.52
15	Nov-02	4.5	1120.0	-0.85	39	Jun-15	4.5	1019.0	-1.15
16	Jun-03	4.5	1460.0	0.16	40	Nov-15	4.5	1231.0	-0.52
17	Nov-03	4.5	1590.0	0.55	41	Jun-16	4.5	852.0	-1.65
18	Jun-04	4.5	1353.0	-0.16	42	Nov-16	4.5	880.0	-1.56
19	Dec-04	4.5	1290.0	-0.34	43	Jun-17	4.5	1092.0	-0.93
20	Jun-05	4.5	1121.0	-0.85	44	Nov-17	4.5	841.0	-1.68
21	Dec-05	4.5	1430.0	0.07	45	Jun-18	4.5	932.0	-1.41
22	Jun-06	4.5	1051.0	-1.06	46	Nov-18	4.5	952.0	-1.35
23	Nov-06	4.5	1380.0	-0.08	47	May-19	4.5	737.0	-1.99
24	Jun-07	4.5	1400.0	-0.02	48	Nov-19	4.5	910.0	-1.47
25	Nov-07	4.5	1350.0	-0.17	49	Jun-20	4.5	728.0	-2.02
26	Jun-08	4.5	1410.0	0.01	50	Nov-20	4.5	1126.0	-0.83
27	Nov-08	4.5	1258.0	-0.44	51	Jun-21	4.5	1057.0	-1.04
28	Jun-09	4.5	1184.0	-0.66			4.5		
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

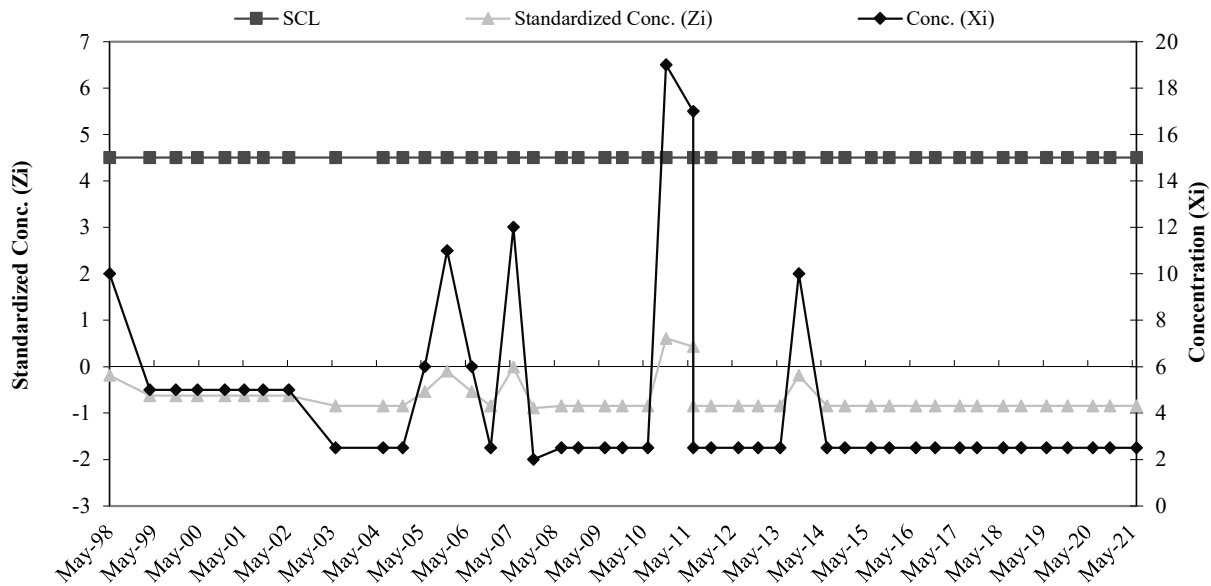


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-9 Cr

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	10	12.12	11.34
2	Aug-95	37		
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	-0.19	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	38	Nov-13	4.5	10	-0.19
14	May-01	4.5	5	-0.63	39	Jun-14	4.5	2.5	-0.85
15	Oct-01	4.5	5	-0.63	40	Nov-14	4.5	2.5	-0.85
16	May-02	4.5	5	-0.63	41	Jun-15	4.5	2.5	-0.85
17	Jun-03	4.5	2.5	-0.85	42	Nov-15	4.5	2.5	-0.85
18	Jun-04	4.5	2.5	-0.85	43	Jun-16	4.5	2.5	-0.85
19	Dec-04	4.5	2.5	-0.85	44	Nov-16	4.5	2.5	-0.85
20	Jun-05	4.5	6	-0.54	45	Jun-17	4.5	2.5	-0.85
21	Dec-05	4.5	11	-0.10	46	Nov-17	4.5	2.5	-0.85
22	Jun-06	4.5	6	-0.54	47	Jun-18	4.5	2.5	-0.85
23	Nov-06	4.5	2.5	-0.85	48	Nov-18	4.5	2.5	-0.85
24	Jun-07	4.5	12	-0.01	49	Jun-19	4.5	2.5	-0.85
25	Nov-07	4.5	2	-0.89	50	Nov-19	4.5	2.5	-0.85
26	Jul-08	4.5	2.5	-0.85	51	Jun-20	4.5	2.5	-0.85
27	Nov-08	4.5	2.5	-0.85	52	Nov-20	4.5	2.5	-0.85
28	Jun-09	4.5	2.5	-0.85	53	Jun-21	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

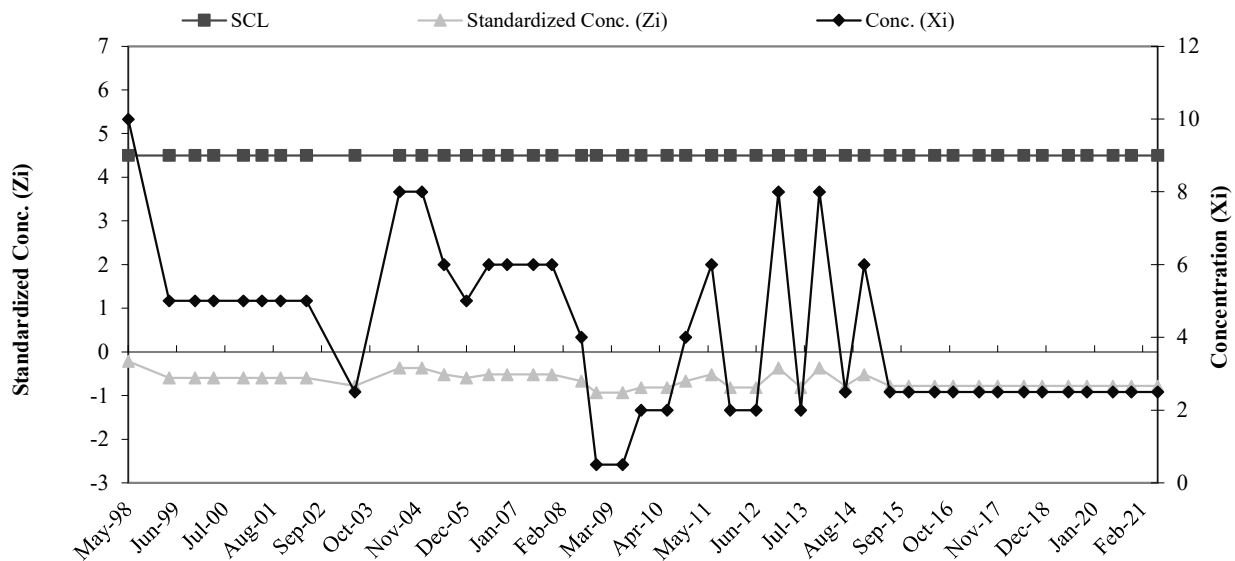


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-9 Cu

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	37	Nov-13	4.5	8	-0.37
14	May-01	4.5	5	-0.59	38	Jun-14	4.5	2.5	-0.78
15	Oct-01	4.5	5	-0.59	39	Nov-14	4.5	6	-0.52
16	May-02	4.5	5	-0.59	40	Jun-15	4.5	2.5	-0.78
17	Jun-03	4.5	2.5	-0.78	41	Nov-15	4.5	2.5	-0.78
18	Jun-04	4.5	8	-0.37	42	Jun-16	4.5	2.5	-0.78
19	Dec-04	4.5	8	-0.37	43	Nov-16	4.5	2.5	-0.78
20	Jun-05	4.5	6	-0.52	44	Jun-17	4.5	2.5	-0.78
21	Dec-05	4.5	5	-0.59	45	Nov-17	4.5	2.5	-0.78
22	Jun-06	4.5	6	-0.52	46	Jun-18	4.5	2.5	-0.78
23	Nov-06	4.5	6	-0.52	47	Nov-18	4.5	2.5	-0.78
24	Jun-07	4.5	6	-0.52	48	Jun-19	4.5	2.5	-0.78
25	Nov-07	4.5	6	-0.52	49	Nov-19	4.5	2.5	-0.78
26	Jul-08	4.5	4	-0.67	50	Jun-20	4.5	2.5	-0.78
27	Nov-08	4.5	0.5	-0.93	51	Nov-20	4.5	2.5	-0.78
28	Jun-09	4.5	0.5	-0.93	52	Jun-21	4.5	2.5	-0.78
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

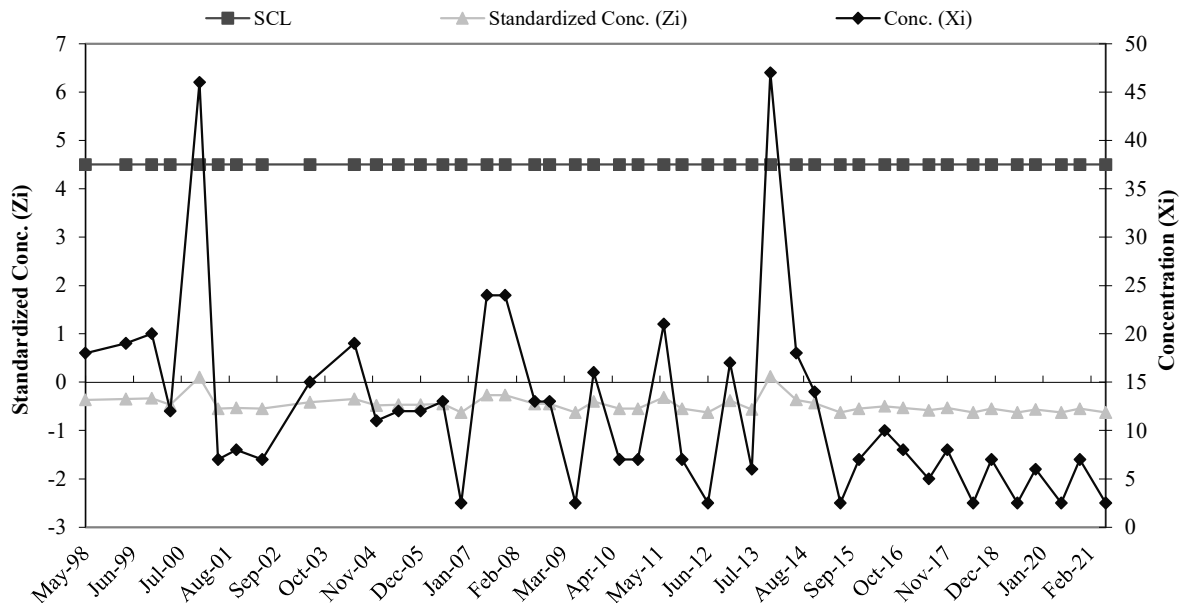


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-9 Ni

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	15	39.83	59.86
2	Aug-95	20		
3	Feb-96	20		
4	Jun-96	10		
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	37	Nov-13	4.5	47	0.12
14	May-01	4.5	7	-0.55	38	Jun-14	4.5	18	-0.36
15	Oct-01	4.5	8	-0.53	39	Nov-14	4.5	14	-0.43
16	May-02	4.5	7	-0.55	40	Jun-15	4.5	2.5	-0.62
17	Jun-03	4.5	15	-0.41	41	Nov-15	4.5	7	-0.55
18	Jun-04	4.5	19	-0.35	42	Jun-16	4.5	10	-0.50
19	Dec-04	4.5	11	-0.48	43	Nov-16	4.5	8	-0.53
20	Jun-05	4.5	12	-0.46	44	Jun-17	4.5	5	-0.58
21	Dec-05	4.5	12	-0.46	45	Nov-17	4.5	8	-0.53
22	Jun-06	4.5	13	-0.45	46	Jun-18	4.5	2.5	-0.62
23	Nov-06	4.5	2.5	-0.62	47	Nov-18	4.5	7	-0.55
24	Jun-07	4.5	24	-0.26	48	Jun-19	4.5	2.5	-0.62
25	Nov-07	4.5	24	-0.26	49	Nov-19	4.5	6	-0.57
26	Jul-08	4.5	13	-0.45	50	Jun-20	4.5	2.5	-0.62
27	Nov-08	4.5	13	-0.45	51	Nov-20	4.5	7	-0.55
28	Jun-09	4.5	2.5	-0.62	52	Jun-21	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

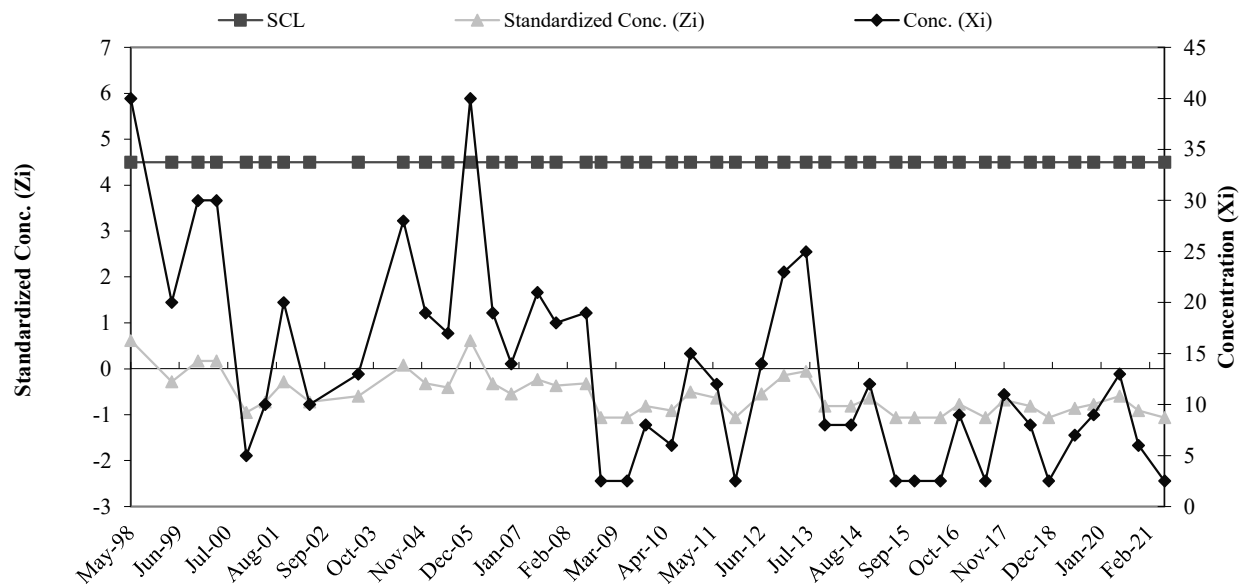


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-9 Zn

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	10	26.23	22.36
2	Aug-95	10		
3	Feb-96	10		
4	Jun-96	10		
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	37	Nov-13	4.5	8	-0.82
14	May-01	4.5	10	-0.73	38	Jun-14	4.5	8	-0.82
15	Oct-01	4.5	20	-0.28	39	Nov-14	4.5	12	-0.64
16	May-02	4.5	10	-0.73	40	Jun-15	4.5	2.5	-1.06
17	Jun-03	4.5	13	-0.59	41	Nov-15	4.5	2.5	-1.06
18	Jun-04	4.5	28	0.08	42	Jun-16	4.5	2.5	-1.06
19	Dec-04	4.5	19	-0.32	43	Nov-16	4.5	9	-0.77
20	Jun-05	4.5	17	-0.41	44	Jun-17	4.5	2.5	-1.06
21	Dec-05	4.5	40	0.62	45	Nov-17	4.5	11	-0.68
22	Jun-06	4.5	19	-0.32	46	Jun-18	4.5	8	-0.82
23	Nov-06	4.5	14	-0.55	47	Nov-18	4.5	2.5	-1.06
24	Jun-07	4.5	21	-0.23	48	Jun-19	4.5	7	-0.86
25	Nov-07	4.5	18	-0.37	49	Nov-19	4.5	9	-0.77
26	Jul-08	4.5	19	-0.32	50	Jun-20	4.5	13	-0.59
27	Nov-08	4.5	2.5	-1.06	51	Nov-20	4.5	6	-0.90
28	Jun-09	4.5	2.5	-1.06	52	Jun-21	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

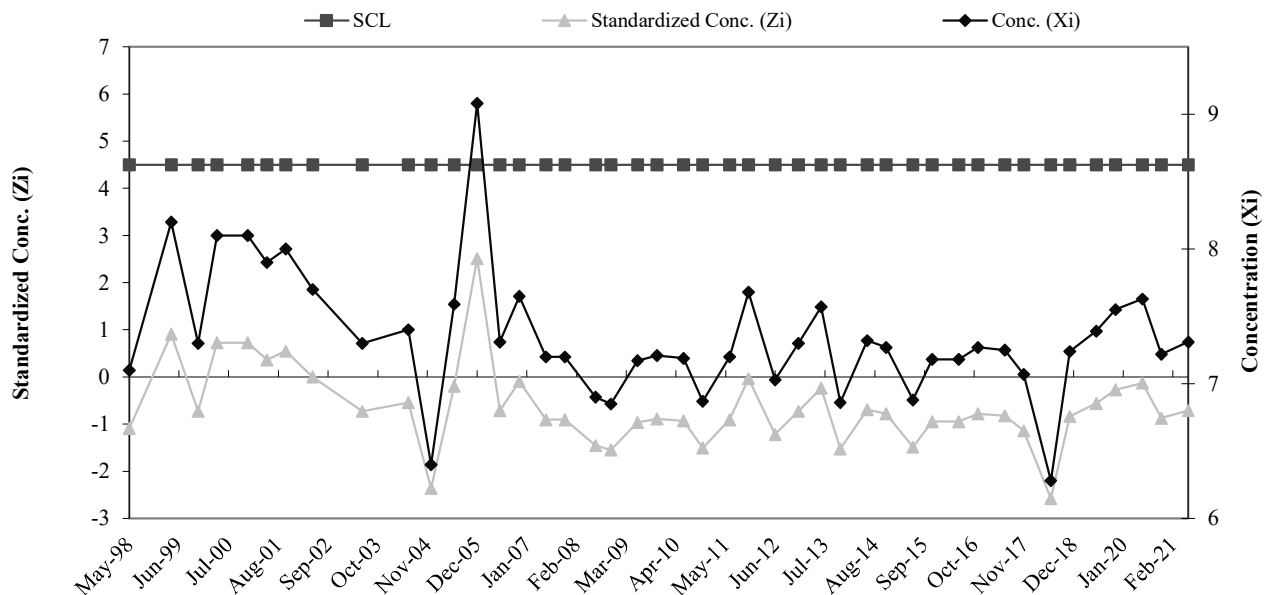


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-9 pH

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

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	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	37	Nov-13	4.5	6.4	-1.53
14	May-01	4.5	7.4	0.36	38	Jun-14	4.5	6.8	-0.69
15	Oct-01	4.5	7.5	0.55	39	Nov-14	4.5	6.8	-0.78
16	May-02	4.5	7.2	0.00	40	Jun-15	4.5	6.4	-1.49
17	Jun-03	4.5	6.8	-0.73	41	Nov-15	4.5	6.7	-0.94
18	Jun-04	4.5	6.9	-0.55	42	Jun-16	4.5	6.7	-0.94
19	Dec-04	4.5	5.9	-2.36	43	Nov-16	4.5	6.8	-0.78
20	Jun-05	4.5	7.1	-0.20	44	Jun-17	4.5	6.8	-0.82
21	Dec-05	4.5	8.6	2.51	45	Nov-17	4.5	6.6	-1.14
22	Jun-06	4.5	6.8	-0.71	46	Jun-18	4.5	5.8	-2.58
23	Nov-06	4.5	7.2	-0.09	47	Nov-18	4.5	6.7	-0.84
24	Jun-07	4.5	6.7	-0.91	48	Jun-19	4.5	6.9	-0.56
25	Nov-07	4.5	6.7	-0.91	49	Nov-19	4.5	7.1	-0.27
26	Jul-08	4.5	6.4	-1.45	50	Jun-20	4.5	7.1	-0.13
27	Nov-08	4.5	6.4	-1.54	51	Nov-20	4.5	6.7	-0.87
28	Jun-09	4.5	6.7	-0.96	52	Jun-21	4.5	6.8	-0.71
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

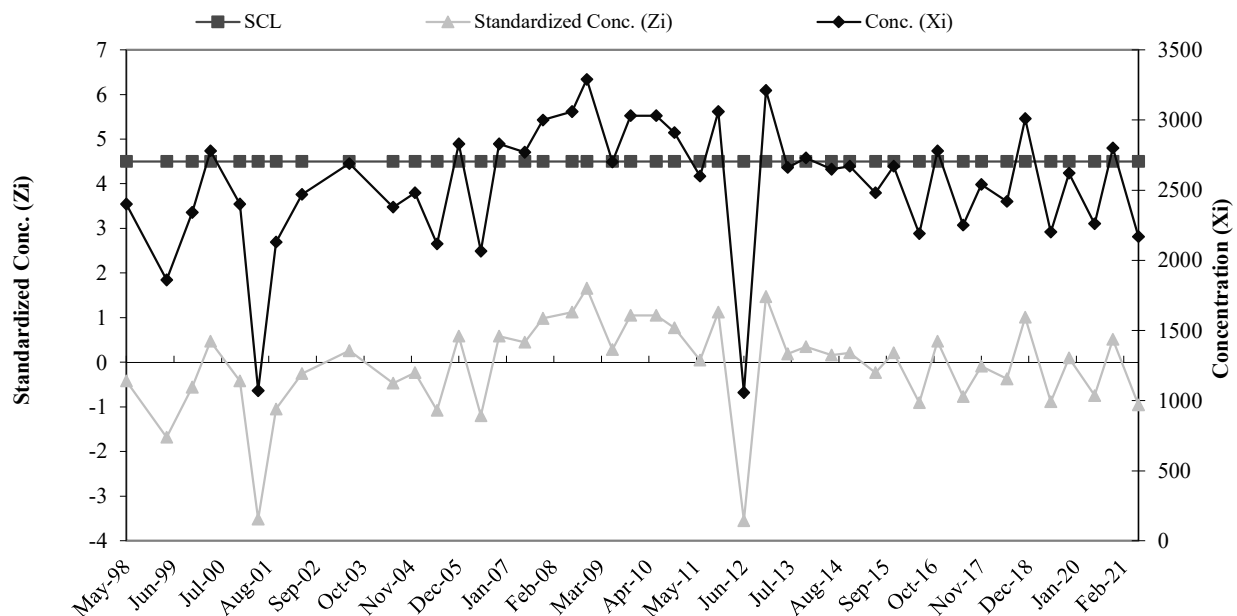


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-9 SpC

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	2400	2,578.63	428.85
2	Aug-95	1829		
3	Feb-96	2860		
4	Jun-96	2550		
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	37	Nov-13	4.5	2730	0.35
14	May-01	4.5	1070	-3.52	38	Jun-14	4.5	2650	0.17
15	Oct-01	4.5	2130	-1.05	39	Nov-14	4.5	2670	0.21
16	May-02	4.5	2470	-0.25	40	Jun-15	4.5	2480	-0.23
17	Jun-03	4.5	2690	0.26	41	Nov-15	4.5	2670	0.21
18	Jun-04	4.5	2379	-0.47	42	Jun-16	4.5	2190	-0.91
19	Dec-04	4.5	2480	-0.23	43	Nov-16	4.5	2780	0.47
20	Jun-05	4.5	2116	-1.08	44	Jun-17	4.5	2250	-0.77
21	Dec-05	4.5	2830	0.59	45	Nov-17	4.5	2540	-0.09
22	Jun-06	4.5	2065	-1.20	46	Jun-18	4.5	2420	-0.37
23	Nov-06	4.5	2830	0.59	47	Nov-18	4.5	3010	1.01
24	Jun-07	4.5	2770	0.45	48	Jun-19	4.5	2200	-0.88
25	Nov-07	4.5	3000	0.98	49	Nov-19	4.5	2620	0.10
26	Jul-08	4.5	3060	1.12	50	Jun-20	4.5	2260	-0.74
27	Nov-08	4.5	3290	1.66	51	Nov-20	4.5	2800	0.52
28	Jun-09	4.5	2700	0.28	52	Jun-21	4.5	2168	-0.96
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

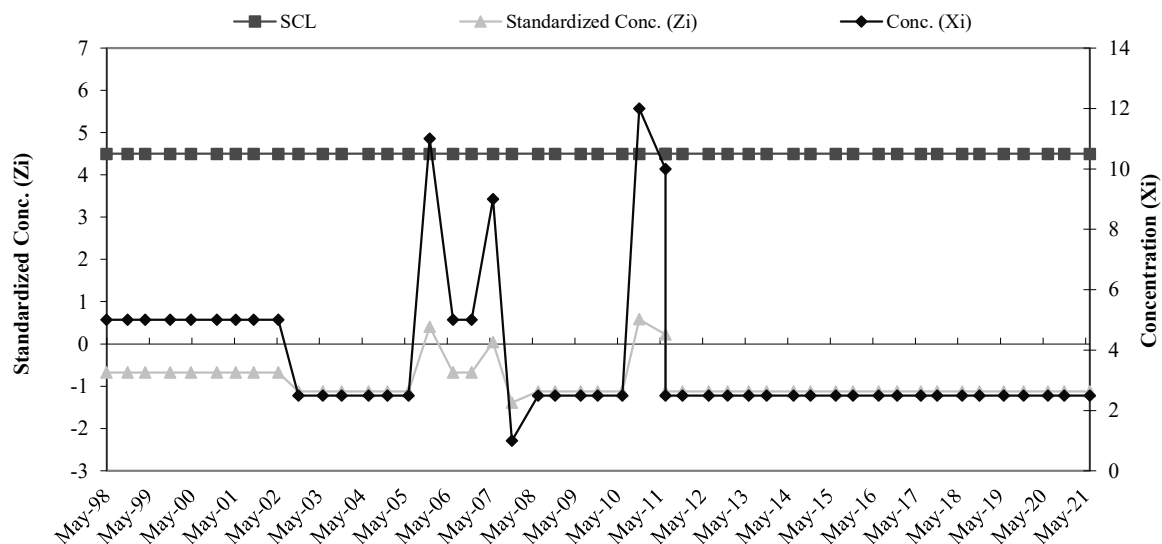


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-18a Cr

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	10	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	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	41	Nov-13	4.5	2.5	-1.12
14	Dec-00	4.5	5	-0.67	42	Jun-14	4.5	2.5	-1.12
15	May-01	4.5	5	-0.67	43	Nov-14	4.5	2.5	-1.12
16	Oct-01	4.5	5	-0.67	44	Jun-15	4.5	2.5	-1.12
17	May-02	4.5	5	-0.67	45	Nov-15	4.5	2.5	-1.12
18	Nov-02	4.5	2.5	-1.12	46	Jun-16	4.5	2.5	-1.12
19	Jun-03	4.5	2.5	-1.12	47	Nov-16	4.5	2.5	-1.12
20	Nov-03	4.5	2.5	-1.12	48	Jun-17	4.5	2.5	-1.12
21	Jun-04	4.5	2.5	-1.12	49	Nov-17	4.5	2.5	-1.12
22	Dec-04	4.5	2.5	-1.12	50	Jun-18	4.5	2.5	-1.12
23	Jun-05	4.5	2.5	-1.12	51	Nov-18	4.5	2.5	-1.12
24	Dec-05	4.5	11	0.41	52	Jun-19	4.5	2.5	-1.12
25	Jun-06	4.5	5	-0.67	53	Nov-19	4.5	2.5	-1.12
26	Nov-06	4.5	5	-0.67	54	Jun-20	4.5	2.5	-1.12
27	Jun-07	4.5	9	0.05	55	Nov-20	4.5	2.5	-1.12
28	Nov-07	4.5	1	-1.39	56	Jun-21	4.5	2.5	-1.12
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



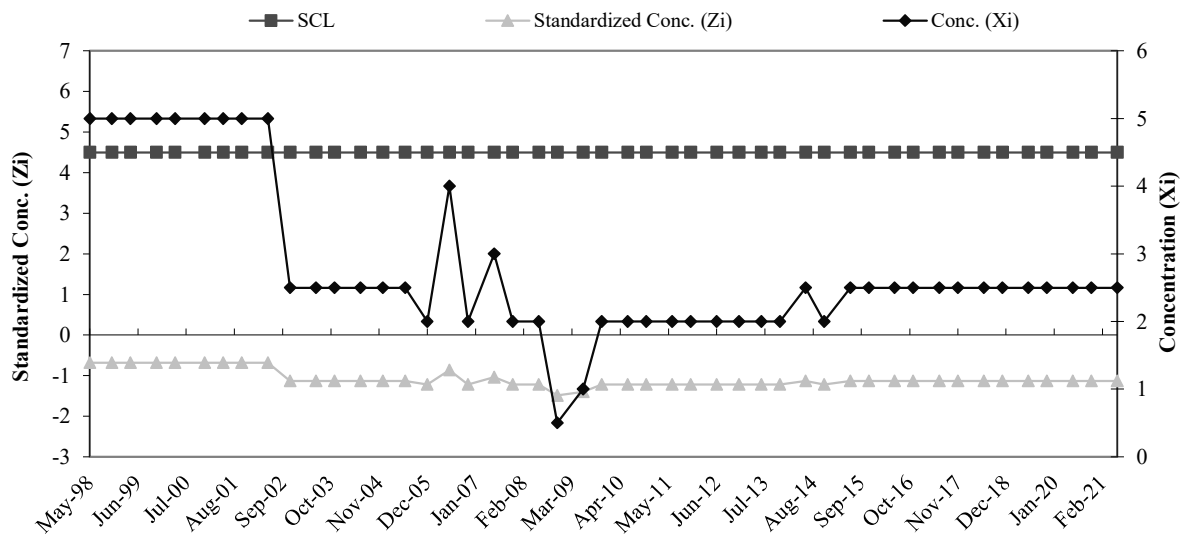
**COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART**

B-18a Cu

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	10	8.78	5.56
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	-0.68	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	40	Nov-13	4.5	2	-1.22
14	Dec-00	4.5	5	-0.68	41	Jun-14	4.5	2.5	-1.13
15	May-01	4.5	5	-0.68	42	Nov-14	4.5	2	-1.22
16	Oct-01	4.5	5	-0.68	43	Jun-15	4.5	2.5	-1.13
17	May-02	4.5	5	-0.68	44	Nov-15	4.5	2.5	-1.13
18	Nov-02	4.5	2.5	-1.13	45	Jun-16	4.5	2.5	-1.13
19	Jun-03	4.5	2.5	-1.13	46	Nov-16	4.5	2.5	-1.13
20	Nov-03	4.5	2.5	-1.13	47	Jun-17	4.5	2.5	-1.13
21	Jun-04	4.5	2.5	-1.13	48	Nov-17	4.5	2.5	-1.13
22	Dec-04	4.5	2.5	-1.13	49	Jun-18	4.5	2.5	-1.13
23	Jun-05	4.5	2.5	-1.13	50	Nov-18	4.5	2.5	-1.13
24	Dec-05	4.5	2	-1.22	51	Jun-19	4.5	2.5	-1.13
25	Jun-06	4.5	4	-0.86	52	Nov-19	4.5	2.5	-1.13
26	Nov-06	4.5	2	-1.22	53	Jun-20	4.5	2.5	-1.13
27	Jun-07	4.5	3	-1.04	54	Nov-20	4.5	2.5	-1.13
28	Nov-07	4.5	2	-1.22	55	Jun-21	4.5	2.5	-1.13
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



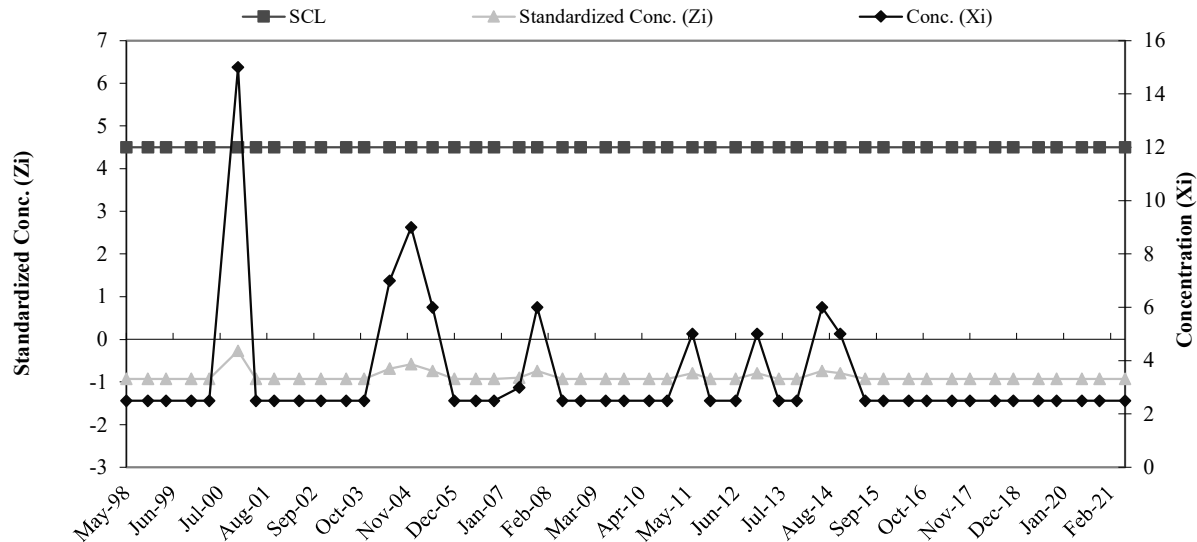
COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART

B-18a Ni

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	15	20.01	18.96
2	Aug-95	20		
3	Feb-96	20		
4	Jun-96	10		
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	40	Nov-13	4.5	2.5	-0.92
14	Dec-00	4.5	15	-0.26	41	Jun-14	4.5	6	-0.74
15	May-01	4.5	2.5	-0.92	42	Nov-14	4.5	5	-0.79
16	Oct-01	4.5	2.5	-0.92	43	Jun-15	4.5	2.5	-0.92
17	May-02	4.5	2.5	-0.92	44	Nov-15	4.5	2.5	-0.92
18	Nov-02	4.5	2.5	-0.92	45	Jun-16	4.5	2.5	-0.92
19	Jun-03	4.5	2.5	-0.92	46	Nov-16	4.5	2.5	-0.92
20	Nov-03	4.5	2.5	-0.92	47	Jun-17	4.5	2.5	-0.92
21	Jun-04	4.5	7	-0.69	48	Nov-17	4.5	2.5	-0.92
22	Dec-04	4.5	9	-0.58	49	Jun-18	4.5	2.5	-0.92
23	Jun-05	4.5	6	-0.74	50	Nov-18	4.5	2.5	-0.92
24	Dec-05	4.5	2.5	-0.92	51	Jun-19	4.5	2.5	-0.92
25	Jun-06	4.5	2.5	-0.92	52	Nov-19	4.5	2.5	-0.92
26	Nov-06	4.5	2.5	-0.92	53	Jun-20	4.5	2.5	-0.92
27	Jun-07	4.5	3	-0.90	54	Nov-20	4.5	2.5	-0.92
28	Nov-07	4.5	6	-0.74	55	Jun-21	4.5	2.5	-0.92
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

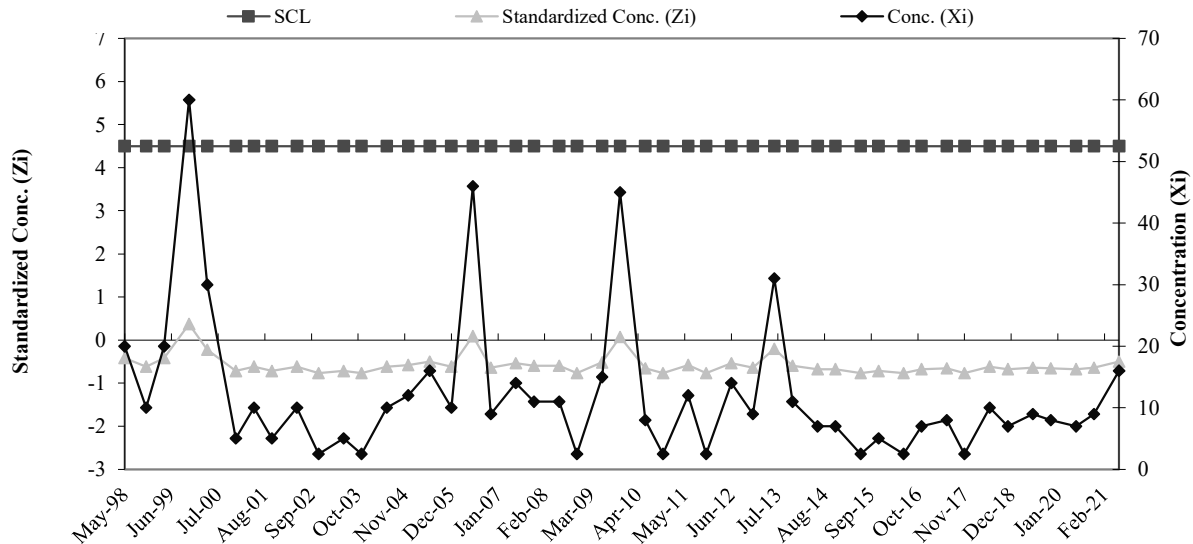


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-18a Zn

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	150	41.25	50.67
2	Aug-95	10		
3	Feb-96	10		
4	Jun-96	10		
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	40	Nov-13	4.5	11	-0.60
14	Dec-00	4.5	5	-0.72	41	Jun-14	4.5	7	-0.68
15	May-01	4.5	10	-0.62	42	Nov-14	4.5	7	-0.68
16	Oct-01	4.5	5	-0.72	43	Jun-15	4.5	2.5	-0.76
17	May-02	4.5	10	-0.62	44	Nov-15	4.5	5	-0.72
18	Nov-02	4.5	2.5	-0.76	45	Jun-16	4.5	2.5	-0.76
19	Jun-03	4.5	5	-0.72	46	Nov-16	4.5	7	-0.68
20	Nov-03	4.5	2.5	-0.76	47	Jun-17	4.5	8	-0.66
21	Jun-04	4.5	10	-0.62	48	Nov-17	4.5	2.5	-0.76
22	Dec-04	4.5	12	-0.58	49	Jun-18	4.5	10	-0.62
23	Jun-05	4.5	16	-0.50	50	Nov-18	4.5	7	-0.68
24	Dec-05	4.5	10	-0.62	51	Jun-19	4.5	9	-0.64
25	Jun-06	4.5	46	0.09	52	Nov-19	4.5	8	-0.66
26	Nov-06	4.5	9	-0.64	53	Jun-20	4.5	7	-0.68
27	Jun-07	4.5	14	-0.54	54	Nov-20	4.5	9	-0.64
28	Nov-07	4.5	11	-0.60	55	Jun-21	4.5	16	-0.50
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

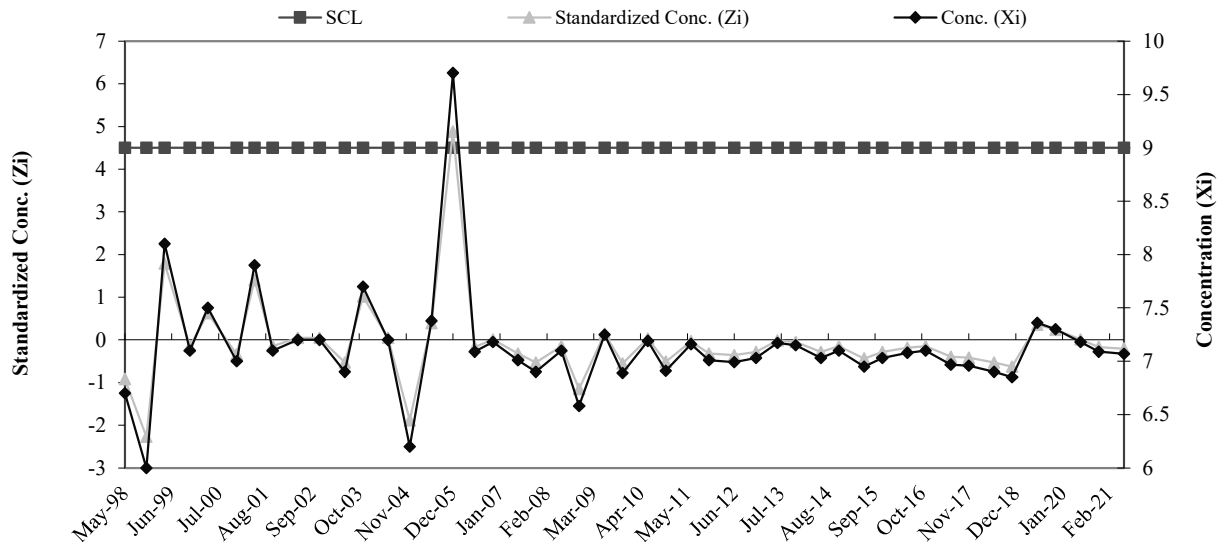


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-18a pH

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	40	Nov-13	4.5	7.2	-0.05
14	Dec-00	4.5	7.0	-0.34	41	Jun-14	4.5	7.0	-0.28
15	May-01	4.5	7.9	1.40	42	Nov-14	4.5	7.1	-0.14
16	Oct-01	4.5	7.1	-0.14	43	Jun-15	4.5	7.0	-0.43
17	May-02	4.5	7.2	0.05	44	Nov-15	4.5	7.0	-0.28
18	Nov-02	4.5	7.2	0.05	45	Jun-16	4.5	7.1	-0.18
19	Jun-03	4.5	6.9	-0.53	46	Nov-16	4.5	7.1	-0.14
20	Nov-03	4.5	7.7	1.01	47	Jun-17	4.5	7.0	-0.40
21	Jun-04	4.5	7.2	0.05	48	Nov-17	4.5	7.0	-0.42
22	Dec-04	4.5	6.2	-1.88	49	Jun-18	4.5	6.9	-0.53
23	Jun-05	4.5	7.4	0.40	50	Nov-18	4.5	6.9	-0.63
24	Dec-05	4.5	9.7	4.88	51	Jun-19	4.5	7.4	0.36
25	Jun-06	4.5	7.1	-0.16	52	Nov-19	4.5	7.3	0.24
26	Nov-06	4.5	7.2	0.01	53	Jun-20	4.5	7.2	0.01
27	Jun-07	4.5	7.0	-0.32	54	Nov-20	4.5	7.1	-0.16
28	Nov-07	4.5	6.9	-0.53	55	Jun-21	4.5	7.1	-0.20
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

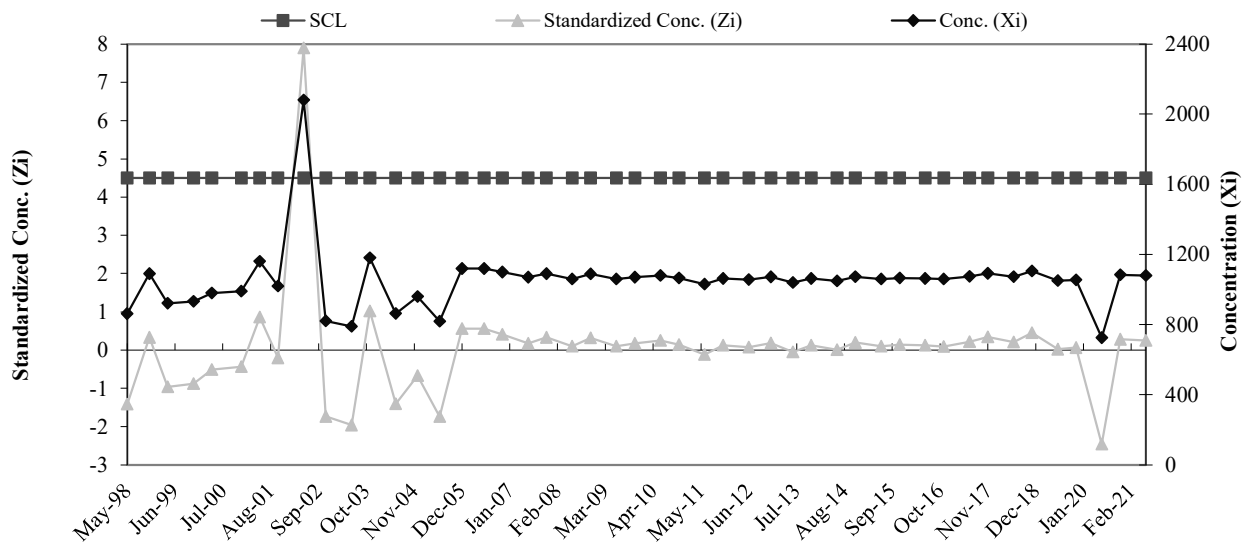


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-18a SpC

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	1048	1,046.75	130.80
2	Aug-95	989		
3	Feb-96	1021		
4	Jun-96	944.0		
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	40	Nov-13	4.5	1063	0.12
14	Dec-00	4.5	990.0	-0.43	41	Jun-14	4.5	1048	0.01
15	May-01	4.5	1160	0.87	42	Nov-14	4.5	1073	0.20
16	Oct-01	4.5	1020	-0.20	43	Jun-15	4.5	1060	0.10
17	May-02	4.5	2080	7.90	44	Nov-15	4.5	1065	0.14
18	Nov-02	4.5	820	-1.73	45	Jun-16	4.5	1063	0.12
19	Jun-03	4.5	790	-1.96	46	Nov-16	4.5	1059	0.09
20	Nov-03	4.5	1180	1.02	47	Jun-17	4.5	1075	0.22
21	Jun-04	4.5	863	-1.40	48	Nov-17	4.5	1092	0.35
22	Dec-04	4.5	960	-0.66	49	Jun-18	4.5	1074	0.21
23	Jun-05	4.5	819	-1.74	50	Nov-18	4.5	1106	0.45
24	Dec-05	4.5	1120	0.56	51	Jun-19	4.5	1050	0.02
25	Jun-06	4.5	1120	0.56	52	Nov-19	4.5	1055	0.06
26	Nov-06	4.5	1100	0.41	53	Jun-20	4.5	725	-2.46
27	Jun-07	4.5	1070	0.18	54	Nov-20	4.5	1084	0.28
28	Nov-07	4.5	1090	0.33	55	Jun-21	4.5	1080	0.25
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

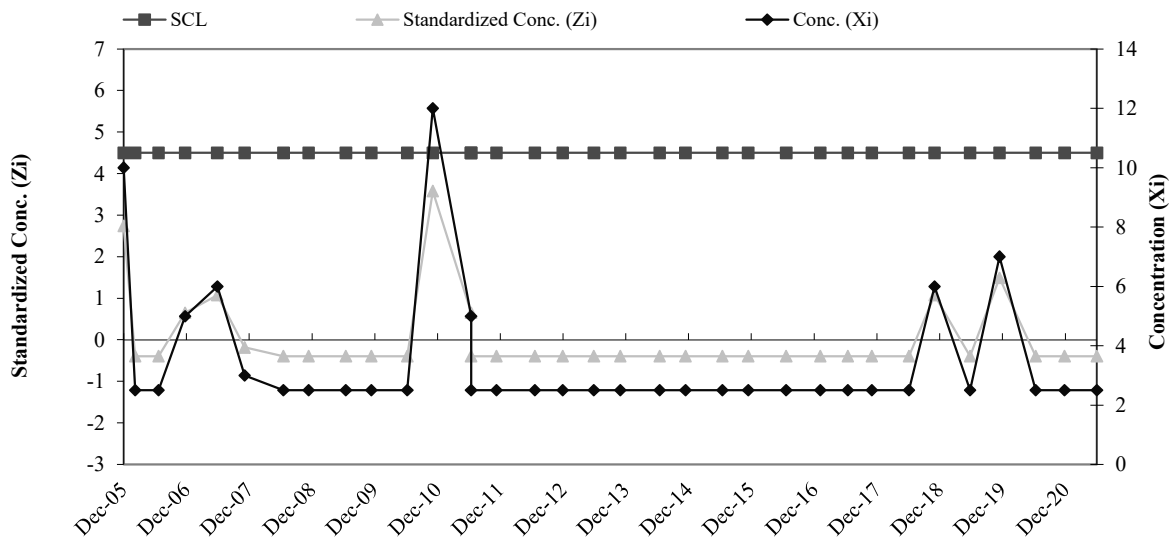


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-19a Cr

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	May-98	5	3.44	2.39
2	May-01	5		
3	May-02	5		
4	Jun-03	2.5		
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)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Dec-05	4.5	10	2.74	37	Nov-18	4.5	6	1.07
10	Feb-06	4.5	2.5	-0.39	38	Jun-19	4.5	2.5	-0.39
11	Jun-06	4.5	2.5	-0.39	39	Nov-19	4.5	7	1.49
12	Nov-06	4.5	5	0.65	40	Jun-20	4.5	2.5	-0.39
13	Jun-07	4.5	6	1.07	41	Dec-20	4.5	2.5	-0.39
14	Nov-07	4.5	3	-0.18	42	Jun-21	4.5	2.5	-0.39
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					
27	Nov-13	4.5	2.5	-0.39					
28	Jun-14	4.5	2.5	-0.39					
29	Nov-14	4.5	2.5	-0.39					
30	Jun-15	4.5	2.5	-0.39					
31	Nov-15	4.5	2.5	-0.39					
32	Jun-16	4.5	2.5	-0.39					
33	Jan-17	4.5	2.5	-0.39					
34	Jun-17	4.5	2.5	-0.39					
35	Nov-17	4.5	2.5	-0.39					
36	Jun-18	4.5	2.5	-0.39					

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

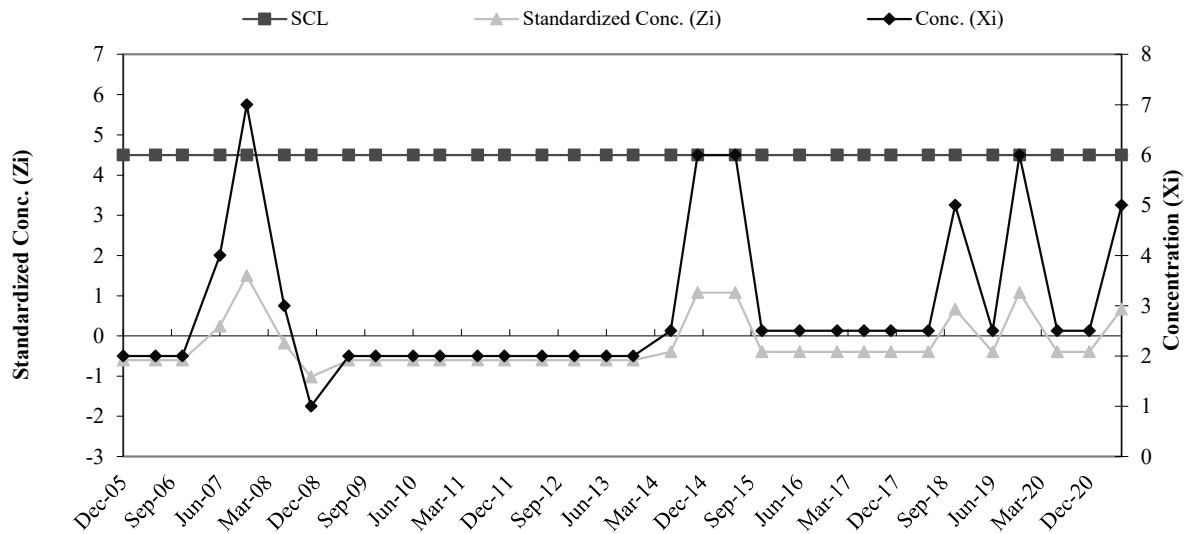


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-19a Cu

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	May-98	5	3.43	2.38
2	May-01	5		
3	May-02	5		
4	Jun-03	2.5		
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)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Dec-05	4.5	2	-0.60	36	Jun-19	4.5	2.5	-0.39
10	Jun-06	4.5	2	-0.60	37	Nov-19	4.5	6	1.08
11	Nov-06	4.5	2	-0.60	38	Jun-20	4.5	2.5	-0.39
12	Jun-07	4.5	4	0.24	39	Dec-20	4.5	2.5	-0.39
13	Nov-07	4.5	7	1.50	40	Jun-21	4.5	5	0.66
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					
25	Nov-13	4.5	2	-0.60					
26	Jun-14	4.5	2.5	-0.39					
27	Nov-14	4.5	6	1.08					
28	Jun-15	4.5	6	1.08					
29	Nov-15	4.5	2.5	-0.39					
30	Jun-16	4.5	2.5	-0.39					
31	Jan-17	4.5	2.5	-0.39					
32	Jun-17	4.5	2.5	-0.39					
33	Nov-17	4.5	2.5	-0.39					
34	Jun-18	4.5	2.5	-0.39					
35	Nov-18	4.5	5	0.66					

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

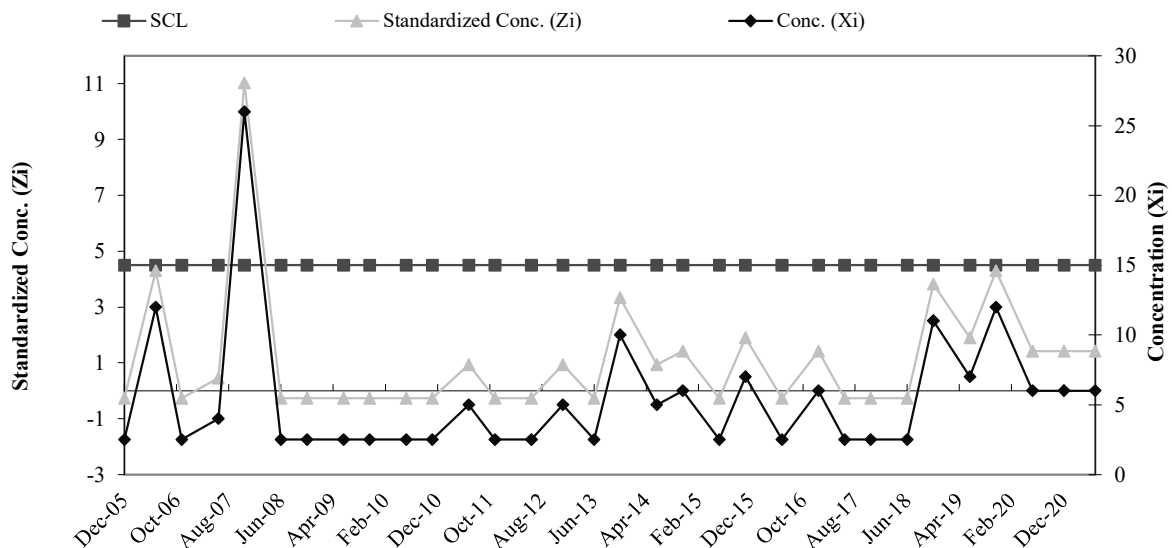


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-19a Ni

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)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Dec-05	4.5	2.5	-0.27	37	Jun-19	4.5	7	1.89
10	Jun-06	4.5	12	4.30	38	Nov-19	4.5	12	4.30
11	Nov-06	4.5	2.5	-0.27	39	Jun-20	4.5	6	1.41
12	Jun-07	4.5	4	0.45	40	Dec-20	4.5	6	1.41
13	Nov-07	4.5	26	11.03	41	Jun-21	4.5	6	1.41
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					
26	Nov-13	4.5	10	3.34					
27	Jun-14	4.5	5	0.93					
28	Nov-14	4.5	6	1.41					
29	Jun-15	4.5	2.5	-0.27					
30	Nov-15	4.5	7	1.89					
31	Jun-16	4.5	2.5	-0.27					
32	Jan-17	4.5	6	1.41					
33	Jun-17	4.5	2.5	-0.27					
34	Nov-17	4.5	2.5	-0.27					
35	Jun-18	4.5	2.5	-0.27					
36	Nov-18	4.5	11	3.82					

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

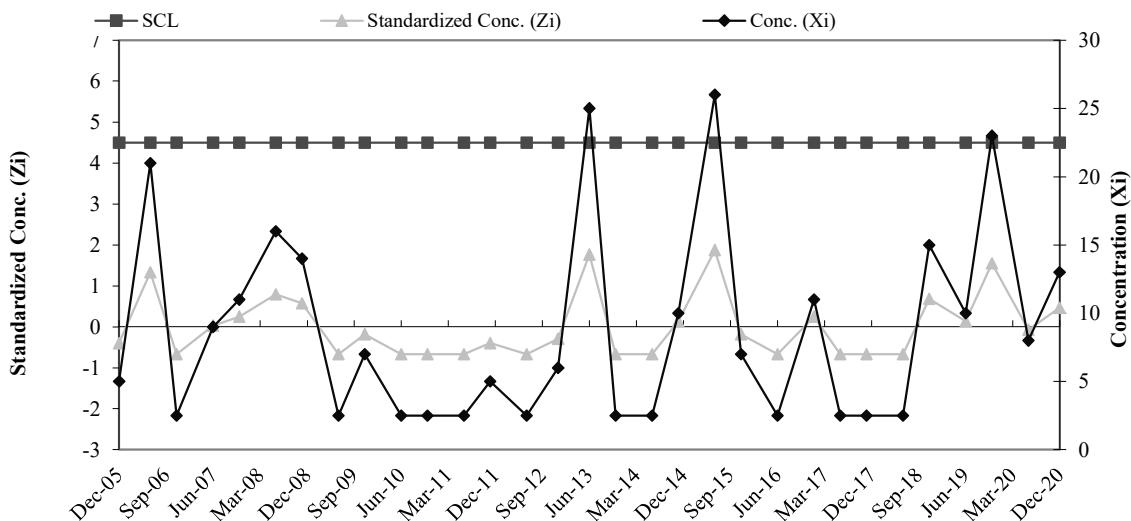


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-19a Zn

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)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Dec-05	4.5	5	-0.40	37	Nov-19	4.5	23	1.55
10	Jun-06	4.5	21	1.33	38	Jun-20	4.5	8	-0.07
11	Nov-06	4.5	2.5	-0.67	39	Dec-20	4.5	13	0.47
12	Jun-07	4.5	9	0.03	40	Jun-21	4.5	12	0.36
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					
25	Nov-13	4.5	2.5	-0.67					
26	Jun-14	4.5	2.5	-0.67					
27	Nov-14	4.5	10	0.14					
28	Jun-15	4.5	26	1.87					
29	Nov-15	4.5	7	-0.18					
30	Jun-16	4.5	2.5	-0.67					
31	Jan-17	4.5	11	0.25					
32	Jun-17	4.5	2.5	-0.67					
33	Nov-17	4.5	2.5	-0.67					
34	Jun-18	4.5	2.5	-0.67					
35	Nov-18	4.5	15	0.68					
36	Jun-19	4.5	10	0.14					

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

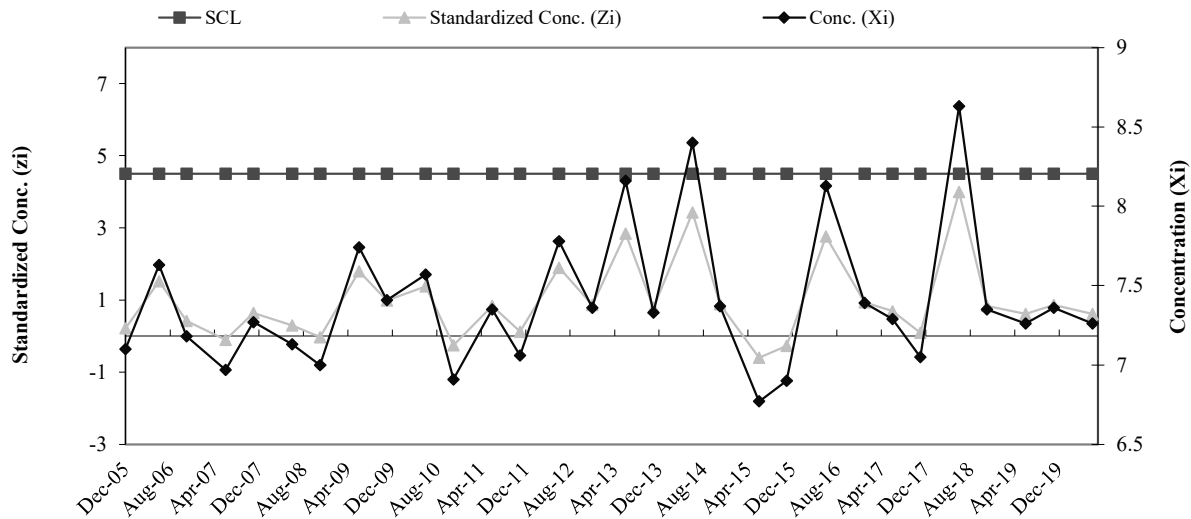


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-19a pH

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)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Dec-05	4.5	7.1	0.22	38	Jun-20	4.5	7.3	0.61
10	Jun-06	4.5	7.6	1.53	39	Nov-20	4.5	7.0	0.02
11	Nov-06	4.5	7.2	0.42	40	Jun-21	4.5	7.3	0.66
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					
25	Nov-13	4.5	7.3	0.79					
26	Jun-14	4.5	8.4	3.43					
27	Nov-14	4.5	7.4	0.89					
28	Jun-15	4.5	6.8	-0.60					
29	Nov-15	4.5	6.9	-0.27					
30	Jun-16	4.5	8.1	2.76					
31	Jan-17	4.5	7.4	0.94					
32	Jun-17	4.5	7.3	0.69					
33	Nov-17	4.5	7.1	0.10					
34	Jun-18	4.5	8.6	4.00					
35	Nov-18	4.5	7.4	0.84					
36	Jun-19	4.5	7.3	0.61					
37	Nov-19	4.5	7.4	0.86					

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

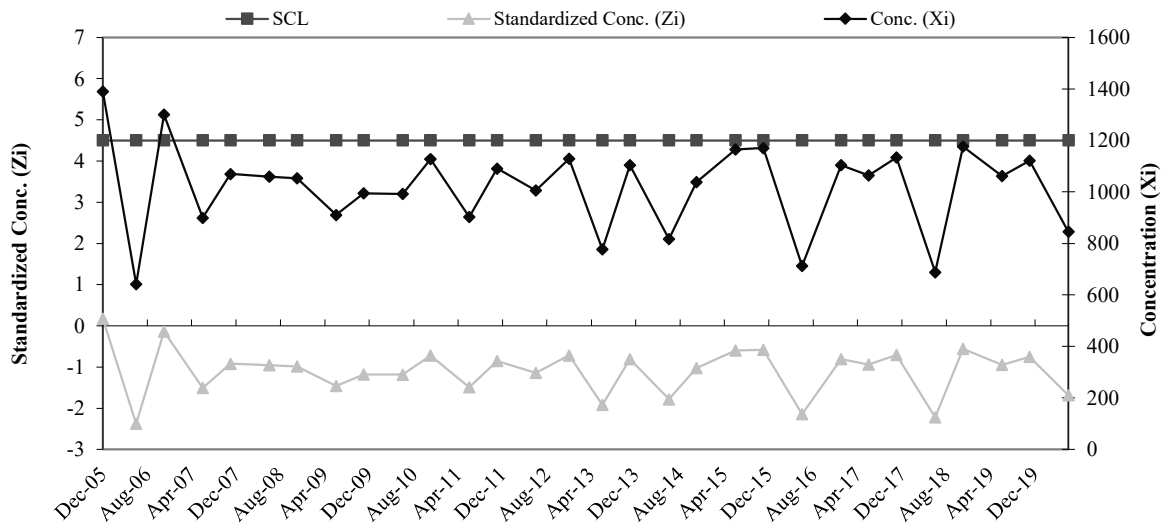


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-19a SpC

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

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Dec-05	4.5	1390	0.17	38	Jun-20	4.5	845	-1.69
10	Jun-06	4.5	642	-2.38	39	Nov-20	4.5	1172	-0.57
11	Nov-06	4.5	1300	-0.14	40	Jun-21	4.5	1194	-0.50
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					
25	Nov-13	4.5	1104	-0.81					
26	Jun-14	4.5	817	-1.78					
27	Nov-14	4.5	1038	-1.03					
28	Jun-15	4.5	1165	-0.60					
29	Nov-15	4.5	1170	-0.58					
30	Jun-16	4.5	712	-2.14					
31	Jan-17	4.5	1104	-0.81					
32	Jun-17	4.5	1064	-0.94					
33	Nov-17	4.5	1134	-0.70					
34	Jun-18	4.5	688	-2.22					
35	Nov-18	4.5	1176	-0.56					
36	Jun-19	4.5	1062	-0.95					
37	Nov-19	4.5	1121	-0.75					

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

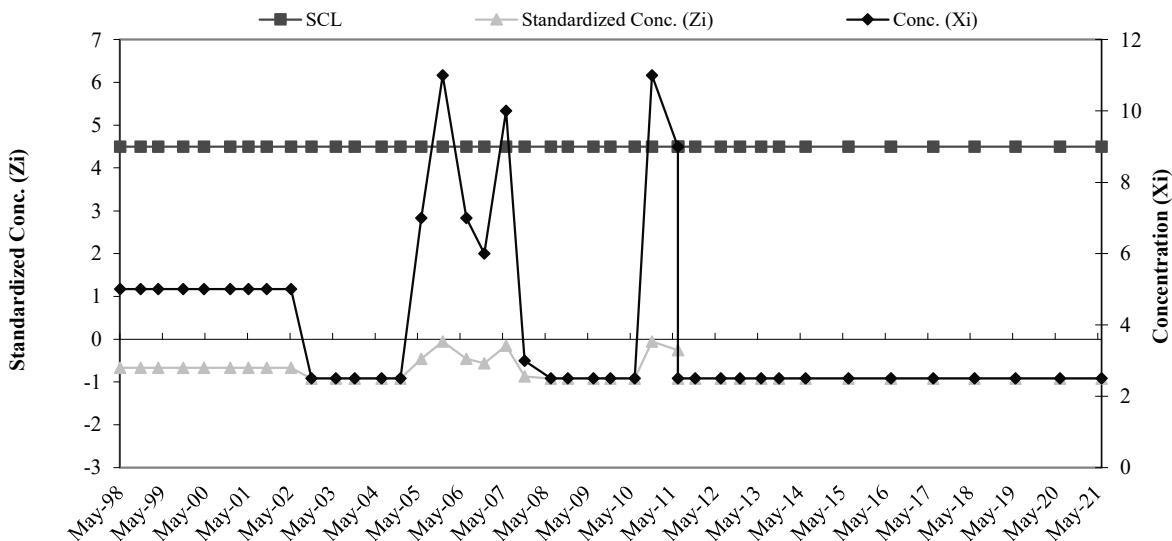


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-20d Cr

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	10	11.51	9.80
2	Aug-95	10		
3	Feb-96	32		
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	-0.66	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	41	Nov-13	4.5	2.5	-0.92
14	Dec-00	4.5	5	-0.66	42	Jun-14	4.5	2.5	-0.92
15	May-01	4.5	5	-0.66	43	Jun-15	4.5	2.5	-0.92
16	Oct-01	4.5	5	-0.66	44	Jun-16	4.5	2.5	-0.92
17	May-02	4.5	5	-0.66	45	Jun-17	4.5	2.5	-0.92
18	Nov-02	4.5	2.5	-0.92	46	Jun-18	4.5	2.5	-0.92
19	Jun-03	4.5	2.5	-0.92	47	May-19	4.5	2.5	-0.92
20	Nov-03	4.5	2.5	-0.92	48	Jun-20	4.5	2.5	-0.92
21	Jun-04	4.5	2.5	-0.92	49	Jun-21	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

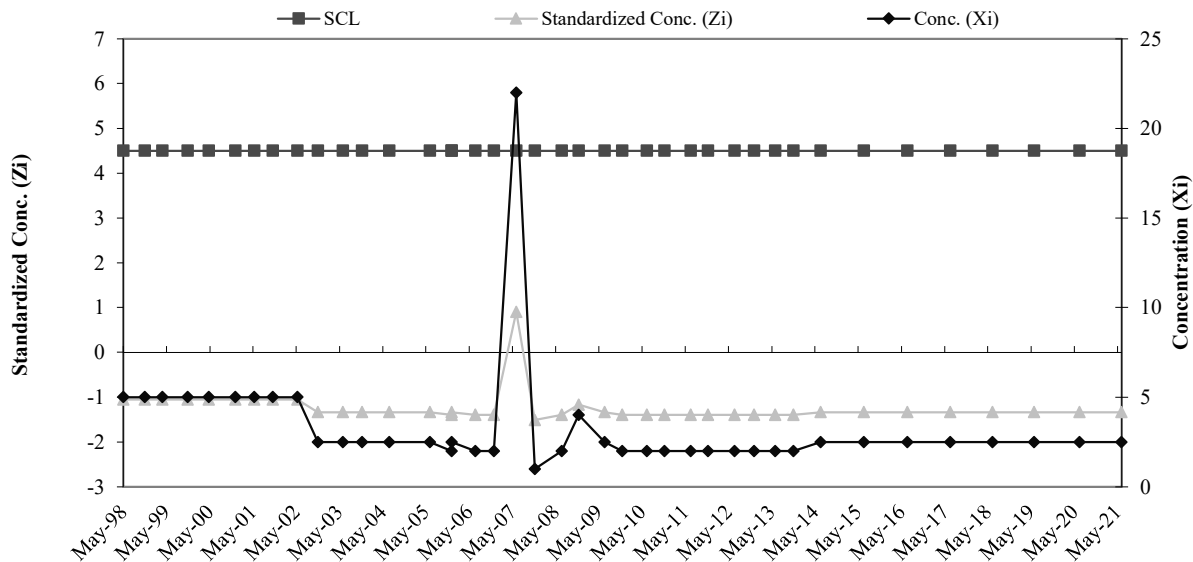


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-20d Cu

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	10	14.13	8.70
2	Aug-95	20		
3	Feb-96	28		
4	Jun-96	10		
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	40	Nov-13	4.5	2	-1.39
14	Dec-00	4.5	5	-1.05	41	Jun-14	4.5	2.5	-1.34
15	May-01	4.5	5	-1.05	42	Jun-15	4.5	2.5	-1.34
16	Oct-01	4.5	5	-1.05	43	Jun-16	4.5	2.5	-1.34
17	May-02	4.5	5	-1.05	44	Jun-17	4.5	2.5	-1.34
18	Nov-02	4.5	2.5	-1.34	45	Jun-18	4.5	2.5	-1.34
19	Jun-03	4.5	2.5	-1.34	46	May-19	4.5	2.5	-1.34
20	Nov-03	4.5	2.5	-1.34	47	Jun-20	4.5	2.5	-1.34
21	Jun-04	4.5	2.5	-1.34	48	Jun-21	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

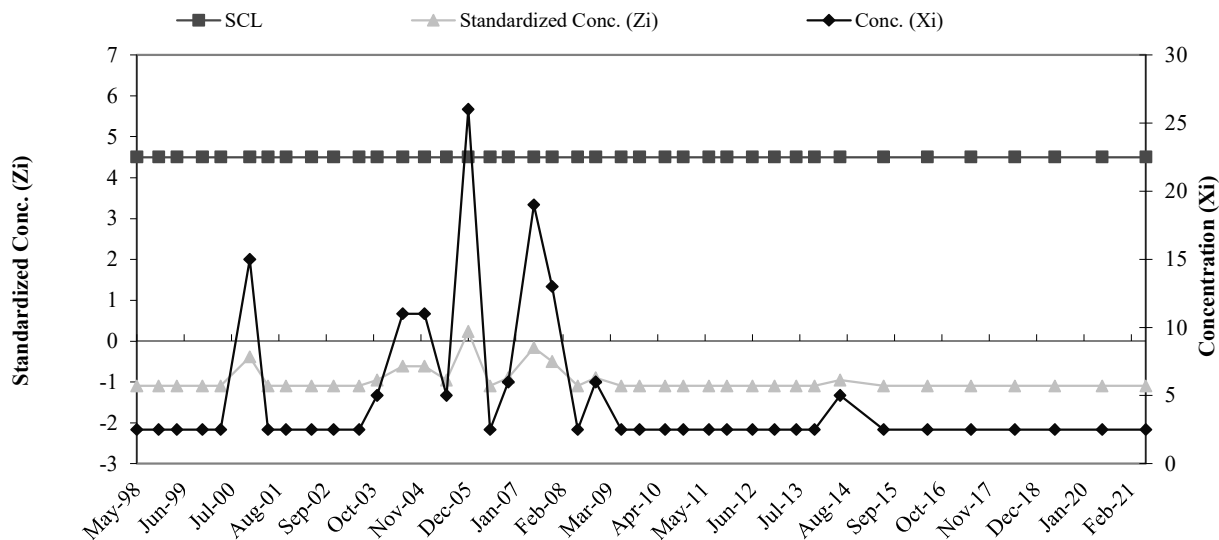


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-20d Ni

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	15	21.88	17.64
2	Aug-95	20		
3	Feb-96	54		
4	Jun-96	10		
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	40	Nov-13	4.5	2.5	-1.10
14	Dec-00	4.5	15	-0.39	41	Jun-14	4.5	5	-0.96
15	May-01	4.5	2.5	-1.10	42	Jun-15	4.5	2.5	-1.10
16	Oct-01	4.5	2.5	-1.10	43	Jun-16	4.5	2.5	-1.10
17	May-02	4.5	2.5	-1.10	44	Jun-17	4.5	2.5	-1.10
18	Nov-02	4.5	2.5	-1.10	45	Jun-18	4.5	2.5	-1.10
19	Jun-03	4.5	2.5	-1.10	46	May-19	4.5	2.5	-1.10
20	Nov-03	4.5	5	-0.96	47	Jun-20	4.5	2.5	-1.10
21	Jun-04	4.5	11	-0.62	48	Jun-21	4.5	2.5	-1.10
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

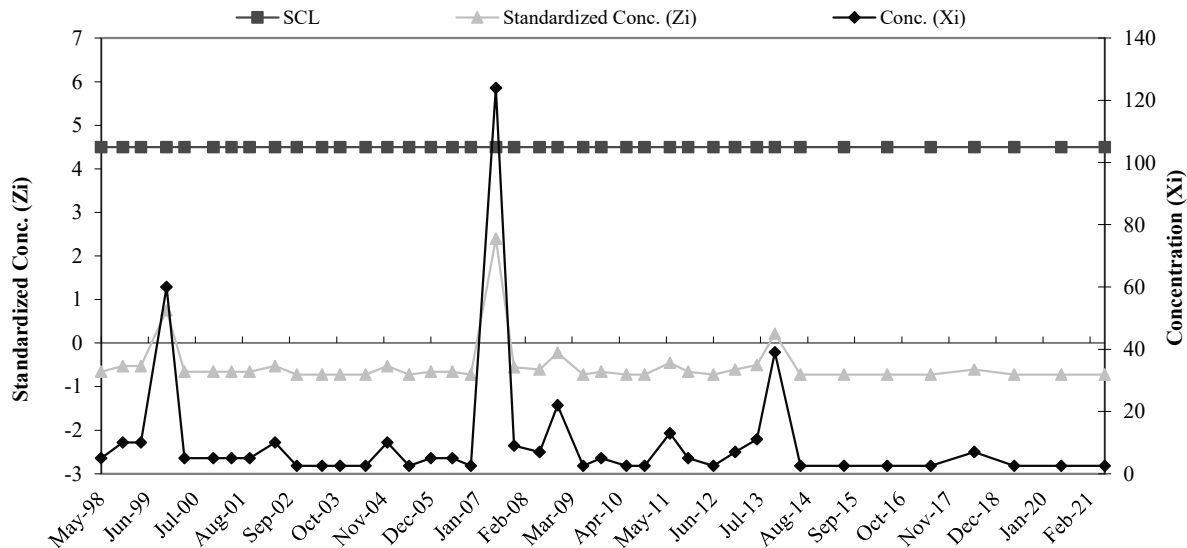


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-20d Zn

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	10	30.66	38.93
2	Aug-95	10		
3	Feb-96	120		
4	Jun-96	10		
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	40	Nov-13	4.5	39	0.21
14	Dec-00	4.5	5	-0.66	41	Jun-14	4.5	2.5	-0.72
15	May-01	4.5	5	-0.66	42	Jun-15	4.5	2.5	-0.72
16	Oct-01	4.5	5	-0.66	43	Jun-16	4.5	2.5	-0.72
17	May-02	4.5	10	-0.53	44	Jun-17	4.5	2.5	-0.72
18	Nov-02	4.5	2.5	-0.72	45	Jun-18	4.5	7	-0.61
19	Jun-03	4.5	2.5	-0.72	46	May-19	4.5	2.5	-0.72
20	Nov-03	4.5	2.5	-0.72	47	Jun-20	4.5	2.5	-0.72
21	Jun-04	4.5	2.5	-0.72	48	Jun-21	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

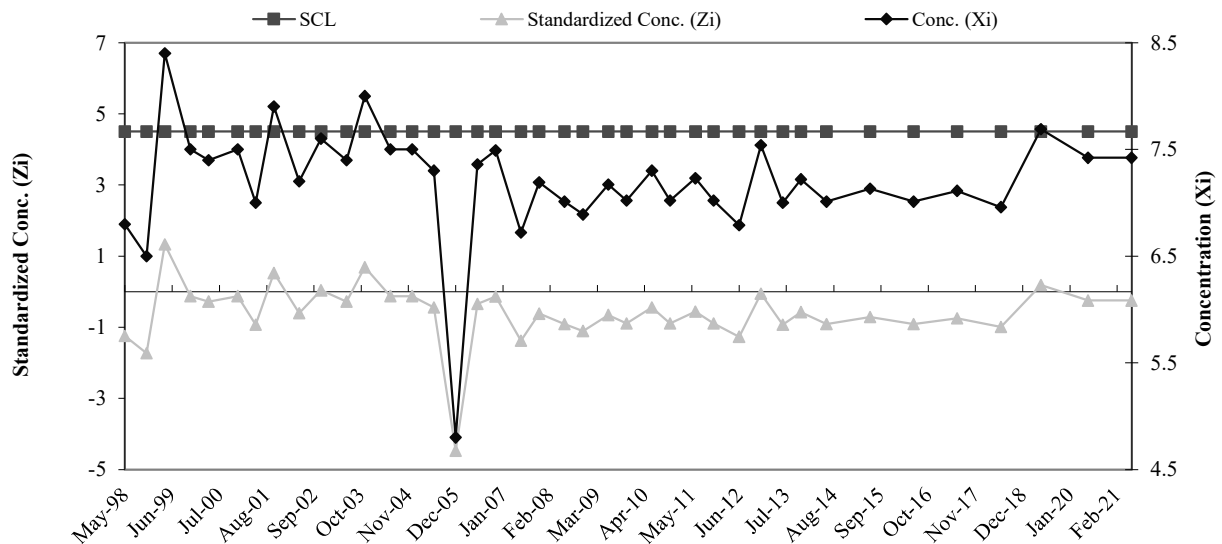


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-20d pH

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	40	Nov-13	4.5	7.2	-0.57
14	Dec-00	4.5	7.5	-0.12	41	Jun-14	4.5	7.0	-0.91
15	May-01	4.5	7.0	-0.93	42	Jun-15	4.5	7.1	-0.72
16	Oct-01	4.5	7.9	0.52	43	Jun-16	4.5	7.0	-0.91
17	May-02	4.5	7.2	-0.60	44	Jun-17	4.5	7.1	-0.75
18	Nov-02	4.5	7.6	0.04	45	Jun-18	4.5	7.0	-0.99
19	Jun-03	4.5	7.4	-0.28	46	May-19	4.5	7.7	0.19
20	Nov-03	4.5	8.0	0.68	47	Jun-20	4.5	7.4	-0.25
21	Jun-04	4.5	7.5	-0.12	48	Jun-21	4.5	7.4	-0.25
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

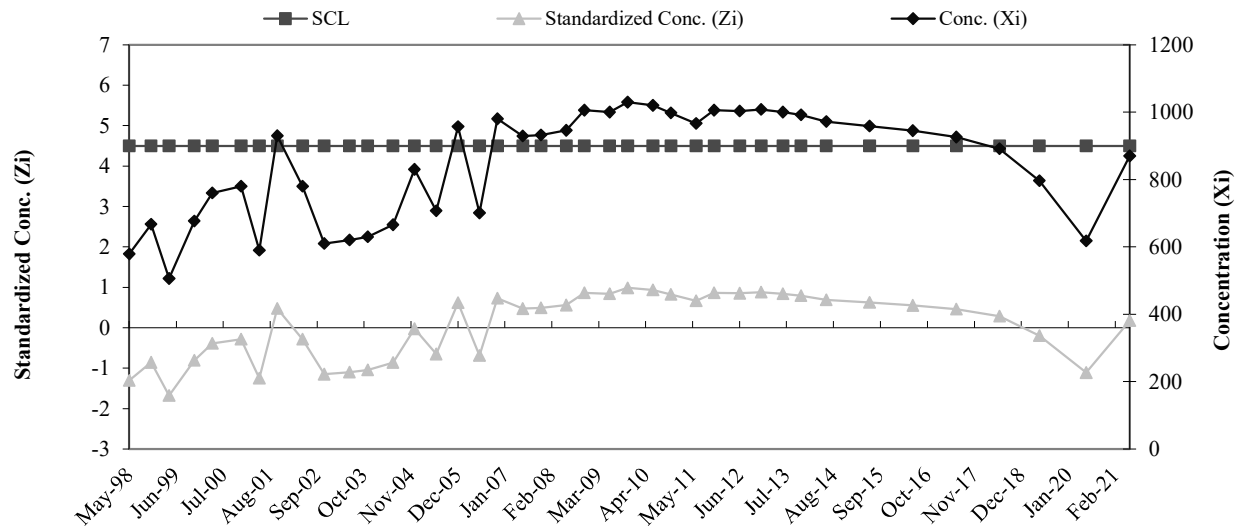


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-20d SpC

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	40	Nov-13	4.5	992	0.79
14	Dec-00	4.5	780	-0.28	41	Jun-14	4.5	972	0.69
15	May-01	4.5	590	-1.25	42	Jun-15	4.5	959	0.63
16	Oct-01	4.5	930	0.48	43	Jun-16	4.5	945	0.56
17	May-02	4.5	780	-0.28	44	Jun-17	4.5	926	0.46
18	Nov-02	4.5	610	-1.15	45	Jun-18	4.5	892	0.29
19	Jun-03	4.5	620	-1.10	46	May-19	4.5	797	-0.20
20	Nov-03	4.5	630	-1.05	47	Jun-20	4.5	618	-1.11
21	Jun-04	4.5	666	-0.86	48	Jun-21	4.5	870	0.17
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

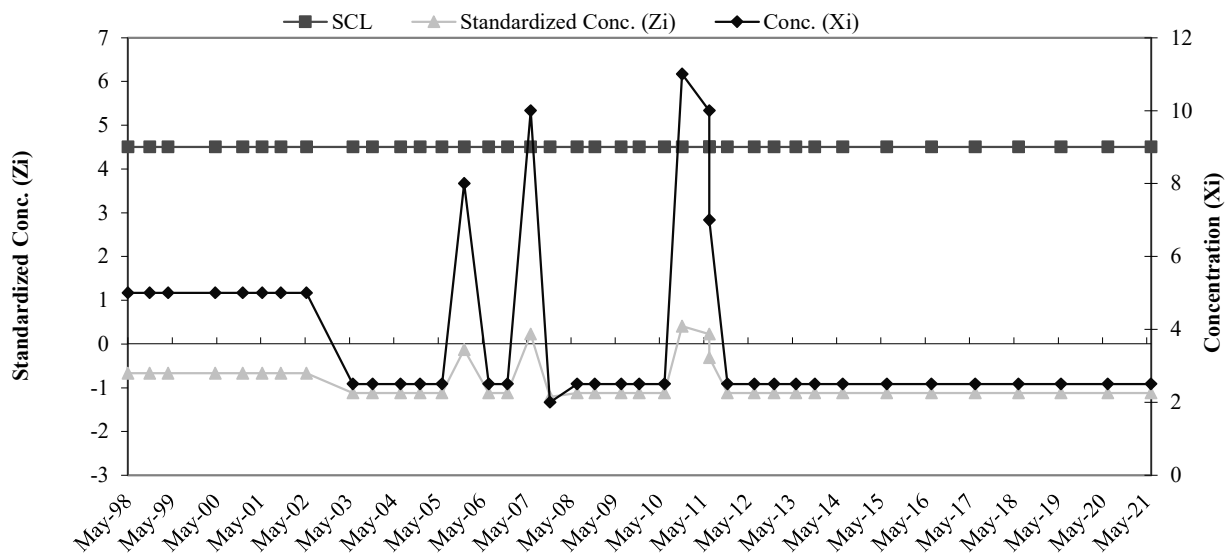


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-21d Cr

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	40	Nov-13	4.5	2.5	-1.12
14	May-01	4.5	5	-0.67	41	Jun-14	4.5	2.5	-1.12
15	Oct-01	4.5	5	-0.67	42	Jun-15	4.5	2.5	-1.12
16	May-02	4.5	5	-0.67	43	Jun-16	4.5	2.5	-1.12
18	Jun-03	4.5	2.5	-1.12	44	Jun-17	4.5	2.5	-1.12
19	Nov-03	4.5	2.5	-1.12	45	Jun-18	4.5	2.5	-1.12
20	Jun-04	4.5	2.5	-1.12	46	May-19	4.5	2.5	-1.12
21	Dec-04	4.5	2.5	-1.12	47	Jun-20	4.5	2.5	-1.12
22	Jun-05	4.5	2.5	-1.12	48	Jun-21	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



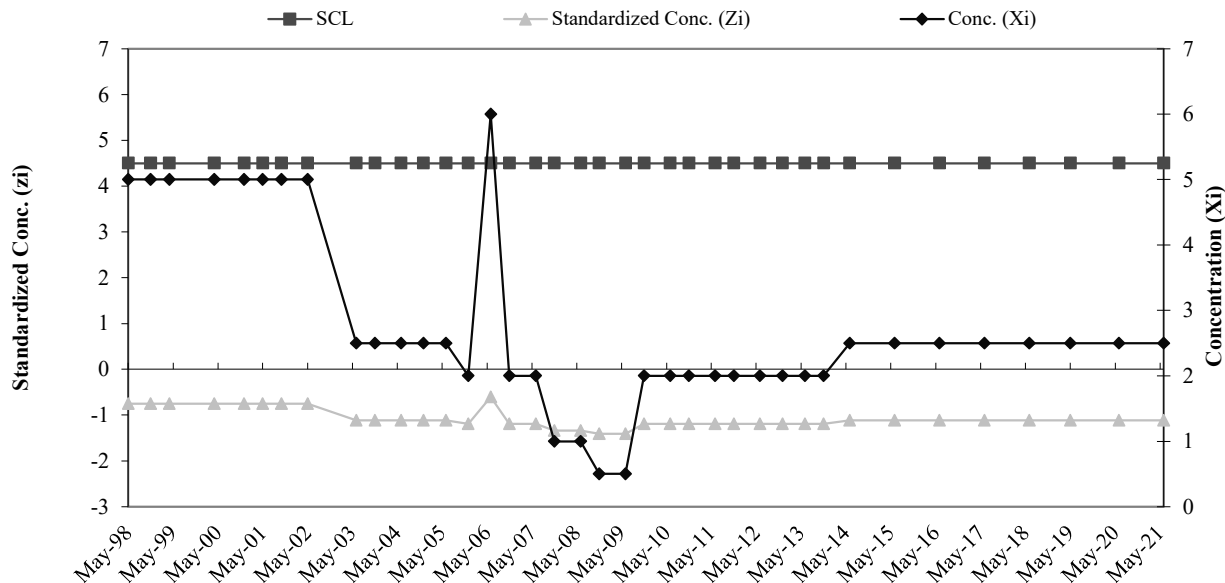
**COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART**

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	39	Nov-13	4.5	2	-1.19
14	May-01	4.5	5	-0.75	40	Jun-14	4.5	2.5	-1.12
15	Oct-01	4.5	5	-0.75	41	Jun-15	4.5	2.5	-1.12
16	May-02	4.5	5	-0.75	42	Jun-16	4.5	2.5	-1.12
18	Jun-03	4.5	2.5	-1.12	43	Jun-17	4.5	2.5	-1.12
19	Nov-03	4.5	2.5	-1.12	44	Jun-18	4.5	2.5	-1.12
20	Jun-04	4.5	2.5	-1.12	45	May-19	4.5	2.5	-1.12
21	Dec-04	4.5	2.5	-1.12	46	Jun-20	4.5	2.5	-1.12
22	Jun-05	4.5	2.5	-1.12	47	Jun-21	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

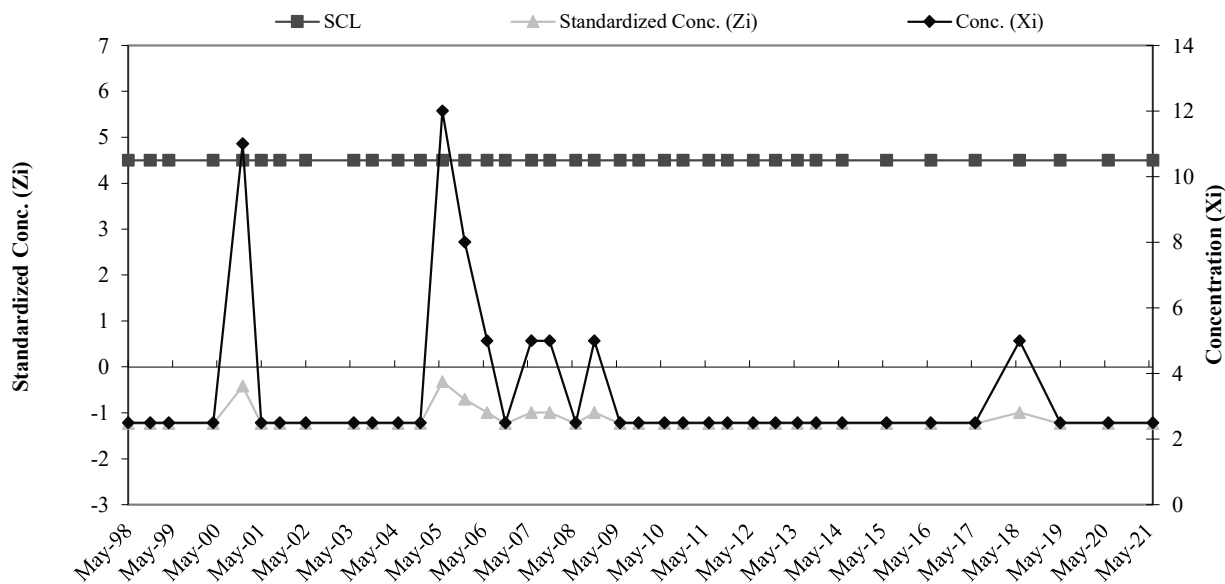


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-21d Ni

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	39	Nov-13	4.5	2.5	-1.23
14	May-01	4.5	2.5	-1.23	40	Jun-14	4.5	2.5	-1.23
15	Oct-01	4.5	2.5	-1.23	41	Jun-15	4.5	2.5	-1.23
16	May-02	4.5	2.5	-1.23	42	Jun-16	4.5	2.5	-1.23
18	Jun-03	4.5	2.5	-1.23	43	Jun-17	4.5	2.5	-1.23
19	Nov-03	4.5	2.5	-1.23	44	Jun-18	4.5	5	-0.99
20	Jun-04	4.5	2.5	-1.23	45	May-19	4.5	2.5	-1.23
20	Dec-04	4.5	2.5	-1.23	46	Jun-20	4.5	2.5	-1.23
21	Jun-05	4.5	12	-0.32	47	Jun-21	4.5	2.5	-1.23
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

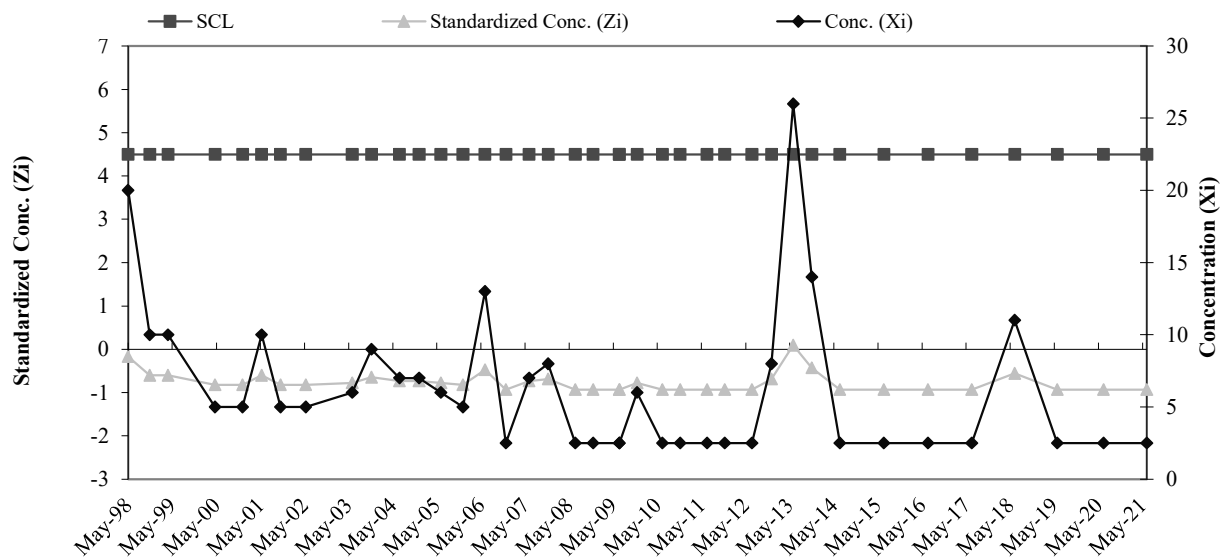


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-21d Zn

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	61	23.89	23.00
2	Aug-95	10		
3	Feb-96	10		
4	Jun-96	10		
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	40	Nov-13	4.5	14	-0.43
14	May-01	4.5	10	-0.60	41	Jun-14	4.5	2.5	-0.93
15	Oct-01	4.5	5	-0.82	42	Jun-15	4.5	2.5	-0.93
16	May-02	4.5	5	-0.82	43	Jun-16	4.5	2.5	-0.93
18	Jun-03	4.5	6	-0.78	44	Jun-17	4.5	2.5	-0.93
19	Nov-03	4.5	9	-0.65	45	Jun-18	4.5	11	-0.56
20	Jun-04	4.5	7	-0.73	46	May-19	4.5	2.5	-0.93
21	Dec-04	4.5	7	-0.73	47	Jun-20	4.5	2.5	-0.93
22	Jun-05	4.5	6	-0.78	48	Jun-21	4.5	2.5	-0.93
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

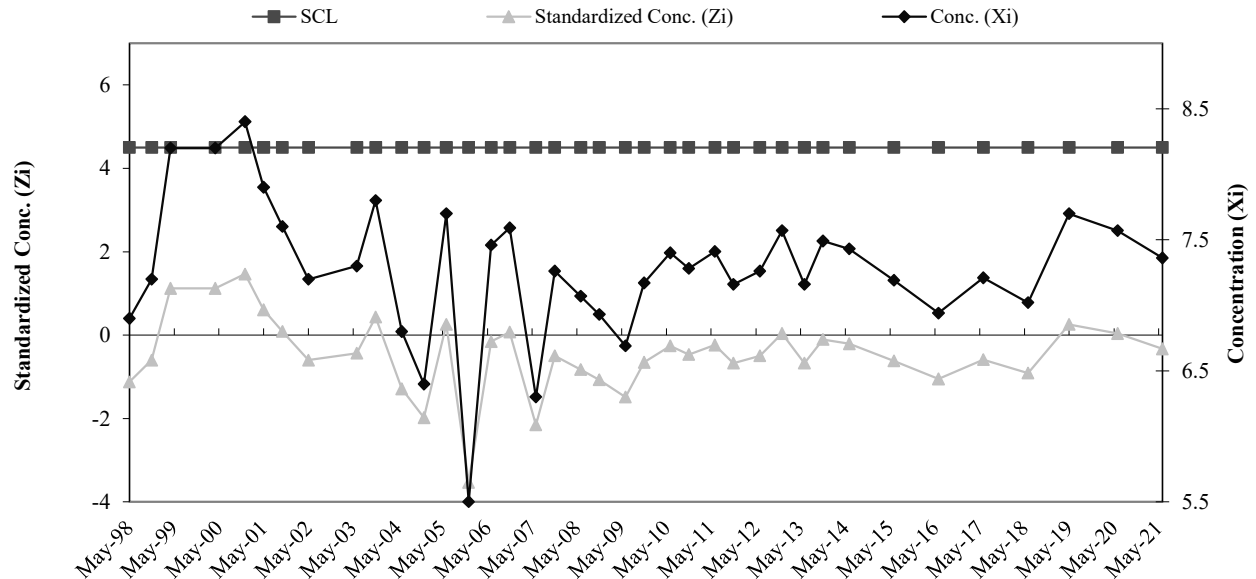


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-21d pH

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

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	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	39	Nov-13	4.5	7.5	-0.10
14	May-01	4.5	7.9	0.60	40	Jun-14	4.5	7.4	-0.21
15	Oct-01	4.5	7.6	0.09	41	Jun-15	4.5	7.2	-0.62
16	May-02	4.5	7.2	-0.60	42	Jun-16	4.5	6.9	-1.05
18	Jun-03	4.5	7.3	-0.43	43	Jun-17	4.5	7.2	-0.59
19	Nov-03	4.5	7.8	0.43	44	Jun-18	4.5	7.0	-0.91
20	Jun-04	4.5	6.8	-1.29	45	May-19	4.5	7.7	0.26
21	Dec-04	4.5	6.4	-1.98	46	Jun-20	4.5	7.6	0.03
22	Jun-05	4.5	7.7	0.26	47	Jun-21	4.5	7.4	-0.33
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

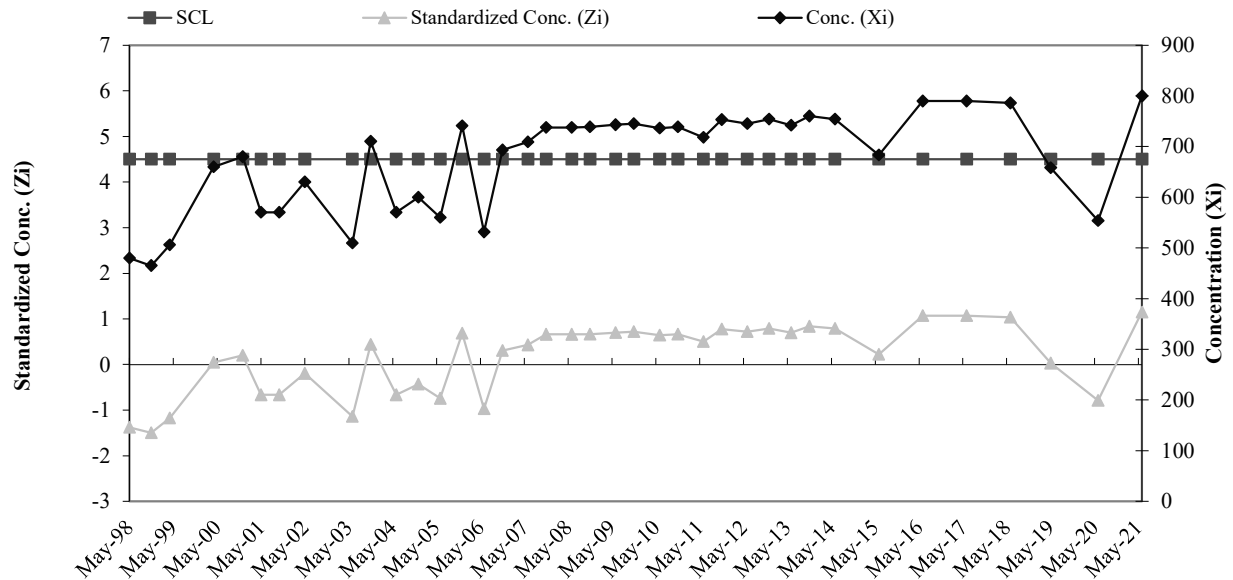


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-21d SpC

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	870	654.13	126.68
2	Aug-95	684		
3	Feb-96	646		
4	Jun-96	577		
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	39	Nov-13	4.5	760	0.84
14	May-01	4.5	570	-0.66	40	Jun-14	4.5	754	0.79
15	Oct-01	4.5	570	-0.66	41	Jun-15	4.5	683	0.23
16	May-02	4.5	630	-0.19	42	Jun-16	4.5	790	1.07
18	Jun-03	4.5	510	-1.14	43	Jun-17	4.5	790	1.07
19	Nov-03	4.5	710	0.44	44	Jun-18	4.5	786	1.04
20	Jun-04	4.5	570	-0.66	45	May-19	4.5	658	0.03
21	Dec-04	4.5	600	-0.43	46	Jun-20	4.5	554	-0.79
22	Jun-05	4.5	560	-0.74	47	Jun-21	4.5	800	1.15
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

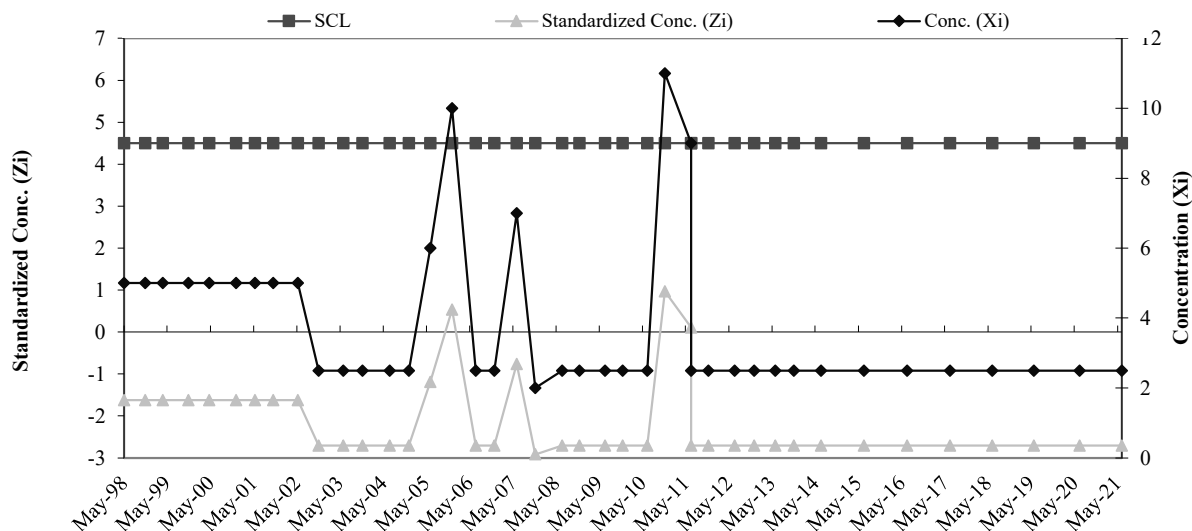


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-22D Cr

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

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	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	41	Nov-13	4.5	2.5	-2.70
14	Dec-00	4.5	5	-1.62	42	Jun-14	4.5	2.5	-2.70
15	May-01	4.5	5	-1.62	43	Jun-15	4.5	2.5	-2.70
16	Oct-01	4.5	5	-1.62	44	Jun-16	4.5	2.5	-2.70
17	May-02	4.5	5	-1.62	45	Jun-17	4.5	2.5	-2.70
18	Nov-02	4.5	2.5	-2.70	46	Jun-18	4.5	2.5	-2.70
19	Jun-03	4.5	2.5	-2.70	47	May-19	4.5	2.5	-2.70
20	Nov-03	4.5	2.5	-2.70	48	Jun-20	4.5	2.5	-2.70
21	Jun-04	4.5	2.5	-2.70	49	Jun-21	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

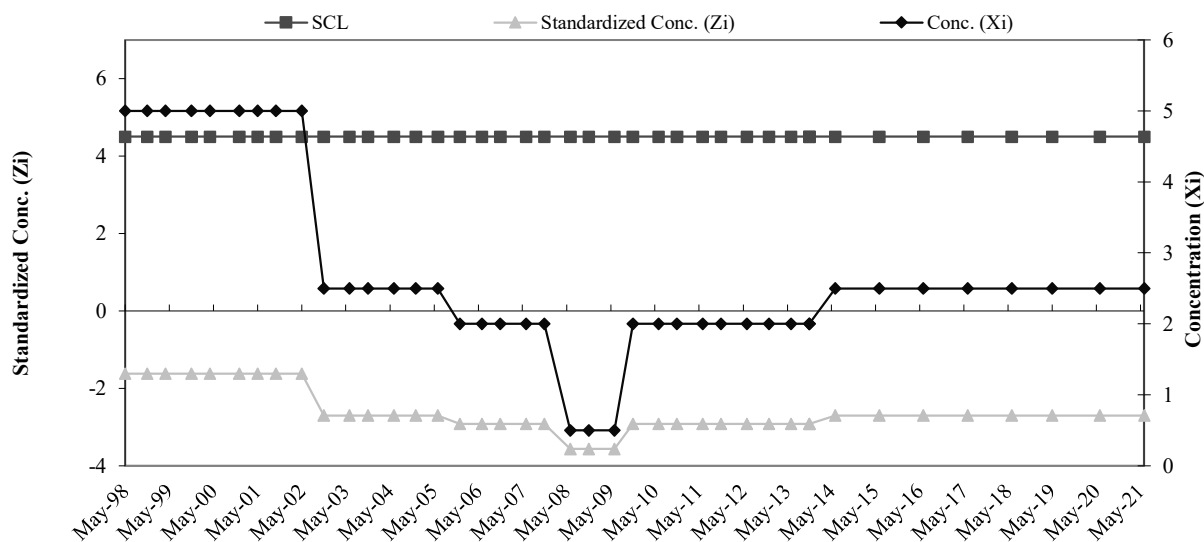


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-22D Cu

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

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	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	40	Nov-13	4.5	2	-2.92
14	Dec-00	4.5	5	-1.62	41	Nov-13	4.5	2	-2.92
15	May-01	4.5	5	-1.62	42	Jun-14	4.5	2.5	-2.70
16	Oct-01	4.5	5	-1.62	43	Jun-15	4.5	2.5	-2.70
17	May-02	4.5	5	-1.62	44	Jun-16	4.5	2.5	-2.70
18	Nov-02	4.5	2.5	-2.70	45	Jun-17	4.5	2.5	-2.70
19	Jun-03	4.5	2.5	-2.70	46	Jun-18	4.5	2.5	-2.70
20	Nov-03	4.5	2.5	-2.70	47	May-19	4.5	2.5	-2.70
21	Jun-04	4.5	2.5	-2.70	48	Jun-20	4.5	2.5	-2.70
22	Dec-04	4.5	2.5	-2.70	49	Jun-21	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

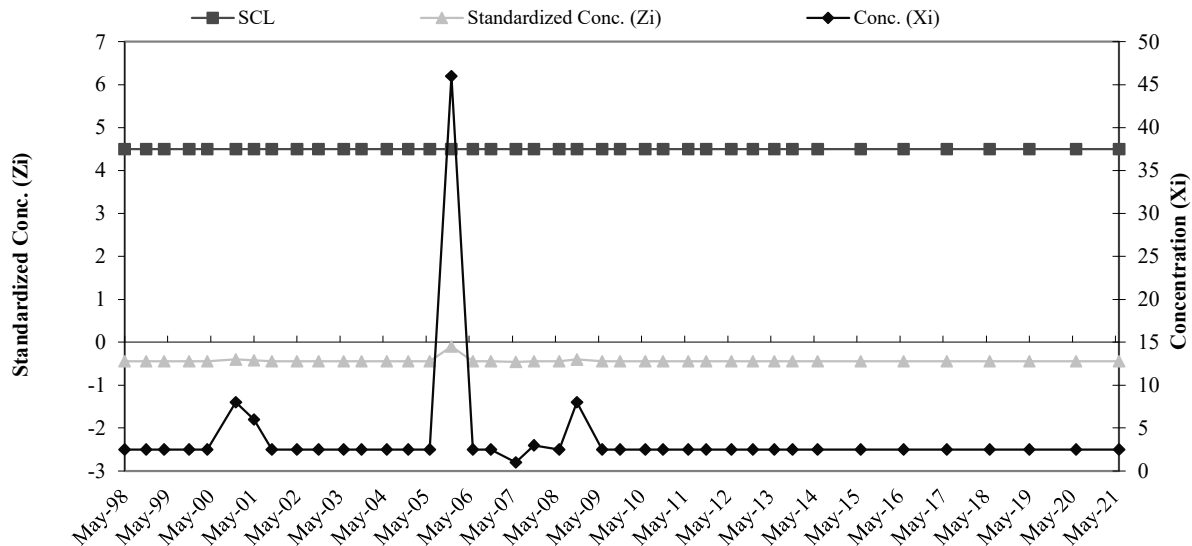


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-22D Ni

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	370	58.94	125.96
2	Aug-95	20		
3	Feb-96	20		
4	Jun-96	10		
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	40	Nov-13	4.5	2.5	-0.45
14	Dec-00	4.5	8	-0.40	41	Jun-14	4.5	2.5	-0.45
15	May-01	4.5	6	-0.42	42	Jun-15	4.5	2.5	-0.45
16	Oct-01	4.5	2.5	-0.45	43	Jun-16	4.5	2.5	-0.45
17	May-02	4.5	2.5	-0.45	44	Jun-17	4.5	2.5	-0.45
18	Nov-02	4.5	2.5	-0.45	45	Jun-18	4.5	2.5	-0.45
19	Jun-03	4.5	2.5	-0.45	46	May-19	4.5	2.5	-0.45
20	Nov-03	4.5	2.5	-0.45	47	Jun-20	4.5	2.5	-0.45
21	Jun-04	4.5	2.5	-0.45	48	Jun-21	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

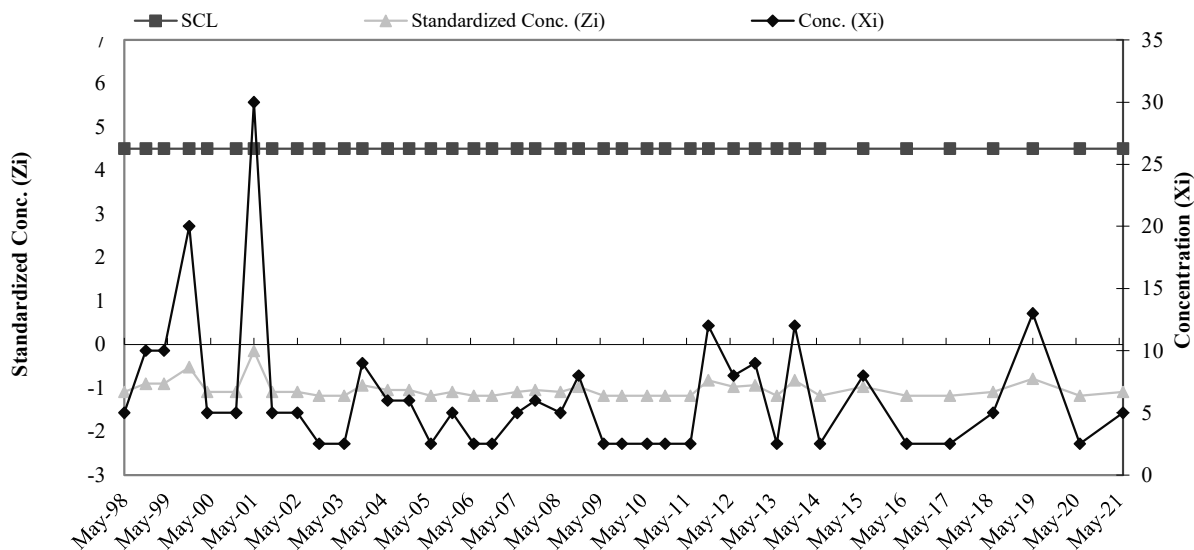


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-22D Zn

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	10	34.00	26.69
2	Aug-95	47		
3	Feb-96	80		
4	Jun-96	20		
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	40	Nov-13	4.5	12	-0.82
14	Dec-00	4.5	5	-1.09	41	Jun-14	4.5	2.5	-1.18
15	May-01	4.5	30	-0.15	42	Jun-15	4.5	8	-0.97
16	Oct-01	4.5	5	-1.09	43	Jun-16	4.5	2.5	-1.18
17	May-02	4.5	5	-1.09	44	Jun-17	4.5	2.5	-1.18
18	Nov-02	4.5	2.5	-1.18	45	Jun-18	4.5	5	-1.09
19	Jun-03	4.5	2.5	-1.18	46	May-19	4.5	13	-0.79
20	Nov-03	4.5	9	-0.94	47	Jun-20	4.5	2.5	-1.18
21	Jun-04	4.5	6	-1.05	48	Jun-21	4.5	5	-1.09
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

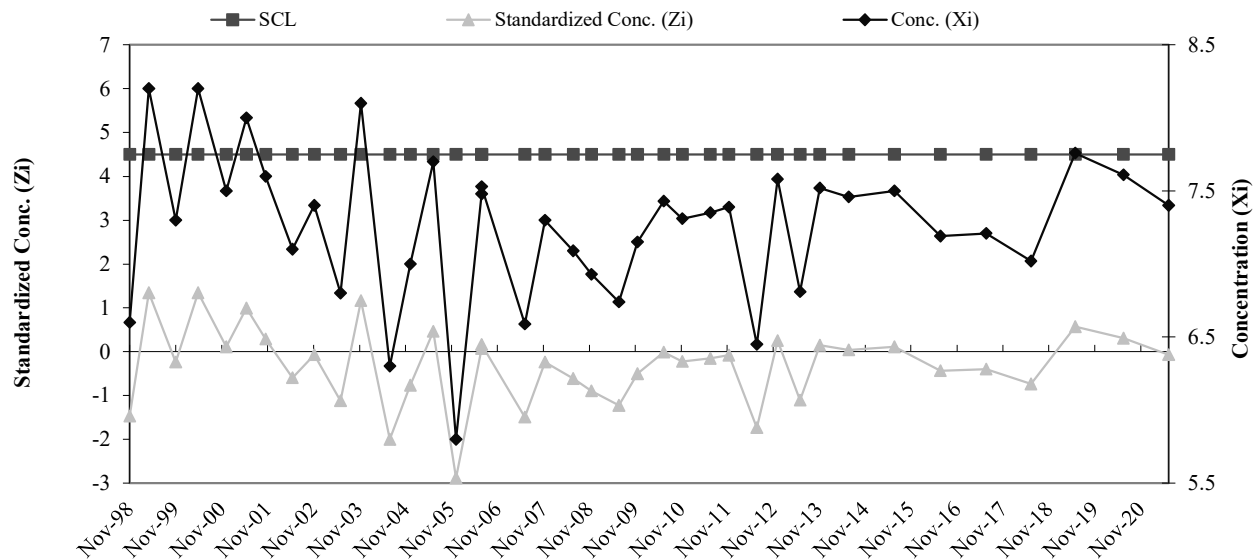


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-22D pH

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

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	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	39	Nov-13	4.5	7.5	0.15
14	May-01	4.5	8	0.99	40	Jun-14	4.5	7.5	0.04
15	Oct-01	4.5	7.6	0.29	41	Jun-15	4.5	7.5	0.11
16	May-02	4.5	7.1	-0.59	42	Jun-16	4.5	7.2	-0.44
17	Nov-02	4.5	7.4	-0.07	43	Jun-17	4.5	7.2	-0.40
18	Jun-03	4.5	6.8	-1.12	44	Jun-18	4.5	7.0	-0.73
19	Nov-03	4.5	8.1	1.17	45	May-19	4.5	7.8	0.57
20	Jun-04	4.5	6.3	-2.00	46	Jun-20	4.5	7.6	0.30
21	Dec-04	4.5	7	-0.77	47	Jun-21	4.5	7.4	-0.07
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

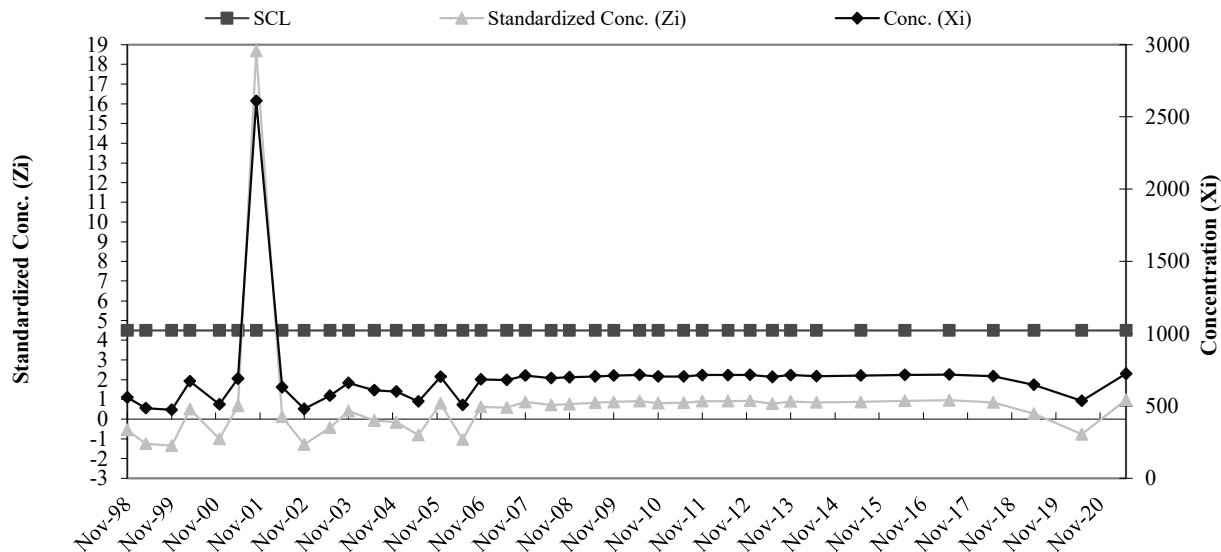


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-22D SpC

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	573	617.25	106.65
2	Aug-95	739		
3	Jun-96	600		
4	Aug-96	608		
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	39	Nov-13	4.5	713	0.90
14	May-01	4.5	690	0.68	40	Jun-14	4.5	707	0.84
15	Oct-01	4.5	2610	18.68	41	Jun-15	4.5	710	0.87
16	May-02	4.5	630	0.12	42	Jun-16	4.5	716	0.93
17	Nov-02	4.5	480	-1.29	43	Jun-17	4.5	718	0.94
18	Jun-03	4.5	570	-0.44	44	Jun-18	4.5	707	0.84
19	Nov-03	4.5	660	0.40	45	May-19	4.5	647	0.28
20	Jun-04	4.5	610	-0.07	46	Jun-20	4.5	535	-0.77
21	Dec-04	4.5	600	-0.16	47	Jun-21	4.5	722	0.98
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

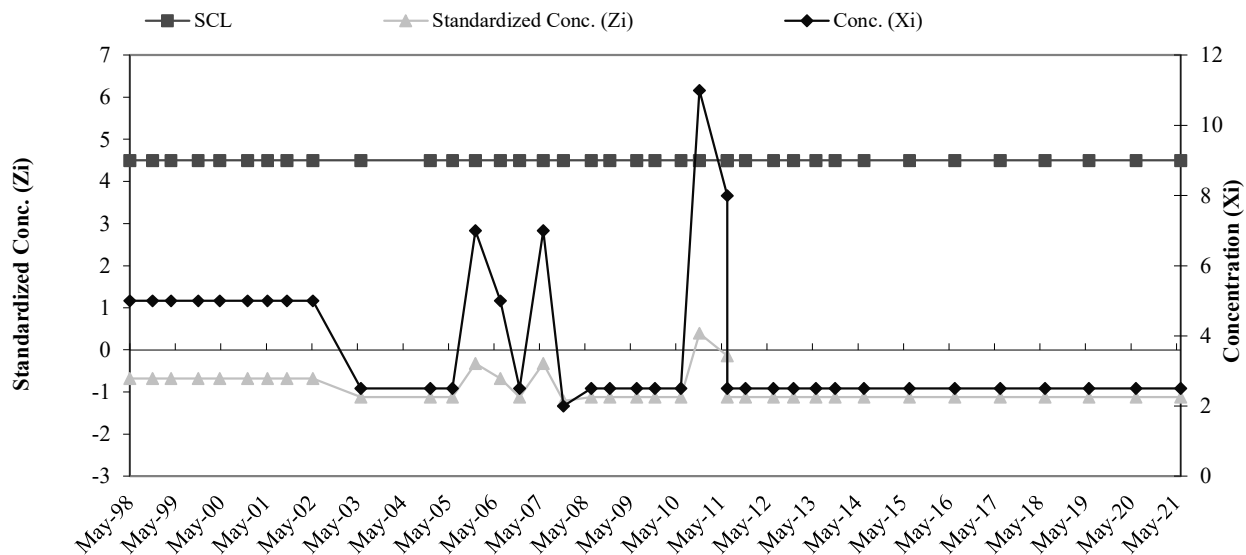


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-23d Cr

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	10	8.79	5.60
2	Aug-95	10		
3	Feb-96	10		
4	Jun-96	10		
5	Aug-96	10		
6	Nov-96	10		
7	May-97	5		
8	Nov-97	5		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	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	38	Nov-13	4.5	2.5	-1.12
14	Dec-00	4.5	5	-0.68	39	Jun-14	4.5	2.5	-1.12
15	May-01	4.5	5	-0.68	40	Jun-15	4.5	2.5	-1.12
16	Oct-01	4.5	5	-0.68	41	Jun-16	4.5	2.5	-1.12
17	May-02	4.5	5	-0.68	42	Jun-17	4.5	2.5	-1.12
18	Jun-03	4.5	2.5	-1.12	43	Jun-18	4.5	2.5	-1.12
19	Dec-04	4.5	2.5	-1.12	44	Jun-19	4.5	2.5	-1.12
20	Jun-05	4.5	2.5	-1.12	45	Jun-20	4.5	2.5	-1.12
21	Dec-05	4.5	7.0	-0.32	46	Jun-21	4.5	2.5	-1.12
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

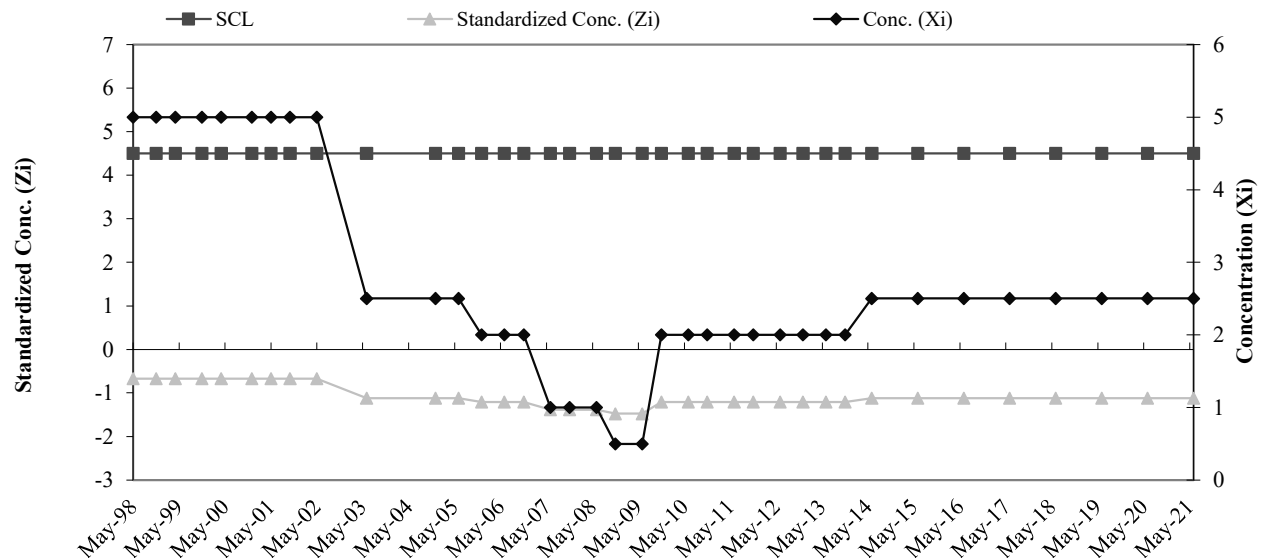


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-23d Cu

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	37	Nov-13	4.5	2	-1.21
14	Dec-00	4.5	5	-0.67	38	Jun-14	4.5	2.5	-1.12
15	May-01	4.5	5	-0.67	39	Jun-15	4.5	2.5	-1.12
16	Oct-01	4.5	5	-0.67	40	Jun-16	4.5	2.5	-1.12
17	May-02	4.5	5	-0.67	41	Jun-17	4.5	2.5	-1.12
18	Jun-03	4.5	2.5	-1.12	42	Jun-18	4.5	2.5	-1.12
19	Dec-04	4.5	2.5	-1.12	43	Jun-19	4.5	2.5	-1.12
20	Jun-05	4.5	2.5	-1.12	44	Jun-20	4.5	2.5	-1.12
21	Dec-05	4.5	2.0	-1.21	45	Jun-21	4.5	2.5	-1.12
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

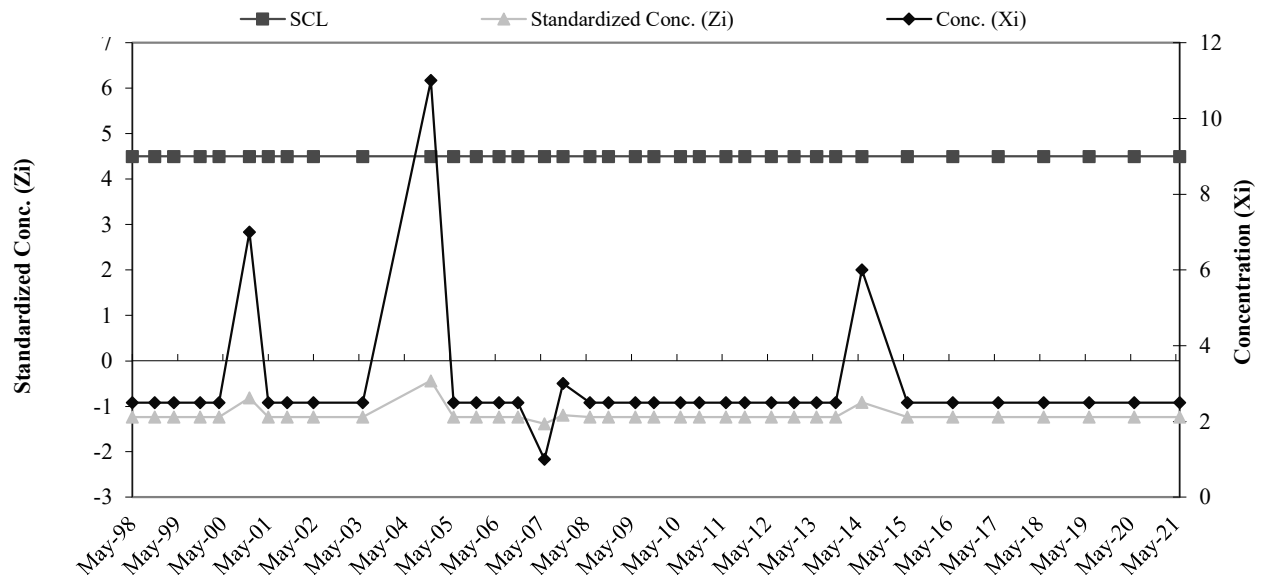


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-23d Ni

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	37	Nov-13	4.5	2.5	-1.24
14	Dec-00	4.5	7.0	-0.81	38	Jun-14	4.5	6	-0.91
15	May-01	4.5	2.5	-1.24	39	Jun-15	4.5	2.5	-1.24
16	Oct-01	4.5	2.5	-1.24	40	Jun-16	4.5	2.5	-1.24
17	May-02	4.5	2.5	-1.24	41	Jun-17	4.5	2.5	-1.24
18	Jun-03	4.5	2.5	-1.24	42	Jun-18	4.5	2.5	-1.24
19	Dec-04	4.5	11.0	-0.44	43	Jun-19	4.5	2.5	-1.24
20	Jun-05	4.5	2.5	-1.24	44	Jun-20	4.5	2.5	-1.24
21	Dec-05	4.5	2.5	-1.24	45	Jun-21	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

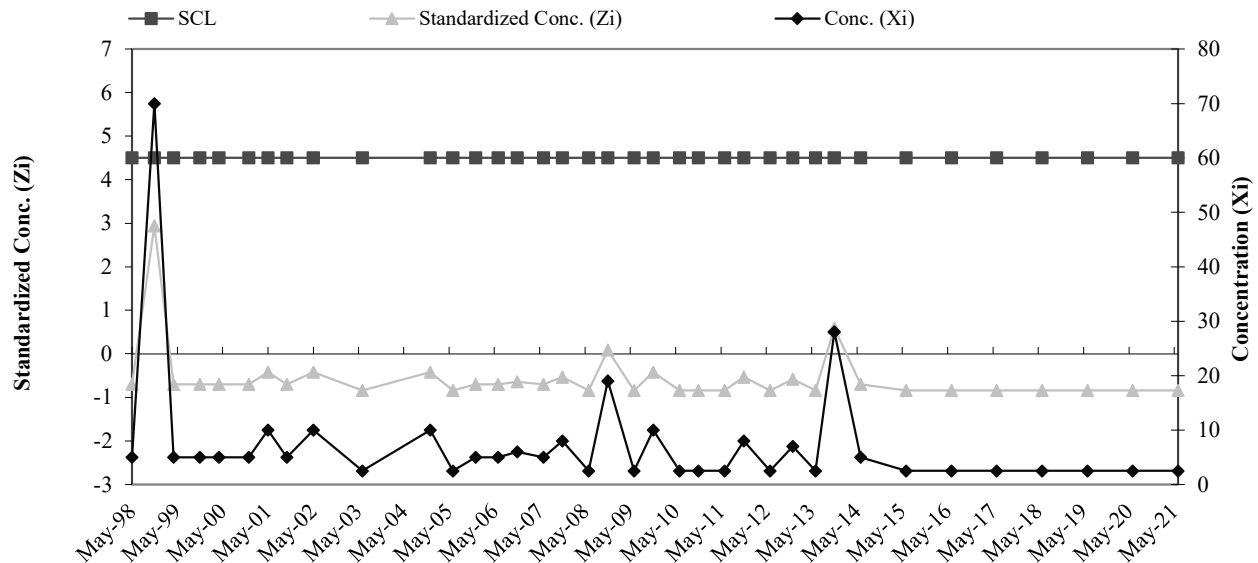


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-23d Zn

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	10	17.49	17.84
2	Aug-95	10		
3	Feb-96	10		
4	Jun-96	10		
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	37	Nov-13	4.5	28	0.59
14	Dec-00	4.5	5.0	-0.70	38	Jun-14	4.5	5	-0.70
15	May-01	4.5	10.0	-0.42	39	Jun-15	4.5	2.5	-0.84
16	Oct-01	4.5	5.0	-0.70	40	Jun-16	4.5	2.5	-0.84
17	May-02	4.5	10.0	-0.42	41	Jun-17	4.5	2.5	-0.84
18	Jun-03	4.5	2.5	-0.84	42	Jun-18	4.5	2.5	-0.84
19	Dec-04	4.5	10.0	-0.42	43	Jun-19	4.5	2.5	-0.84
20	Jun-05	4.5	2.5	-0.84	44	Jun-20	4.5	2.5	-0.84
21	Dec-05	4.5	5.0	-0.70	45	Jun-21	4.5	2.5	-0.84
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

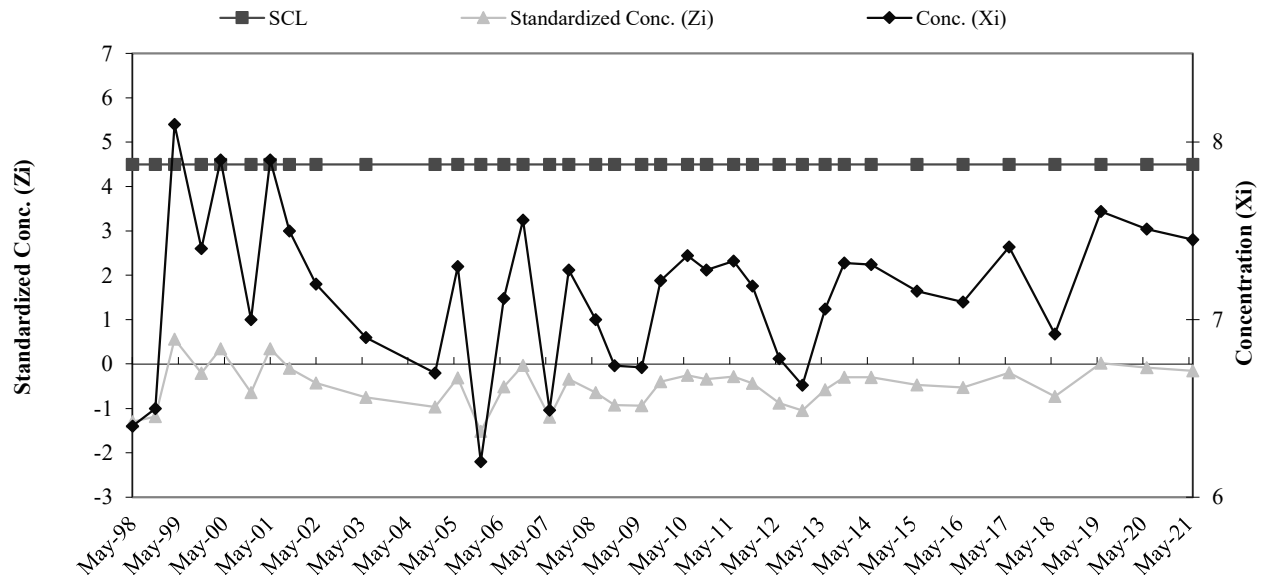


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-23d pH

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	7.3	7.59	0.91
2	Aug-95	8.2		
3	Feb-96	7.5		
4	Jun-96	8.3		
5	Aug-96	8.9		
6	Nov-96	7.7		
7	May-97	6.8		
8	Nov-97	6.0		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	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	37	Nov-13	4.5	7.3	-0.29
14	Dec-00	4.5	7.0	-0.64	38	Jun-14	4.5	7.3	-0.30
15	May-01	4.5	7.9	0.34	39	Jun-15	4.5	7.2	-0.47
16	Oct-01	4.5	7.5	-0.10	40	Jun-16	4.5	7.1	-0.53
17	May-02	4.5	7.2	-0.42	41	Jun-17	4.5	7.4	-0.19
18	Jun-03	4.5	6.9	-0.75	42	Jun-18	4.5	6.9	-0.73
19	Dec-04	4.5	6.7	-0.97	43	Jun-19	4.5	7.6	0.02
20	Jun-05	4.5	7.3	-0.31	44	Jun-20	4.5	7.5	-0.08
21	Dec-05	4.5	6.2	-1.52	45	Jun-21	4.5	7.5	-0.15
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

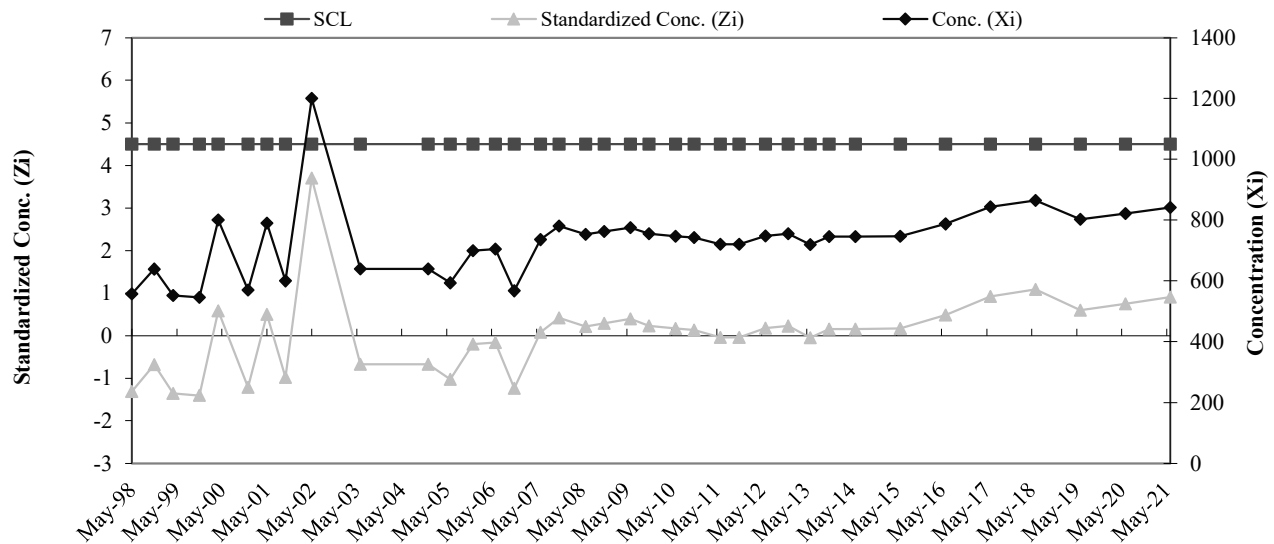


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-23d SpC

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-95	680	725.75	127.98
2	Aug-95	845		
3	Feb-96	751		
4	Jun-96	632		
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	37	Nov-13	4.5	746	0.16
14	Dec-00	4.5	570	-1.22	38	Jun-14	4.5	746	0.16
15	May-01	4.5	790	0.50	39	Jun-15	4.5	747	0.17
16	Oct-01	4.5	600	-0.98	40	Jun-16	4.5	788	0.49
17	May-02	4.5	1200	3.71	41	Jun-17	4.5	844	0.92
18	Jun-03	4.5	640	-0.67	42	Jun-18	4.5	865	1.09
19	Dec-04	4.5	640	-0.67	43	Jun-19	4.5	803	0.60
20	Jun-05	4.5	594	-1.03	44	Jun-20	4.5	822	0.75
21	Dec-05	4.5	700	-0.20	45	Jun-21	4.5	842	0.91
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

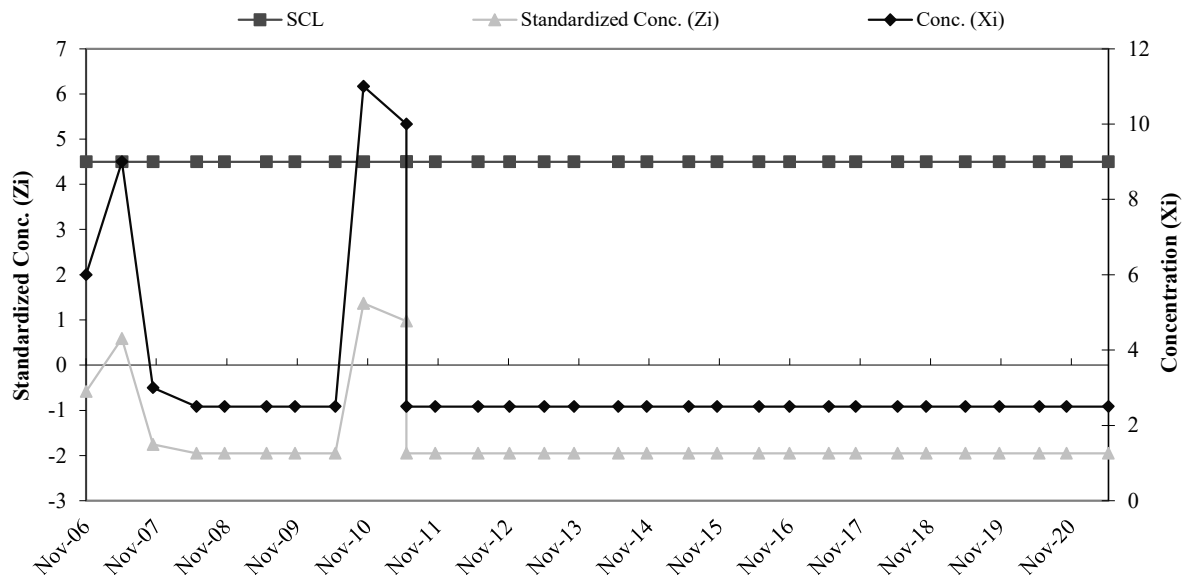


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-24 Cr

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)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Nov-06	4.5	6	-0.59	35	May-19	4.5	2.5	-1.95
10	Jun-07	4.5	9	0.59	36	Nov-19	4.5	2.5	-1.95
11	Nov-07	4.5	3	-1.76	37	Jun-20	4.5	2.5	-1.95
12	Jun-08	4.5	2.5	-1.95	38	Nov-20	4.5	2.5	-1.95
13	Nov-08	4.5	2.5	-1.95	39	Jun-21	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					
24	Nov-13	4.5	2.5	-1.95					
25	Jun-14	4.5	2.5	-1.95					
26	Nov-14	4.5	2.5	-1.95					
27	Jun-15	4.5	2.5	-1.95					
28	Nov-15	4.5	2.5	-1.95					
29	Jun-16	4.5	2.5	-1.95					
30	Nov-16	4.5	2.5	-1.95					
31	Jun-17	4.5	2.5	-1.95					
32	Nov-17	4.5	2.5	-1.95					
33	Jun-18	4.5	2.5	-1.95					
34	Nov-18	4.5	2.5	-1.95					

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

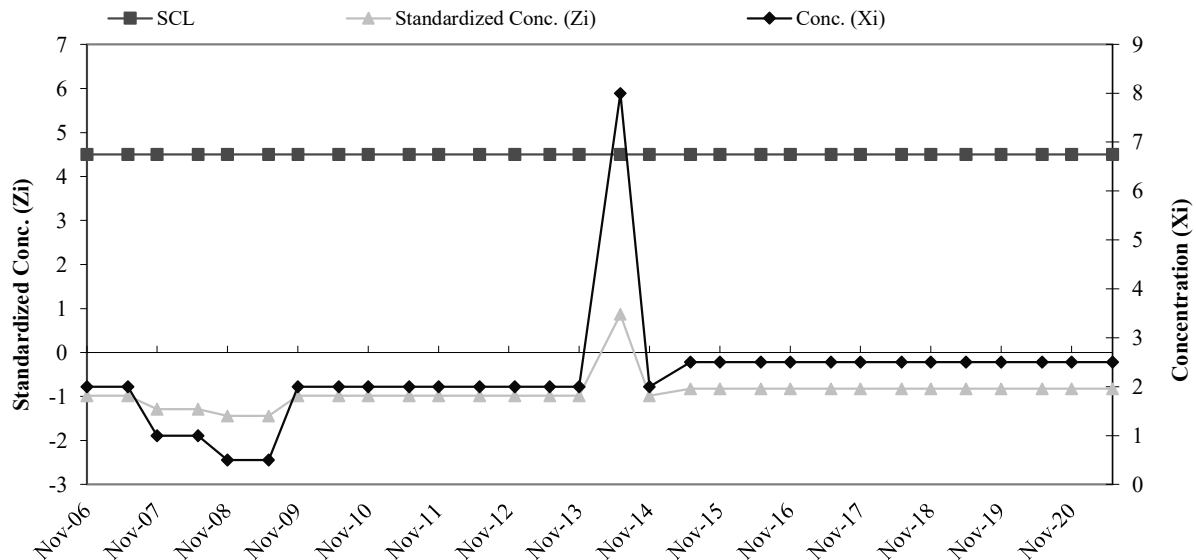


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-24 Cu

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Aug-96	10	5.19	3.25
2	Nov-96	10		
3	May-97	5		
4	May-98	5		
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)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Nov-06	4.5	2	-0.98	35	Nov-19	4.5	2.5	-0.83
10	Jun-07	4.5	2	-0.98	36	Jun-20	4.5	2.5	-0.83
11	Nov-07	4.5	1	-1.29	37	Nov-20	4.5	2.5	-0.83
12	Jun-08	4.5	1	-1.29	38	Jun-21	4.5	2.5	-0.83
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					
23	Nov-13	4.5	2	-0.98					
24	Jun-14	4.5	8	0.87					
25	Nov-14	4.5	2	-0.98					
26	Jun-15	4.5	2.5	-0.83					
27	Nov-15	4.5	2.5	-0.83					
28	Jun-16	4.5	2.5	-0.83					
29	Nov-16	4.5	2.5	-0.83					
30	Jun-17	4.5	2.5	-0.83					
31	Nov-17	4.5	2.5	-0.83					
32	Jun-18	4.5	2.5	-0.83					
33	Nov-18	4.5	2.5	-0.83					
34	May-19	4.5	2.5	-0.83					

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

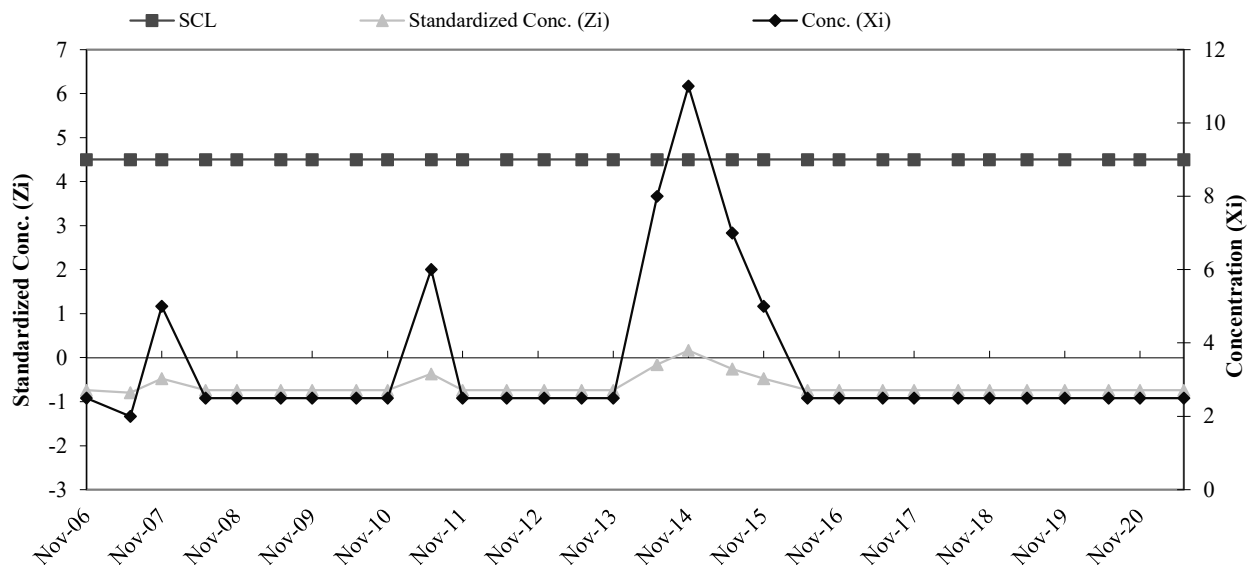


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-24 Ni

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Aug-96	10	9.44	9.35
2	Nov-96	10		
3	May-97	31		
4	May-98	8		
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)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Nov-06	4.5	2.5	-0.74	35	Nov-19	4.5	2.5	-0.74
10	Jun-07	4.5	2	-0.80	36	Jun-20	4.5	2.5	-0.74
11	Nov-07	4.5	5	-0.47	37	Nov-20	4.5	2.5	-0.74
12	Jun-08	4.5	2.5	-0.74	38	Jun-21	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					
23	Nov-13	4.5	2.5	-0.74					
24	Jun-14	4.5	8	-0.15					
25	Nov-14	4.5	11	0.17					
26	Jun-15	4.5	7	-0.26					
27	Nov-15	4.5	5	-0.47					
28	Jun-16	4.5	2.5	-0.74					
29	Nov-16	4.5	2.5	-0.74					
30	Jun-17	4.5	2.5	-0.74					
31	Nov-17	4.5	2.5	-0.74					
32	Jun-18	4.5	2.5	-0.74					
33	Nov-18	4.5	2.5	-0.74					
34	May-19	4.5	2.5	-0.74					

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

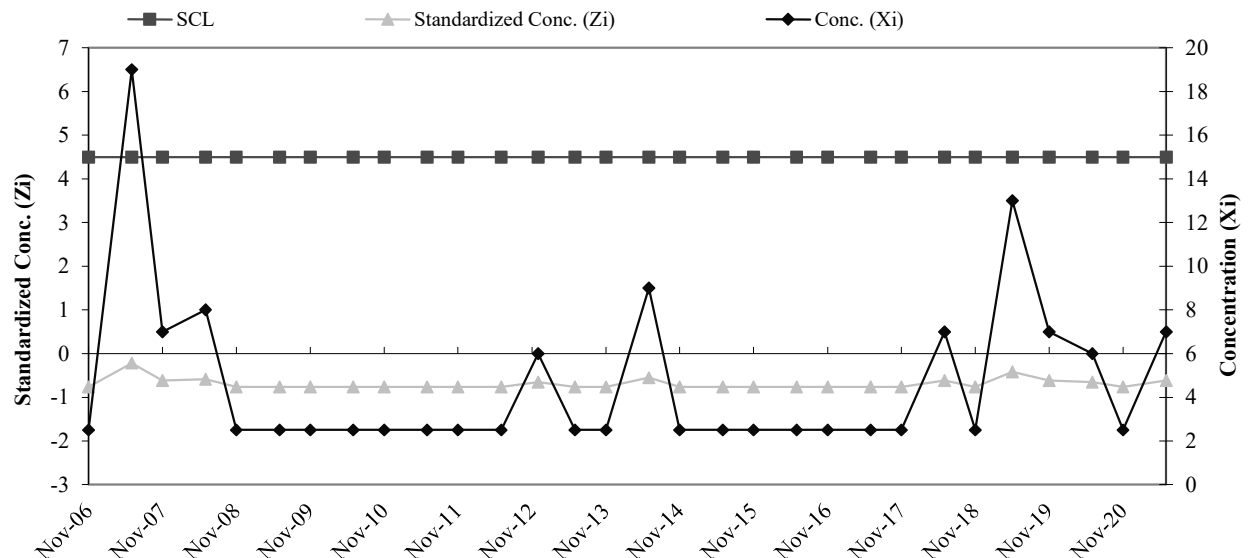


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-24 Zn

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Aug-96	90	25.63	30.14
2	Nov-96	50		
3	May-97	10		
4	May-98	20		
5	Nov-03	20		
6	Jun-05	2.5		
7	Dec-05	10		
8	Jun-06	2.5		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Nov-06	4.5	2.5	-0.77	35	Nov-19	4.5	7	-0.62
10	Jun-07	4.5	19	-0.22	36	Jun-20	4.5	6	-0.65
11	Nov-07	4.5	7	-0.62	37	Nov-20	4.5	2.5	-0.77
12	Jun-08	4.5	8	-0.58	38	Jun-21	4.5	7	-0.62
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					
23	Nov-13	4.5	2.5	-0.77					
24	Jun-14	4.5	9	-0.55					
25	Nov-14	4.5	2.5	-0.77					
26	Jun-15	4.5	2.5	-0.77					
27	Nov-15	4.5	2.5	-0.77					
28	Jun-16	4.5	2.5	-0.77					
29	Nov-16	4.5	2.5	-0.77					
30	Jun-17	4.5	2.5	-0.77					
31	Nov-17	4.5	2.5	-0.77					
32	Jun-18	4.5	7	-0.62					
33	Nov-18	4.5	2.5	-0.77					
34	May-19	4.5	13	-0.42					

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

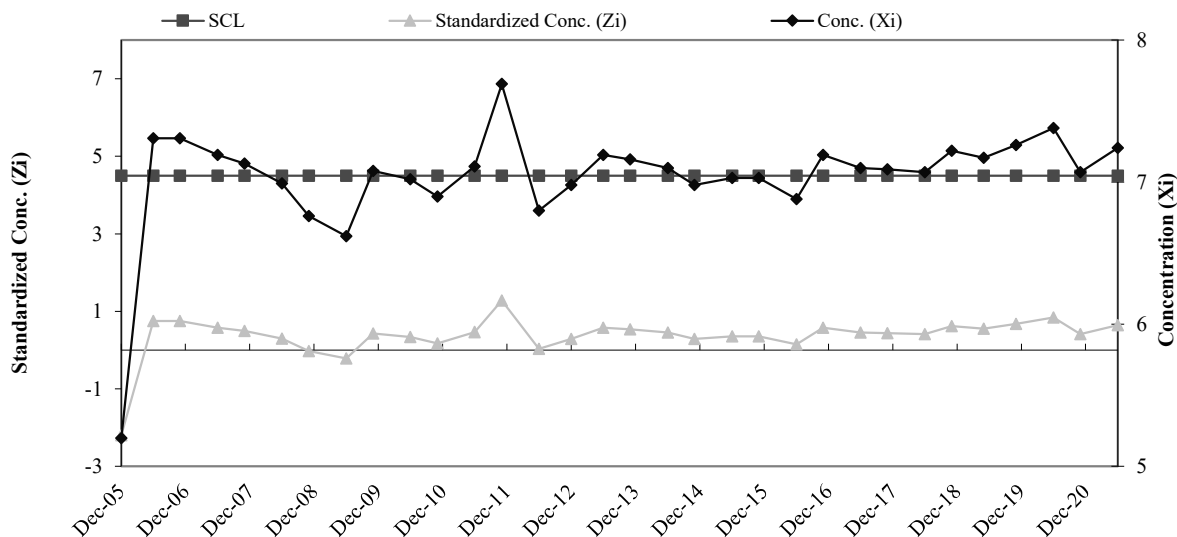


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-24 pH

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)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Dec-05	4.5	5.2	-2.20	35	Nov-19	4.5	7.3	0.68
10	Jun-06	4.5	7.3	0.75	36	Jun-20	4.5	7.4	0.84
11	Nov-06	4.5	7.3	0.75	37	Nov-20	4.5	7.1	0.41
12	Jun-07	4.5	7.2	0.58	38	Jun-21	4.5	7.2	0.65
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					
23	Nov-13	4.5	7.2	0.54					
24	Jun-14	4.5	7.1	0.45					
25	Nov-14	4.5	7.0	0.29					
26	Jun-15	4.5	7.0	0.36					
27	Nov-15	4.5	7.0	0.36					
28	Jun-16	4.5	6.9	0.15					
29	Nov-16	4.5	7.2	0.58					
30	Jun-17	4.5	7.1	0.45					
31	Nov-17	4.5	7.1	0.44					
32	Jun-18	4.5	7.1	0.41					
33	Nov-18	4.5	7.2	0.62					
34	May-19	4.5	7.2	0.55					

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

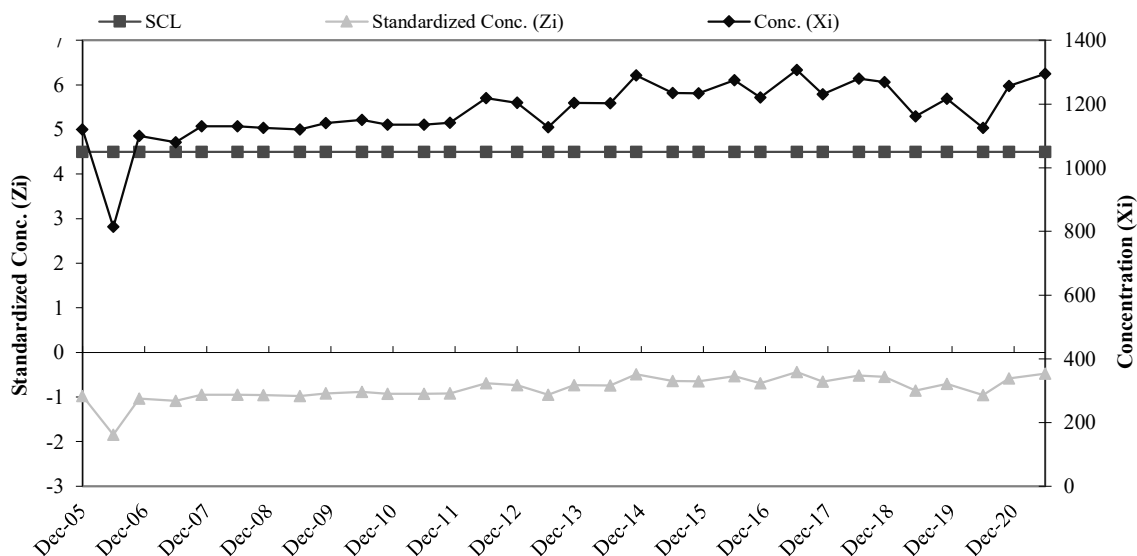


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-24 SpC

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Aug-96	1502	1,462.00	351.23
2	Nov-96	2030		
3	May-97	1700		
4	May-98	1410		
5	Nov-98	1595		
6	Nov-99	1152		
7	May-01	1450		
8	Jun-05	857		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)	Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Dec-05	4.5	1120	-0.97	37	Nov-19	4.5	1216	-0.70
10	Jun-06	4.5	814	-1.84	38	Jun-20	4.5	1125	-0.96
11	Nov-06	4.5	1100	-1.03	39	Nov-20	4.5	1257	-0.58
12	Jun-07	4.5	1080	-1.09	40	Jun-21	4.5	1295	-0.48
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					
25	Nov-13	4.5	1203	-0.74					
26	Jun-14	4.5	1202	-0.74					
27	Nov-14	4.5	1290	-0.49					
28	Jun-15	4.5	1235	-0.65					
29	Nov-15	4.5	1234	-0.65					
30	Jun-16	4.5	1275	-0.53					
31	Nov-16	4.5	1220	-0.69					
32	Jun-17	4.5	1307	-0.44					
33	Nov-17	4.5	1231	-0.66					
34	Jun-18	4.5	1280	-0.52					
35	Nov-18	4.5	1269	-0.55					
36	May-19	4.5	1161	-0.86					

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

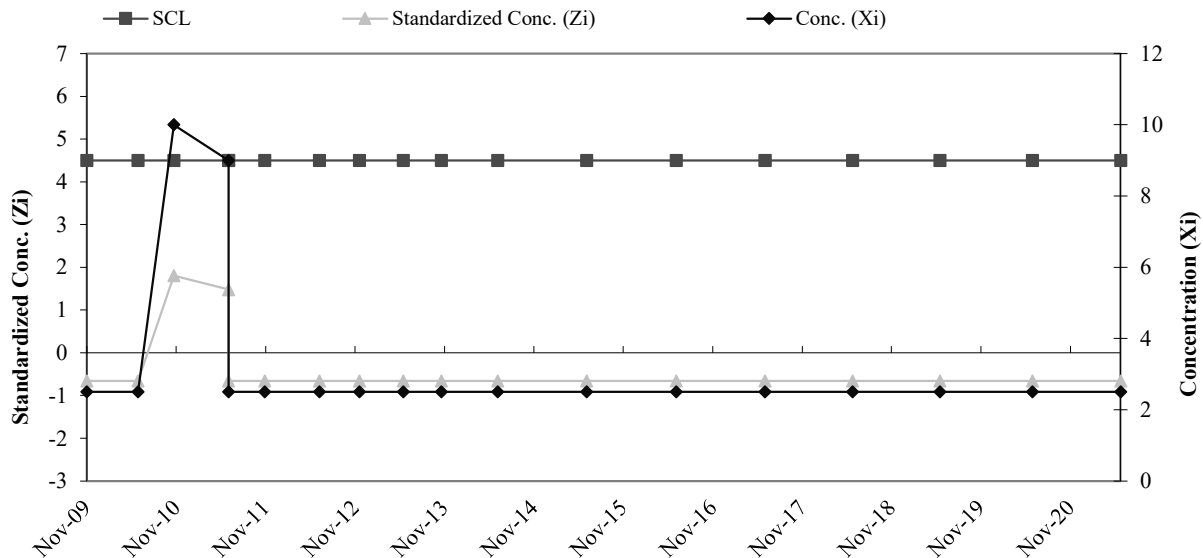


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-27 Cr

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Dec-05	9	4.50	3.05
2	Jun-06	6		
3	Nov-06	2.5		
4	Jun-07	9		
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
18	Nov-13	4.5	2.5	-0.66
19	Jun-14	4.5	2.5	-0.66
20	Jun-15	4.5	2.5	-0.66
21	Jun-16	4.5	2.5	-0.66
22	Jun-17	4.5	2.5	-0.66
23	Jun-18	4.5	2.5	-0.66
24	Jun-19	4.5	2.5	-0.66
25	Jun-20	4.5	2.5	-0.66
26	Jun-21	4.5	2.5	-0.66

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

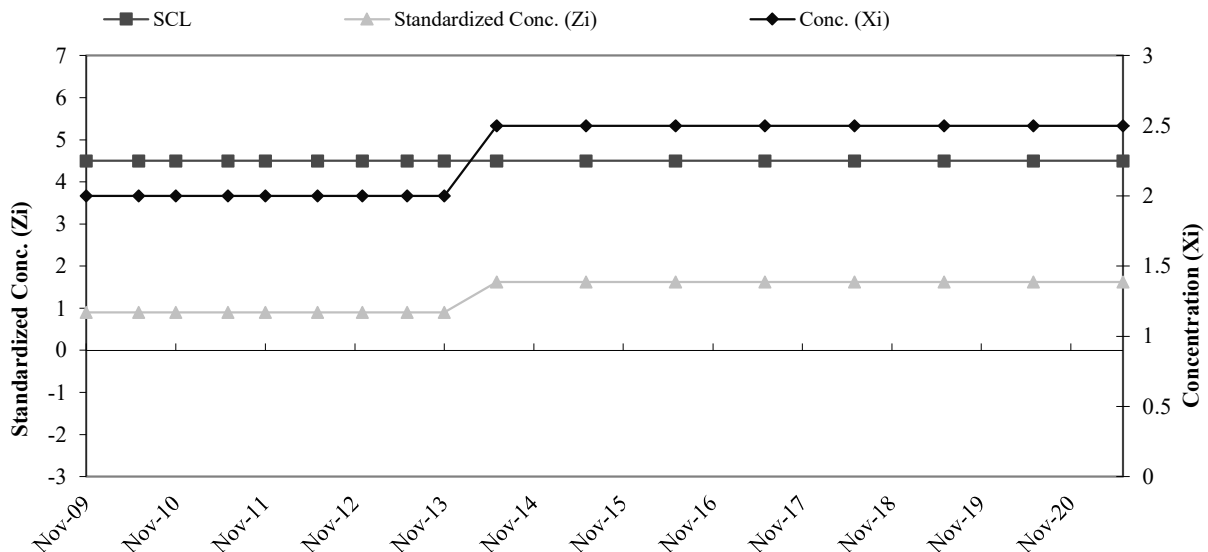


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-27 Cu

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
17	Nov-13	4.5	2	0.90
18	Jun-14	4.5	2.5	1.62
19	Jun-15	4.5	2.5	1.62
20	Jun-16	4.5	2.5	1.62
21	Jun-17	4.5	2.5	1.62
22	Jun-18	4.5	2.5	1.62
23	Jun-19	4.5	2.5	1.62
24	Jun-20	4.5	2.5	1.62
25	Jun-21	4.5	2.5	1.62

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

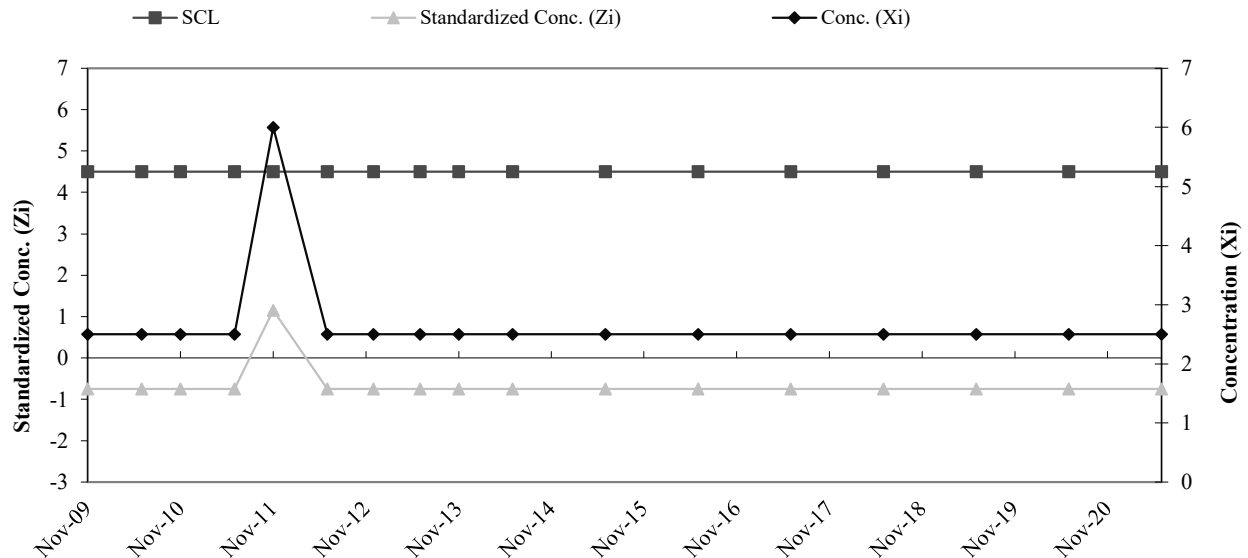


B-27 Ni

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Dec-05	6	3.88	1.85
2	Jun-06	7		
3	Nov-06	2.5		
4	Jun-07	3		
5	Nov-07	5		
6	Jun-08	2.5		
7	Nov-08	2.5		
8	Jun-09	2.5		

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

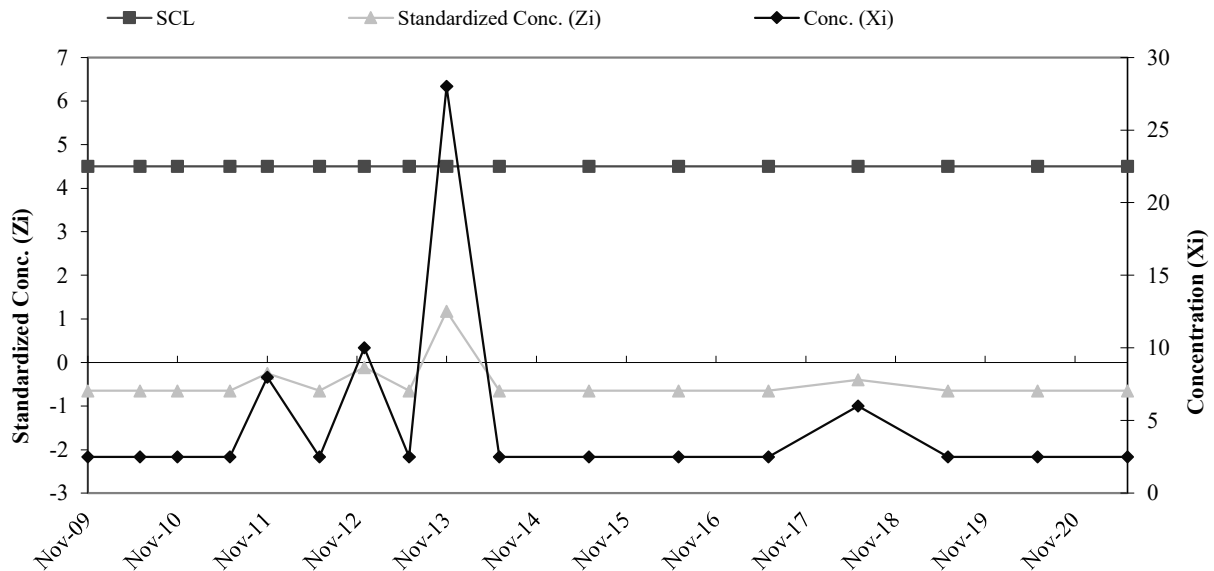


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-27 Zn

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Dec-05	5	11.56	13.97
2	Jun-06	6		
3	Nov-06	6		
4	Jun-07	36		
5	Nov-07	32		
6	Jun-08	2.5		
7	Nov-08	2.5		
8	Jun-09	2.5		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Nov-09	4.5	2.5	-0.65
10	Jun-10	4.5	2.5	-0.65
11	Nov-10	4.5	2.5	-0.65
12	Jun-11	4.5	2.5	-0.65
13	Nov-11	4.5	8	-0.26
14	Jun-12	4.5	2.5	-0.65
15	Dec-12	4.5	10	-0.11
16	Jun-13	4.5	2.5	-0.65
17	Nov-13	4.5	28	1.18
18	Jun-14	4.5	2.5	-0.65
19	Jun-15	4.5	2.5	-0.65
20	Jun-16	4.5	2.5	-0.65
21	Jun-17	4.5	2.5	-0.65
22	Jun-18	4.5	6	-0.40
23	Jun-19	4.5	2.5	-0.65
24	Jun-20	4.5	2.5	-0.65
25	Jun-21	4.5	2.5	-0.65

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

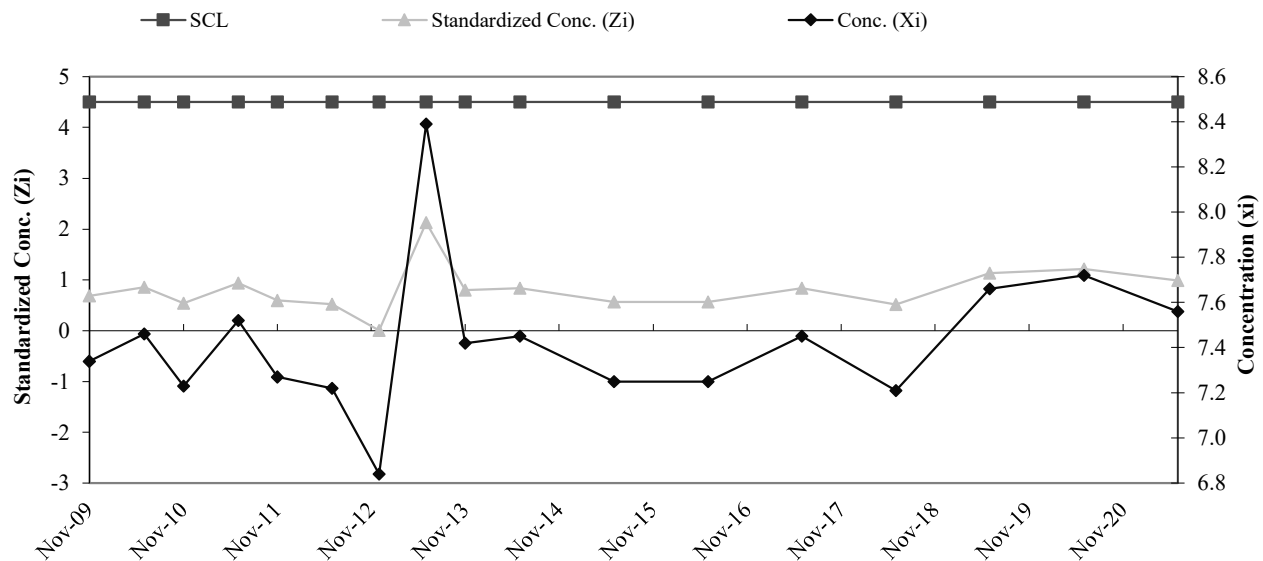


B-27 pH

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		

[illegible]

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

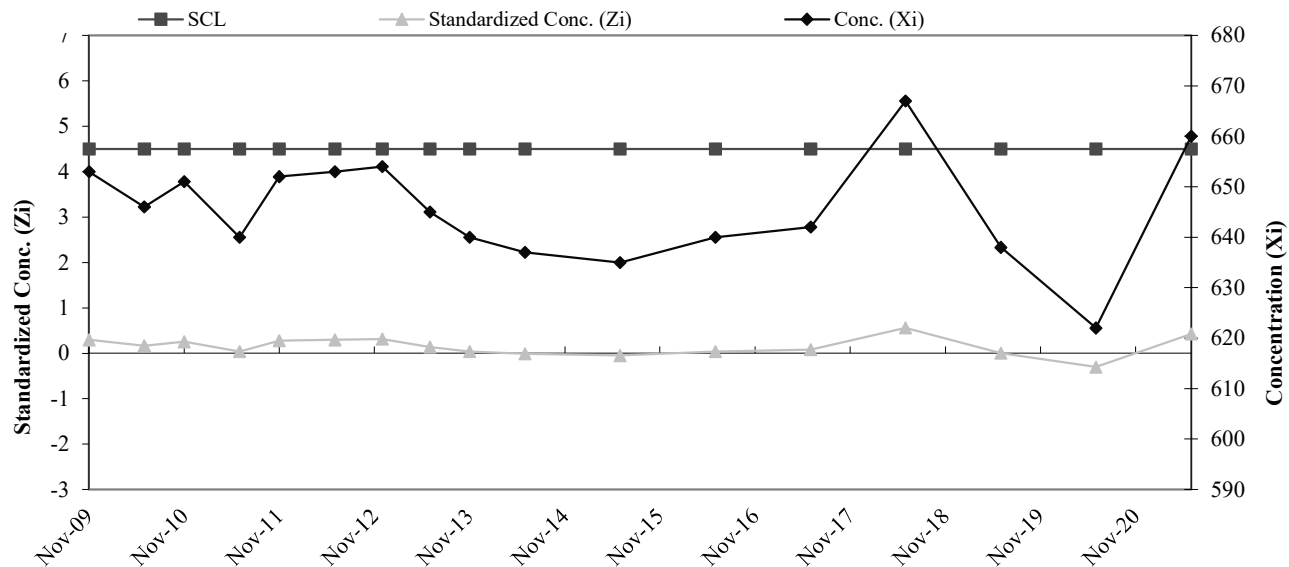


B-27 SpC

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Dec-05	714	637.75	52.08
2	Jun-06	594		
3	Nov-06	540		
4	Jun-07	628		
5	Nov-07	649		
6	Jun-08	659		
7	Nov-08	667		
8	Jun-09	651		

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

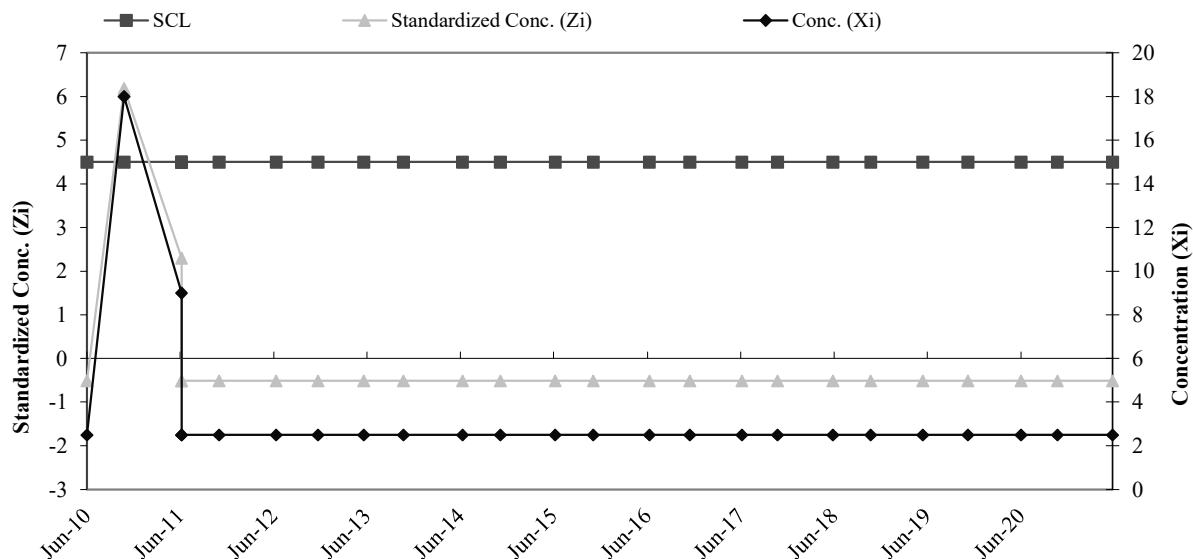


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-28 Cr

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-06	5	3.69	2.31
2	Dec-06	2.5		
3	Jun-07	9		
4	Nov-07	3		
5	Jun-08	2.5		
6	Nov-08	2.5		
7	Jun-09	2.5		
8	Nov-09	2.5		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Jun-10	4.5	2.5	-0.51
10	Nov-10	4.5	18	6.19
11	Jun-11	4.5	9	2.30
12	Jun-11	4.5	2.5	-0.51
13	Jun-11	4.5	2.5	-0.51
14	Nov-11	4.5	2.5	-0.51
15	Jun-12	4.5	2.5	-0.51
16	Dec-12	4.5	2.5	-0.51
17	Jun-13	4.5	2.5	-0.51
18	Nov-13	4.5	2.5	-0.51
19	Jun-14	4.5	2.5	-0.51
20	Nov-14	4.5	2.5	-0.51
21	Jun-15	4.5	2.5	-0.51
22	Nov-15	4.5	2.5	-0.51
23	Jun-16	4.5	2.5	-0.51
24	Nov-16	4.5	2.5	-0.51
25	Jun-17	4.5	2.5	-0.51
26	Nov-17	4.5	2.5	-0.51
27	Jun-18	4.5	2.5	-0.51
28	Nov-18	4.5	2.5	-0.51
29	May-19	4.5	2.5	-0.51
30	Nov-19	4.5	2.5	-0.51
31	Jun-20	4.5	2.5	-0.51
32	Nov-20	4.5	2.5	-0.51
33	Jun-21	4.5	2.5	-0.51

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

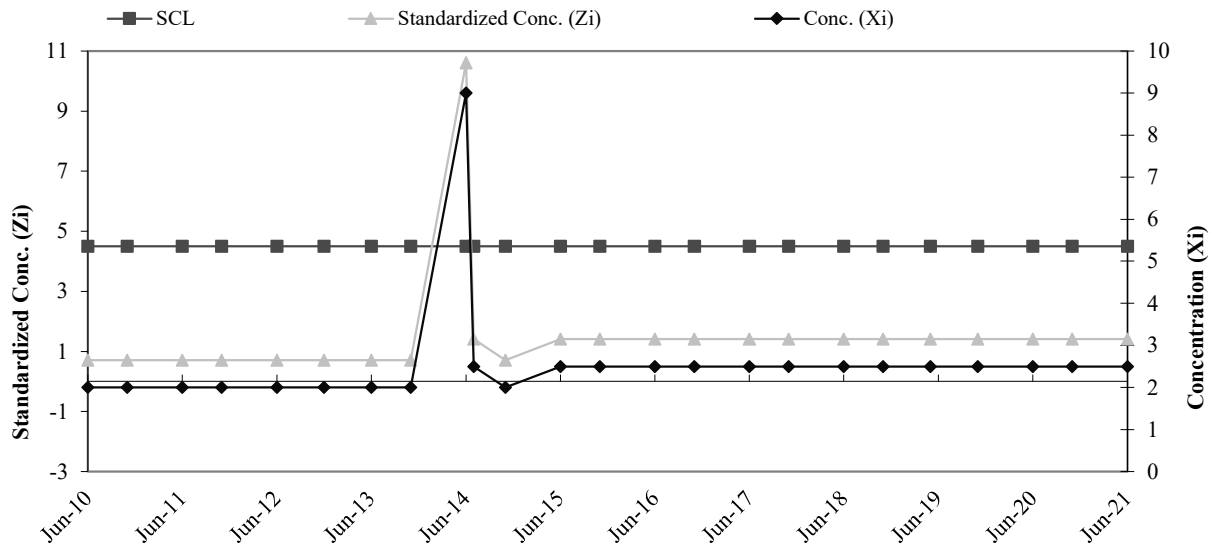


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-28 Cu

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
16	Nov-13	4.5	2	0.71
17	Jun-14	4.5	9	10.61
18	Jul-14	4.5	2.5	1.41
19	Nov-14	4.5	2	0.71
20	Jun-15	4.5	2.5	1.41
21	Nov-15	4.5	2.5	1.41
22	Jun-16	4.5	2.5	1.41
23	Nov-16	4.5	2.5	1.41
24	Jun-17	4.5	2.5	1.41
25	Nov-17	4.5	2.5	1.41
26	Jun-18	4.5	2.5	1.41
27	Nov-18	4.5	2.5	1.41
28	May-19	4.5	2.5	1.41
29	Nov-19	4.5	2.5	1.41
30	Jun-20	4.5	2.5	1.41
31	Nov-20	4.5	2.5	1.41
32	Jun-21	4.5	2.5	1.41

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

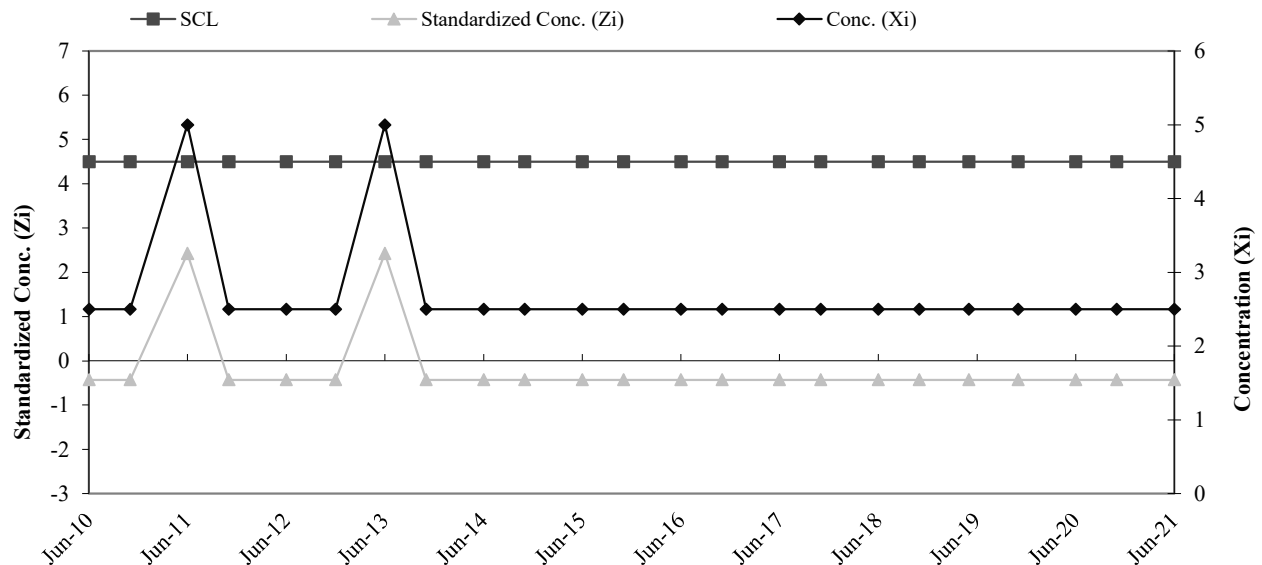


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-28 Ni

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Jun-06	2.5	2.88	0.88
2	Dec-06	2.5		
3	Jun-07	3		
4	Nov-07	5		
5	Jun-08	2.5		
6	Nov-08	2.5		
7	Jun-09	2.5		
8	Nov-09	2.5		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Jun-10	4.5	2.5	-0.43
10	Nov-10	4.5	2.5	-0.43
9	Jun-11	4.5	5	2.43
10	Nov-11	4.5	2.5	-0.43
11	Jun-12	4.5	2.5	-0.43
12	Dec-12	4.5	2.5	-0.43
13	Jun-13	4.5	5	2.43
14	Nov-13	4.5	2.5	-0.43
15	Jun-14	4.5	2.5	-0.43
16	Nov-14	4.5	2.5	-0.43
17	Jun-15	4.5	2.5	-0.43
18	Nov-15	4.5	2.5	-0.43
19	Jun-16	4.5	2.5	-0.43
20	Nov-16	4.5	2.5	-0.43
21	Jun-17	4.5	2.5	-0.43
22	Nov-17	4.5	2.5	-0.43
23	Jun-18	4.5	2.5	-0.43
24	Nov-18	4.5	2.5	-0.43
25	May-19	4.5	2.5	-0.43
26	Nov-19	4.5	2.5	-0.43
27	Jun-20	4.5	2.5	-0.43
28	Nov-20	4.5	2.5	-0.43
29	Jun-21	4.5	2.5	-0.43

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

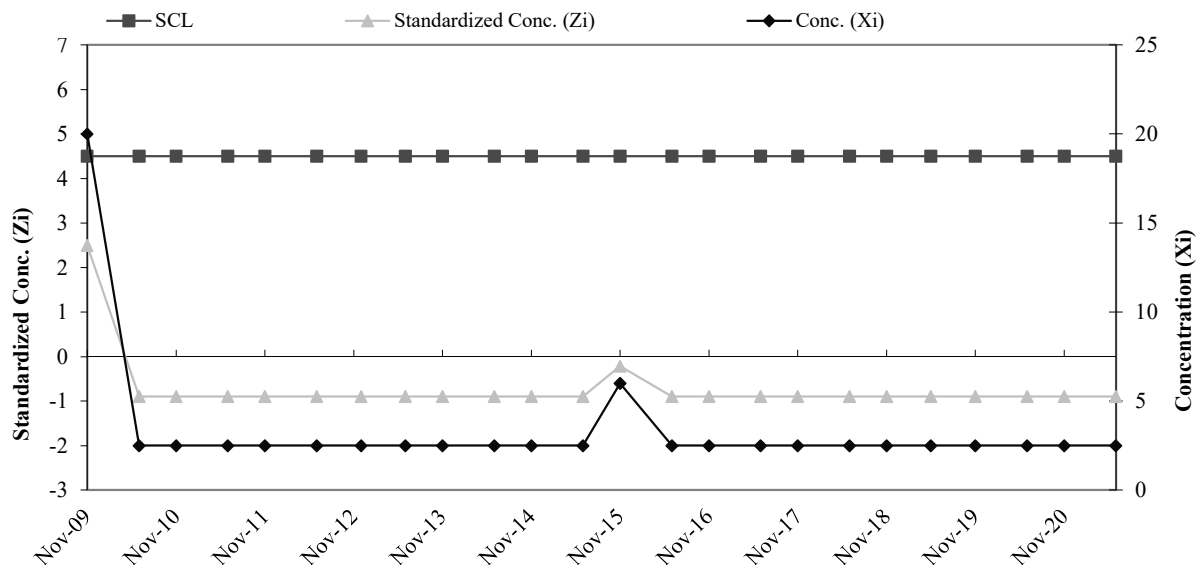


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-28 Zn

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Nov-05	7	7.13	5.16
2	Jun-06	18		
3	Dec-06	5		
4	Jun-07	6		
5	Nov-07	11		
6	Jun-08	5		
7	Nov-08	2.5		
8	Jun-09	2.5		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Nov-09	4.5	20	2.50
10	Jun-10	4.5	2.5	-0.90
11	Nov-10	4.5	2.5	-0.90
12	Jun-11	4.5	2.5	-0.90
13	Nov-11	4.5	2.5	-0.90
14	Jun-12	4.5	2.5	-0.90
15	Dec-12	4.5	2.5	-0.90
16	Jun-13	4.5	2.5	-0.90
17	Nov-13	4.5	2.5	-0.90
18	Jun-14	4.5	2.5	-0.90
19	Nov-14	4.5	2.5	-0.90
20	Jun-15	4.5	2.5	-0.90
21	Nov-15	4.5	6	-0.22
22	Jun-16	4.5	2.5	-0.90
23	Nov-16	4.5	2.5	-0.90
24	Jun-17	4.5	2.5	-0.90
25	Nov-17	4.5	2.5	-0.90
26	Jun-18	4.5	2.5	-0.90
27	Nov-18	4.5	2.5	-0.90
28	May-19	4.5	2.5	-0.90
29	Nov-19	4.5	2.5	-0.90
30	Jun-20	4.5	2.5	-0.90
31	Nov-20	4.5	2.5	-0.90
32	Jun-21	4.5	2.5	-0.90

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

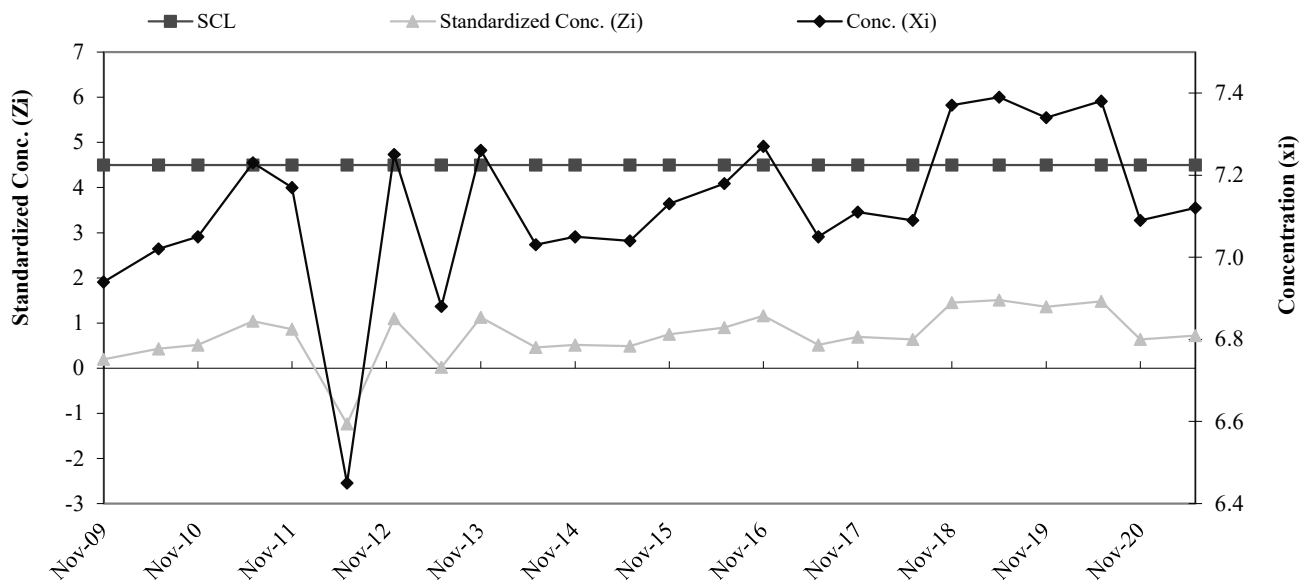


COLDWATER ROAD LANDFILL FACILITY
RCRA GROUND WATER DETECTION MONITORING SYSTEM
SHEWART CONTROL CHART
B-28 pH

Baseline Data				
Ti	Date	Conc.	Mean	Std. Dev
1	Nov-05	6.2	6.87	0.34
2	Jun-06	7.1		
3	Dec-06	7.4		
4	Jun-07	6.8		
5	Nov-07	6.8		
6	Jun-08	6.9		
7	Nov-08	6.8		
8	Jun-09	7.0		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Nov-09	4.5	6.9	0.19
10	Jun-10	4.5	7.0	0.43
11	Nov-10	4.5	7.1	0.51
12	Jun-11	4.5	7.2	1.04
13	Nov-11	4.5	7.2	0.87
14	Jun-12	4.5	6.5	-1.24
15	Dec-12	4.5	7.3	1.10
16	Jun-13	4.5	6.9	0.02
17	Nov-13	4.5	7.3	1.13
18	Jun-14	4.5	7.0	0.46
19	Nov-14	4.5	7.1	0.51
20	Jun-15	4.5	7.0	0.49
21	Nov-15	4.5	7.1	0.75
22	Jun-16	4.5	7.2	0.89
23	Nov-16	4.5	7.3	1.16
24	Jun-17	4.5	7.1	0.51
25	Nov-17	4.5	7.1	0.69
26	Jun-18	4.5	7.1	0.63
27	Nov-18	4.5	7.4	1.45
28	May-19	4.5	7.4	1.51
29	Nov-19	4.5	7.3	1.36
30	Jun-20	4.5	7.4	1.48
31	Nov-20	4.5	7.1	0.63
32	Jun-21	4.5	7.1	0.72

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	Nov-05	994	845.13	61.71
2	Jun-06	828		
3	Dec-06	812		
4	Jun-07	845		
5	Nov-07	816		
6	Jun-08	840		
7	Nov-08	804		
8	Jun-09	822		

Ti	Date	SCL	Conc. (Xi)	Standardized Conc. (Zi)
9	Nov-09	4.5	814	-0.50
10	Jun-10	4.5	841	-0.07
11	Nov-10	4.5	813	-0.52
12	Jun-11	4.5	837	-0.13
13	Nov-11	4.5	823	-0.36
14	Jun-12	4.5	849	0.06
15	Dec-12	4.5	823	-0.36
16	Jun-13	4.5	834	-0.18
17	Nov-13	4.5	842	-0.05
18	Jun-14	4.5	852	0.11
19	Nov-14	4.5	844	-0.02
20	Jun-15	4.5	860	0.24
21	Nov-15	4.5	849	0.06
22	Jun-16	4.5	866	0.34
23	Nov-16	4.5	853	0.13
24	Jun-17	4.5	863	0.29
25	Nov-17	4.5	859	0.22
26	Jun-18	4.5	839	-0.10
27	Nov-18	4.5	880	0.57
28	May-19	4.5	803	-0.68
29	Nov-19	4.5	833	-0.20
30	Jun-20	4.5	862	0.27
31	Nov-20	4.5	904	0.95
32	Jun-21	4.5	936	1.47

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

